NTNU – Trondheim
Norwegian University of
Science and Technology

Strategic market opportunity discovery

A study on how maritime companies in the Møre cluster discover new strategic market opportunities, and how they decide which opportunities to pursue.

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3. Masteroppgave

Oppstartsdato	Innleveringsfrist
15. jan 2014	**11. jun 2014**
Oppgavens (foreløpige) tittel **Strategic market opportunity discovery** **A study on how maritime companies in the Møre cluster discover new strategic market opportunities, and how they decide which opportunities to pursue.**	
Oppgavetekst/Problembeskrivelse The purpose of this thesis is to investigate how maritime companies in a cluster discover new market opportunities, and how they decide which opportunities to pursue. The theoretical background is based on strategic management and marketing. Case study methodology is applied, hereunder interviews, which have been engaged with relevant firms and companies within the maritime industry. The thesis includes the following chapters, in addition to a theoretical literature review: -Theoretical propositions -Methodology -Analysis -Discussion -Conclusion, implications and further research	
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4. Bedømmelse

Kandidatene skal ha *individuell* bedømmelse
Kandidatene skal ha *felles* bedømmelse ☒

Trondheim 3/6-14
Sted og dato

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Originalen oppbevares på instituttet.

Preface

This master's thesis was written in the spring of 2014 as the final work of our M.Sc. in Industrial Economics and Technology Management at NTNU in Trondheim, Norway. The thesis is written as a part of our specialization in Strategy and International Business Development.

The purpose of the thesis is to examine how maritime companies in a successful industrial cluster discover new market opportunities, and how they decide which opportunities to pursue. Relevant academic literature has been reviewed and case study methodology has been applied for this thesis.

We would like to express our thankfulness to our case companies; VARD, Ulstein Group, Kongsberg Evotec, Seaonics as well as three anonymous shipowners, for sharing their knowledge, experience and information with us. Their contribution have been of essential importance for this study.

Last, we would like to thank our academic supervisor, Øystein Moen, at the Department of Industrial Economics and Technology Management, for valuable guidance, feedback and support throughout the work with this thesis.

Trondheim, 6th of June, 2014

Sigurd Ulimoen Myhre

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Executive summary

For companies in today's technological and advanced environment, it is of great importance to discover new market opportunities and to decide which opportunities to pursue, in order to stay competitive. Due to the importance and success of the local maritime clusters in Norway, as well as the authors' interest in the industry, this thesis sought out to answer two research questions. The first is how maritime companies in a successful cluster discover new market opportunities, and the second is how these companies decide which opportunities to pursue.

To answer these complex questions, an industry and literature review were conducted, and formed the foundation for the thesis. Academic literature on market orientation and strategic decision making were chosen to shed light on the two research questions, respectively. Theory on clusters was used as supportive literature. Together, these theoretical fields were used to develop theoretical propositions.

A multiple case study approach has been utilized, and eleven semi-structured interviews with people from seven different companies formed the empirical data for the thesis. For this study, it has been chosen to focus on companies in the successful cluster in Møre. Through the interviews, knowledge and understanding of specific opportunities and decision making processes were obtained. Following the interviews, the empirical data was analyzed in relation to the theoretical propositions.

The study finds that the maritime companies in Møre discover opportunities through their customer orientation. These opportunities occur when customers present their needs or when the companies actively search for new opportunities. Findings also indicate that the few companies that are competitor oriented, discover opportunities through their monitoring and analyzes of competitors.

It has been found that most maritime companies in Møre have a long-term focus when they decide which opportunities to pursue, but that the decisions are made in different ways. Some companies behave rationally and perform structured processes intended to increase their information basis before making a final decision. Other companies base their decisions mainly on intuition, and these decisions are often based on top executives' experience and judgement.

The thesis has proposed that the maritime companies should focus more on their competitors to discover more market opportunities. Further, it is believed that a focus on customers, competitors and on being interfunctionally coordinated, while also becoming more proactively market oriented, can be ways to gain a competitive advantage in the future Norwegian maritime offshore industry. Already today, it is found that customer orientation is a necessity to compete in this industry. Based on the analysis, it is also identified that the shipowners, even though they make large investments, mainly base their decisions on intuition.

From a theoretical standpoint the thesis has broadened the theoretical field of market orientation, as it investigates it in relation to opportunity discovery and strategic decision making. Further, the thesis has provided a discussion of how the concept of market orientation varies between companies with different sizes, and it shows support for cluster theory on the effects of being affiliated to a cluster.

Sammendrag

For selskaper som konkurrerer i dagens tekniske og avanserte miljø, er det av stor betydning å oppdage nye markedsmuligheter og å avgjøre hvilke muligheter selskapet skal arbeide mot, slik at de forblir konkurransedyktige. Grunnet innflytelsen og suksessen til lokale maritime klynger i Norge, sammen med forfatternes egen interesse for denne bransjen, forsøker denne oppgaven å besvare to forskningsspørsmål. Det første er hvordan maritime selskaper i suksessfulle klynger oppdager nye markedsmuligheter, mens det andre er hvordan disse selskapene avgjør hvilke muligheter de skal arbeide mot.

For å svare på disse komplekse spørsmålene, har det blitt gjennomført en industri- og litteraturstudie for å skape oppgavens fundament. Akademisk litteratur om markedsorientering og strategisk beslutningstaking er valgt for å belyse henholdsvis det første og andre spørsmålet. Som støtte er det også brukt litteratur om klyngeteori. Samlet ble disse teoretiske områdene brukt for å lage teoretiske proposisjoner.

Forskningsmetoden "multiple case study" er brukt, og det empiriske grunnlaget for oppgaven består av elleve semi-strukturerte intervju med personer fra syv ulike selskaper. Denne studien har valgt å fokusere på selskaper fra den suksessrike klyngen på Møre. Gjennom intervjuene ble kunnskap og forståelse om spesifikke markedsmuligheter og beslutningsprosesser innhentet. I etterkant av intervjuene ble det empiriske datagrunnlaget analysert opp imot oppgavens teoretiske proposisjoner.

Studien avdekker at de maritime selskapene på Møre oppdager markedsmuligheter ved å i hovedsak fokusere kundene sine. Disse mulighetene forekommer ved at kundene deres presenterer en mulighet eller ved at selskapet aktivt søker etter nye muligheter. Funn indikerer også at de få selskapene som er fokusert mot konkurrenter, oppdager muligheter gjennom monitorering og analyse av disse.

Det har fremkommet at de fleste maritime selskaper har lang tidshorisont når de avgjør hvilke markedsmuligheter de skal arbeide mot, men at avgjørelsene fattes på ulike måter. Noen selskaper arbeider rasjonelt og anvender strukturerte prosesser for å øke deres beslutningsgrunnlag før en endelig beslutning fattes. Andre selskaper baserer avgjørelser på intuisjon, og disse avgjørelsene er da ofte basert på toppledelsens erfaring og dømmekraft.

I oppgaven foreslås det at de maritime selskapene bør fokusere mer på konkurrentene sine for å oppdage flere markedsmuligheter. Videre foreslås det at fokus på kunder, konkurrenter og på koordinering av interne avdelinger og enheter, samt å bli mer proaktivt markedsorientert, vil være måter å få et konkurransefortrinn i den norske maritime offshoreindustrien i fremtiden. Basert på oppgavens analyse er det også kommet frem at selv om rederiene gjør store investeringer, fatter de i hovedsak avgjørelser ved bruk av intuisjon.

Fra et teoretisk standpunkt har oppgaven utvidet det teoretiske feltet omkring markedsorientering ettersom det er forent med oppdagelse av markedsmuligheter og strategisk beslutningstaking. Videre har oppgaven diskutert hvordan markedsorientering varierer mellom selskaper med ulik størrelse, og den har støttet effekten, foreslått av klyngeteori, ved å være tilknyttet en klynge.

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Introduction

Chapter 1

Introduction

In today's technological and advanced environment, discovering and acting on the right opportunities is highly important in order to stay competitive and to be successful. Companies that are unable to grasp new opportunities run the risk of stagnation and can lose their attraction from customers.

The maritime industry is one of the world's most important industries, as 90 % of global trade is carried by sea (RS Platou, 2013). Its importance is expected to increase due to globalization and increased demand for energy, as it is an important infrastructure for trade and transport (Norwegian Shipowners' Association, 2014). Norway is one of the most important maritime nations in the world and plays an especially important role in the maritime offshore sector. It has the world's second largest maritime offshore fleet (Norwegian Shipowners' Association, 2013a). The maritime sector has been important along the entire coastline for over a century, and today, one of the driving forces of the maritime industry in Norway is the regional clusters.

1.1. Research questions

Given the maritime industry's success in Norway, we consider it interesting to gain insight into how the companies in the industry discover opportunities. Through this, companies can better evaluate its strengths and weaknesses on how opportunity discovery is done. With this knowledge, the maritime companies can adjust their approach towards discovering new opportunities in order to remain and improve their competitiveness. This leads to our first research question:

> *RQ1: How do maritime companies in a successful cluster discover new strategic market opportunities?*

In order to gain success, the maritime companies must also orderly evaluate the different opportunities and make strategic decisions on how and which opportunities to act upon. By studying and evaluating recent examples, the maritime companies can benefit in the same manner as from the first research question above. The second research question of our master's thesis is therefore:

> *RQ2: How do maritime companies in a successful cluster choose which opportunities to pursue?*

Our study is descriptive of nature, as we attempt to study recent events. In order to be able to properly answer the research questions we deem it necessary to constrain ourselves to a specific selection of maritime companies. The thesis is therefore focused on the maritime companies in the maritime cluster in the Møre-region of Norway, which is world-leading in advanced offshore solutions and known for its success (Norwegian Shipowners' Association, 2014). Though both research questions will be answered, we consider RQ1 to be the main focus of the thesis. This will be reflected in the analysis and discussion.

To help us answer the first research question, we will utilize literature from the theoretical field of market orientation, as it was found appropriate to assess how opportunities are discovered. The link between market orientation and opportunity discover is, to our knowledge, a novel topic, which we deem highly interesting to investigate. Its use towards the maritime industry is also of a novel character. Further, literature on market orientation, along with literature from strategic decision-making will help to reveal the answer to the second research question. Since the studied companies are located in a cluster,

we have included theory on industrial clusters as a supportive literature to enable us to see how the cluster affects the answer of predominantly the first research question. A multiple case study, including interviews with relevant companies within the industry, will form our empirical foundation.

1.2. Unit and level of analysis

Our unit of analysis is limited to how maritime companies in Møre discover specific strategic market opportunities, and how these companies choose which opportunities to pursue. A strategic market opportunity can be defined, in accordance with the definition of a strategic decision proposed by Eisenhardt and Zbaracki (1992), as an opportunity that, if acted upon, is important in terms of the actions taken and the resources used. An example can be an opportunity and decision to enter a new market or to merge or acquire another company. In the thesis, we use the terms strategic market opportunity, market opportunity and opportunity interchangeably.

According to de Wit and Meyer (2010), there are four levels of strategy; functional, business, corporate and network level. As can be seen from Figure 1, this thesis' level of analysis is at the interface between the business and corporate level. The level of analysis is adapted according to the companies interviewed, as the appropriate level of analysis can be expected to differ between the companies. If for example a company consists of several strategic business units, but only one of these units are in the maritime industry in Møre, we will focus on the business level. However, for a company that has several departments present in the Møre-cluster, the interview and company analysis will be performed at the corporate level. This is seen as appropriate as it will allow for a more thorough and flexible analysis. We do not believe that these levels will be in conflict when our analysis is conducted.

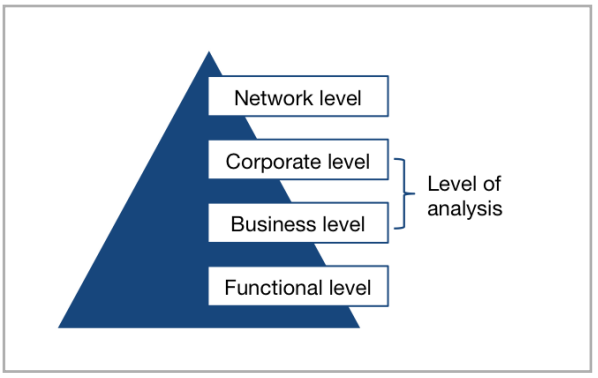

Figure 1: The level of analysis

Source: Adapted from de Wit and Meyer (2010)

Last, we note that we use the term companies when we refer to the maritime companies in the Møre-cluster and Møre-region, if not specified otherwise. Additionally, other academic literature and news articles in particular, use the term maritime cluster for both a regional cluster as the one in Møre and for the entire Norwegian maritime industry. To avoid any misinterpretation, we will use the word 'cluster' for regional cluster, such as the one in Møre, and we will use 'maritime industry in Norway' when talking about the whole maritime industry in Norway.

1.3. Guide to the reader

Overall, the thesis is structured around theoretical propositions, which help us to answer our research questions, and help the reader to follow our reasoning.

In Chapter 2 we present an industry review of the maritime industry to get a good understanding of the industry studied in this thesis. Our literature review is presented in Chapter 3, Chapter 4 and Chapter 5 in addition to our theoretical propositions, which are also based on information from the industry review. The literature review ends with a summary of propositions in Chapter 6, where we also give a preliminary theoretical conclusion to our research questions.

Documentation of the methodology used in this thesis is presented in Chapter 7. This includes

methods used to both collect relevant literature and information, as well as how the case studies were conducted. In Chapter 8, a summary of the interview with each case company is presented.

Our comprehensive analysis of the theoretical propositions is presented in Chapter 9. In Chapter 10, we present our conclusion before we take a more holistic and normative approach in order to discuss some overall findings discovered in the thesis. We end the chapter and the thesis with some implications for managers, policy makers, and researcher and our final remarks.

Figure 2 illustrates the structure and logic of this thesis.

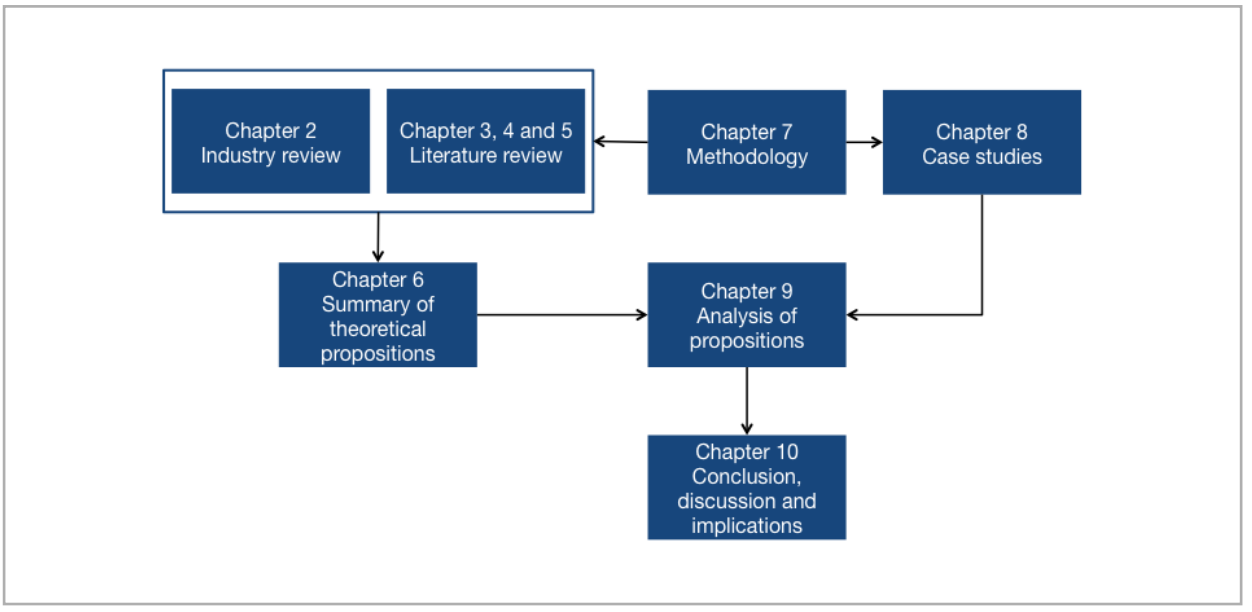

Figure 2: The structure of thesis

INDUSTRY REVIEW

CHAPTER 2

THE MARITIME INDUSTRY

To get an understanding of the maritime industry, this chapter presents relevant background information. We first present the maritime industry in general in Section 2.1, before we in Section 2.2, introduce the maritime industry in Norway.

The maritime industry is defined to include all companies that own, operates design, build or deliver specialized equipment or services for ships and floating units (Menon Business Economics, 2011; Reve & Sasson, 2012).

2.1. THE MARITIME INDUSTRY IN GENERAL

The maritime industry is one of the world's most important industries. Approximately 90 % of global trade measured by value is carried by sea and handled by ports worldwide (RS Platou, 2013). The industry is characterized by globalization, which in effect drives increased global transportation of goods and energy sources like oil and gas (Norwegian Shipowners' Association, 2013b). Also, partly as a consequence of its global character, the industry's profitability is highly affected by the world economy, making it highly volatile (Norwegian Shipowners' Association, 2013b). The financial crisis in 2008 led to problems for maritime companies, but the industry is now in a positive trend (Teige, 2013).

2.1.1. The maritime value chain

In order to easier understand the dynamics of the maritime industry, a presentation of the industry's value chain and a simplified network of the relationships between its different segments is therefore appropriate. In Figure 3, the black arrows indicate the formal business relationships where transactions occur. In reality, informal relationships will be present between most of the actors. A description of the different maritime actors are given in Table 1.

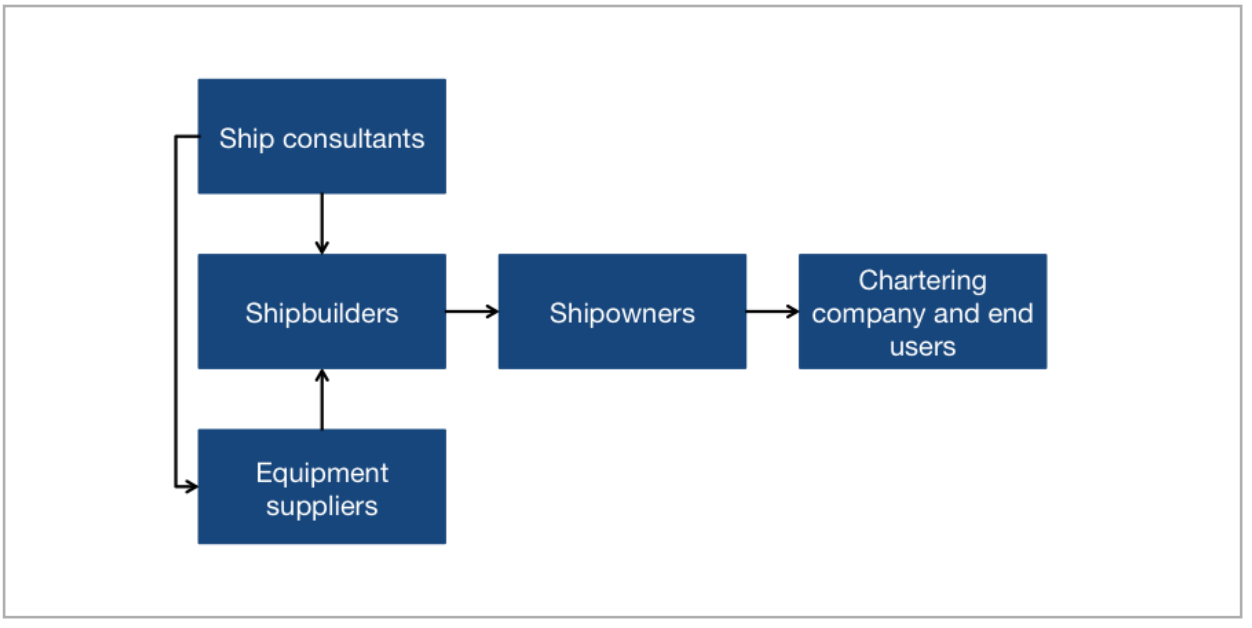

Figure 3: Illustration of the relationships between the different maritime actors

Source: Hervik, Oterhals, Bergem and Johannessen (2012)

Industry actor	Description
Chartering and end users	Hire vessels for a specific activity. Includes ferry operators and oil and gas operators.
Shipowners	Owner of the vessels that the end user company hires. Normally the shipowner focus on owning ships within one sector, such as offshore oil and gas, cruise and people transport, ferries or similar.
Shipbuilders	Build vessels to the shipowners' specifications. Depending on the firm's strategic arrangement, it can build and include hull and equipment based on its own design or buy this from other ship consultancy firms and suppliers.
Equipment suppliers	Deliver equipment and services to the vessels. This can include anything from the interior design, winches, to ship engines.
Ship consultants	Provide different services to the shipbuilders. From complete ship designs to smaller engineering solutions on deck.

Table 1: Description of the different maritime industry actors

2.1.2. History, trends and development

Historically, Europe has dominated the world's shipbuilding industry, but after the 1950s, Asian countries have taken a stronger position in the market (Ecorys, 2009). Japan grew its influence in the market in the 1950s, and from the 1970s, South Korea entered the market and became the world-leading shipbuilding nation in 2005. During the last ten years China has also become a dominant player, and the country has seen a strong increase in global market share (Ecorys, 2009). Today, the Asian countries are especially dominant in the high-volume and steel-intensive segments such as container and bulk vessels, while the European countries are still dominant in more specialized segments such as cruise vessels, offshore vessels and luxury yachts. This development is partially explained by higher labor costs in Europe, forcing European companies to build ships with higher value. In general, these specialized vessels are characterized by high-tech qualities, complex production processes and one-of-a-kind production (Ecorys, 2009).

Traditionally, the shipyards themselves did most of the shipbuilding work. Today, however, the role of maritime equipment suppliers is becoming more and more important. With technological advances, a need for specialized companies have spiked, and the value of the produced equipment has been assessed to be 50-80 % of the total product value. As a consequence, the shipbuilders therefore create important knock-on effects for maritime equipment suppliers. Due to this, close ties between suppliers and shipyards are common (Ecorys, 2009).

2.2. The maritime industry in Norway

The maritime industry is one of Norway's most important industries, and the industry provided 10 % of the total value creation in Norway in 2011 (Norwegian Shipowners' Association, 2013b). The industry also employs 100 000 people yearly, making it an important employer in several areas of the country. The maritime industry in Norway has a long history as boats and ships have been a necessity for trade and transportation due to the country's long coast and fjords (Menon Business Economics, 2011). Though these original reasons for a maritime industry is not present today, Norway is still an important maritime contributor internationally.

Today, knowledge, skills and a complete industry give Norway a competitive advantage (Menon Business Economics, 2011). The industry

is becoming more and more global, something that has driven Norway to target the more knowledge intensive segments, such as the offshore segment, that demand advanced technology. Thus, even though the Norwegian fleet has declined in numbers, it is becoming more and more valuable due to the advanced machinery.

In their cluster analysis of the maritime sector in Norway from 2003, Benito, Berger, De la Forest and Shum argue that the Norwegian maritime industry is successful due to its completeness, as companies operate in all parts of the value chain. Other success factors are the demand conditions, firms' strategy, the industry structure and rivalry, and because of the government and supporting industries.

Maritime companies from Norway have competed in international markets for decades, and today much of their revenue is generated by export sales (Norwegian Shipowners' Association, 2014). For the future, Norwegian continental shelf and the Arctic is expected to be the domestic growth markets, and internationally, Brasil, Western Africa and Australia are expected to be important areas (Norwegian Shipowners' Association, 2013b). These growing markets are mainly offshore focused, which is also the main focus for this thesis. We, therefore, continue with a more in-depth study of this segment.

2.2.1. The maritime offshore sector in Norway

Almost all vessels ordered in Norway in 2012 were offshore vessels (Invest in Norway, 2014), and a description of the most common vessels are given in Table 2. The Norwegian offshore fleet is second largest in the world and the 500 ships are also the most modern. For example, Norwegian companies are world leading at positioning and control systems and also had the first gas-powered offshore vessel. The size of the fleet also dictates that it operates globally: over half of the operating revenue is derived in Asia, Latin-America and in Africa (Norwegian Shipowners' Association, 2013a). It is estimated that one fourth of all offshore vessels in Brazil are Norwegian-controlled. In 2011, Norway contributed to almost 20 % of the total value creation done by the global offshore fleet (Norwegian Shipowners' Association, 2013a).

This heavy focus on offshore in the maritime Norway is not accidental, as the global industry has been driven by increased oil and gas operations throughout the world in the last few years. The growth, good profitability and the transition to more offshore activity is closely tied to high oil prices (Invest in Norway, 2014). As the

Type of vessel	Description
Platform Support Vessel (PSV)	Vessel transporting cargo and personnel to drilling rigs or installations being built or in the production phase. Usually it brings drilling mud, fuel, chemicals, and drinking water to and from the plattforms.
Anchor-Handling Tug Supply (AHTS)	Handles anchors for platforms and are therefore build open to load on/off anchors. Carries winches in order to tug platforms to destination. Also transport supply to and from drilling rigs.
Offshore Supply Vessel (OSV)	Specialized vessels for the exploration, development and production phases of offshore oil and gas
Subsea specialized vessel	Designed for underwater operations, especially during installation and repairment of subsea installations used in production of oil and gas. Can handle ROVs, offshore cranes, module handling tower and other equipment specific solutions.

Table 2: Description of different offshore vessels

Source: Norwegian Shipowners' Association (2013)

petroleum activities have moved to more deep water and challenging working conditions under water, the demand for advanced technology and machinery have increased accordingly. In addition to this, the activities have moved to more demanding conditions like in the High North (Myhre & Pilskog, 2013). These recent trends to more challenging regions and challenging tasks favor the Norwegian maritime industry in the international competitive market, as Norway is deemed as an innovative and technologically strong country (Norwegian Shipowners' Association, 2013a).

2.2.2. The industry's focus on cutting cost

Due to the high cost level in Norway, there is a trend that more contracts are being given to international companies, especially in South-east-Asia (Reve, 2014). Reve (2014) explains this by lower labor costs and that the premium the Norwegian sector has been used to taking is not worth the costs anymore. He points to Statoil, the largest oil and gas operator in the Norwegian offshore industry, that recently stated that costs in the Norwegian offshore industry "must be cut radically". This implies that the industry must become more cost-focused in order to stay competitive and attractive for its customers. In February 2014, Statoil announced that it was going to make substantial cuts in costs in addition to reducing its investment budget over the next two years (Lorentzen, 2014). The costs have increased concurrently as operations become more complex, an increase of raw-material costs and rising demand (Holter, 2014). With this change of behavior, Statoil impacts all of its suppliers, which includes firms from the entire value chain shown in Figure 4.

2.2.3. The maritime cluster in Møre

The maritime industry in Møre constitutes an important part of the maritime industry in Norway. 213 companies are part of the maritime cluster in Møre, and they had an aggregate revenue of 50 billion NOK in 2012 (Hervik et al., 2012). The cluster consists of companies in all parts of the value chain, but according to Reve and Sasson (2012) and the Norwegian Shipowners' Association (2014), the ship owners comprise the center of the cluster, and are therefore driving the development. Møre clearly have the largest share of shipyards and the largest share of offshore shipping companies in Norway (Norwegian Shipowners' Association, 2013a). In 2012, 35 of 67 contracts for newbuildings in Norway were built in Møre (Hervik & Oterhals, 2013).

The history

The maritime cluster in Møre has a long history, and cooperation between the companies in cluster, started when two of the shipbuilding companies in Ulsteinvik established the first co-operative organization in the region, "Verkstedsforeninga", which was suppose to help with recruiting, increase work competence and increase the competitive advantage for the firms in the region (Teige, 2013). This focus on recruitment and developing competence in the region has always been a focus for the cluster. A brief overview of the cluster's history is given in Figure 4.

All the initiatives shown in Figure 4 lead to the establishment of the National Center of Expertise (NCE) Maritime in 2005. Today, NCE Maritime is important for driving the competitiveness of the maritime cluster in Møre (Teige, 2013). Through the NCE program, the organization receives public funding to perform a variety of initiatives intended to support the region's global competitiveness, recruitment and research competence. Education and competence have become key areas where the organization works closely with Aalesund University College, while it also attempts to facilitate incubation of new companies with the plan of going international (Teige, 2013).

The next step for the cluster will be to gain status as a Global Center of Expertise (GCE) (Innovation Norway, 2014), which the cluster is trying to become, in order to receive more public funding (NCE Maritime, 2013).

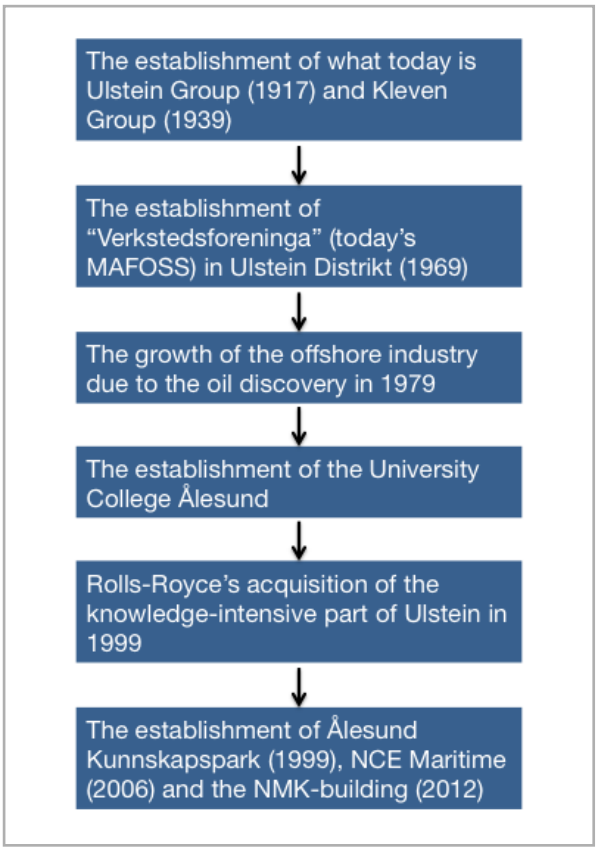

Figure 4: The history of the maritime cluster in Møre

Source: Adapted from Teige (2013)

Key figures and characteristics of the Møre-cluster

Most of the maritime companies in the Møre-cluster are profitable, as the firms in the region had a mean profit margin of 6-10 % in 2012 (Hervik et al., 2012). The region has experienced a growth in work stock of 5000 full-time equivalents the last ten years, and according to Hervik and Oterhals (2013), the region will continue to grow in the future. Although the region is deemed to be more vulnerable for international competition and global economic trends, it is expected that it will grow with 2000-3000 new employees until the year 2020. In the annual report from 2012, Hervik et al. depict that with a strong focus on innovation, competence development, product improvement and smart logistics the maritime cluster will have good chances for success (Hervik et al., 2012).

NCE Maritime consists mostly of small to medium-sized firms who contributes with a strong force on innovation and development. This in turn, attracts large global players to establish themselves in the cluster (NCE Maritime, 2013). The cluster is recognized for its work to align the cluster with global value chains (Teige, 2013) and for stimulating the mechanisms that build competence and challenge the firms to increase their development speed (Menon Business Economics, 2011).

Literature review

Introduction to the literature review

In this section, our literature review is presented. Our main theoretical field, market orientation, is presented in Chapter 3, and will help to answer both research questions. Literature on strategic decision making, which helps us answer RQ2, is presented in Chapter 4. Chapter 5 holds a review of our supportive literature on clusters. Our theoretical propositions are presented throughout these chapters. The majority of our propositions are directed towards one of our research questions. Additionally, some more general propositions have been created as these were seen as interesting and appropriate to investigate. For the propositions that are intended to help us answer one of the research questions, the research question itself is indicated in brackets, like this [RQX]. For the general theoretical propositions, these brackets are not included. Our literature review is ended in Chapter 6 with a summary of our theoretical propositions and a preliminary theoretical conclusion to our research questions.

The argumentation for each proposition is given after the review of relevant theory in its own section. The proposition is then presented in italic font and with background color.

CHAPTER 3

MARKET ORIENTATION

To understand how the maritime companies discover market opportunities, and how they decide which opportunities to pursue, we present literature on market orientation. We first introduce the research area and two widely used frameworks in Section 3.1. One of these frameworks are chosen for this thesis, and its construct is presented in Section 3.2. Following this, we describe two different behaviors within market orientation in Section 3.3, before we, in Section 3.4, review some empirical articles that investigate the relationship between market orientation and both performance and innovation. In Section 3.5, we discuss discovery of market opportunities within market orientation, and in Section 3.6, we discuss how the characteristics of the maritime industry affect the need to be market oriented. The chapter is ended in Section 3.7, with a brief review on how to become market oriented. Besides the last section, which is included solely as support, theoretical propositions are presented throughout the chapter.

3.1. INTRODUCTION

A strategic orientation can be described as the guiding principles that influence the marketing and strategy-making activities of a firm. Within the marketing literature, market orientation has received considerable attention. Broadly, market orientation deals with how a business can create a sustainable competitive advantage through creating superior value for its customer, and its proponents claim that market oriented companies gain a sustainable competitive advantage that leads to improved performance (Hult, Ketchen, & Slater, 2005; Narver & Slater, 1990; Noble, Sinha, & Kumar, 2002; Slater & Narver, 1994). The literature has a long and rich tradition, but two frameworks or measures of market orientation have dominated the research area since they were published in 1990 (Carrillat, Jaramillo, & Locander, 2004; Noble et al., 2002). The first of the two frameworks was published by Narver and Slater (1990), the second was published by Kohli and Jaworski (1990).

The two frameworks differ in their construct of market orientation. Narver and Slater (1990) take a cultural approach and conceptualize market orientation in terms of organizational characteristics (Carrillat et al., 2004). Kohli and Jaworski (1990), on the other hand, take a behavioral approach and describe market orientation in terms of organizational behavior.

The cultural elements included in market orientation according to Narver and Slater (1990) are customer orientation, competitor orientation and interfunctional coordination. Further, they argue that a market oriented organization has a long-term focus, and that the overriding objective of a market oriented organization is profitability. Long-term focus and profitability are labeled as key decision criteria used by market oriented organizations.

Kohli and Jaworski's (1990) behavioral approach conceptualize market orientation as the organization-wide generation, dissemination and responsiveness to market intelligence. However, they agree with Narver and Slater (1990), that in a market orientated organization, customer focus and interfunctional coordination are operationally manifested. Also, they emphasize that intelligence generation also includes monitoring competitors. Though the frameworks operationalize market orientation differently, it can be concluded that they are fairly similar in the description of market orientation. Both frameworks also note that market orientation is not either present or absent in an organization. It should rather be seen as a continuum, where organisations can be more or less market oriented.

In this thesis, the cultural elements proposed by Narver and Slater (1990) will act as a fundament for our theoretical structure and discussion. The cultural approach is found as most suitable and interesting when doing a case study on maritime companies. By using the cultural elements, it is possible to analyze how the different elements affect the discovery of strategic opportunities, and whether the decision criteria affect the decision-making process. Additionally, though both frameworks have several similarities, using one as a basis will make it easier for the reader to follow our discussion.

3.2. The market orientation construct

Next, the three cultural elements and the two decision criteria proposed by Narver and Slater (1990) are presented.

3.2.1. Cultural elements

Customer orientation

According to Narver and Slater (1990), customer orientation is the "sufficient understanding of one's target buyers to be able to create superior value for them continously" (p. 21), and this pillar is often considered to be the most important one in market orientation literature (Day, 1994; Han, Kim, & Srivastava, 1998; Narver & Slater, 1990). In order to deliver superior customer value, it requires that a seller understands the whole value chain of its buyers, both today and in the future (Narver & Slater, 1990; Slater & Narver, 1994). Being customer oriented therefore goes beyond traditional customer research, as it also includes non-verbalized, future needs. This means that an important job for a market-oriented company is to anticipate future needs and trends in the market space. Han et al. (1998) argue that increased customer orientation leads to continuous innovation, as the business then strive towards meeting the customers' demand.

A common characteristic for market oriented organization is that their employees spend considerable time with its customers to find new ways to satisfy their needs. To spend time with their customers a company can for example bring customer representatives into their facilities, or send employees on customer visits (Slater & Narver, 1994). Making improved customer satisfaction an organizational objective is also an organizational characteristic for market oriented organizations.

Competitor orientation

Competitor orientation includes all activities involved in acquiring information about competitors, what technology they offer, and whether they are an attractive alternative for target customers (Han et al., 1998; Slater & Narver, 1994). To deliver superior value, a company must understand its competitors' short- and long-term strengths and weaknesses.

In a competitor oriented organization, employees across departments discuss and share information about their competitors, and top managers frequently discuss competitors' strategies to discover competitor threats (Slater & Narver, 1994). By sharing and discussing this information, a company can easier either target a market where competitors are weak, or stop competitors from getting an advantage in a market.

To discover its competitors' strengths and weaknesses, Day (1994) proposes that a company can benchmark itself against its competitors. Through benchmarking, a firm can also gain insight on how to perform discrete activities and processes in a better way. If a competitor is "best-in-class" and performs activities better than the focal organization, informed imitation can be an alternative to deliver a better value offering.

Interfunctional coordination

Interfunctional coordination comprises the organization's joint efforts to create superior value for the buyers. This value can be created based on information from customer and competitor orientation. Any point in the buyer's value chain is an opportunity to deliver extra value, which means that any individual in the organization,

regardless of their position, can potentially take part in the value creation (Narver & Slater, 1990).

In an interfunctionally coordinated organization, all departments are involved in creating customer value (Slater & Narver, 1994). To ensure interfunctional coordination, management must support and believe in it, for example by rewarding each department for their contribution to added customer value (Narver & Slater, 1990).

In their literature review article, Menguc and Auh (2006) emphasize that interfunctional coordination is different specific and identifiable routines and processes for collecting and disseminating information throughout the firm. Interfunctional coordination can be ensured through frequent committee meetings, face-to-face contacts in both horizontal and vertical relationships along with a larger degree of shared decisions between departments (Han et al., 1998).

3.2.2. Decision criteria

Long-term focus

The literature propose that a market oriented organization primarily has a long-term focus when it implements all of the behavioral elements, for example when building relationships with key customers. This is required in order to stay competitive in the long-run perspective. To stay ahead of its competitors, a company must always strive to discover and implement additional value for its customers in the long-term (Han et al., 1998; Narver & Slater, 1990).

Profitability

Traditionally, it has been proposed that profitability focus is a part of market orientation, but this has later been debated (Narver & Slater, 1990). Narver and Slater (1990) take the stand that profitability is best considered to be an objective for an organization. Kohli and Jaworski (1990) on the other hand, treat profitability rather as a consequence of market orientation. Therefore, it seems as the literature is inconclusive on how a focus on profitability affects decisions in a market orientated organization. For now, profitability will be treated as a decision criterion for market oriented companies in order to find support for or to dismiss the relationship.

Together, the construct of market orientation can be summarized in Figure 5.

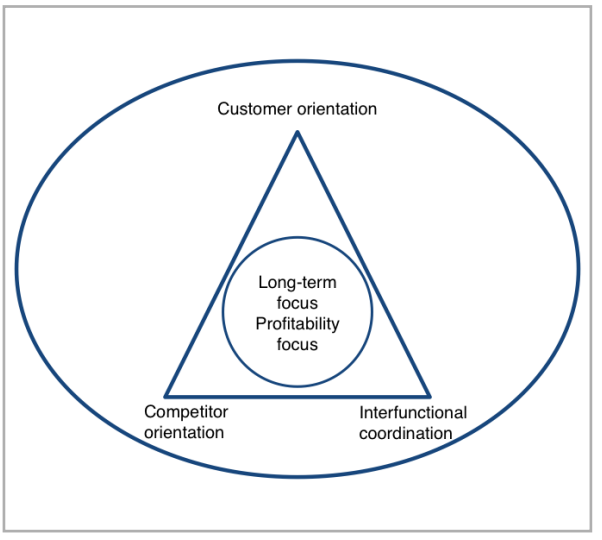

Figure 5: The construct of market orientation
Source: Narver and Slater (1990)

3.2.3. Argumentation for proposition 1

As the maritime companies in Møre are geographically close to each other and have a similar history that allow them to easier create relations to suppliers, customers and also their competitors, they should have good conditions to be market oriented. This environment also allows the companies to learn more about each other and communicate easily.

The maritime industry is an industrial market with high degree of customization, as shown in Chapter 2, which demands close relationships between buyers and suppliers. Since the products sold are not over-the-counter type of products, it is likely that the companies must be market oriented in order to be aware of which customer needs they should please.

It is probable that the Norwegian tradition with cooperation and low power distances make it

easier for everyone within an organization to speak up and be heard. It is believed that this allows for interfunctionally coordinated businesses where knowledge and information are easily spread between departments and between power levels in an organization.

However, some variation between the different firms in the region is likely to occur. Small and young companies might be forced to limit their investments in market orientation until other parts of the organization are well-functioning. They might therefore show low degree of market orientation. Other mitigating effects can be a lack of resources or limited knowledge about the concept of market orientation.

To summarize, these elements should allow the maritime companies in Møre to more easily adapt to market orientation. As the region contains firms with all sizes, it is likely that the degree of market orientation will also vary.

Proposition 1

The maritime companies in Møre are market oriented, but the degree of market orientation will vary between companies.

3.3. Responsive and proactive market oriented behavior

Based on market orientation literature and the empirical studies from the 1990s, researchers have debated the net benefits of being market oriented. Among others, Christensen and Bower (1996), argue that market oriented companies could lose their competitive position by listening too carefully to their present customers. As a consequence of this critique, it has later been proposed that there are two different behaviors of market orientation (Carrillat et al., 2004; Jaworski, Kohli & Sahay, 2000; Narver, Slater & MacLachlan, 2004). The two behaviors are labeled responsive and proactive by Narver et al. (2004), and market-driven and market-driving by Carrillat et al. (2004) and Jaworski et al. (2000). These terms share the same definition, and for simplicity we choose to use the terms introduced by Narver et al. (2004) in this thesis.

3.3.1. Responsive market orientation

Organizations that are responsively market oriented attempt to discover, understand and satisfy expressed customer needs, and accept the market structure and market behavior as is (Jaworski et al., 2000; Narver et al., 2004). An expressed customer need is a need the customer is aware of, and therefore can express. The challenge with being responsively market oriented is that it is harder for an organization to stand out from its competitors. Further, if all companies follow a responsive strategy, no actor will be able to deliver a value proposition superior to the competitor (Carrillat et al., 2004). The result of this is typically that a commodity market occur, where there is tough price competition and low margins (Narver et al., 2004).

3.3.2. Proactive market orientation

A proactively market oriented organization attempts to discover, understand and satisfy latent customer needs, where a latent need is a need the customer is unaware that it needs. To uncover these latent needs, an organization can engage in focused, disciplined searches, for example by observing customer behavior, monitoring customer complaints or by working closely with lead users (Jaworski et al., 2000; Narver et al., 2004). In addition to satisfying latent needs, an organization can change the composition and roles of players in the market by doing activities differently than what has been done before, or by changing the industry structures through value chain integration or acquisitions (Carrillat et al., 2004; Jaworski et al., 2000). Carrillat et al. (2004) argue that being proactive is needed to achieve superior business performance, as firms then actively influence the market as a market leader.

It is important to note that these approaches to market orientation are complementary (Jaworski et al., 2000). An organization can often be both responsive and proactive at the same time. A typical example is an organization, which

tries to protect a cash-generating old technology while simultaneously developing new technology for future business. A recent example would be Apple's iPad that threatened to cannibalize the market for the company's MacBook. However, this turned out to be a successful product strategy and today both products continue to sell.

3.3.3. Argumentation for proposition 2

For maritime companies in Møre, arguments can be made for both why companies can show behavior of responsive and proactive market orientation. Proactive market orientation can be needed due to tough industry competition, which may force companies to always innovate new products to stay ahead of competitors. The fact that companies in the cluster are successful, and that the Norwegian maritime industries are known for being innovative indicate that the companies are proactive. Additionally, the high costs in Norway is expected to make it important to be proactive and to always deliver new and better products and services.

On the contrary, the rigorous safety policies and demands in the offshore industry, favor a more responsive behavior, where the suppliers always tend to meet the safety measures of the customer. To minimize risk, customers will want tried and tested products and services, something that will generate a more incremental and responsive development. The industry is characterized by high investments, something that likely will increase this effect. Further development in recent years, especially in the oil and gas industry, has been an increased focus on minimizing costs. This is a development that one can expect will lead to a more responsive behavior for the equipment suppliers, as they do not want to do expensive product development when their customers are lowering their expenditures. The above discussion, which highlights valid reasons for both behaviors lead to the following proposition.

Proposition 2 [RQ1 indirectly]

It is expected to be a high degree of variation between the market oriented behaviors for the maritime companies in Møre. Some companies will be responsively market oriented, while others will be proactively market oriented.

3.4. Market orientation in relation to performance, innovation and size

In their study of market orientation literature, Liao, Chang, Wu and Katrichis (2010) analyzed the most common keywords used in market orientation articles. Six categories were found to have substantial activity related to market orientation. Of these categories, the far most common was the category of articles examining the relationship between market orientation and performance. Additionally, it was found that a great amount of market orientation research was done on innovation, marketing, learning, competition and quality. In this section we discuss the performance and the innovation categories of the literature, while we end with a short review of empirical research on the link between market orientation and firm size. Performance is discussed at it is seen as important to establish the link between market orientation and business performance, and innovation is considered important as the innovative Norwegian maritime industry is studied in this thesis. Firm size is discussed as the size of the maritime companies in Møre varies to a large extent, as seen in Section 2.2.3.

3.4.1. Market orientation's effect on business performance

In Table 3 we highlight the main findings in some well-cited and also some of the more recent empirical studies that investigate the relationship between market orientation and performance.

As seen from Table 3, all the empirical articles find a positive relationship between market orientation and performance. This positive relationship is found either directly or through a mediator such as responsiveness (Hult et

Author(s) and year	Dependent variable	Result
Homburg and Pflesser (2000)	Financial performance	Positive relationship
Hult et al. (2005)	Financial performance	Positive relationship
Kara, Spillan and DeShields (2005)	Subjective performance indicators	Positive relationship
Kumar, Jones, Venkatesan and Leone (2011)	Financial performance	Positive relationship
Menguc and Auh (2006)	Subjective performance indicators	Positive relationship
Morgan, Vorhies and Mason (2009)	Subjective performance indicators	Positive relationship
Narver and Slater (1990)	Financial performance	Positive relationship
Pelham (2000)	Subjective performance indicators.	Positive relationship

Table 3: Literature findings on the relationship between market orientation and performance

al., 2005) or innovativeness (Menguc & Auh, 2006). The validity of this relationship is also strengthened by the variety of firms and industries studied in the different articles, as well as that the positive relationship is found with a number of performance measures (e.g. sales, profit, return on investment, subjective). The establishment of a positive relationship is also in accordance with findings in two meta-analytical survey articles by Liao et al. (2010) and Kirca, Jayachandran and Bearden (2005). Both articles study a wide range of previous quantitative articles, and conclude that the link between business performance and market orientation has been fully established.

Liao et al. (2010) also state that research today has moved beyond establishing the relationship between performance and market orientation. Studying the moderating and mediating effects have been a growing research area in recent years. Competitive environment and intensity, technological turbulence and industry characteristics are common moderating effects being studied. Of the studies in Table 3, Homburg and Pflesser (2000) and Kumar et al. (2011) find that the relationship between market orientation and performance is strengthened in turbulent business environments. Moreover, Kumar et al. (2011) believe that the relationship is further strengthened in environments with strong competition.

Of the mediating effects, Hult et al. (2005) and Kara et al. (2005) believe that market orientation is linked to responsiveness, and that market oriented companies are better to act quickly on new knowledge gained. Menguc and Auh (2006) find that innovativeness enhances the effects of being market oriented, and together with Morgan et al. (2009), they highlight the importance of aligning firm capabilities with a market oriented behavior. This can also be seen in line with Pelham (2000), which emphasizes that incorporation of market orientation in a company should be aligned with its business strategy.

3.4.2. Market orientation's effect on innovation

The relationship between market orientation and a firm's innovativeness has seen a variety of findings. Although Kohli and Jaworski (1990) give strong support for the benefit market orientation should give to new product development, others have traditionally argued that marketing leads to poorer innovation activity and, thus, performance in the long run (Bennet & Cooper, 1981, Hayes & Abernathy, 1980; as cited in Atuahene-Gima, 1995). In Table 4, we highlight

Author(s) and year	Dependent variable	Result
Atuahene-Gima (1995)	New product market performance	Positive relationship
Atuahene-Gima (1996)	Market success and project impact performance	Positive relationship
Atuahene-Gima, Slater and Olson (2005)	New product program performance	Responsive behavior - Positive U-shaped relationship Proactive - Positive inverted U-shape relationship
Augusto and Coelho (2009)	Type of innovation	Dependent on the company's focus on the cultural elements
Han et al. (1998)	Subjective innovation performance	Positive relationship
Kahn (2001)	Product development and product management performance	Weak positive relationship
Lukas and Ferrell (2000)	Type of innovation	Dependent on the company's focus on the cultural elements

Table 4: Literature findings on the relationship between market orientation and innovation

the main findings from relevant literature and empirical studies on market orientation and innovation.

Generally, the empirical studies provided in Table 4 all show, to some extent, that there is a positive relationship between an organization's degree of market orientation and their innovativeness. Being market oriented allows the organization to adapt products so that they can better meet the market needs, which would increase its rate of success (Atuahene-Gima, 1996).

We note that Atuahene-Gima et al. (2005) find that effects that market orientation has on innovation depend on the type of market oriented behavior. For responsive companies, there is a positive relationship that occur at a specific point of market orientation. For proactive companies this relationship is negative after a specific point.

Literature also discuss how market orientation affects product newness. Atuahene-Gima (1995, 1996) argues that market orientation has a negative effect on product newness, which means that market oriented firms usually launch products that are familiar to the experience and patterns that the customer are used to. In his 1995 article, Atuahene-Gima further argues that market oriented is less required for new-to-the-world products, as they can be sold through their sophistication and complexity alone.

Augusto and Coelho (2009) and Lukas and Ferrell (2000) bring new light to the above debate as they discuss how the cultural elements of market orientation affects the type of innovation. Both articles argue that customer orientation facilitates new-to-the-world innovations, while interfunctional coordination favors more in-line innovation. The two articles disagree, however, on the effect that competitor orientation has on innovation. Augusto and Coelho (2009) find that it increases the new-to-the-world innovation. Contrary to this, Lukas and Ferrell (2000) find that new-to-the world innovation is negatively related to competitor orientation, and that it rather facilitate me-too innovations. The difference in result from Lukas and Ferrell (2000) can be explained by different study approaches, as Augusto and Coelho (2009) take a more firm-wide analysis, not just evaluating the effect on a single product launch. The effect seems to be evident when research look across different product lines within an organization.

3.4.3. Market orientation and firm size

Another studied relationship in market orientation literature is how market orientation relates to firm size. In his empirical examination, Liu (1995) finds that larger firms are more market oriented and argues that this can be due to resources availability, while Laforet (2008) does not find any relationship. On the contrary, Pelham (2000) finds that market orientation has a negative relationship with firm size, and argue that this is due to organizational complexity, resistance to adaptation and inertia. Thus, in accordance with Merlo and Auh (2009), it can be stated that the results are conflicting, and that more research is needed on the area.

3.4.4. Argumentation for proposition 3

Through the study of empirical studies, displayed in Table 3 and Table 4, it becomes clear that organizations increase their performance due to their market oriented behavior. Organizations with market oriented behavior also seem to experience positive effects on their innovativeness, although these effects are different pending on what cultural element within market orientation the organization focus on. Given the industry structure and its suitable environment for market orientation that has been argued for earlier, these effects should thus be also found in the maritime companies in Møre. This gives us proposition 3.

Proposition 3

The maritime companies in Møre that are market oriented are expected to have increased performance and innovation as an effect of this behavior.

3.4.5. Argumentation for proposition 4

As seen from the above two sections, there are generally great benefits associated with being market oriented, both related to performance and innovation. However, it is important to note that there are costs related to being and becoming market oriented. Having close contact with customers or benchmarking against competitors consumes resources, and can be seen as a cost. Being interfunctionally coordinated can also be costly if this means that a company must change their organizational structure, or if more time have to be spent on meetings and similar. Narver and Slater (1990) and Atuahene-Gima et al. (2005) indicate that a company can use too much resources on being market oriented. A company like this will use more resources on being market oriented than the benefits gained by the orientation. From a resource perspective, companies at this point should not become more market oriented.

It is plausible that the maritime companies in Møre will incur the costs elaborated on above if they wish to become more market oriented. At some point, these costs will likely exceed the benefits gained. By this argument, proposition 4 follows.

Proposition 4

It is expected that the maritime companies in Møre can use too much resources on being market oriented. As a result, the companies will use more resources on being market oriented than the benefits gained from the orientation.

3.5. Market orientation and discovery of market opportunities

The literature on market orientation has given limited attention to the direct effects that market orientation has on discovery of market opportunities. In this section it is argued how market orientation can affect this discovery, and it can, in its entirety, be seen as argumentation for propositions. Specific headings are therefore not given for the argumentation. Theoretically, this part of the thesis can be said to be quite exploratory, as it seeks to close the theoretical gap between opportunity discovery and both market orientation and strategic decision making.

3.5.1. The cultural elements and discovery of market opportunities

By being customer oriented, a company inter-

acts closely with customers to understand both present and future needs. Through the process of understanding these needs, it is likely that opportunities can be discovered. If for example a customer is in need of new technology or a partner with international experience, this can be exploited as an opportunity. These opportunities can be discovered directly when employees spend time with their customers to find new ways to satisfy their needs, as proposed by Slater and Narver (1994). An opportunity may also come to light if the company performs an analysis of what future needs its customers have. These two behaviors are similar to the responsive and proactive behaviors reviewed in Section 3.3. Similar to a proactive behavior, Sciascia, Naldi and Hunter (2006) find in their empirical investigation on small and medium entrepreneurs, that a market oriented behavior that consists of scanning the environment with a concrete focus for customers will enhance the likelihood of discovering entrepreneurial opportunities.

Based on the above arguments, proposition 5a is presented.

Proposition 5a [RQ1]

The maritime companies in Møre will discover market opportunities by being customer oriented.

Competitor oriented companies actively monitor their competitors to learn about what they do and what markets they target. Day (1994) propose that benchmarking and imitation are activities companies can perform to sense events and trends in the market. It is likely that opportunities can be discovered through these methods. For example by imitating a competitor that enters a new market, or by developing a product or service that is lacking in the competitor's value offering.

The maritime companies in Møre are surrounded by competitors, and these competitors will likely use new technology, target new markets or acquire other companies. By monitoring these activities, it is likely that a company can discover new opportunities itself. This leads to proposition 5b.

Proposition 5b [RQ1]

The maritime companies in Møre will discover market opportunities by being competitor oriented

It can be noted that the two arguments above is of a nature that is also found in strategic network literature; that companies are affected by other actors in their network. Håkonsson and Ford (2002), for example, argue that a company's relationships and resources can lead to major opportunities of innovation, through development and combined use with other actors. Contrary to research on market orientation, Håkonsson and Ford (2002) and other network researchers (e.g., Harrison, Holmen & Pedersen, 2010), is more focused towards a firm's active involvement to impact the network dynamics and the actors within it. This could be the result of a customer orientation and competitor orientation as well, but these behaviors are first and foremost used to observe and learn from the environment around the focal firm.

The effect that customer orientation and competitor orientation can have on opportunity discovery will likely increase in an interfunctionally coordinated organization. This is because all employees are aware of market information, which means that more people can pick up and identify an opportunity that occur. Proposition 5c is presented based on the above arguments.

Proposition 5c [RQ1]

The maritime companies in Møre will discover market opportunities by being interfunctionally coordinated.

3.5.2. The decision criteria and discovery of market opportunities

As the maritime industry has large investments in shipyards, ships and equipment, it is believed that these companies operate with a long-term focus. Given the size of the investments, it will be impossible to expect return on investments

in the first coming years, which implies that the companies have to be patient with their investments. Also, if a company is market oriented, any investment in customer and competitor orientation cannot be expected to be paid off in the nearest future.

In addition, the maritime industry is identified as a fairly conservative and slow paced industry, which allows for a long time-frame on decisions. The slow pace means that companies can make long-term plans, and does not have to focus excessively on making plans for a short-term, temporary marked environment. With the above arguments we propose proposition 5d.

Proposition 5d [RQ2]

The maritime companies in Møre will have a long-term focus when making decisions about market opportunities.

The maritime companies in Møre are all commercial and privately owned, and for companies like this, profitability is often considered to be one of the key objectives. Additionally, a number of the companies have a long history and have been profitable for years. As presented in Section 2.2.3, the different maritime segments have had a profit margin of 6-10 %, which at least indicates a profitability focus. As shown in Section 3.2.2, literature argue whether profitability is a characteristic for market oriented companies, or a characteristic for all companies. Regardless of this debate, it is, based upon the above argument, believed that companies in Møre regard profitability when strategic decisions are made. With this, proposition 5e is presented.

Proposition 5e [RQ2]

Companies in the successful maritime cluster in Møre will have a profitability focus when making decisions about market opportunities.

In accordance with Narver and Slater (1990) we believe that market orientation can be seen as a one-dimensional construct made up of the three cultural elements, and the two decision criteria. Therefore, as we believe all the three cultural elements lead to more market opportunities being discovered, a logical consequence for us will be to state that market orientation in itself will lead to more market opportunities being discovered. Similarly, as it is argued that the two decision criteria will be used, independently, when decisions about market opportunities are made, a consequence is that market oriented behavior affect the decision making. Hence, Proposition 5f can be considered as a summary of propositions 5a to 5e.

Proposition 5f [RQ1 and RQ2]

The maritime companies in Møre will discover market opportunities by being market oriented, and decide which opportunities to pursue based on this behavior.

3.6. Market orientation in the maritime industry

In this section we discuss how the characteristics of the maritime affects the need to incorporate market orientation in a business. The section can in its entirety be considered as argumentation for proposition 6.

As highlighted in Section 2.1.2 and Section 2.2.1, Norway and Northern Europe dominate the more specialized and innovate maritime segment, such as cruise ships and offshore vessels. This means that vessels are adapted to a customer's unique needs. To do this, close cooperation between the maritime companies and their customers is expected. This is necessary if the maritime company is going to be able to understand the customers' true needs, and to know where new development is needed.

Because of the specialized and innovative market segment, which the companies in Norway and Northern Europe operate within, a degree of competitor orientation is expected to be needed as the companies must understand their competitors' strengths, weaknesses and value offering.

Further, a degree of interfunctional coordination is expected to be found due to the culture in

Norway and Northern Europe, and also because the market characteristics will make it a necessity for the whole organization to be customer and competitor oriented.

Kumar et al. (2011) argue in their longitudinal empirical study on the relationship between market orientation and performance, that market orientation has become the cost of competing today, and no longer a source to competitive advantage. In line with this, and because of the characteristics of the maritime industry in Norway and Northern Europe, we believe that customers "demand" that their suppliers are market oriented, as they will not be able to deliver satisfying products and services without this orientation.

Proposition 6

The characteristics of the maritime industry in Norway and Northern Europe have made market orientation a necessity in order to compete, and not a source to competitive advantage.

3.7. How to become market oriented

Throughout this chapter we have presented literature and propositions, which implicitly argue that market orientation can create a competitive advantage for a company, and that companies therefore should be or become market oriented. This section is presented, even though propositions are not created, as support and guidance on how a company can become market oriented.

To become market oriented, several authors (e.g., Day, 1994; Gebhardt, Carpenter & Sherry, 2006) argue that an organization needs to change its organizational culture. This is in line with Narver and Slater's (1990) definition of market orientation as consisting of different cultural elements. An organization wanting to become market oriented must therefore create a culture where the entire organization is dedicated to deliver superior value to its customers (Day, 1994).

To change a culture, top management support is needed (Day, 1994; Jaworski & Kohli, 1993; Slater & Narver, 1994). Gebhardt et al. (2006) support this by stating that a change process, which needed to create a new culture has to be initiated from top management. Only after top management has created support for cultural change can other techniques or tools be utilized, such as establishing incentive and reward systems. Jaworski and Kohli (1993) suggest that top managers put emphasis on market orientation through continual reminders to employees, which is critical in order to be responsive to market development. For more detailed guides on how to incorporate market orientation in an organization, Gebhardt et al. (2006) offer a four step guide, while Day (1994) and Samat, Ramayah and Saad (2006) offer an analysis on how market orientation can be incorporated through the implementation of Total Quality Management. Readers interested in more detailed information on how to implement market orientation are encouraged to explore these articles.

Chapter 4

Strategic decision making

As firms discover opportunities, they need to make a decision on whether they should act on the opportunity or not. To understand how this process is done, and to be able to answer the second research question of this thesis, literature on strategic decision making is now reviewed. After a brief introduction in Section 4.1, we present the two main paradigms within strategic decision making; the rational model in Section 4.2, and the politics and power model in Section 4.3. For both models, we report on the relationship between the decision making model and decision or organizational performance. In Section 4.4 we discuss the role of intuition in decision making, and the chapter in ended with a presentation of proposition 7.

4.1. Introduction

Eisenhardt and Zbaracki (1992) define a strategic decision as one "which is important, in terms of the actions taken, the resources committed, or the precedence set" (p. 17). According to Dean and Sharfman (1996) a strategic decision can for example be the launch of a new product, to expand geographically, or to restructure an organization. Understanding the processes surrounding strategic decisions are important as these decisions shape the future of the firm (Eisenhardt & Zbaracki, 1992). Further, it is argued that a good strategic decision making process leads to a better decision (Dean & Sharfman, 1996).

Within strategic decision making, two concepts or paradigms are dominant; the rational model and the politics and power model (Eisenhardt & Zbaracki, 1992). Dean and Sharfman (1990), and Elbanna (2006) use the term procedural rationality, which is similar to the rational model, and the term proposed by Eisenhardt and Zbaracki (1992) will therefore be used. Next, these two paradigms are presented.

4.2. The rational model

The rational model, in its most basic form, assumes that human choices have a clear purpose. According to the rational model, actors enter a situation with known objectives, and these objectives determine the value of the possible consequences of an action. To make a decision, actors then collect relevant information, develop alternative actions and select the optimal alternative (Dean & Sharfman, 1996; Eisenhardt & Zbaracki, 1992).

Central to the rational model is the term bounded rationality. It was introduced by Herbert Simon (1957), and means that the decision maker is limited to the information he or she possesses. Thus, the decision maker attempts to make an optimal choice with the information he is aware of or is able to collect.

In the traditional rational model, there are three sequential steps (Eisenhardt & Zbaracki, 1992):

1. the identification phase,
2. the development phase, and
3. the selection phase of decision making.

The first two steps are usually seen as part of increasing the bounded rationality, and traditionally, these steps were seen to appear in sequence. A more recent version of the rational model proposes that these steps are conducted in unsystematic order, repeatedly, and in a cycle when decisions are made, and that goals and objectives develop over time as decisions are made (Eisenhardt & Zbaracki, 1992). Therefore, every decision process can be seen as unique. Further, Eisenhardt and Zbaracki (1992) state that decision makers can be rational in some ways, but not in others, and that the rational model is

more a multidimensional model, where the decision makers can show several behaviors.

To increase the bounded rationality, Dean and Sharfman (1996) argue that relying on structured analyzes are effective and that rationality can be increased by seeking more information and creating more viewpoints. To stimulate these processes, using a dialectical inquiry and having a devil's advocate can be beneficial (Dean & Sharfman, 1996; Eisenhardt & Zbaracki, 1992).

There exists a few obstacles to use the rational model when making decisions. Jones, Jacobs and van't Spijker (1992), argue that increasing the bounded rationality requires resources, which some organizations may lack. Further, the decision maker may have limited cognitive abilities, degrading the effectiveness of an analysis. Last, though one decision is found most rational after an analysis, it may not be viable due to external factors. For example if the decision has potential to create organizational conflicts.

In his literature review on empirical articles studying the rational model, Elbanna (2006) finds that the relationship between rational decision processes and organizational outcomes seems to be problematic, and that no consensus has emerged. The empirical results point in direction of a positive relationship, a negative relationship and no relationship. How environmental factors affect this relationship is also debated. However, Elbanna (2006) finds that an overweight of the studies find that the relationship between rational decision processes and performance is strengthened in high-velocity and turbulent environments. Dean and Sharfman (1996) state that in such a business environment, decision makers who fail to systematically collect and analyze information will more likely make the wrong strategic decision. Thus, they believe that a strategic decision making process where management make choices in light of potential factors, should be more successful than those who do not do so. On the contrary, Eisenhardt and Zbaracki (1992) argue that there is a need to be irrational, without a decision process, in fast-paced uncertain situations, which forces decision makers to behave intuitively.

4.3. The politics and power model

This paradigm argues that decisions are the result of a process where decision makers, who have different goals and priorities, come together through coalitions. Then, the preference of the most powerful will triumph. The process of resolving conflicts with competing preferences from individuals identifies this paradigm. The different preferences stem from different perspectives on the environment and the individual's position in it. Thus, within the eyes of the political model, each individual is rational or boundedly rational, but not collectively (Dean & Sharfman, 1996; Eisenhardt & Zbaracki, 1992).

In order to increase the power of the individual and win the conflict, people try to change the power structure through coalitions, lobbying, using information strategically or applying outside experts. This is labeled as engaging in politics to influence a decision.

Though politics were traditionally believed to be an effective method to create change and adaptations within an organization, Elbanna (2006) shows that most research today supports a negative relationship between political behavior and organizational outcome. Elbanna (2006) points out three reasons for why this negative relationship exists:

1. Political tactics may hamper open discussion and sharing of information. Decisions can therefore be made based on incomplete information, which according to Dean and Sharfman (1996) decreases the effectiveness of the strategic decisions.
2. A political process can be time-consuming, which may lead to delay for a decision. This can result in loss of opportunities or profits. Eisenhardt and Zbaracki

(1992) support this, and state that the ineffectiveness in itself can ultimately lead to poorer business performance.

3. Third, as argued by Dean and Sharfman (1996), political behavior can lead to an incomplete understanding of the environmental constraints. This can occur because the decision is centered around self-interest, and not around the environment. Further, political behavior can exclude alternatives because they are in conflict with a decision maker's self-interest. Thus, decisions are made on inferior information.

As a concluding note of the two dominant paradigms we note that literature argue that they are not mutually exclusive (Dean & Sharfman, 1996). Decision processes can, thus, occur with a mix of the two paradigms or with only one of them. Eisenhardt and Zbaracki (1992) state that an organization is best seen as a political system where the decision maker have limited cognitive abilities and are boundedly rational.

4.4. The role of intuition

There is limited research on the role of intuition in strategic decision making, and most research on intuition is conducted by psychologists (Elbanna, 2006). However, several authors argue that intuition is a part of the decision making process (Elbanna, 2006; Khatri & Ng, 2000). Eisenhardt and Zbaracki (1992) argued that studying intuition is a way to understand how decision makers actually think. Elbanna (2006) also states that making decisions based on intuition is increasingly seen as a viable approach today, because few strategic decisions have the advantage of complete, accurate and timely information.

Intuition is, according to Eisenhardt and Zbaracki (1992), incremental adaptations based on deep and intimate knowledge of the situation, which decision makers face. Khatri and Ng (2000) suggest that intuition is subconscious, complex, quick, not based on emotions, and that it is not biased. Further, Khatri and Ng (2000) operationalize intuition, and argue that there are three indicators of intuition, and Elbanna (2006) states that these indicators are widely used in literature. They are therefore presented below:

- **Reliance on judgment:** As decisions based on intuition are often needed when decisions are required to be made fast, judgment might be needed (Khatri & Ng, 2000). This can be because the decision is made in absence of previous adequate information and without previous precedence.
- **Reliance of past experience:** According to Khatri and Ng (2000) and Prietula and Simon (1989), intuitive synthesis can be represented as a form of experience that is based on knowledge from similar problems. Therefore, whether a decision maker can make good intuitive decisions are highly related to the decision maker's amount of experience.
- **Gut-feel:** Parikh (1994), as cited in Khatri and Ng (2000), describe intuition as a process of feeling out a problem trusting one's gut feel. In such situations, Elbanna (2006) states that decision makers find it hard to articulate what exactly a decision is based upon.

Elbanna (2006) states that most empirical research studying the relationship between intuition and decision outcome are still initial research with shortcomings. The research lack generalizability, and most research does not clearly examine the relationship between intuition and decision outcomes.

4.4.1. Argumentation for proposition 7

Given the above theory, it is probable that maritime companies in Møre use different techniques to increase their rationality. The maritime industry is characterized by large investments, making thorough analyzes more needed and probable. Further, the Norwegian culture, with low power distance and high degree of openness, should

allow different perspective to come to light and should be well suited for knowledge diffusion in an organization. These aspects allow the rationality to increase, which is important in order to properly analyze the market and future effects of a decision.

The maritime companies in Møre have, as shown in Section 2.2.3, a long history, and several companies are run and owned by people with strong personalities. Traditionally, it can be expected that personal interests and meanings have affected decision making processes, and this is further strengthened by the strong personalities found in several companies. Hence, it is expected that political processes will be evident.

A number of companies in Møre are led by people with a lot of experience from the maritime industry. It is also probable that it sometimes will be hard to collect and analyze relevant data. Historically, it is also arguable that decisions were often based on the leader's gut feel more than on an analysis. It can be expected that this is still evident in the maritime companies, and it is proposed that a degree of intuition will be evident in decision making processes.

Proposition 7 [RQ2]

A high degree of variation is expected to be found in the decision making processes used by the maritime companies in Møre. Some companies will actively seek to broaden their rationality through different techniques, while other organizations will make decisions after a more political process where different coalitions argue their view. Further, it is probable that some intuition will be used when decisions are made.

CHAPTER 5

CLUSTERS

Presenting theory on clusters is useful to fully understand the business environment, and how this affects the maritime companies in how they operate. The theoretical field has therefore been chosen as supportive literature. The chapter starts with an introduction of the literature field in Section 5.1. Then we discuss the different sources to locational competitive advantage in Section 5.2. In Section 5.3, the common effects of being in a cluster is discussed, before the chapter is ended with proposition 8.

5.1. INTRODUCTION

According to Porter (2000), one of the most prominent authors in the academic field of cluster theory, "a cluster is geographic concentrations of interconnected companies, specialized suppliers, service providers, firms in related industries, and associated institution (e.g., universities, standards agencies, trade associations) in a particular field that compete but also cooperate" (p. 15). Accordingly, geographic proximity has been seen as a factor that facilitates transmission of knowledge and the development of institutions, which again can enhance cluster effectiveness (Karaev, Koh & Szamosi, 2007). However, Porter (1998) argues that a clusters' boundaries depend mainly on the linkages among the cluster participants and complementarities among industries and institutions.

There are many examples of successful clusters worldwide. Clusters such as the furniture, ceramics and food cluster in Northern Italy focus on "traditional products", while the Silicon Valley cluster is dominated by high technology companies. This shows that clusters are not limited to specific product categories, but most often a specific cluster focus on one specific product category.

5.2. SOURCES TO LOCATIONAL COMPETITIVE ADVANTAGE

According to Porter (2000), competitive advantage is affected by location through its influence on productivity and especially on productivity growth. Firms can become more productive if they employ sophisticated methods, use advanced technology, and offer unique products and services.

The sophistication and degree of how companies compete in an area is strongly influenced by the quality of the microeconomic business environment (Porter, 2000). To assess the microeconomic business environment, Porter introduced the diamond model (Figure 6) in 1990, which assesses the effect of location on competition through four interrelated factors.

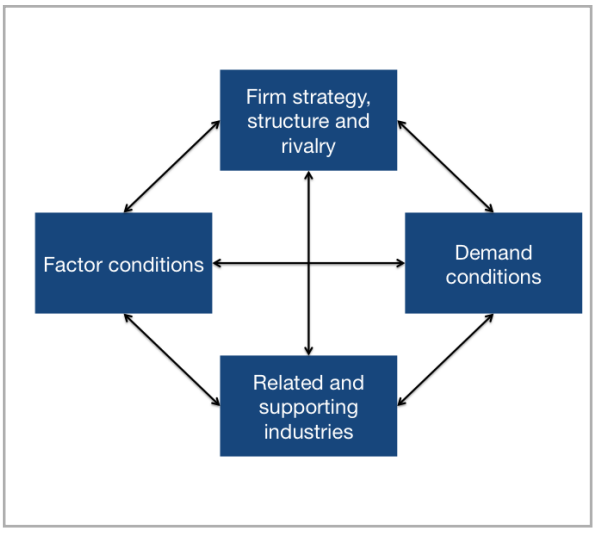

Figure 6: The diamond model
Source: Porter (1990)

A description of the four main factors is presented in Table 5.

The argument is made that when the factors described in Figure 6 and Table 5 are strong and

Factor	Description
Factor conditions	Factor conditions include everything from tangible assets such a physical machines to information and university research institutes that firms can draw on in competition (Porter, 2000). If firms are to improve their productivity, the factor inputs must increase their efficiency, quality and specialization to particular cluster areas.
Firm strategy structure and rivalry	This factor refers to the rules, incentives and norms governing the type and intensity of local rivalry (Porter, 2000). Porter (1990) argue that the presence of a strong local rivalry is a powerful stimulus to the creation and persistence of competitive strategy. For an advanced economy to emerge, vigorous local rivalry must develop, meaning that the rivalry moves from low wages to low total cost, and ultimately to a focus on differentiation in addition to a focus on cost (Porter, 1990, 2000).
Demand conditions	Demanding local markets is important for local competitive advantage to emerge (Porter, 2000). The presence of demanding customers pressure firms to innovate faster and produce better products, which can give them a global or international competitive advantage (Cavusgil, Knight, & Riesenberger, 2013). Also, it is pointed out that the character and quality of the demand is far more important than the size of the demand (Porter, 1990, 2000).
Related and supporting industries	This factor refers to the existence of clusters of suppliers, competitors and complementary firms that excel in particular industries (Cavusgil et al., 2013). Competitive local suppliers can create a downstream advantage because they can deliver the most cost-efficient inputs in the best manner. As important as local suppliers, is also the presence of local supporting industries and firms. Operating in an area where a mass of related industries are present provide advantages through information and knowledge synergies, and economies of scale (Cavusgil et al., 2013; Porter, 1990).

Table 5: Description of factor conditions that affect locational competitive advantage

present, a locational competitive advantage can occur. A well-developed cluster provides productivity and innovation benefits for its participants that are hard to match by firms elsewhere (Porter, 2000).

5.3. Common effects of being part of a cluster

Literature points to several advantages of participating in a cluster, and the whole point of a cluster is that the linkages among its members creates a whole that is larger than the sum of its parts (Karaev et al., 2007; Porter, 1998). According to Porter (1998, 2000), there are three distinctive advantages/effects of being in a cluster:

Enhanced productivity

Firms in a cluster can operate more productively because of sourcing of inputs, easier access to information, access to technology and institutions, and easier coordination with related companies. Further, Porter (1998, 2000), argues that the productivity can be enhanced through the following factors.

- **Access to specialized inputs and suppliers:** A vibrant business environment surrounding companies in a cluster makes it less costly to get access to specialized inputs such as components, machinery, business services and qualified employees.
- **Access to information:** Information is accumulated by all the firms in a cluster, and

the members of the cluster have preferred access to this information.

- **Complementarities:** Members of a cluster complement each other, and the value for a buyer is increased as a typical cluster can provide a wide range of services
- **Access to institutions and public goods:** Investments made by the government and local companies such as investments in infrastructure, education programs and laboratories can enhance the benefits perceived of cluster participants.
- **Better motivation and measurement:** Peer pressure in a cluster increases motivation because of the desire to look good in the local community. Clusters also ease the process of measuring in-house activities as several other local firms perform similar activities, which makes it easier to assess its own efficiency.

Enhanced innovation

Cluster participation offers potential advantages for innovation, and some of the characteristics that enhance productivity have an effect on innovation as well. First of all, cluster participants are often more able to perceive new buyer needs, which in some cases can be a precondition for innovation. In the same manner, perceiving new technological, operating or delivery opportunities are easier for cluster participants because they are surrounded by competitors, universities and research labs, which they can learn from. Additionally, competitive pressure, peer pressure and constant comparison, rise the motivation and need to innovate (Porter, 2000).

However, Porter (1998, 2000) highlights that clusters can deter innovation if groupthink occurs, which could be the case if the cluster participants share a common way of competing. This could result in old behaviors being used, avoiding new ideas and create rigid structures that prevent improvements to be installed. Another hazard of being in a cluster, is that it might not support new-to-the-world innovation, as that tends to void the existing knowledge base, talent and infrastructure in the cluster.

Enhanced new business formation

Many new businesses are founded within clusters rather than in isolated locations. This happens for a variety of reasons. First, it is attractive to enter a cluster because of better information about opportunities. Individuals in a cluster can perceive gaps in products and services, which they exploit by starting a new business (Porter, 1998, 2000). The barriers to enter are also lower since resources and infrastructure are already available. The existence of a cluster often also means that there is a local demand in place. Last, a business formation has a positive feedback effect, because more cluster members amplify the cluster benefits.

5.3.1. Argumentation for proposition 8

It can be argued that the four main factors introduced by Porter (1990, 2000), which affects the locational advantage, ease the process of being and becoming more market oriented in the cluster in Møre. As seen in Section 2.2.3, the cluster in Møre is complete, which means that the maritime companies are surrounded by strong competitors, which should facilitate competitor orientation. Further, the presence of local customer demand should also facilitate customer orientation, and make it easier to understand their needs. Additionally, having supportive organizations like NCE Maritime and universities close by will give companies an advantage in anticipating future trends and needs, something that can be used to give their customers better products and services. It is not believed that the cluster affiliation affects the ease of being interfunctionally coordinated as this is an internal matter. However, since the two other pillars of market orientation is affected by this affiliation, it can be expected that being market oriented is made easier by the cluster affiliation.

The above argument argues that it is easier to be market oriented for maritime companies in the cluster in Møre. It can also be argued that this effect is strongest locally, meaning that it is easier to be competitor and customer oriented towards competitors and customers that belong to the same cluster. Though not mentioned in

other literature, this may negatively affect the ease of being internationally or globally market oriented. Since it requires resources to be locally market oriented, the global market environment might be neglected. The danger is that the maritime companies in Møre become too shortsighted, and put an overly emphasis on their local cluster. With the above arguments proposition 8 is presented:

Proposition 8 [RQ1 indirectly]

Being part of a cluster will make it easy for companies to be locally market oriented, but this may negatively affect the global market orientation.

We note that this proposition has an important dependence on proposition 5f. If we assume that proposition 5f and 8 is true, it gives two important results. First, that the maritime companies in Møre will discover more opportunities locally due to the cluster. This is because support for proposition 5f means that companies discover market opportunities by being market oriented, and if proposition 8 is supported, this means that it is easier to be locally market oriented. Thus, more local opportunities will be discovered due to the cluster. Second, it also means that fewer international opportunities will be discovered, because less global market orientation will lead to less global opportunities, based on the same argument as above.

CHAPTER 6

SUMMARY OF PROPOSITIONS

Throughout our literature review, we have presented theoretical propositions. We now give a preliminary conclusion to the two research questions of the thesis, before we present an illustration that summarizes the propositions.

> *RQ1: How do maritime companies in a successful cluster discover new strategic market opportunities?*

Propositions 5a, 5b, 5c, 5f and indirectly 2 and 8 have been presented to help us answer RQ1. Based on the argumentation underlying propositions 5a, 5b, 5c and 5f, we believe that the maritime companies in Møre discover opportunities through customer and competitor orientation, interfunctional coordination, and in effect through the cultural elements of market orientation. Furthermore, through proposition 2, we expect that a responsive and proactive behavior can lead to discovery of existing and latent customer needs that can provide the maritime companies with opportunities. Based on proposition 8, we believe that the cluster affiliation of the maritime companies will make it easier for them to be locally market oriented, which in effect will provide the companies with more local opportunities.

> *RQ2: How do maritime companies in a successful cluster choose which opportunities to pursue?*

Propositions 5d, 5e and 7 have been presented to help us answer RQ2. Through propositions 5d and 5e we believe that the maritime companies have a long-term and profitability focus when they decide on which opportunities to pursue. Based on proposition 7, we expect the decisions to be made in a variety of ways. More specifically through rational analyzes and procedures, through political processes and by using intuition.

An illustration of all the propositions is given in Figure 7. The illustration is divided into three main parts, in accordance to the structure of the propositions. To the left, the general propositions, which are related to market orientation, are given. These propositions form a basis, as it is seen necessary to establish whether the studied companies are market oriented and other related issues. These propositions are propositions 1, 3, 4 and 6.

The propositions intended to help us answer RQ1, are found in the middle, while the propositions related to RQ2 are given to the right in the illustration.

The arrows indicate how the propositions affect each other. As illustrated, proposition 1 affects a number of other propositions, as market orientation is our theoretical foundation. For example does it affect proposition 2, which investigates the type of market oriented behavior.

We note that propositions 2 and 8 lie inbetween the general propositions and the propositions related to RQ1. This is because they are more general of nature, but indirectly affect opportunity discovery. Hence, the dotted lines.

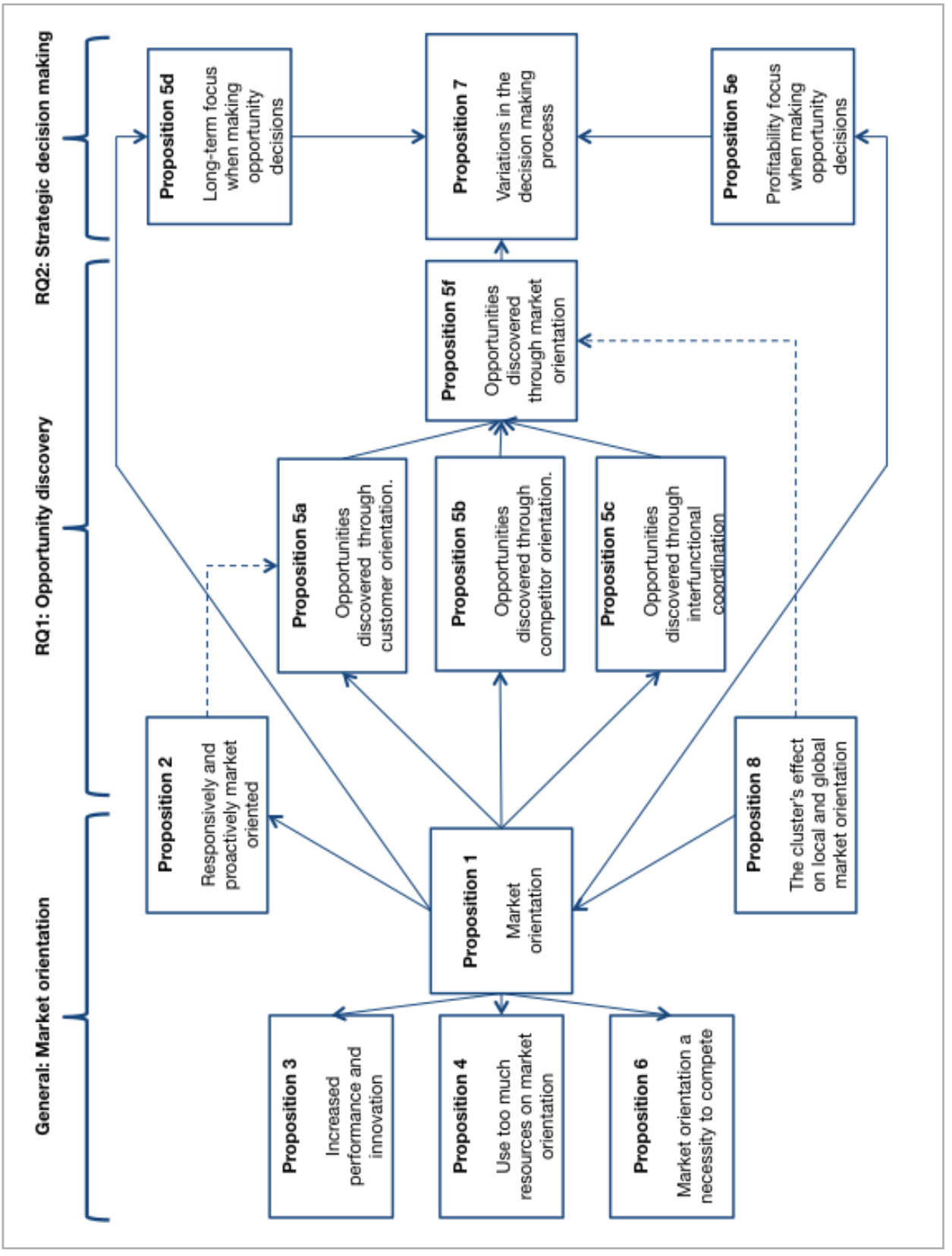

Figure 7: Illustration of theoretical propositions

METHODOLOGY

Chapter 7

Methodology

This chapter provides documentation on the methodology used in this study. We first describe our research design and some theoretical terms that are used throughout this chapter in Section 7.1. In Section 7.2 and Section 7.3 we give an overview of how our industry and literature review were conducted, respectively. We then present our empirical study, and how the interviews were performed in Section 7.4. An overall evaluation of our research methods are given in Section 7.5, and we end this chapter in Section 7.6 with some critical reflections related to our research.

7.1. Research design and theoretical terms

7.1.1. Qualitative research strategy

The purpose of this study is to reveal how maritime companies in a successful cluster discover new market opportunities, and how they decide which opportunities to pursue. To answer these questions, a qualitative research strategy was chosen, as qualitative research seeks to answer questions about particular, localized occurrences or contexts, while also focusing on understanding the world through an interpretation of that world by its participants (Bryman, 2012).

Further, to answer our complex research questions, a multiple case study approach was found most relevant since a case study is appropriate when there are more variables of interest than data points (Yin, 2013). A multiple case study would also allow us to compare different cases with others, increasing the strength of our findings.

7.1.2. Theoretical terms

A case study is a complex research form, and assessing the trustworthiness and credibility is important to ensure high research quality (Yin, 2013). To evaluate our research we draw upon four criteria presented by Yin (2013). As these are discussed throughout the chapter, they are defined here for convenience:

- *Construct validity:* the identification of correct operational measures for the concepts studied.
- *Internal validity:* refers to the degree of which causal relationships are established.
- *External validity:* refers to the degree of generalizability of a study.
- *Reliability:* explains to which degree a study, if replicated, yields the same results.

7.2. Industry review

To get an in-depth understanding of the maritime industry, a thorough industry review was conducted. Our project thesis, conducted in the fall of 2013, also analyzed the maritime industry, which gave us a good starting point for our industry review. An outside-in approach was chosen, where we initially focused on the maritime industry as a whole, before we focused more specifically on the maritime industry in Møre, with a focus on the offshore segment.

Our industry review provided us with a context for answering the research questions in this thesis. It also enabled us to better prepare for the interviews that were conducted. The information was gathered through online search, industry papers, organizational websites and news articles. Our industry review can be characterized as having a wide approach, as we sought to include all relevant material on the topic. The broad and

more unstructured approach was also needed as doing a structured industry review is challenging because there is a lack of specific and defined databases to find information in. Also, because we wanted to include the most recent information, searching for information from a wide variety of sources was considered appropriate. We have tried to confirm our information through data triangulation by using several sources where possible.

7.3. Literature review

Based on our research questions we sought to find theoretical perspectives, which would help us analyze and answer them in a proper manner. After reading papers related to several strategic perspectives, and by using key learnings from our project thesis, market orientation was chosen as our main theoretical perspective. Market orientation was chosen as it seemed like an interesting research field, which would help us to answer both our research questions. Also, we were surprised to find limited market orientation literature, which focused explicitly on the discovery of market opportunities. As a result, we saw an opportunity to expand the research area.

To analyze how the maritime companies decide which opportunities to act upon, literature on strategic decision making was found suitable. Further, as the maritime companies in Møre are part of an industrial cluster, we found it appropriate to include cluster theory as a supporting literature. As a result, our literature review includes three different literature areas; market orientation, which is our main focus, strategic decision making and cluster theory.

Our literature review on market orientation was guided by a semi-structured approach. First, a literature search in the databases Scopus Elsevier and ScienceDirect was performed to find our initial articles. The databases were chosen due to their wide coverage. As said, market orintation literature has payed limited attention to opportunity discovery, and due to this we had to take a broad approach when searching for literature to get an overview of the research area in general. Therefore, keywords such as "market orientation", "market-orientation" and "marketing-orientation" were used, and this provided us with a list of approximately 170 well-cited articles. Of these articles, we read the abstract of the 80 most cited articles to discover the most salient work on the area. This provided us with a list of about 25 articles, which we found to be relevant for the thesis. Further, we tried to discover market orientation articles that focused on discovery of market opportunities. To do this we used keywords such as "market orientation AND opportunity discovery", "market orientation AND market discovery", "market orientation AND opportunity sensing" and "market orientation AND market opportunity". However, as literature has yet to focus on such research, this left us with few new articles.

After our initial structured review, a more unstructured search was conducted, where we performed reference list screenings to discover remaining well cited articles in the field. More search in Google Scholar, with a wide variety of keywords, were also performed. This allowed us to discover more of the recent work, and also work that was excluded in our structured selection, but which still gave us valuable insight.

For the review of literature on strategic decision making, a more narrow approach was used. Initially search on Google Scholar was conducted to identify the most cited literature on the field. Through these articles, more relevant articles were discovered by investigating the articles' reference lists, and by doing more searches in areas of interest.

As the research area on clusters has been considered as more supportive literature, we chose to limit our attention to the most influential articles, which were mainly articles by Porter (e.g., 1998, 2000). This choice was also made due to the time constraints for this thesis.

For the selection of articles, three criteria were

used for all the research areas:

1. The articles had to be accessible through the NTNU library's agreement, or through open access.
2. The articles had to be in Norwegian or English. All the academic articles we ended up with were written in English.
3. The academic articles had to have been published in a journal.

7.4. Empirical data

A multiple case study has been utilized for this thesis, and data for each case was gathered through interviews with one or more representatives from each case company.

To select our sample firms, a number of companies in the Møre-region was contacted after examining a company member list at www.nce-maritime.no. In total, five companies were interviewed specifically for this thesis, in addition to one interview with a supportive organization, NCE Maritime. By interviewing the organization, more unbiased data could be collected, and data triangulation would also be enabled. The reason for interviewing a number of companies was to increase the internal validity of the study. If general trends between different case would be found, the internal validity would be strengthened.

When deciding on our sample firms we wanted to include companies from the whole value chain, in accordance to Figure 3, shown in Section 2.1.1. Our final sample included firms from three segments of the industry: shipowners, shipbuilders and equipment suppliers. The two shipbuilders also had activities as ship consultants. By referring to Figure 4, companies from all segments present in the Møre-region were then included, as end users and chartering companies are not present in the cluster.

In addition to the above interviews, five more interviews were conducted in relation to another research project, which the authors have been involved in. This research project also focused on maritime companies from Møre, but with a different focus. However, relevant information was included in the data foundation for this thesis.

7.4.1. Interviews

The six interviews were conducted in a semi-structured fashion. This was chosen as it allows for flexibility and opportunities to investigate interesting topics more in detail (Sage, 2013). However, to ensure a similar structure for each interview, an interview guide was created (Appendix A). This guide was created based on the literature review, to ensure construct validity. To measure market orientation in the different companies, questions were based on scales and statements presented by Narver and Slater (1990), which strengthens our construct validity. Prior to each interview, a short version of this guide was also sent to each interviewee, so that they could prepare for a more fruitful discussion. Each interviewee was also asked to prepare an opportunity-example that would allow us to get deeper into the process leading up to its discovery and the decision making process around it.

Each interview was audio-recorded and notes taken simultaneously. Both of the authors were present on every interview, which had a length of about an hour.

The interview with NCE Maritime had a bit different structure than the others, since it is an external representative. No opportunity example was discussed, but instead the interviewee elaborated about some program events the organization arranged in order to let firms discover opportunities through them. To get a more unbiased view, and to facilitate for data triangulation, the representative from NCE Maritime was also asked to describe and discuss the different firms in the cluster.

For the additional interviews, a different interview guide was used. Due to the different focus of these interview, only the limited data that

was found relevant for this thesis, was included. Other than that, the interviews had the same semi-structured fashion and they all lasted for an hour and were audio recorded.

7.4.2. Empirical analysis

After each interview, we discussed the main findings with each other in order to ensure that we had the same perception of each firm. This also increased the internal validity, as it should remove spurious relationships from being established.

All interviews were thereafter transcribed in Norwegian. It was then sent back to the interviewee for proof-reading, which resulted in some additions and occasional corrections, in addition to some parts being made anonymous. We later translated and shortened the transcribed interview and presented it in this thesis with a structure that the reader would find familiar. In the summaries included in the thesis, the authors' interpretations have also been included, but clearly delaminated from the empirical data. This is believed to increase the internal validity as readers can easily understand how different conclusions have been reached.

7.5. Overall evaluation of research methods

Through the chapter, the different criteria by Yin (2013) have been discussed where appropriate. We now evaluate our research methods on an overall level.

7.5.1. Construct validity

We have obtained construct validity throughout the work with this research study by using a number of data sources, which Yin (2013) proposes should increase construct validity. As we relied much of our data collection on firm interviews, it was important for us to include an interview with an external representative (NCE Maritime), in order to assess the statements by the company representatives we met.

Yin (2013) proposes to establish a chain of evidence to increase construct validity, and this has been ensured by including case summaries in the thesis

By basing our interviews on our literature review, the construct validity should be further strengthened.

7.5.2. Internal validity

Ensuring internal validity is especially important in the analysis phase as it is important to establish the correct causal relationships (Yin, 2013). This thesis utilize cross-case synthesis in order to match interview findings against intended outcomes outlined in the theoretical propositions. The delimitation of interview statements from our analysis should also strengthen the internal validity, as this structure should also make it easy for the reader to follow our reasoning, and understand how our conclusions have been reached.

We have tried to not let our own subjective opinions and interpretations affect our analysis. The use of two researchers has made is possible to cross-check our analyzes and has therefore strengthened our validity. Further, our work has been reviewed by our supervisor numerous times.

7.5.3. External validity

Since we have studied a specific industry, the generalizability is limited. Other industries may have other characteristics and discoveries may evolve differently. The lack of external validity is more due to the nature of our problem statement, rather than our research methods. Other researchers who wish to use our methods in other industries should, therefore, use them with caution. However, by the use of theory we were able to establish theoretical propositions that might be generalized among other industries. However, since we are among the first to investigate opportunity discovery within the field of market orientation, the propositions should act as a foundation. If other case studies confirm

the propositions and findings provided in this study in other industries, generalizability can be strengthened.

7.5.4. Reliability

To ensure reliability, we have described all the steps we have performed in our research, as proposed by Yin (2013). Our methods used to conduct a literature review, industry review, interview and data collection and analysis have been elaborated on in this chapter. If these methods are replicated, the results should be similar.

Our literature and industry review have been partially structured and partially unstructured. By following the steps for the structured part of our literature review, the same foundation of articles should be obtained. However, since the rest of articles were found and selected based on subjective measures, obtaining the complete list of articles would be difficult.

Due to the semi-structured nature of our interviews, it is likely that the data collected from new interviews also would be slightly different. Also, because of our open-ended questions, a respondent would probably not answer the same question in the same way, something that weakens our reliability. However, our interview guide can be found in Appendix A, and by using this and by following the other steps mentioned above, we believe that the empirical findings should be similar.

7.6. Critical reflections

For this study we chose market orientation to be the main theoretical domain at an early point of our work. We acknowledge that in order to provide appropriate answers to our research questions, we could have chosen other theoretical fields that could provide sufficient answers, if not better. We do, however, have confidence in the procedure that lead to the choice of market orientation as our theoretical foundation. Additionally, by choosing market orientation as a theoretical field, we were able to expand the research area.

In our literature and industry review, we have strived to include the most salient and relevant information. However, we do not propose that we have included all relevant reports and articles. Also, our more semi-structured approach might have led to a biased selection of reports and articles. Some important information may therefore have been overlooked.

Our data collection provides us with a perception of the maritime industry in Møre and its companies. The study is limited to the extent to which our interviews actually reflect the companies in the industry, as we make assumptions based on a limited number of interviews. The interviews were further conducted with a limited number of people, which may have a biased and overly positive view of the firm they work in and the industry in general. We could have received different answers if we asked the same questions to other persons in the organizations. However, since we mainly met people in the management or employee's with strategic leadership roles, we do believe that they had a good overview of the firm and its state.

The research topic we attempt to collect appropriate data for, can also behold a sensitive nature for the firms we interviewed. This can lead to dishonest answers and interviewees that omit to answer to the best of their knowledge. This limit the findings provided in this study.

After having taken these critical reflections into account, we still believe that our master's thesis brings value to those interested in the maritime industry in Møre and for researchers interested in discovery of strategic market opportunities, the field of market orientation and the field of strategic decision making.

Case studies

Chapter 8

Case studies

In the following, the interview and the authors' interpretations are presented. The interviews are all presented in a similar matter. First, a general description, history and context is given. We then present one or more market opportunities discovered by the case company, and we then interpret market orientation, strategic decision making and the cluster affiliation in relation to this opportunity. Then a more overall discussion is given, as we discuss market orientation, strategic decision making and cluster effects for each company in general. The interviews are all ended with a brief summary.

By interviewing key personnel in maritime companies located in the Møre region, it can be revealed how the maritime companies discover market opportunities and how they decide which opportunities to pursue. Coupling interview findings with the theoretical propositions will, thus, prepare for proper answers to the research questions of this thesis.

- Comment: The replies of the interviewees are denoted with normal type font, while our analyzes and interpretations are denoted like this, in blue.

8.1. The case companies

Six interviews were conducted specifically for this master's thesis. Five of these interviews were with maritime companies located in Møre, and one was done with the supportive organization, NCE Maritime. All interviews were conducted between the 25th and 28th of March, 2014.

Additionally, five more interviews were conducted in relation to another research project on the 12th and 13th of May, 2014.

The case companies differ from each other in several ways. They are different in size, maturity and position in the maritime value chain. Such differences enable analysis of deviations in how opportunities are discovered in companies with different characteristics.

In Table 6, a short presentation of key attributes and quick facts of each case company is given, and the companies are categorized according to the maritime value chain presented in Section 2.1. All shipowners interviewed wanted to stay anonymous, and company specific information is therefore not given to ensure that they are not identified. Furthermore, some of the information given in Table 6 is not applicable for NCE Maritime.

Company name	Number of interviews	Segment	Established	Number of employees	Revenue (2012)
Norwegian Shipowner (anonymous)	1	Shipowner	Not given	Not given	Not given
VARD	1	Shipbuilder/ship consultant	1998	1000	9 billion NOK
Ulstein	3 (4 representatives in total)	Shipbuilder/ship consultant	1917	800	2 billion NOK
Seaonics	1	Equipment supplier	2011	35	91 million NOK
Kongsberg Evotec	1	Equipment supplier	2006	90	290 million NOK
Norwegian Shipowner 2 (anonymous)	2	Shipowner	Not given	Not given	Not given
Norwegian Shipowner 3 (anonymous)	1 (with two representatives)	Shipowner	Not given	Not given	Not given
NCE Maritime	1	External organization	2006	Not applicable	Not applicable

Table 6: Presentation of the case companies

Source: Proff.no (2014) and interviews

8.2. Norwegian Shipowner (NS)

The company is a large Norwegian shipowner within the offshore segment. NS has chosen to stay anonymous throughout this study, and its year of establishment and size will therefore not be revealed.

The interviewee has 18 years of experience from the offshore industry. In NS, the interviewee is employed as Chief Operating Officer (COO), and is responsible for chartering, sales and operations.

8.2.1. History and context

NS has a long history of owning fishery vessels, but within the last ten years the company has invested heavily in offshore vessels. Today, the company is mainly focused towards the PSV market, while it also has vessels for the anchor handling market and a number of vessels for the offshore construction market.

The vessels owned by NS are on both long-term and short-term contracts. Long-term contracts are favorable due to predictability, while short-term contracts are favorable because of traditionally higher margins. NS prefers to have a number of vessels on long-term contracts, but the interviewee mentions also the importance of being visible and present in the spot marked in order to achieve new customer relationships. 70 % of NS' vessels are on contract out 2014.

All of NS' customers operate on the Norwegian and British continental shelf.

8.2.2. Strategic market opportunity example

A recent market opportunity occurred when a large oil and gas operator wanted an Inspection, Maintenance and Repair (IMR) vessel and approached several subcontractors to compete for this tender. One subcontractor, which had an ongoing close relationship with NS, initiated cooperation with NS so that they could win the tender. Together they decided to build a brand new vessel, built after the specifications of the oil and gas company. The subcontractor ultimately won the contract with the oil and gas company as it could offer a vessel that fulfilled its specifications to a reasonable price.

In this example, the contract between NS and the subcontractor lasts eight years, but the investment costs for the vessel will not be paid back until after this time period. The interviewee highlights that financial factors are not the only criterion used when deciding to act on contracts like this. In this case, the end customer is a well-known oil and gas company, and building relationships and reputation were also considered important.

- It seems that market orientation, or more specifically customer orientation, was important for the above opportunity. Without its customer relationship, the opportunity would not have occurred to NS. The example does also indicate a long-term orientation at NS. Building relationships and reputation is seen as long-term considerations, and the payback-time accepted for this specific opportunity also indicates a long-term mind set.
- In regard of the decision making process little is revealed through this example.
- The example is not influenced directly by the cluster, as both the customer and the operator are not affiliated with the cluster.

8.2.3. In general

Market orientation

Generally, the COO states that decisions to act on a market opportunity is based on market insight as well as on the financial options provided by the shipbuilder. The interviewee states that "NS has traditionally built vessels on speculations, and it has often been a gamble." In fact, every vessel the company has built have been on speculation, except in the example case provided above.

Customer contact is mainly the responsibility

of the interviewee (COO), and the company does not have key account managers or similar. According to the interviewee, this is a potential area of improvement for NS.

When NS contracts a vessel to be built, representatives from the customer (if they have any), the design company and the shipbuilding company are involved. This is done to ensure that all specifications are met throughout the value chain. Related to work on discovering market opportunities, the interviewee state that this work does not include a lot of cooperation across departments.

- It seems fair to say that NS does not have a distinct market oriented culture or an awareness to obtain it. As most ships are built on speculation, the example elaborated on in the interview does not provide signs of a customer oriented culture. Market orientation does not seem important for NS.

Decision-making

In decision making processes, the COO states that the CEO, the company board and himself are mainly involved. The interviewee states that NS does not have any structured processes or steps that are conducted when the company makes a decision, and that the basis for a decision is the top management's market insight, the CEO's gut feeling, and input from shipbrokers and similar.

- From the interview, it seems that NS takes an unstructured approach to decision-making based on intuition. It is revealed that the company does not perform any specific or fixed analyzes or steps when decisions are made.

Cluster

The biggest advantage of being a part of the Møre cluster, according to the interviewee, is that NS has close access to large suppliers in the whole value chain. Additionally, NS take advantage of the good renomé of the cluster, which can be used when working with new potential customers.

Being part of the cluster also makes it easier for NS to have a good overview of the market and the technological development. The interviewee does not provide any other benefits, but comments that when competing in the global market, price and product quality is much more important than the cluster affiliation.

- The effects of being in the Møre cluster seems to be more related to closeness to relevant companies and effects are drawn from having a good overview of the market and technological development.

8.2.4. Summary

Through the interview with COO, we are left with the impression that market orientation is an unfamiliar behavior at NS. Though the firm is customer oriented to some degree, it is considered to have a low degree of the other two cultural elements. NS does make decisions with a long-term focus and profitability in mind. In regard of its decision making process, NS has an unstructured approach where mainly the top management seems to be involved.

8.3. VARD

VARD is a global shipbuilding company, constructing advanced offshore and other specialized vessels. VARD has about 1000 employees, and the company had a revenue of 9 billion NOK in 2012.

The interviewee was Anne Seth, who works as a Business Development Manager. She has worked six years in the company and holds a Master's degree in Business Administration from NHH.

8.3.1. History and context

In 1998, Aker Yards was founded by merging a number of shipyards in Norway into the organization, which grew in number and size through the coming years. After being stock listed in 2007, Aker Yards ASA was bought by the Korean STX group in 2008. Aker Yards was the largest shipbuilding group in Europe at the time. In 2013, the company again shifted owners, this time to the Italian shipbuilding group Fincantieri, who still controls the company. Subsequently, the name of the Norwegian establishment was changed to VARD.

Today, VARD mainly focuses on construction of offshore and specialized vessels used for oil and gas activity, but it also build LNG-powered ferris and fishing vessels. Additionally, since 2007, VARD has also sold design and equipment to yards outside its own shipbuilding group. VARD evaluates subsea-vessels to be in demand in the near future.

VARD's headquarter is located in Ålesund, Norway. Labor intensive tasks such as construction of hulls, are done in the yards in Romania, while more technologically advanced tasks are carried out at the Norwegian yards. Since its customers are located all over the globe, it has been natural for VARD to establish yards close to its customers, namely in Brazil and Vietnam. The company, thus, has ten shipbuilding facilities: five in Norway, two in Romania, two in Brazil, and one in Vietnam. In 2014 it was also announced that it will open a design subsidiary in Canada as well, to take a position in this region.

8.3.2. Strategic market opportunity example

Seth elaborates on two important market opportunities, which have been discovered in VARD the last ten years. The first was the establishment of a design subsidiary in Canada, and the second was an opportunity to open a service department in Australia.

A few years ago, VARD conducted a screening and analysis of the whole world in order to identify attractive markets where the company could establish subsidiaries. Both the Canadian and the Australian opportunity were discovered through this process. Canada was seen as an attractive market for several reasons, according to Seth. First and foremost, because Canadian legislation is protectionist, which makes it a necessity to be physically present in the country. Additionally, due to the attractive North-American market and its growth, but also because the Norwegian design department already carries a high workload, making it hard to serve the Canadian market from Norway. According to Seth, VARD does not have any existing customers in Canada, and therefore needs to build new relations in the market.

Australia was also identified as an attractive market in the screening process. VARD considered opening a service location there, partly because this was requested by potential customers. Therefore, management wanted to establish a service subsidiary in the country. However, after a more in-depth analysis it was revealed that Australia was not as attractive as initially thought, due to several reasons; the shipowners would rather bring their vessels to Singapore for service, the country has poor maritime infrastructure and it is hard to get access to competent employees. In the analysis, these reasons were revealed through inquiries with existing customers.

- None of the opportunities mentioned were discover directly through market oriented behavior, but through a strategic analysis

that sought to develop the business further. However, it is likely that a focus on potential customers and competitors have been present in these analyzes, and market oriented behavior may therefore have affected the opportunity discovery indirectly. The possibility of moving into Australia also became present partly due to interest from potential customers, but later rejected. The establishment in a foreign region can also be seemed as a long-term focus, where the return on investment cannot be expected until relations are build in the region over several years.

- In regard to decision making, the use of a structured analysis show that VARD values multiple perspectives to come to light.
- The examples were not influenced by VARD's cluster participation.

8.3.3. In general

Market orientation

More generally, Seth states that VARD works closely with its customers. It is mostly the sales department that is responsible for customer contact, and in practice each customer has one key account manager. When VARD is involved in more close discussion with customers, or when it builds vessels, personnel from the design department and the shipyard is involved in the customer contact. After a vessel is delivered, VARD follows up on customers to measure customer satisfaction etc.

- VARD seems to be customer oriented, as it works closely with its customers to develop new products and services in the shipyard. Through the interview, we uncovered few signs of competitor orientation other than through the structured analyzes, while interfunctional coordination is present in the sale phase and building process.

Seth states that "success is that the customer returns and wants more." Additionally, she claims that success is to deliver vessels without any defects. Last, financial goals is seen as a success criterion. When VARD makes opportunity decisions, it assess the payback time, and the company seldom makes investment with a payback time of more than ten years.

- The decision criteria used in VARD resembles the decision criteria proposed in market orientation literature. Long-term focus became evident through the elaborated example, and profitability focus as it values financial goals as a success criterion.

Decision-making

According to Seth, strategic decisions are mainly dealt with by the management team. Only larger investments must be cleared with the board, where representatives from Fincantieri are represented. A small group of people are involved in building the business case, and after this the management team makes a decision after some discussion. VARD has an analytical framework that is followed when strategic decision are made. This analytical framework involves economical analyzes and similar.

- VARD takes an active approach to broaden their rationality when making decision through discussion in the management team. At the same time, discussions seem to be limited to only some parts of the organization, which could limit the number of perspectives in the process.

Cluster

According to Seth, "the cluster is very important". For VARD, the cluster is important because the yard has a number of suppliers close by, which enables VARD to deliver better products and services for its own customers. Additionally, the competition among local yards enhances VARD's competitiveness externally. Seth also highlights the importance of having risk-willing shipowners in the cluster.

Seth cannot remember any market opportunity that has been discovered solely through the cluster affiliation. The most negative effect of being in the cluster is that everyone mimic each other.

- The greatest effect of being in the clusters seems to be related to product quality and operations. Discovery of market opportunities through the cluster is more limited, and the mimicking among the companies might degrade radical innovation.

8.3.4. Summary

The interview with Seth gives an impression of a highly customer oriented organization, while it appears to have a medium degree of competitor orientation and interfunctional coordination. Both of the decision criteria within market orientation are highly present at VARD. The organization's decision making process is done via structured process.

8.4. Ulstein

Ulstein is a Norwegian based company with activities within ship design, shipbuilding, power and control and shipping. It mainly builds vessels for the offshore segment. The company was established in 1917 and today it has about 800 employees.

The interviewees were Ingebjørn Røren (Business Analyst/Project Manager) and Anne Hestflått (Business Consultant). The interviewees both work in Ulstein International, a business development department within Ulstein Group.

8.4.1. History and context

Ulstein was established in 1917 as a builder of ships used for fishing. Since then, the company has grown, and is today present in seven countries, but the headquarter is still located in Ulsteinvik. During the 1990s, Ulstein changed owners several times, but the company is presently family-owned.

The company is specialized towards the offshore segment, and Ulstein's only shipyard is located in Ulsteinvik, but the company cooperates with several international yards, which often manufactures the hull for its vessels.

Besides shipbuilding, Ulstein has a substantial activity within design, and power and control. Additionally, the company has a global service network represented in Singapore, China and Brazil, among others.

8.4.2. Strategic market opportunity example

Røren and Hestflått present two strategic market opportunities during the interview. The two opportunities appeared quite differently for the firm, even though both were developed internally.

The first example, appeared a few years ago, as the Ulstein family initiated an analytical process to investigate the PSV-market. The company had

capital it wanted to invest and the PSV-market was seen as an ideal market due to risk and the size of investment needed. According to Røren, the business development department initiated an analysis, which included insight into ship databases. Through these, it was revealed that the PSV-market lacked mid-sized vessels, and with some adjustment, the medium-sized vessels could do the same job the larger vessels do today. As an effect, using a smaller vessel would be more cost effective for Ulstein's customers.

Røren states that based on the above analysis, Ulstein ordered and financed the building of six new mid-sized PSV-vessels through their own investment company, Blue Ship Invest. All the vessels were sold to Nordic American Offshore, which later ordered two additional medium-sized PSVs.

Another market opportunity for Ulstein was the creation of the X-BOW®. During a period with less manufacturing, Ulstein had more time for R&D activities, and during this period Ulstein came up with the design for the X-BOW®. It was designed internally and then presented in a magazine. A local shipowner, Bourbon Offshore Norway, showed interested in contracting a vessels with the new bow and was later involved in realizing the first X-BOW® vessels.

- None of the above opportunities were discovered directly through market orientation. Ulstein seems to take an active approach to market opportunity discovery, where opportunities are discovered through an active and structured analysis or through internal development projects. In the analysis process, it is probable that market oriented behavior and considerations are present. It also seems that cooperation and contact with customers are important for the completion and commercialization of a project.
- The PSV-example indicates that Ulstein tries to increase the information basis through analyzes before making a decision. The X-BOW®-example does show that the final decision to commercialize is not taken without clear customer interest, meaning that Ulstein relies on outsiders before deciding.
- The examples does not seem to have been influenced by Ulstein's position in the cluster.

8.4.3. In general

Market orientation

More generally, the interviewees state that Ulstein work closely with its customers. When Ulstein creates a new design, customers need to be involved to ensure that the design is commercially viable. When customers get involved, this can be initiated both from Ulstein and from the customer. Røren mentions examples where the customer has come with a challenge it wants Ulstein to solve.

The interviewees state that Ulstein monitor its competitors for example by studying patent applications. Through this, Ulstein can track the technological development. Røren states that it is a challenge that the company both competes and cooperates with the same companies in the region. In situations like this, Ulstein must be careful not to reveal information, which Ulstein's competitors can use to improve their own products and services.

- Customers are important for Ulstein when it develop new product and services, but the company can initiate new projects without customer support. Ulstein also seems to be competitor oriented as it monitors its competitors through the patent databases.
- Little is revealed around its interfunctional coordination. As both the interviewees work in a separate business development department, we assume they interact with the different units when applicable. It is, however, uncertain how the information is shared.

According to the interviewees, Ulstein does not

have a specific payback time requirement, but the company usually operates with a 10-12 years payback time. Ulstein can also build new ships with losses, if it believes that the same design can be used in the future, something that will make the investment worth-while in the long run. Currently, the business development department is conducting an analysis to reveal what projects are most profitable in order to decide what Ulstein should focus more on.

- The decision criteria used by Ulstein are in-line with the decision criteria proposed in market orientation literature. The company has a long-term focus, and is driven by a profitability focus, shown through Ulstein's search for the most profitable projects.

Decision making

Ulstein has its own analytical framework, called Ulstein Accelerated Business Development, which is intended to assist Ulstein when making strategic decisions. The framework was established to ensure that more perspectives and thoughts were considered before a decision is made. Røren exemplifies this with stating that economical considerations need to be made before a new ship design is developed. By using the framework, Ulstein hopes to increase the success rate of the opportunities it pursues.

The business development department is usually responsible for the analysis, and the interviewees emphasize that the analyzes they perform are iterative and dynamic, and that they do not just put a report on the management's desk. When natural, other departments and external experts are also brought into the analysis process. Being a family owned company, the interviewees state that final decisions are usually made by the owners.

- Ulstein takes an active approach to increasing its rationality when strategic decisions are to be made. By using an established framework, Ulstein ensures that a fixed number of steps always are included and the company utilize techniques such as dialectical inquiry and expert opinions.

Cluster

According to the interviewees, the cluster decreases the distance between companies in the region. Ulstein has contacts in most of the region's companies due to meeting places and events organized by NCE Maritime. Røren also highlights the good cooperation and integration between the shipowners, the design companies and the equipment producers.

The company is also aware of the dangers associated with only doing business internally in the cluster, as this could lead to a high price level, which decreases the companies' global competitiveness.

- The interviewees did not reveal any market opportunities that had been discovered solely through the cluster. Findings indicate that the cluster is important operationally. Additionally, it is interesting to note that Ulstein is aware of the dangers and challenges of the cluster affiliation.

8.4.4. Summary

Ulstein appears to be market oriented, with high degree of competitor orientation, medium customer orientation and interfunctional coordination, while making decisions with a high focus on both long-term and profitability criteria. Its decision-making process includes structured analysis and third-party opinions to increase the rationale that it can base its decisions on.

8.5. SEAONICS

Seaonics is a Norwegian company within the business of handling equipment for the marine and offshore sector. In 2013, two years after its establishment, its revenue was above 160 million NOK and the firm has about 35 employees.

The interviewee was Håkon Fauske, an NTNU-alumni that holds the position as QA/Strategy Implementation Manager. He has been with the company since the fall of 2013.

8.5.1. History and context

At the establishment in 2011, Seaonics acquired the company vision of "improving any lift and handling operation done offshore", and simultaneously set the goal of becoming a reference business in the market by 2020. The company is a joint-venture between VARD and ICD Industries, and was established because the two ventures saw that the equipment handling market would be an important and valuable sector within the industry in the coming years. It is specialized towards offshore winches and cranes, often used in relation to ROVs in subsea operations

With engineers and sales personnel located in Ålesund, in addition to one engineering department in Poland, the company rent production capacity in the southern part of Europe.

As a fairly new actor in the market, Seaonics has endured high barriers into the market. Winches and cranes are deemed as critical components on vessels, and most buyers therefore value the experience from more established companies. A key factor for Seaonics to succeed is thus to be evaluated as a trusted and reliable actor in this market sector.

8.5.2. Strategic market opportunity example

In 2013, Seaonics became a major shareholder in Castor Drilling Solution (CDS). With Seaonics' knowledge for ships and vessels combined with CDS' knowledge within drill operations, Seaonics saw this combination as a good fit. According to Fauske, the offshore drill market was deemed very attractive and through this ownership Seaonics could acquire key knowledge and a valuable network within the sector. In addition, Seaonics would now be able to deliver equipment to a larger share of the activities within drilling operations.

The opportunity presented itself through the informal relationship between Seaonics' CEO, Stig Are Espeseth, and the CEO of CDS Holding, Øyvind Vaagland Reiten, who is the major shareholder of CDS. They saw the opportunity to take a position in this market, with synergies from both companies.

Only the two companies' executives and board members were involved in the process that lead to the partnership. According to Fauske, no detailed market analysis was conducted, but the decision was based on the experience from the personnel involved in the process. As Fauske states: "It was fairly easy to see that this partnership had market potential."

- Interview findings indicate that the market opportunity was discovered through the CEO's personal network rather than through market oriented behavior by the company.
- No formal decision routines were performed when the decision was made. It seem that the CEO's market knowledge and intuition were more important.
- Nothing indicates that the cluster has influenced Seaonics in this example.

8.5.3. In general

Market orientation

According to Fauske, close relations with its customers are important for Seaonics in order to be aware of new contracts and opportunities. Customer relationship are handled by sales personnel that mostly have no engineering background, but often have experience from marine

activities. When needed, the sales department can receive additional knowledge from technical engineers working at Seaonics. Fauske states that their customers are the main driver for any technological advancements, and the company would like to develop more products in cooperation with its customers. As of now, the company wants to be sure that customers are willing to buy its products and therefore relies on customer interest before it develops solutions and products.

Fauske evaluates the market for offshore equipment suppliers to be fairly transparent, which allows Seaonics to know and evaluate its competitors and their products. When a competitor wins a contract, Seaonics wants to figure out details about the competitor's products and services. Seaonics do not perform any benchmarking activities or other activities to systematically monitor its competitors, but try to have a sense of the activities in the market. Fauske mentions that having employees who have worked in competing firms help to give insight into their product portfolios.

- Seaonics appears to be customer oriented. Through the interview evidence is also found for responsive market orientation in Seaonics, as they see the customer as leading the technological development. Limited evidence is found for competitor orientation, at least not in a manner that extends normal market activities, as it does not have any routines for how to monitor or react to competitor actions. Seaonics seems to be interfunctionally coordinated to some extent, as people from different departments are involved in both the sales phase and the product development phase.

The company has relations to shipowners, ship design companies and shipbuilders to ensure that these actors are aware of what Seaonics have to offer. Fauske points out that it is important to focus wider than just the shipbuilders, even though they are usually their customer. This is due to shipbuilders' heavy cost focus. It is the user, usually an oil company or a subcontractor, which is willing to pay a premium for new equipment on board the vessel. Therefore, Fauske believes that by nurturing its end user relationships, Seaonics could possibly sell more new products and services. Still, this is an area of improvement for Seaonics, as it focuses mostly on the shipbuilder, according to Fauske. He explains this by stating that the maritime industry is a conservative industry, and that talking mainly to the shipbuilders is how it is done. Additionally, relations with the oil service companies are assessed to give returns in 3-5 years, something Seaonics feels is too long. By communicating with shipowners, it can expect returns in 1-2 years.

- A short-term focus is indicated in Seaonics, as it seems to emphasize short-term return over long-term returns in relation to its customer relationships. However, a profitability focus is indicated, as the company only takes on projects where customers have shown clear interest.

Strategic decision making

Seaonics makes many of its strategic decisions based on the executives gut feeling and "seaman's experience", according to Fauske, which also believes that this is a general characteristic of the maritime industry. Fauske himself believes that the introduction of more market analyzes and academic processes would benefit the industry. He does mention that Seaonics subscribe to ship databases to follow trends in the market, which can aid the firm to do more informed decisions.

- Findings from the interview indicate that Seaonics makes decisions based on intuition, as its relies on gut feeling and seaman's experience. No signs of fixed processes or others are found.

Cluster

First and foremost, Fauske highlights that being part of the cluster allows the company and its workers to be extremely near the market and its actors. This allows for good insight into what is

happening in the market, and also allows it to be aware of changes in the market at an early stage. The fact that 80% of some of the segments of the industry is located in 1,5 km radius, give the company a great opportunity to gain know-how and new customer relations. The short geographical distances also enable product development between companies in the region. Fauske points out that Seaonics itself is a product of the cluster, as it sprung out from the initiative of VARD and ICD Technology.

Fauske does not see anything negative by being part of the cluster, but he also believes that it does not give much benefit towards the company's international customers. If any, Fauske believes that the area's good renomé can be positive for Seaonics.

- Seaonics appears to benefit from the cluster by having close relations to partners when performing product development and getting insight into market activities.

8.5.4. Summary

Seaonics has a high degree of customer orientation, yet it shows little competitor orientation. A medium degree of interfunctional coordination is present alongside a clear short-term focus. Profitability is also deemed to be an important decision criterion for Seaonics. The company's process for making decisions occurs to be based on intuition from the management.

8.6. Kongsberg Evotec

Kongsberg Evotec is a company that designs equipment for offshore supply-, construction and seismic vessels. The company was established in 2006, has 90 employees, and had a total revenue of 290 million NOK in 2012.

The interviewee was Leif Løken, an NTNU-alumni who works in the sales department with the offshore-sector as his responsibility.

8.6.1. History and context

After the establishment in 2006 by four founders, Evotec was bought by Kongsberg in 2012. Kongsberg Evotec is located in Ålesund, where the design and product development is performed. Since 2006, the company has grown considerably, and the rapid growth has brought its challenges. However, Løken states that these challenges are solved, and that the company now expect a more steady growth and business development.

Kongsberg Evotec's goal is deliver equipment for every work task on a vessel. Through the mother company, Kongsberg, Evotec has a great advantage as Kongsberg can provide systems and other parts that Kongsberg Evotec's competitors do not have the size or variety to achieve. One of its selling points is that Kongsberg Evotec can provide a large range of the technical equipment from the same producer, which should be beneficial to the user. Ensuring contracts for its mother company will benefit Kongsberg Evotec in the long run as well, according to Løken.

The company's client base is mainly in Norway, partly due to its price level. It does, however, have some customers in Brazil and it also receives enquiries from Asia. Being an equipment supplier, Kongsberg Evotec's formal customers are the shipbuilders, though shipowners and charter companies are the users of its' products and services.

8.6.2. Strategic market opportunity example

Løken elaborates on an opportunity that Kongsberg Evotec was able to take advantage from. In this example, a large oil and gas company had proposed a supplier competition that Kongsberg Evotec among others entered. The oil and gas company wanted a secure and automatic method for securing a platform pipeline to the side of the ship. In the past, this had been done by manpower that was unreliable and unsafe.

Kongsberg Evotec won the competition with its "pipe pinch", which secured the pipeline with an innovative solution that ensured no harm to the pipeline itself. When this suggestion won, the oil and gas company and Kongsberg Evotec started to work closely together in order to make the solution as good as possible in accordance with the customer's needs. Even though both companies used resources to develop the solution, it is often sold with an option to leave it be. Thus, due to cost-focus, the customer may later in the development change its mind and dismiss the equipment in the final design.

- Market orientation does not seem to have a direct effect on the discovery of this opportunity. The opportunity was rather discovered because the oil and gas company published a public tender. However, close customer contact was important for the completion of the development project.
- The decision process used for this opportunity was not revealed during the interview.
- The cluster affiliation did not seem to have any effect on the discovery of this opportunity.

8.6.3. In general

Market orientation

Løken states that Kongsberg Evotec relies heavily on its customers. Customer contact is ensured through informal dialog with key personnel in customer organizations, and the same day as the interview, Løken had informal phone calls with representatives from four different companies. He mentions that this is an important part of his day. Further, it is emphasized that the organization is very sales driven, and product development is started after customer initiation. This is also explained by the costs associated with product development. Without an involved customer, Kongsberg Evotec is not guaranteed any income, which makes the projects too risky. By involving customers early, Løken also emphasizes that the company only does product development, which customers are actually interested in.

Having strong customer relationships is also highly valued by Kongsberg Evotec. Løken highlights that it is critical to retain the firm's existing customers, and states that the company would pay the price needed to do this, in terms of giving extra after sales service or similar.

According to Løken, Kongsberg Evotec does not monitor its competitors through any specific activities. However, he continues by stating that the market is transparent, which allows Kongsberg Evotec to follow the changes that occur in the market and what its competitors are up to. Kongsberg Evotec positions itself according to what the customer wants, rather than in relation to its competitors.

Moreover, Løken describes an informal and low hierarchical work environment in Kongsberg Evotec. When the company gets involved in new projects, it seeks to involve sales personnel, designers, and other technical personnel as well customer representatives.

- Interview findings indicate strong customer orientation in Kongsberg Evotec, as its operations evolve around customer interest and initiatives. No signs of competitor orientation is revealed, but the company seems to be interfunctionally coordinated in terms of how it operates. Profitability also appears to be a key indicator for decisions made at Kongsberg

Evotec, as the company is not willing to take on projects where income is not guaranteed. The informal contact with no specific purpose and the willingness to invest in long-term customer relationships, indicate a more long-term orientation, as the company probably believes that this will pay off in the future. However, the company was not explicit about this, and the inclination to adapt to customers indicate a more short-term focus.

Strategic decision making

According to Løken, Kongsberg Evotec does not have any formal decision making processes. However, it does evaluate sales prices, production and development costs before taking on new projects. Additionally, for larger contracts, the company develops business cases to get a better decision foundation.

- There does not seem to be any systematic routines for how the company does strategic decision making. However, building business cases for larger projects indicates the usage of rational decision processes. The informal and low hierarchy can also enable decision processes where more information come to light.

Cluster

Løken states that the cluster affiliation makes it easier to develop business relationships as the maritime industry is a part of the everyday life for the people in the region. Thus, business relationships are developed not only in the board rooms, but also at the local coffee shop.

Further, Løken believes that it is an advantage for Kongsberg Evotec that it is located geographically close to important customers such as some of the major shipbuilders in Norway, since this make day-to-day cooperation easier. Other than discovering opportunities through these customer, Løken does not elaborate on opportunities that have been discovered through formal cluster activities.

Through the formal program provided by the cluster, Kongsberg Evotec gets information about cases and new projects that could affect it. Løken does state that as an equipment supplier it is often informed after the shipowners and shipbuilders. This means that companies like Kongsberg Evotec does not receive a lot of new opportunities through the cluster events, as it gets information about the needs from the shipowners and shipbuilders just as quickly.

According to Løken, the most negative effect of being part of the cluster, is the difficulty of recruiting employees, since the area also has several other attractive employers.

- The cluster affiliation makes it easier for Kongsberg Evotec to communicate and cooperate with other companies. Thus, the cluster seems to be most important for the daily operations.

8.6.4. Summary

Kongsberg Evotec has a high degree of customer orientation, low degree of competitor orientation while it appears to have a medium degree of interfunctional coordination. Decisions need to be profitable, and Kongsberg Evotec shows signs of both short and long-term focus. Its decision making process has little formal structure, although larger contracts are evaluated with business cases.

8.7. NCE Maritime

NCE Maritime was established in 2006, and is one of the industrial clusters associated with the official Norwegian cluster program. The official cluster consists of over 200 maritime companies, and these have an aggregated revenue of approximately 55 billion NOK.

The interviewee was Stian Nerland, a project leader at NCE Maritime.

The form of the interview was different because NCE Maritime is a supportive organization and not a business. As stated in Section 1.2, our unit of analysis is the maritime companies within the cluster, but by adding the views of an outside representative, further perspectives can be uncovered and it also enables data triangulation. The interview with Nerland had the same structure as the others. Our interest was to understand how NCE Maritime views market opportunity discovery and decision making in the cluster and whether Nerland could confirm or reject some of the findings we found in the other interviews.

8.7.1. History and context

The Møre cluster has a long history, and the cluster has existed much longer than the official NCE program, which started in 2006. One of the strengths of the cluster is that it is complete in the sense that companies in the whole value chain is represented, and that it is world leading on advanced maritime operations. The cluster is characterized by tough internal competition, but also widespread cooperation between the same companies.

NCE Maritime exists to further develop the maritime cluster and to enhance the cluster's competitiveness. The cluster cooperates with Aalesund University College, initiate activities aimed at enhancing innovation, and arrange academic and networking events.

8.7.2. NCE Maritime as a facilitator for market opportunities

NCE Maritime has several activities, which is meant to help the companies to discover more market opportunities. An overweight of these activities are aimed at helping the smaller companies in the cluster, according to Nerland. Two of these activities are elaborated on.

One of the initiatives is a program called Inside-information. In this program, NCE Maritime has experts from Innovation Norway, the Ministry of Foreign Affairs and similar, come to present interesting international markets such as Brazil and Romania. Information such as special tax rules and common entry strategies is presented, and any company can attend, something that also creates networking effects.

The other initiative is a program called In2, where NCE Maritime gathers a group of companies and travel to an international market where the companies visit potential new customers. Nerland states that the effects this program provides are highly measurable as most of the companies attending the program receives contracts from the companies they meet. The companies also build a network, which can be important when they expand internationally.

8.7.3. Market orientation

Nerland states that smaller equipment producers follow their large customers to international markets. Through their larger customers, the equipment producers enter markets they otherwise would not have had the resources to establish themselves in. According to Nerland, this is one of the reasons why it is important to have large, international companies in the cluster.

According to Nerland, local competition and rivalry should not be underestimated as a driving force in the cluster. Nerland believes that this can affect companies when they make decisions to act on opportunities or not, since local competition drive companies to become first to enter a new market, or the first to apply new

technology.

- Through the interview it appears that smaller firms who have a customer oriented behavior can benefit from this, and achieve market entry to new regions by following their larger customers.
- Through the description of Nerland, it is indicated that the maritime companies in Møre do carry a competitive attitude towards one another. The race to be first seems to result in opportunities that are being explored, whether they are geographical or technological. How this is done in practice is, however, uncertain.

8.7.4. Strategic decision making

As Nerland represents NCE Maritime, he is careful to discuss how the maritime companies in the cluster make decisions. He does, however, state that the companies are characterized by less formal knowledge and more experiential knowledge and business flair.

- The statements from Nerland may indicate that the maritime companies take a more unstructured approach to decision making based on experience and business flair.

8.7.5. Cluster

The above two examples show how the cluster contribute to the discovery of market opportunities. Nerland also states that is an important job for NCE Maritime, as it can initiate new, future-oriented projects, while the companies can focus more on day-to-day activities.

- From the examples, it can be argued that the cluster contributes directly to the discovery of new market opportunities. Since the activities is targeted on the smaller companies, it is plausible that the activities affects these companies the most.

8.8. Additional interviews

In addition to the six interviews conducted specifically for this thesis, five more interviews were conducted with maritime companies in Møre through another research project. These interviews had a different focus than what we had for our own interviews, but some aspects discussed during each interview were relevant for our thesis also. Of the five interviews, two were done with Ulstein, and the other three were done with two different, anonymous shipowners. Since these interviews were done in relation to another research projects, the names and positions of the interviewees will not be given in this thesis.

To enhance our empirical foundation, findings relevant for our thesis is presented next. The relevant findings from these interview are best used to assess the degree of market orientation in the different companies, and not to uncover how opportunities were discovered. This is due to the structure and content of the interviews.

8.8.1. Ulstein

Two interviews were conducted with Ulstein at its headquarter in Ulsteinvik. The first interviewee was with a representative from the sales department at Ulstein Shipbuilding. The second interviewee was with an area sales manager at Ulstein Design & Solutions. The interviewees were interviewed separately, and each interview lasted for one hour.

Interview findings

Both the interviewees state that the region in general, and Ulstein specifically, is characterized by relational and informal customer relationships. According to the first interviewee, this means that if a person change its job, he or she may bring his or her whole customer portfolio. Further, both interviewees state that Ulstein works closely with its customers when developing new products and services. Both interviewees state that Ulstein values innovation highly, which in practice is shown through its internal research and development without customer

support. However, customer commitment is usually needed if a development project is to become a final product or service

By being in a cluster, the first interviewee states that it is easy to have an overview of local competitors. Still, even though Ulstein has lost some contracts to local competitors, he will not, or cannot, explain why Ulstein has lost these contracts.

The second interviewee explicitly highlights the role and importance of cooperation both in the sales phase and the development of products and services phase. However, he emphasizes that the different departments at Ulstein do not share sensitive information with each other that is from customers who also competes with Ulstein.

- The two additional interviews with Ulstein strengthened the image of Ulstein as a customer oriented organization that can also undertake internal development projects. The view on its competitor orientation is not altered, but the company seems to be more interfunctionally coordinated than the impression felt after the first interview.

8.8.2. Norwegian Shipowner 2 (NS2)

Two interviews were conducted with NS2. The first interviewee was the company's procurement manager, and second interview was conducted with one of the company's chartering and operations managers. The interviewees were interviewed separately, and each interview lasted for one hour.

Interview findings

The chartering and operations manager states that NS2 traditionally have contracted new vessels based on speculation. Top management, which have long experience from the maritime industry, makes the decisions about what new vessels to contract.

The chartering and operations officer states that when NS2 contracts new vessels, or modify existing ones, it works closely with its customers to understand what kind of vessel they request.

NS2 does not monitor its competitors, according to the chartering and operations manager. The manager further states that NS2 now aligns itself in order to target the offshore subsea segment, and that the company is the only one which is having this focus today.

The procurement manager gives examples where several employees and departments are involved. An example given, is the process of buying paint for the vessels. In this process, employees working in the technological department of the company are involved to assess the different paint suppliers and, thus, provide insight that the procurement manager can make better decisions upon.

- Finding from NS2 strengthen the view that shipowners contract new vessels based on speculation, and that there is no structured decision-making process, but rather the management who makes decisions solely on its own terms and gut feeling. Furthermore, NS2 does not seem to be competitor oriented, but are to some extent both customer oriented and interfunctionally coordinated.

8.8.3. Norwegian Shipowner 3 (NS3)

The interviewees at NS3 was the procurement manager and chartering and operations manager. Both were interviewed in the same interview, which lasted for approximately one and a half hour.

Interview findings

The interviewees state that NS3 is concerned about following the market, which involves following its customers and competitors. NS3 works closely with its customer, which is exemplified with stating that customers seek advice when it is considering new geographical markets and similar.

Related to the contracting of newbuildings, the interviewees state that approximately half of its vessels are already on contract when they order them.

- NS3 seems to be customer oriented, and also more competitor oriented as it is concerned about keeping an eye on its competitors. Indication of less speculation is also found, as NS3 has chartering contracts with half of its vessels before they are built.

Analysis of theoretical propositions

CHAPTER 9

ANALYSIS OF THEORETICAL PROPOSITIONS

In this chapter we discuss our theoretical propositions. To perform this, we draw on our empirical data from the interviews in addition to the literature and industry review.

The analysis will be conducted by systematically discussing and analyzing each proposition. The proposition itself will be repeated before we assess each proposition through an empirical analysis. Last, we provide theoretical implications for each proposition. In the end of the chapter we summarize the analysis and illustrates the result of each proposition.

9.1. ANALYSIS

9.1.1. Proposition 1 - High degree of customer orientation

The maritime companies in Møre are market oriented, but the degree of market orientation will vary between companies.

Proposition 1 reflects the expectation that the maritime companies in Møre are market oriented to a varying degree. The proposition is best discussed through the different cultural elements and decision criteria found in literature (Carrillat et al., 2004; Kohli & Jaworski, 1990; Narver & Slater, 1990).

Empirical analysis

Several of the companies interviewed highlight their close customer relationships and how they cooperate with their customers when developing products and services. All the interviewees at VARD and Ulstein emphasize how they work closely with their customers when new designs are developed, or when a new vessel is built (Section 8.3.3 and Section 8.4.3). This ensures that the new products give the customer additional value. Similarly, the interviewees at Seaonics and Kongsberg Evotec state that their customers are very important when they take on new projects or decide to develop new products. Seeing this in line with literature from Narver and Slater (1990) and Slater and Narver (1994) give strong indications of a customer oriented culture in most of the maritime companies studied. The exception is NS, where we did not find evidence of customer oriented behavior. This finding for shipowners was further strengthened after the additional interview with NS3.

Findings of competitor orientation varies between the case companies. NS, Seaonics and Kongsberg Evotec do not seem to monitor or pay close attention to their competitors, which, thus, indicates no competitor orientation. At Ulstein, the most direct evidence of competitor orientation is found, as it monitors patent databases to keep track of the technological development. This can be seen as a typical activity done in order to understand its competitors' technology offering, and whether it can be seen as an attractive alternative for its customers (Han et al., 1998; Slater & Narver, 1994). For the shipbuilders, indications of competitor orientation is found as it is likely that their analyzes also included competitor evaluation. Even though the interviews with the maritime companies showed mixed results for competitor orientation, the external representative at NCE Maritime explicitly said not to underestimate the strength of local competition. It is therefore hard to conclude whether the external representative are wrong, or whether the interviewees do not want to reveal that they are competitor oriented.

The degree of interfunctional coordination is also varied, and is moderate in most of the case companies. The shipbuilders and equipment suppliers seem to be interfunctionally coordinated in how they operate, as several departments and employees are involved in the sales and product development processes to create increased customer value. This is in line with literature (e.g., Han et al., 1998; Kohli & Jaworski, 1990; Slater & Narver, 1994). However, no evidence of committee meetings or shared decision processes between departments were found at the shipbuilders or the equipment suppliers. For NS and NS3 no evidence of interfunctional coordination is found. The view of the shipowners is moderated slightly by the interview with NS2, where different departments are involved in procurement processes. However, together, our view of the shipowners is that they are interfunctionally coordinated to a limited degree.

Findings from NS, VARD and Ulstein indicate a long-term focus when they make decisions. The opportunity example from NS shows that the company invests in long-term relationships, which is what is exemplified as a long-term focus by Han et al. (1998). The two shipbuilders show long-term focus when they establish offices in foreign countries without present customers, and when they build vessels with losses as long as they can reuse the design in the future. This can be seen as something done to implement additional value for customers in the future, which is in line with Narver and Slater (1990). The two equipment producers, Seaonics and Kongsberg Evotec, show evidence of a more short-term focus. This is especially evident with Seaonics as it choose to nurture relationships with shipbuilders, even though it knows it would yield better return in the future if the people at Seaonics built relationships with end users. Kongsberg Evotec shows signs of both short-term and long-term focus, as it emphasizes on its customers' present needs, but at the same time it nurtures customer relationships for long-term business opportunities.

Through the interviews, a strong profitability focus is found to be present in all the case companies. All the interviewees state that they only undertake projects where profitability is expected in the short- or long-run. This is in accordance with Narver and Slater (1990) and Kohli and Jaworski (1990), and will be discussed further in the theoretical implications below.

In summary, the proposition is found to be partially supported. Across all companies, customer orientation is found, and the companies dominantly utilize the decision criteria proposed by market orientation literature. However, the same unison support is not found for the other two cultural elements, competitor orientation and interfunctional coordination. Because market orientation consists of these elements together, the first part of the proposition is not fully supported. The evaluation of the different cultural elements for each company can be seen in Table 7. The variation between the degree of

Company	Customer orientation	Competitor orientation	Inter-functional coordination	Long-term focus	Profitability focus
NS	Medium	Low	Low	High	High
VARD	High	Medium	Medium	High	High
Ulstein	High	High	Medium	High	High
Seaonics	High	Low	Medium	Low	High
Kongsberg Evotec	High	Low	Medium	Medium	High

Table 7: Evaluation of the cultural elements and decision criteria for the case companies

market orientation is also as expected, as we find companies with both a high and low degree of market orientation. Support is therefore found for the second part of the proposition.

Theoretical implications

As was shown in Section 3.2.2, literature has debated whether profitability is actually a part of a market oriented behavior or not. The interview findings show that all the companies in our sample had a strong profitability focus. An implication from this, is that support is given for Kohli and Jaworski (1990), who believe that a profitability focus is evident in every organization, not just market oriented ones. Due to our sample firms, we note that this finding is limited to the maritime industry. However, causality has not been fully established here since the profitability focus could be a part of the market orientation inherent in the maritime companies. Also, we did not study any firms without any market oriented behavior, but with a profitability focus. If such a firm was found, we could more confidently reject that profitability is part of a market oriented behavior in the maritime industry. Still, it is indicated that the profitability focus is not tightly related to market orientation, but rather an objective for every organization. The finding is, however, strengthened since all firms in our sample have a high degree of profitability focus, even though they vary in their degree of market orientation. In Section 3.2, we presented Figure 5, which represented the construct of market orientation. If our findings are correct, this should be altered according to Figure 8.

9.1.2. Proposition 2 - Variations in the market oriented behavior

It is expected to be a high degree of variation between the market oriented behaviors for the maritime companies in Møre. Some companies will be responsively market oriented, while others will be proactively market oriented.

Proposition 2 attempts to shed light on the responsive and proactive market oriented behaviors proposed by several articles (Carrillat et al., 2004; Jaworski et al., 2000; Narver et al., 2004). Both behaviors are expected to be revealed in the maritime industry.

Empirical analysis

Through the findings of our interviews, it is made obvious that the equipment suppliers operate with a policy of only developing, producing and commercializing solutions that have received explicit customer interest. Both Seaonics and Kongsberg Evotec state that this way of prioritizing is due to their cost-focus, to ensure that they do not invest in product development that does not give any return. This type of organizational mindset is a way of safeguarding, which

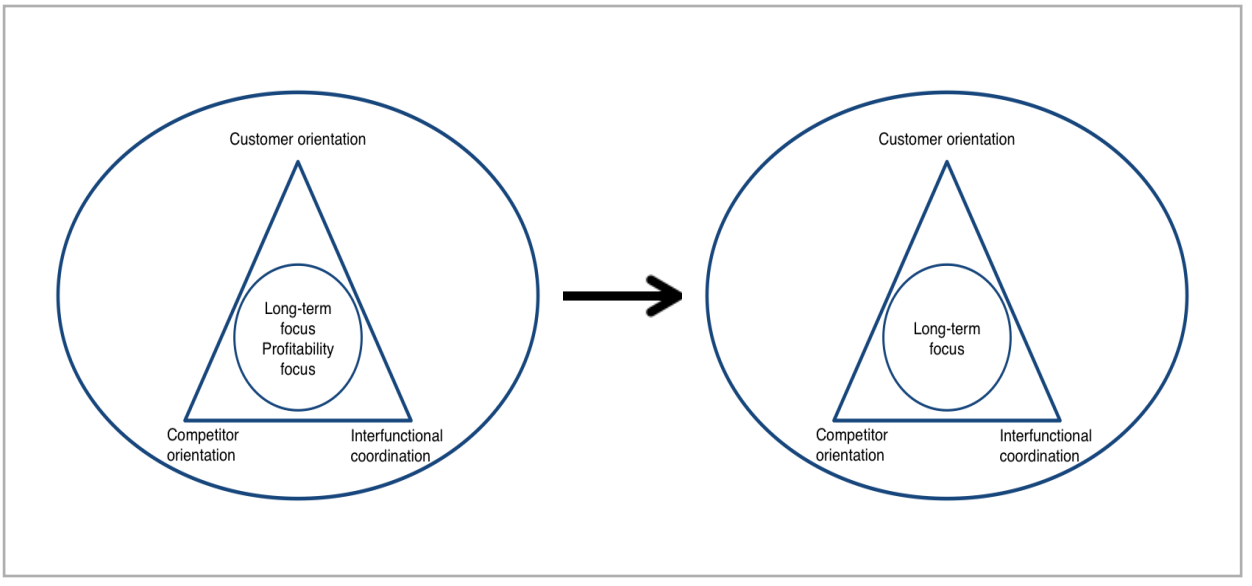

Figure 8: Revised construct of market orientation in the maritime industry

also ensures that the new product is in line with the current market structure. This identifies a responsive market oriented business according to Jaworski et. al (2000) and Narver et al. (2004).

The shipbuilders and shipowners through both interview rounds appear to be more proactive in their market orientation. All of them express a need to understand future market trends in order to ensure market success. Shipowners in both interview rounds, to the extent they are actually market oriented, emphasize the importance of having a fleet that fits the market in the near future. Aligning its business with future customer needs indicate a proactive behavior according to Carrillat et al. (2004) and Jaworski et al. (2000)

As a conclusion, proposition 2 is supported, as the companies' market oriented behavior varies. We see that the maritime equipment suppliers in Møre are responsively market oriented, while both the shipowners and shipbuilders are noticed for their proactively market oriented behavior. Still, it is believed, in accordance with Jaworski et al. (2000) that these two behaviors are not mutually exclusive.

Theoretical implications

Literature on responsive and proactive market oriented behavior do not assess how industry characteristics and value-chain position affect what behavior companies inherit. Our empirical analysis indicates that the behavior varies according to value-chain position, as the equipment suppliers seem to be responsively market oriented, while shipowners and shipbuilders are more proactive. Thus, we find that companies that are closer to the end customer are more proactive. Is it so that the companies that are higher in the value chain are more proactive because they are closer to the end user? And is it so that smaller companies do not have the financial resources to be proactive, as there is higher risk of costly product development that does not meet customer needs? These patterns and relationships should be further investigated by researchers.

9.1.3. Proposition 3 - Inconclusive effects of market orientation

The maritime companies in Møre that are market oriented are expected to have increased performance and innovation as an effect of this behavior.

Proposition 3 pursues to find increased performance and innovativeness in similar fashion as the different industries in the empirical studies shown in Section 3.4. Findings from these studies will be compared with our findings from the maritime industry.

Empirical findings

Due to the case study approach used in this study, it is not possible to fully reveal whether the firms have increased performance and innovation as an effect of the firms' market oriented behavior. This is due to the difficulty of comparing performance and innovativeness in firms with and without market orientation. However, what can be found are specific examples that have been made possible through the orientation. We do acknowledge that the interviewees may have had incentives to not elaborate on negative examples, consequently giving us a biased look on their past experiences.

Ulstein's successful ship design, the X-BOW®, which can be characterized as a radical design, was initially developed via its own research and development department. The discovery was therefore not made through the company's market orientation. Nonetheless, Ulstein would not have commercialized it without any interest from the initial customer who saw the design in a magazine. Thus, it can be argued that the process that lead Ulstein to commercialize the X-BOW®-design, was influenced by its customer oriented behavior and that this lead the company to be more innovative. At least, being customer oriented lead the firm to be more able to commercialize its innovation and experience high performance as a result. This gives support to Lukas and Ferrell (2000) and Augusto and Coelho (2009), which found focused customer orientation to result in increased new-to-the-world products.

Another opportunity utilized by Ulstein, was the investment and building of six medium-sized PSV's. The structured analysis that lead to the discovery of this opportunity included competitor evaluation, and is described in Section 8.4.2. The focus on medium-sized PSV's can best be described as a me-too innovation, since the change of technology is minor. Thus, this example supports Lukas and Ferrell's (2010) finding that competitor orientation leads to more me-too innovative products.

Kongsberg Evotec also appears to increase its innovativeness through its customer oriented behavior. By closely cooperating with customers, the company is able to develop solutions it otherwise could not develop due to high investment risk. The products launched is believed to have a higher success rate, as the company involves customers early in the process to provide input. By adopting customer input, the product should become more attractive for the customers, which should result in better product performance as well. This finding is in line with Atuahene-Gima (1996), who found that market orientation made products more familiar to the experience and behavior patterns of the customer. The close contact between Kongsberg Evotec and the customers reduce the need for major behavioral customer changes.

As a summary, proposition 3 is found to be inconclusive. Due to our research methods, we are not able to measure any increased performance and innovation due to market oriented behavior from the maritime companies. We do, however, find several examples and episodes where market orientation have made innovations commercially viable. Thus, it is indicated that market orientation have increased both innovation and in effect performance, which is in accordance with Menguc and Auh (2006).

Theoretical implication

The strongest implication of the analysis above is that we have found support for several articles that examine the relationship between market orientation and both innovation and performance. We also highlight that researchers should have the right unit and level of analysis when investigating this relationship. Through the empirical analysis it becomes present, for example in regard of competitor orientation, that Augusto and Coelho (2009) and Lukas and Ferrell (2010) have findings that differ due to different research levels. Such differences should be clearly stated in order for future research to learn from previous differences in research.

Another implication relates to Atuahene-Gima's (1995) finding that market orientation was less important for the success of new-to-the-world products, as these could be sold through their sophistication alone. The example with the X-BOW®-design contradicts this as it demanded customer orientation to be commercialized, and it therefore appears that new-to-the-world innovations in the maritime industry, given its cost-focus, depends on customer orientation to be successful.

9.1.4. Proposition 4 - Unanswered resource dilemma

It is expected that the maritime companies in Møre can use too much resources on being market oriented. As a result, the companies will use more resources on being market oriented than the benefits gained from the orientation.

The purpose of this proposition is to investigate the amount of resources the maritime companies in Møre use on being market oriented, and if the use of these resources give them benefits that exceeds the resources used. By evaluating the resources used, a more nuanced understanding of market orientation is enabled.

Empirical analysis

All the firms are found to have close contact with customers, which is likely to demand resources that otherwise could have been used elsewhere. From proposition 1 it is also argued that the shipbuilders are competitor oriented, which will also demand resources. As an example, monitoring patent databases, which Ulstein does, or per-

forming market analyzes, which both the shipbuilders do, require resources. It is also probable that the equipment suppliers' medium degree of interfunctional coordination consumes resources. When they are in sales and product development processes, some coordination overhead must be expected. This is in accordance with our arguments presented in the end of Section 3.4. Thus, we find some indications for the fact that the maritime companies in Møre use resources to be market oriented, even though no companies were explicit about this.

However, to find support for this proposition, a more complex line of reasoning must be established. First, we must be able to measure the resources used on the orientation, and then we must measure the benefits gained from using these resources. This has not been possible through the research strategy of this thesis, and we are, therefore, also unable to evaluate if the companies gain more benefits than the resources used.

Still, we do observe some effects of the use of resources on being market oriented. Through the structured analyzes performed by both shipbuilders, which also included market oriented considerations, they were able to discover business opportunities that they acted upon. NS, Seaonics and Kongsberg Evotec also discovered opportunities directly through their customer relationships. However, measuring the direct effect of these opportunities have not been possible.

To, summarize, proposition 4 remains inconclusive. Findings show that resources are used on being market orientation, and it is also indicated that the use of these resources result in benefits such as discovery of opportunities. Still, due to the research strategy, measuring the amount of resources used or the benefits gained, have not been possible.

Theoretical implication

The analysis above reached no conclusion for proposition 4. Theoretical implications are therefore dominantly based on our initial explanation for the proposition and literature. Referring to the indication presented by Narver and Slater (1990) and Atuahene-Gima et al. (2005), we support the notion that there exists a ceiling for how market oriented organizations should become. We hypothesize that the relationship between market orientation and benefits gained, follows a path similar to a S-curve, as illustrated in Figure 9. We believe that at some point, using more resources do not increase the benefits subsequently. Thus, there is a ceiling for how much resources an organization should use on being market oriented. For an organization this implies that it must be sure that the resources used on market orientation will yield results. If not, the resources should be used on other activities and initiatives.

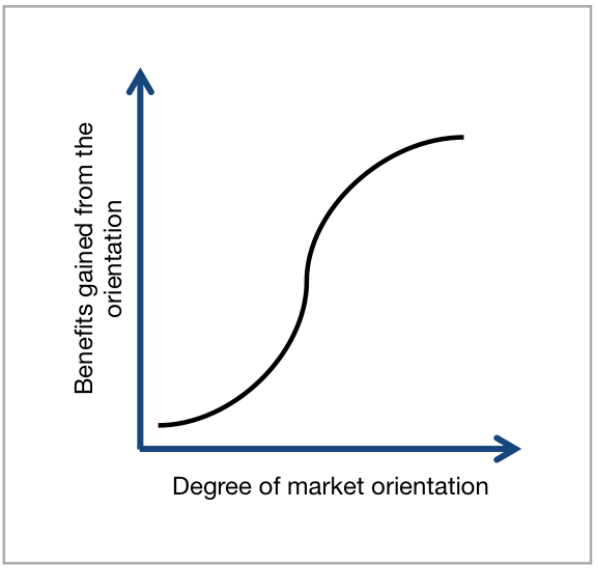

Figure 9: Market orientation and the resource dilemma

9.1.5. Introduction to proposition 5a-f

As stated in Section 3.5, opportunity discovery has not been widely discussed in market orientation literature. Still, we proposed different propositions in relation to this field. As mentioned, the thesis and in particular these propositions are quite exploratory. The propositions seek to identify the link between market orientation and market opportunity discovery.

In the following these propositions are discussed. Proposition 5a to 5e can be considered as sub-propositions to proposition 5f, where propositions 5a-c attempt to provide answers to RQ1 and 5d-e assist a solution to RQ2. The result of proposition 5f is therefore dependent on the five previous propositions. This can also be seen from the illustration of our propositions in Figure 7.

9.1.6. Proposition 5a [RQ1] - Opportunities are discovered through customer orientation

The maritime companies in Møre will discover market opportunities by being customer oriented.

The proposition investigates whether the maritime companies discover opportunities through customer orientation, and is based on arguments presented in Section 3.5. Based on proposition 1, it is already found that most of the companies are customer oriented, and whether this results in more market opportunities is an interesting discussion.

Empirical analysis

Discovery of market opportunities directly or indirectly through customer orientation is largely confirmed by all interviewees. However, most companies seem to discover opportunities more indirectly than directly through customer orientation. NS was the only company that elaborated on an opportunity that was discovered directly through market orientation, as a subcontractor approached NS with an offer to cooperate. However, as our interpretations in Section 8.2.3 state, this cannot be seen as a typical opportunity discovery by NS.

For the two shipbuilders, it is likely that customer orientation was present in their structured analyzes, and that they acted on the opportunities because they saw it as a better way to fulfill present and potential customers' needs. As elaborated in Section 3.5.1, Sciascia et al. (2006), state that scanning the environment enhances the possibility to discover entrepreneurial opportunities, and the behavior by the shipbuilders seem to be in accordance with this. Further, though the equipment suppliers did not discover their discussed opportunities through customer orientation, they both highlight the importance of their customers when they do new product development and initiate new activities. The close cooperation with customers are performed to give them superior value, which indicates that opportunities are also discovered through customer orientation, by using the definition by Day (1994) and Narver and Slater (1990).

In summary, proposition 5a is found to be supported, as most of the companies discover market opportunities directly or indirectly through their customer orientation. This finding can be used directly to help answer RQ1.

Theoretical implications

Through proposition 5a, we have seen that customer orientation can successfully be used to analyze how maritime companies in Møre discover opportunities. Thus, support is found for Sciascia et al. (2006) as firms with particular concern for their customers will discover more opportunities. This also makes sense when analyzing the early work of Narver and Slater (1990) and Kohli and Jaworski (1990), as it can be said that uncovering a latent customer need is similar to discovering a new opportunity. Further, this indicates that opportunities are discovered by being proactively customer oriented. This explicit link between opportunity discovery and customer orientation should be highlighted and investigated in future research.

9.1.7. Proposition 5b [RQ1] - Competitor orientation as a source to discover opportunities

The maritime companies in Møre will discover market opportunities by being competitor oriented.

This proposition is based on the arguments made in Section 3.5.1, and aims to uncover whether the maritime companies discover market opportunities through competitor orientation. Following our arguments in Section 9.1.1 it is found that only some of the studied companies

are competitor oriented.

Empirical analysis

Our interview findings support that competitor orientation affects opportunity discovery when opportunities are discovered through a structured analyzes. As stated earlier, it is likely that competitors were considered in the analytical processes performed by VARD and Ulstein that lead to discovery of several opportunities.

By referring back to the empirical analysis for proposition 1 and Table 7, it is not surprising that only the shipbuilders discovered market opportunities indirectly through competitor orientation, as no one else is found to have a competitor oriented behavior. A natural consequence of not being competitor oriented is the impossibility to discover opportunities through the orientation.

However, this does suggest that the companies that are actually competitor oriented, do to some degree use this orientation when actively seeking for new opportunities. Also, by referring to the interview with NCE Maritime, it was stated that one should not underestimate local competition. Intuitively, a natural suggestion would be that this local competition would lead to more competitor monitoring, which again could lead to increased opportunity discovery.

To conclude, proposition 5b is partially supported, and helps to answer RQ1. The discussion highlights that only a few of the companies in our selection is competitor oriented. Even though these companies discover opportunities through the orientation, the empirical foundation and findings are not considered to be strong enough to give full support to this proposition.

Theoretical implications

Even though proposition 5b receives partial support, the case of the shipbuilders brings support for the statements from Day (1994). Namely, that market oriented organizations perform structured analyzes such as benchmarking and imitation towards their competitors. The structured analyzes performed by the shipbuilders did likely include similar techniques towards their competitors. Moreover, Day's (1994) suggested techniques, which seek to investigate the strengths and weaknesses of current and potential competitors, can be seen as a more accurate extension of competitor orientation as proposed by Han et al. (1998) and Slater and Narver (1994).

9.1.8. Proposition 5c [RQ1] - Interfunctional coordination not important for opportunity discovery

The maritime companies in Møre will discover market opportunities by being interfunctionally coordinated.

The proposition is based on the arguments presented in Section 3.5.1, that interfunctionally coordinated organization discover more opportunities as the whole organization is focused on the two other cultural elements.

Empirical analysis

All companies, except NS, were in Section 9.1.1 found to be interfunctionally coordinated to some extent, as several departments were involved in delivering superior customer value. However, none of the opportunities discussed during the interviews revealed that interfunctional coordination was important for the discovery. In accordance with Menguc and Auh (2006) it was expected that routines for collecting and disseminating would increase interfunctional coordination, and that this in effect would lead to opportunity discovery. However, this was not observed.

Contrary to the explanation for proposition 5b, the lack of support for this proposition cannot be explained by an absence of interfunctional coordination in the organizations, since the companies are interfunctionally coordination to a medium degree. By observing this, a rejection of proposition 5c is found to be appropriate.

Theoretical implications

The inclination to reject proposition 5c has

important theoretical implications for the link between market orientation and opportunity discovery. Arguments made above show that interfunctional coordination is not an important part of opportunity discovery for maritime companies, and the proposition is therefore removed from our set of propositions. Researchers that wish to investigate opportunity discovery in the maritime industry in the future should take this into account, and investigate if the finding can be generalized to other industries. We do note, however, that a case study methodology, where one representative is interviewed from each organization, is perhaps not the best approach to discover the effects of interfunctional coordination.

9.1.9. Proposition 5d [RQ2] - Varying time horizon used for the maritime companies

The maritime companies in Møre will have a long-term focus when making decisions about market opportunities.

The proposition aims to discover the time horizon used by the maritime companies when they decide upon a market opportunity.

Empirical findings

Findings from the interview with NS, indicate a long-term focus when the company decided to enter a long-term contract partly to improve its renomé and to build a new customer relationship. To stay competitive in the future, having relationships with strong industry players, as well as having a good renomé can be important. Emphasizing this indicates that NS has a long-term focus. This is in accordance with a long-term focus as proposed by Han et al. (1998) and Narver and Slater (1990).

The two shipbuilders showed similar characteristics. VARD's opening of a design subsidiary without any existing customers or relationships indicate a belief that this will be beneficial in the future. Ulstein's commercialization of the X-BOW® shows similar inclination of a long-term belief that this product development would be beneficial in the future.

For the two equipment suppliers more varying findings are revealed. Kongsberg Evotec's focus on oil and gas customers' explicit needs indicates a more short-term than long-term orientation when evaluated in regard of Han et al. (1998) and Narver and Slater (1990). Seaonics' ownership position in CDS is most likely a result of thoughts that this will yield positive return on investment in the future. However, Seaonics' focus on shipowners instead of end users, indicates a short-term focus, as it is more concerned about present rather than future needs.

Together, the proposition is partially supported as evidence predominantly point in the direction of a long-term focus, and shed light to the answer to RQ2. However, the more limited support for the equipment suppliers indicate the finding cannot be generalized to all the maritime companies.

Theoretical implications

Comparing the analysis above with the findings in proposition 2, gives some interesting implications. It can be seen that the more proactive companies have a more long-term orientation, while the more responsive companies have tendency to be short-term oriented. Thus, the market oriented behavior seems to have a link to the time-horizon used when making decisions about market opportunities. This is perhaps not surprising since responsive companies try to fulfill present needs (Jaworski et al., 2000; Narver et al., 2004), which in itself indicates a short-term thinking. Still, this link should be further investigated so that it can be confirmed and explicitly formulated.

9.1.10. Proposition 5e [RQ2] - Profitability focus when deciding to act on opportunities

Companies in the successful maritime cluster in Møre will have a profitability focus when making decisions about market opportunities.

The proposition reflects the expectation that the

maritime companies focus on profitability when they decide which opportunities to act upon.

Empirical analysis

Generally, a focus on profitability is found to be present when all the maritime companies studied make decisions. Even though NS entered a contract, which would not repay the investment cost for the vessel, it seems as this is based on an expectation of future profitability. Further, NS stated that the financial options provided by shipbuilders are important for when they contract a vessel, indicating a focus on profitability.

Both the shipbuilders included economical analyzes in their market analyzed, and they usually operate with specific payback time requirements when evaluating opportunities. This can be evaluated as signs of having a profitability focus.

The equipment suppliers do also seem to value profitability when they make decisions about market opportunities. Both state that they only do development projects and other projects if they have an established customer. If a project is not deemed profitable, it is not conducted, indicating a focus on profitability.

In summary, we find support for the proposition. This is perhaps not surprising when seeing it in line with our findings for proposition 1, where we found that the studied organizations strongly focus on profitability. When an organization focus on profitability in general, a natural consequence is that they also evaluate profitability when they make decisions about market opportunities.

Theoretical implications

Theoretically, further support is found for our hypothesis that a profitability focus is a part of every organization and not just market oriented ones. Further, a link between profitability focus in general and profitability focus when making strategic decisions is found, which is not surprising. A profitability oriented organization will also focus on profitability when making strategic decisions. Thus, we believe that profitability should be removed as a decision criterion towards market opportunities in a market oriented company. Profitability focus is still seen as relevant when maritime companies make decisions, but not when seeing it specifically in relation to market orientation. Proposition 5e is therefore removed from our set of propositions, and will not be used to answer RQ2.

9.1.11. Proposition 5f [RQ1 and RQ2] - Opportunities are partially discovered through market orientation

The maritime companies in Møre will discover market opportunities by being market oriented.

This proposition can be seen as a summary proposition of propositions 5a-5e. As stated in Section 3.7, we view discovery and decisions towards opportunities through market orientation as a one-dimensional construct made up of the three cultural elements and the two decision criteria. Therefore, the result of proposition 5f will be a product of the aforementioned propositions.

Empirical analysis

From the above arguments, we see that only proposition 5a and 5e is fully supported. However, proposition 5e has been removed from the set of propositions. Thus, proposition 5a is the only proposition that is fully supported. Propositions 5b and 5d are partially supported; the maritime companies that are competitor oriented seem to use this orientation when discovering market opportunities and most of the companies have a long-term focus when deciding which opportunities to act upon. Our proposition that interfunctional coordination would enable opportunity discovery was rejected.

As a summary, proposition 5f is partially supported since only some of its elements are found to be prevalent.

Theoretical implications

Theoretical implications have been given for the cultural elements and the decision criteria in the above sections. Thus, this section pres-

ents some overall implication for theory. Most importantly, discovery of market opportunity through market orientation cannot be considered as a one-dimensional construct made up of the cultural elements and the decision criteria. This was originally hypothesized based on arguments made by Narver and Slater (1990) and Kohli and Jaworksi (1990), but cannot be supported since proposition 5c is rejected, and since proposition 5e is taken out the equation. Discovery of opportunities should rather be analyzed through customer orientation, predominantly and also through competitor orientation. Further, in light of market orientation, long-term focus is used as a decision criterion when these companies decide to act on opportunities or not.

9.1.12. Proposition 6 - Customer orientation a necessity to compete

The characteristics of the maritime industry in Norway and Northern Europe have made market orientation a necessity in order to compete, and not a source to competitive advantage.

Theory says market orientation gives a competitive advantage to the firms that obtain it (Hult et al., 2005; Narver & Slater, 1990; Noble et al., 2002; Slater & Narver, 1994). Seen in Section 2.2, knowledge, skills and a complete industry have been known to characterize the Norwegian maritime industry. Given these characteristics, we anticipate all firms to need market orientation to succeed and that it therefore does not give a competitive advantage.

Empirical analysis

As concluded in proposition 1, there is only partial evidence for market orientation among the maritime companies. Proposition 6 can therefore not be supported in its entirety.

However, empirical findings do show that the maritime companies have a strong customer orientation. The companies highlight the importance of developing products and services that their customers certainly will value. To do this, they all emphasize the need to collaborate closely with their customers. This is seen as customer oriented behavior, and since all firms do, and highlight the importance of this, we believe customer orientation is a necessity to compete.

Since the presence of competitor orientation and interfunctionally coordination is not as strong in the maritime companies, it weakens the confidence in proposition 6. We do believe, as shown in proposition 5b, that firms could use competitor orientation in order to discover opportunities in a larger extent than today. Again, these two cultural elements do not appear necessary in order to compete.

In summary, proposition 6 is not supported in its original form, as market orientation is not found to be a necessity in order to compete. This is because the maritime companies in Møre remain successful even though they show little degree of competitor orientation and little interfunctional coordination. A revised proposition 6 is therefore presented:

The characteristics of the maritime industry in Norway and Northern Europe have made customer orientation a necessity in order to compete, and not a source to competitive advantage.

Theoretical implication

Market orientation researchers should investigate in which industries the different cultural elements are best utilized, as we have found that customer orientation is found to be a necessity to compete in the maritime industry. Other elements can be necessary in other industries, and should be studied. Since our findings indicate that only customer orientation is a necessity to compete, it contradicts Kumar et al. (2011), who indicate that all the elements have become a necessity. However, Kumar et al. (2011) did not research a specific industry like this thesis. Thus, we also imply that results such as this should not be generalized too wide, but that they rather remain industry specific.

9.1.13. Proposition 7 - Intuition and tendency to increase rationality when making decisions

A high degree of variation is expected to be found in the decision making processes used by the maritime companies in Møre. Some companies will actively seek to broaden their rationality through different techniques, while other organizations will make decisions after a more political process where different coalitions argue their view. Further, it is probable that some intuition will be used when decisions are made.

The purpose of proposition 7 is to unveil the decision making processes used by the maritime companies in Møre. In line with Eisenhardt and Zbaracki (1992), this is deemed as an important aspect as it shapes the future of the firm.

Empirical analysis

The firms in our selection provide a number of examples of actively increasing their rationality before making decisions. Both VARD and Ulstein revealed structured processes that ensures that relevant information is gathered and analyzed. Dean and Sharfman (1996) argue that this is an important element in order to increase the rationality.

In addition, the shipbuilders and Kongsberg Evotec mentioned the importance of including experts and customers as early as possible to get insight from people outside the organization before making a decision. These actions to obtain more viewpoints on a matter is also acknowledged by Dean and Sharfman (1996) as important. This also ensures that the structured process does not lead to group thinking, which would deter the decision making framework (Eisenhardt & Zbaracki, 1992). VARD's possible establishment in Australia is an example of the latter, where the management at one point recommended to establish in Australia. However, due to steps in its analytical framework, this opportunity was rejected due to new outside-information from potential customers. The example shows that the solid decision making process turned into what VARD perceived to be a better choice, which supports the argument by Dean and Sharfman (1996), that this would also lead to a better outcome.

Through the interviews we find it difficult to disclose any indications of the politics and power perspective on strategic decision making. No incidents of competing preferences that were resolved through conflict (Eisenhardt & Zbaracki, 1992), were elaborated to us through the interviews. Although we did not observe such behavior, we doubt that it does not exist in the maritime industry. We admit that our research methods of interviews may not be suitable to disclose such behaviors, as the interviewee can experience, or be afraid of, reprisals if he or she reveals such behavior in the organization.

NS and Seaonics elaborated on examples where decisions had been made solely through the gut feeling of the CEO or top management. Given the vast experience of these persons this might not be as surprising as it first may seem. As shown in Section 4.4, Katri and Ng (2000) describe gut feeling as being part of intuition. Also, knowledge experience from previous, similar problems such as choosing which type of newbuilding a shipbuilder should contract, is deemed as intuitive synthesis (Khatri & Ng, 2000).

Thus, proposition 7 can be supported, and gives strong indications for the answer to RQ2. We have found a high degree of variation in the companies' decision making process. While we did not reveal any influence of the politics and power perspective, both the rational model and intuition were clearly present.

Theoretical implication

Our observations are mostly in line with the theoretical foundation. However, we cannot confirm theory on the political perspective. This is unfortunate, as Dean and Sharfman (1996) argue that political behavior can lead to an incomplete understanding of the environment as decision makers are centered around self-interest. In result, this can deter market orientation in a company, because the company lose focus

on its environment. Such a finding would have had a great impact on the research questions in this thesis.

Khatri and Ng (2000) argue that intuition is often used when decisions need to be made fast. We do not attempt to reject this statement, but in regard of the role intuition has in strategic decision theory, our research confirms and strengthens the use of intuition in situations where there is limited time pressure. Since intuition in such circumstances has little research in the business and administration field, we want to emphasize this finding. Given the size of investments in the maritime industry, this choice of making decisions is quite surprising and should be researched further.

9.1.14. Proposition 8 [RQ1 indirectly] - The cluster affiliation enable local market orientation

Being part of a cluster will make it easy for companies to be locally market oriented, but this may negatively affect the global market orientation.

The maritime companies in Møre were interviewed because they are located in the regional cluster in Møre. With proposition 8, we want to investigate how being part of the cluster affect the easiness of being market oriented. As Porter (2000) characterizes a cluster by its geographic concentration, we expect it to have positive influence locally and as explained in Section 5.3.1, this will indirectly influence the firms' opportunity discovery.

Empirical analysis

Through the discussion of propositions, it is clear that the maritime companies in the Møre cluster behave customer oriented, and that some behave competitor oriented. Interview findings indicate that the geographic proximity enable these orientations. Interviewees state that the local industry is transparent, which makes it easy to have close relationships with customers, while it at the same time is easier to monitor competitors. This indicate that local customer and competitor orientation is enabled through being in the cluster. This is in accordance with Porter (1998, 2000), who states that the cluster provides the businesses with access to information, which seems accurate for the firms in our selection as well. Since these effects are related to the closeness of other firms, they reduce the use of resources and enhances the productivity within the cluster (Porter, 1998, 2000). It also shows that the maritime companies easier can become locally market oriented due to the cluster.

In accordance with our arguments in Section 5.3.1, no evidence shows that the cluster directly affects interfunctional coordination. This is also reasonable as interfunctional coordination relates to the internal organization and knowledge sharing within an organization, while the cluster impacts the organization's external environment.

No findings show that the maritime companies' global market orientation is negatively effected by the closeness effects discussed above. It is not evident whether the firms have gained information about its global customers or competitors through the cluster, but it cannot be rejected either. The second half of the proposition therefore remains inconclusive.

The representative from NCE Maritime elaborated on a couple of projects where the organization assists the smaller firms to orient themselves internationally. This should help the smaller companies to become more globally market oriented, but were not mentioned by any interviewees.

To conclude, proposition 8 is partially supported. By being in the cluster, it is made easier for the maritime companies to be locally market oriented. Since we do not have any evidence that indicates a negative effect on the global market orientation, the last statement in our proposition remains inconclusive.

Theoretical implication

Assessing cluster theory with the theoretical field of market orientation is a new research area. We

therefore have no comments towards possible alterations that must be made. However, we believe that both research areas would be enhanced if studied collectively. We therefore encourage researchers of both cluster theory and market orientation to research this joint field further. As we are unable to detect negative effects on the global market orientation, we especially encourage this topic to be investigated further. In light of Porter's diamond model (1990), firms located in the maritime cluster have a great foundation in order to stay competitive, but their access to global information used in market orientation appears to be unclear.

9.2. Summary of analysis

In this chapter we have analyzed our theoretical propositions, and proposed theoretical implications. A summary of how the different propositions have been evaluated and a revised illustration of our propositions are presented. For an overall conclusion of our research questions, we refer to the next chapter.

In the revised illustration (Figure 10), propositions which have been rejected are removed, propositions found to be partially supported are made transparent, while the inconclusive propositions are filled with grey color and made transparent.

We initially proposed that the maritime companies in Møre are market oriented, reflected in proposition 1. This proposition was found to be partially supported as the maritime companies do not inherit all the elements included in market orientation. Further, we have proposed, in accordance to Kohli and Jaworski (1990) that profitability should be removed from the construct of market orientation in the maritime industry.

Proposition 2 was evaluated to be supported, as variations in market oriented behavior were found between the different maritime companies. The shipowners and shipbuilders behaved proactively market oriented, and discover opportunities through market analyzes. The equipment suppliers were more responsive in their behavior, and identify opportunities in relation to their customers.

Proposition 3 and 4 remained inconclusive, but has allowed us to present a fruitful discussion. For proposition 3 we were not able to disclose the relationship between market orientation and both performance and innovation. When analyzing proposition 4, we were not able to measure the resources used on, and benefits gained from being market oriented. It was argued that this was due to our research methods.

All propositions related to proposition 5 investigate whether opportunities are discovered through the elements of market orientation and also how the decision making process is affected by the orientation. Proposition 5f can be considered as a summary of propositions 5a to 5e. Through our findings, proposition 5a was supported, while 5b and 5d was partially supported. Proposition 5c was rejected, as no findings revealed that interfunctional coordination was important when the maritime companies discover market opportunities. Even though proposition 5e was supported, it is removed from our new illustration of propositions. This is a consequence of proposition 1, where profitability is removed from the market orientation construct. Based on the above explanations, proposition 5f is partially supported.

Proposition 6 is rejected in its original form, as several companies are successful even though they are not fully market oriented. However, we propose that being customer oriented is necessary to compete, and proposition 6 is changed to reflect this.

A high variation in how the maritime companies make strategic decisions is found, and proposition 7 is therefore supported. Some companies perform structured analyzes before they make decisions, while others base their decisions on intuition.

Proposition 8 is partially supported. Evidence indicates that the cluster affiliation makes is easier to be locally market oriented, but we are not able to conclude on how the affiliation affects the global market orientation.

Together, this leads us to propose our revised illustration of propositions, shown in Figure 10.

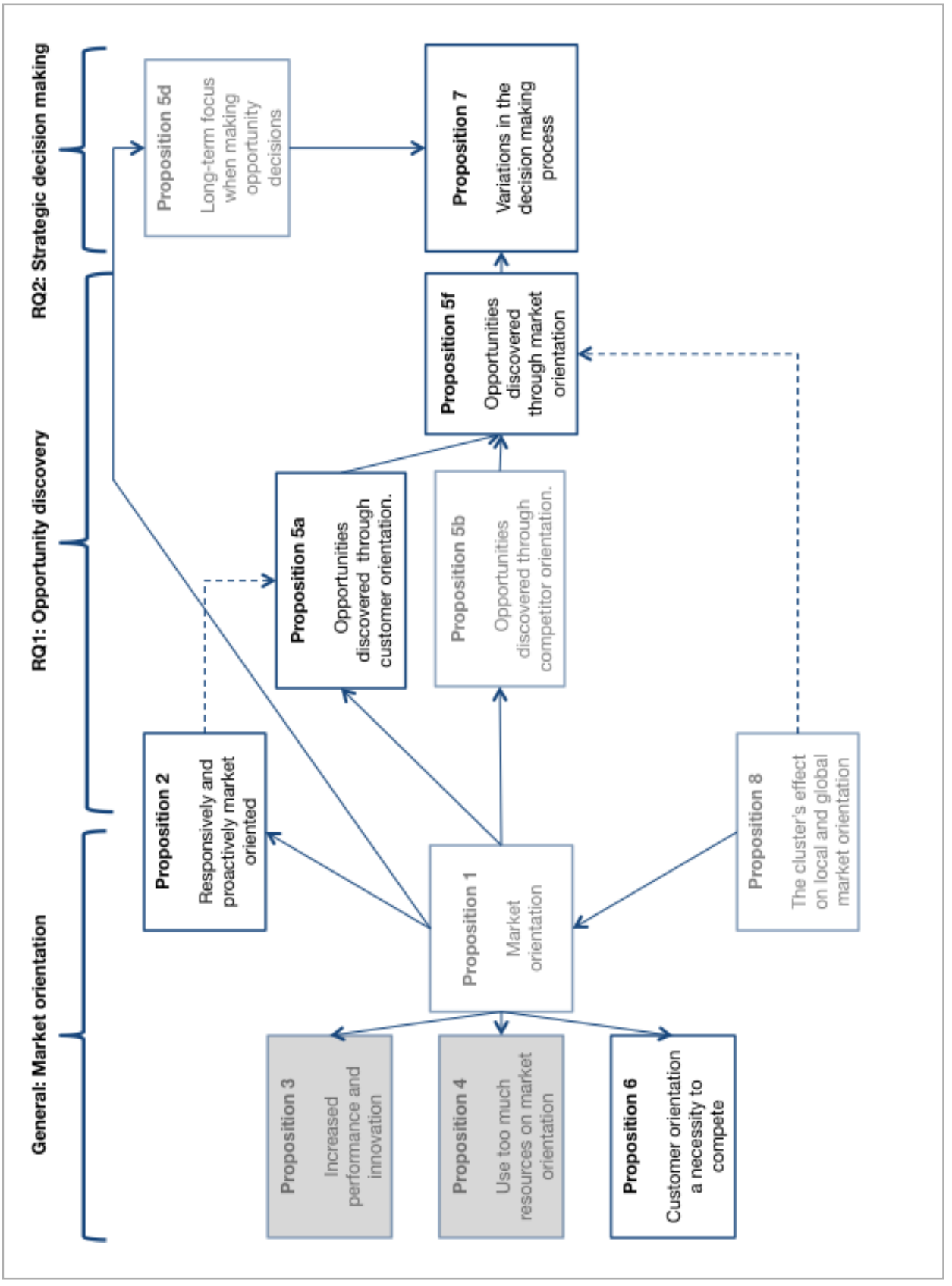

Figure 10: Revised illustration of theoretical propositions

Conclusion, discussion and implications

Chapter 10

Conclusion, discussion and implications

This chapter starts with the conclusion to our research questions, in Section 10.1. We then take a more holistic approach in Section 10.2 and discuss some general and interesting findings of this thesis. Section 10.3 includes our implication for managers, researchers and policy makers. The thesis is ended in Section 10.4 with our final remarks.

10.1. Conclusion

Discovering opportunities and deciding which opportunities to pursue, is of great importance for all companies. Based on this, and our interest in the maritime industry, we presented two research questions, which we now will answer.

> *RQ1: How do maritime companies in a successful cluster discover new strategic market opportunities?*

The maritime companies in Møre partially discover market opportunities through market orientation and its three cultural elements. First, the companies are highly customer oriented, and opportunities are discovered through the identification of customers' current and latent needs. Second, although few, the companies that are competitor oriented discover opportunities through structured analyzes and competitor monitoring. Third, interfunctional coordination is of limited relevance when it comes to opportunity discovery.

Additionally, some companies discover opportunities by proactively analyzing the market, while others have a more responsive behavior and discover opportunities in relation to their customers. Furthermore, the maritime companies indirectly discover more local opportunities due to their cluster affiliation.

> *RQ2: How do maritime companies in a successful cluster choose which opportunities to pursue?*

Most of the maritime companies in Møre have a long-term focus when they decide which opportunities to pursue. Furthermore, some perform structured processes to increase their rationality before making strategic decisions, while others base their decisions more on intuition, and in effect, on top management's experience.

10.2. Discussion

In this section, we try to broaden our horizon and look past our theoretical propositions to discuss the most important findings and aspects discovered in this thesis. We discuss how the companies can discover more market opportunities by becoming more competitor oriented, how market orientation can be a mean for future competitiveness in the Norwegian offshore oil and gas industry and how the shipowners make large investments with unstructured decision making processes. Our last two discussion points are more aimed towards theory and attempt to discuss how size and segment affect the adoption of market orientation and how firms are affected by being located in a cluster.

10.2.1. More opportunities through competitor orientation

Through the analysis of our propositions, we find strong support for customer oriented behavior among the maritime companies in Møre. Via proposition 5f, we also found that market opportunities were discovered through the companies' customer orientation. Contrary to our expectations, the maritime companies in Møre only partially use competitor orientation to discover market opportunities.

We established partial support for proposition 5b, and do argue that the maritime companies in Møre have an opportunity to discover more market opportunities by becoming more competitor oriented. Through the analysis it was revealed that the companies that did behave competitor oriented, found opportunities through this orientation. Without competitor orientation, we believe the maritime companies miss out on advantages proposed by Han et al. (1998) and Slater and Narver (1994). These advantages lead to knowledge that can be used to disclose competitors' strategy and to target a market where competitors are weak (Slater & Narver, 1994). This was achieved by Ulstein prior to its investment in the six medium-sized PSVs. It is also likely that VARD identified the possibility of gaining an advantageous position against its competitors by establishing a subsidiary in Canada. In the innovative maritime industry in Møre, we believe that the different companies will develop new products and services, and target different new market segments. As Day (1994) argues, firms can benchmark against, and imitate their competitors to discover such new opportunities or new ways to improve their value offering. Augusto and Coelho (2009) also found in their firm-wide research that a competitor oriented behavior increases the new-to-the-world product innovation. Thus, more competitor oriented behavior can lead to increased innovation.

Thus, we summarize by arguing that there is an opportunity to discover more opportunities by becoming more competitor oriented which in turn means to become more market oriented. Since only Ulstein and VARD were found to have a competitor oriented behavior, the other firms should see the value of becoming more competitor oriented. This is best done by changing their organizational culture (Day, 1994; Gebhardt et al., 2006), which is best achieved with support from the top management (Jaworski & Kohli, 1993; Slater & Narver, 1994). The CEO of the shipowning company, for example, should give constant reminders to the organization to focus on competitors (Jaworski & Kohli, 1993), as he has most of the decision making authority and would likely have a great impact on the organization's change to a more competitor oriented behavior. Another element in order to get the organization to become more competitor oriented, is to develop appropriate incentives and reward systems (Gebhardt et al., 2006).

10.2.2. Market orientation strengthen offshore competitiveness

As presented in Section 2.2.2, oil and gas exploitation on the Norwegian continental shelf is characterized by a high cost level. To be able to develop new fields for exploitation in the future, and to be internationally competitive, it is expected that the cost level must decrease. Statoil, the largest industry actor on the Norwegian continental shelf, has already announced that it

is reducing its investment budget (Lorentzen, 2014). This will also impact Statoil's suppliers, such as the maritime companies in Møre because the focus on cutting costs will propagate down the value chain. This can be seen from Figure 11, which is developed based on our industry review, and shows a simplified example of the link from Statoil to the case companies in this study.

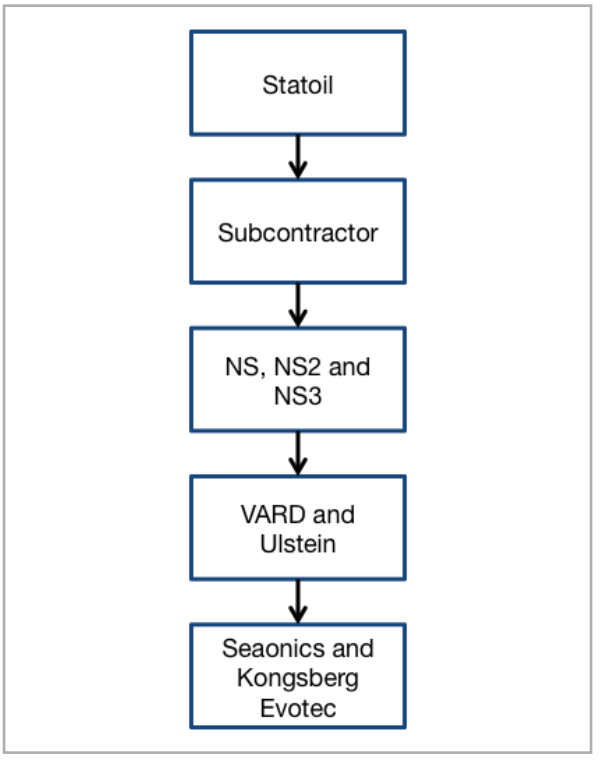

Figure 11: Example of how Statoil affects our sample firms

Due to the increased focus on costs, a more intensive competitive environment can be expected. Companies will strive to deliver cost-effective solutions, and only the ones that manage this will likely succeed. Homburg and Pflesser (2000) and Kumar et al. (2011) find that in a turbulent market environment, the positive relationship between business performance and market orientation is strengthened. Moreover, Kumar et al. (2011) believe that the positive relationship is further strengthened when there is strong competition.

We believe that market orientation can be a mean for maritime companies in order to gain a competitive advantage in the Norwegian oil and gas industry in the future. Literature argues that market oriented businesses are better at delivering superior customer value (Carrillat et al., 2004; Kohli & Jaworski, 1990; Narver & Slater, 1990; Slater & Narver, 1994), and due to the increased cost focus, it is expected that it will become more important to deliver cost-effective solutions in order for customers to perceive superior customer value. By incorporating the three cultural elements of market orientation in an organization, we believe a company can present a superior value offering. First, we believe that a customer oriented organization will be better able to understand and fulfill the needs of customers within the oil and gas sector than its competitors. Second, by being competitor oriented a company can learn from its competitors and also understand where to position itself in the market space. Third, by being interfunctionally coordinated the whole organization is focused on delivering the superior value.

Based on Carrillat et al. (2004), Jaworski et al. (2000) and Narver et al. (2004), we also argue that the maritime companies need to have a long-term focus and be proactive. This is because the need to lower costs might not be as prevalent today, but the companies that can start adapting to this now by identifying customers' latent needs, will be better positioned when the demand gets stronger. This is especially needed for the equipment suppliers, as we found that they predominantly focus on their customers' current rather than future needs.

For the companies that are not market oriented today, but wish to incorporate the orientation to be more competitive in the future, we refer back to Section 10.2.1 above. We do also acknowledge the challenges and barriers of becoming more market oriented. First of all, it can be a barrier for firms to dedicate resources to change an existing culture. Second, it might be a barrier that a firm has to adjust its strategic focus, for example from innovation to customers and competitors. Third, during a period of change, a company might lose some its short-term benefits, which might be perceived as a barrier.

In summary, we propose that the maritime companies in Møre become market oriented in order to get a competitive advantage in the Norwegian offshore oil and gas industry. Further, it is important to be proactive to understand customer's latent needs.

10.2.3. Large investments, but unstructured processes

Through the case studies and interviews, we saw that the strategic opportunities that the shipowners faced and the related decisions made, entailed large investments. The empirical analysis showed that NS and NS2 seem to make decisions on contracting newbuildings solely on the management's intuition to make the best decisions. Thus, by seeing this in light of theory by Khati and Ng (2000), the shipowners make decisions based on the top management's gut feeling and past experience.

We argue that the shipowners should develop a more structured analysis process when making decisions to increase their rationality. Currently, since the top management of NS appears to not get information and insight from the entire organization or through outside-experts, it does not become aware of additional information from other perspectives that could help to increase its rationality. Dean and Sharfman (1996) argue that such additional information from different viewpoints would most likely help the rationality of a decision to be better. By conducting more structured analysis, we believe that the shipowner can make consistently better decisions, and it will also likely spread the decision responsibility as it allows more people to be involved in the decision process. Subsequently, it reduces the dependence of the experience and knowledge of the CEO. By making consistently better decisions, it is also believed that the shipowner in average will have better business performance. This is also supported by Dean and Sharfman (1996), who state that firms that perform a structured decision making process will be more successful than those who do not.

In addition, we found that the shipbuilders are the only ones with a medium or high degree of competitor oriented behavior. We also found that this orientation is partly driven by their structured analyzes. Thus, it seems as NS and other firms can improve their competitor oriented behavior by incorporating more structured analyzes.

10.2.4. Comparison across firm size and segment

Through the thesis we have sought to discover general trends for all the maritime companies in Møre. To nuance the picture, we now discuss some of our findings based on firm size and segment.

In general, for the firms in our sample, the firm size and segments correspond well. The largest firms are the two shipbuilders, VARD and Ulstein, measured by both revenue and number of employees, and the two smallest firms are the two equipment suppliers, Seaonics and Kongsberg Evotec. Without revealing the shipowners' identity, they can all be said to have a medium/large size.

In Section 8.3 and Section 8.4, it was shown that the two shipbuilders performed the most systematic analyzes for assessing new markets and product categories, and that they are the most long-term focused. It was also observed that the largest companies opted to increase their rationality through structured processes when making decisions. Overall, it was found that these companies are most market oriented, which is in accordance with Liu's (1995) finding that firm size is positively related to the degree of market orientation. Contrary to this, our analysis showed that the small and medium sized companies did not perform structured analyzes in most cases, and they also based decisions more on intuition. Overall, they were deemed to have the lowest degree of market orientation due to their lack of competitor orientation, and their more short-term focus. The short-term focus can, as argued in Section 9.1.9, be connected to their more responsive market oriented behavior.

Though our case study sample is too small to generalize, there is a tendency that the larger firms are more market oriented, perform more structured analyzes and that they are more concerned about increasing their rationality. As a result, we indicate support for Liu (1995), and not Pelham (2000), that there exists a positive relationship between firm size and degree of market orientation.

As Liu (1995), we indicate that these differences can be explained by differences in resources available, whether financial, human or technological. Supporting this, Jones et al. (1992), find that performing analyzes consume resources, and that it is therefore likely that only the larger firms have the resources to do this.

Moreover, this difference can also be partly explained by their different value chain position. The shipbuilders, which are close to the end users might have to do more analyzes to stay competitive, while the equipment suppliers can trust the analyzes already performed by shipbuilders and believe it is sufficient to be responsive to the shipbuilders' actions. Indications of this is also found in our case study, where Kongsberg Evotec states that the shipbuilders and shipowners bring opportunities into the cluster. This brings further perspective to our arguments in Section 9.1.2, where it is found that the shipbuilders are more proactive, while the equipment suppliers are more reactive.

As a summary, we indicate that there is differences in market orientation related to firm size, at least in the maritime industry. We have come one step further in confirming the positive relationship between firm size and degree of market orientation found by Liu (1995), but we acknowledge Merlo and Auh's (2009) notion that more research is needed to fully establish this link.

10.2.5. Cluster effects on the maritime companies

Since the maritime companies in Møre are part of a successful cluster, we want to investigate and highlight what the companies themselves value as most beneficial about their cluster participation. We will also evaluate if this is in line with theory.

With the help of the case studies, we found support for many of the positive effects named by Porter (1998, 2000) from being located in a cluster. All the firms enjoy the close geographic distance and relationship to maritime suppliers and customers. This close access allows the firms to receive valuable input and overview on trends in technology and market development. The interviewee from Kongsberg Evotec also mentioned that close relationships with customers allow the company to perform joint development of solutions, which entails knowledge transfer and valuable learning effects. Porter (1998, 2000) argues that information about buyers' needs is one factor that can enhance the productivity in a cluster, which thus is confirmed by the firms in our selection.

The firm interviewees from Ulstein, VARD and NS appreciate the fact that the cluster contains firms from all parts of the value chain in the region. The companies highlight the importance of having demanding customers that pressure them to innovate faster and produce better products, which entails increased global competitive advantage. This is in accordance with Cavusgil et al. (2013). Another factor with the complete value chain, that enhance the productivity according to Porter (1998, 2000), is the access to specialized inputs. The inputs can consists of employees, components and business services. For example, the shipbuilders emphasized the importance of having local suppliers that collectively could deliver all the equipment needed for their vessels. By having easier access to these inputs, it makes the companies more effective in their production.

In general, the close relationships between cus-

tomers, suppliers and competitors appear to give the firms better terms to perform everyday operations within. In turn, this strengthens the international competitive advantage that the maritime companies in Møre will have.

Through this discussion and analysis of proposition 6, it is revealed that the cluster enhances the firm's ability to be locally market oriented. Increased customer and competitor orientation is clearly a result of the cluster. On the other hand, we do find it difficult to establish a direct link between the cluster and market opportunities, even though we believe that being present in a cluster should enable discovery of local market opportunities.

10.3. Implications for managers, researchers and policy makers

Through our analysis and discussion, we are able to give implications for managers, researchers and policy makers. We do note that additional implications have been given throughout our analysis in Chapter 9.

10.3.1. Implications for managers

We argue that companies can discover market opportunities through customer and competitor orientation, and that market orientation in general can be a mean to gain a competitive advantage in the future offshore oil and gas industry in Norway. For managers this implies that a market oriented behavior should be adopted if not already present in the organization. To achieve this, changing the organizational culture in line with the elements of market orientation is needed. To do this, some specific advice is given:

- Ensure that the change of culture has support from top management.
- Give continual reminders to employees of the importance of being aware of customer needs throughout the whole maritime value chain.
- Develop incentive and reward systems, which support a market oriented behavior. For example by rewarding employees if customer satisfaction is increased, or if their department contributes to increased customer value.

Already today, customer orientation is deemed as a necessity to compete in the Norwegian maritime industry. This is especially important for managers of new entrants. To succeed in the maritime industry in Norway, it is vital to develop a customer oriented culture prior to entering the market. If not, potential customer may find competitors more attractive, and the risk of not getting return on the large investments made when entering the market is higher.

Managers should be careful to measure the costs

and corresponding benefits of being market oriented, to avoid that more resources are used than what is gained. This awareness will be important for maritime managers, as the industry becomes more cost focused. To do this, managers should for example measure resources used on market orientation against customer satisfaction, and analyze if this has an effect on revenue or business performance.

In order to assess new strategic opportunities in the best possible manner, managers should develop and perform structured analytic procedures. In the maritime industry this is especially important, as decisions often entails large investments. To achieve more structured processes, managers can develop specific step-by-step frameworks, which must be completed before strategic decisions are made.

10.3.2. Implications for researchers

This thesis argues that profitability focus as a decision criterion should be removed from the construct of market orientation in the maritime industry. Removing profitability from the construct has also been proposed by Narver and Slater (1990), and researchers should investigate if our finding can be replicated for all industries. If so, profitability can be removed from the construct of market orientation.

Further research should perform more quantitative studies on market orientation in relation to the maritime industry in Norway. Through this, the resources used and benefits gained can be compared, and the effect that market orientation has on performance and innovation in the industry should be revealed. In our thesis, the answer to these two aspects remain inconclusive.

To get more detailed and accurate findings, we propose that further research on market orientation should also be done with a more limited unit of analysis. Specifically this should be at the segment level of the maritime industry. For example by solely investigating shipbuilders or shipowners. We believe that this is also relevant for other industries.

Intuition is important when decisions are made in the maritime industry. However, research on intuition is novel, and we propose that more research should be conducted. We propose to prioritize the following areas:

- Follow in the line of Khatri and Ng (2000) to fully operationalize the concept of intuition.
- Investigate the relationship between decisions based on intuition and decision/ business performance.
- Elaborate more on decisions made on intuition made in a stable environment without time pressure.

Further research on strategic decision making should use a different research strategy than this thesis to reveal how politics and power affect the decision making processes. It is believed, that following and observing the entire decision process, should yield more accurate results. In particular, the negative effects that politics and power may have on market orientation should be investigated further.

More research should be conducted in the intercept between market orientation and cluster theory. Specifically, how a regional cluster affects global market orientation, should be an area for further research.

10.3.3. Implications for policy makers

Since companies receive benefits from being in a cluster, we believe that policy makers should continue to fund and support the regional clusters. Through NCE Maritime, we believe that policy makers should specifically support:

- The initiative of establishing a Global Centre of Expertise in Møre, as this can strengthen the maritime cluster.
- Instruction and motivation for firms to adapt a more analytical approach to their decision making. Especially the shipowners, who are often founded on experienced seamen's knowledge and gut feeling, should have a potential for improving their decision making when these analyt-

ical frameworks are combined with their experience.

- Small and medium-sized companies to discover opportunities through various programs initiated by NCE Maritime, like In2 and Inside-information, as there seem to be limited opportunities for these type of firms to discover strategic market opportunities outside their existing customer network. The proven results of these programs should only motivate the policy makers to strengthen the cluster program.

On a more general level, policy makers should make sure that the maritime industry has competitive and reasonable terms to perform business within. This is needed as increased international competition and cost-focus is expected in the global maritime industry.

10.4. Final remarks

Through the work with this master's thesis, in addition to our project thesis in the fall of 2013, we have had the pleasure of acquiring deep insight into one of the most important industries in Norway. It has truly been an exciting voyage to study how the maritime industry has been, still is, and is likely to remain as one of the areas where Norway is in the international forefront. While the media focuses on our nation's sole dependency of the Norwegian continental shelf, Norway's offshore fleet has vast experience of sailing in international waters. However, increased cost-focus and global competition threatens to hamper the Norwegian dominance in the industry. It is our hope that the introduction of market orientation literature as a mean to discover strategic market opportunities can assist to contain the Norwegian maritime industry's global position. This is only possible if the maritime companies within the industry continue to seek opportunities that force them to please customer needs and that they make decisions that enable them to remain at the technological forefront.

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Appendix A: Interview guide

The interview guide is presented in Norwegian.

Introduksjon

Intervjuguiden sin hensikt er å skape rammene for intervjuet slik at gjennomføringen og troverdigheten til intervjuene blir god.

The Research Questions of the Master's thesis:

RQ1: How do maritime companies in a successful cluster discover new strategic opportunities?
RQ2: How do maritime companies in a successful cluster choose which opportunities to pursue?

Intervjuinnhold

Intro

Fortelle litt om oss selv, vår bakgrunn og hensikten med intervjuet.

Om intervjuobjektet

Målet er å skape tillit mellom intervjuer og intervjuobjektet.

- Hvor lenge har du jobbet i XXX?
- Hva slags bakgrunn har du?
- Hva er dine ansvarsområder (spørres kun om dersom personen ikke er CEO)?
- Hvor lenge har du jobbet i den maritime bransjen og i selskapet?

Om selskapet og bransjen

Målet er å få innsikt i selskapet og i den maritime bransjen, samt deres egen innsikt i disse to aspektene.

- Hva kjennetegner XXX som selskap? Verdier/mål
- Hvilke parametre brukes for å måle selskapets suksess?
- Hvilke belønningsmekansimer har dere i selskapet?
- Hvordan tror du andre bedrifter vil beskrive XXX som selskap?
- Hvordan vil du beskrive dagens marked i forhold til kunder og konkurrenter? -nærområdet og internasjonalt
- Hvordan er den teknologiske utviklingen i bransjen?
- Hvordan oppfatter du de andre selskapene i klyngen?

Vi ønsker nå å diskutere et konkret eksempel hvor bedrift XXX oppfattet en ny markedsmulighet, hvordan denne muligheten ble oppdaget, og hvordan beslutningsprosessen rundt muligheten var. Intervjuobjektet er blitt forespurt via e-post om å forberede dette eksempelet i forkant.

Oppdagelse av muligheten

Målet er å få innsikt i hvordan en spesifikk mulighet ble oppdaget av selskapet, samt prosessen rundt oppdagelsen.

- Hvordan ble muligheten oppdaget av organisasjonen?
- Aktiv eller passiv prosess
- Hvem oppdaget muligheten?
- Hvor kom muligheten fra?
- Er dette den normale måten muligheter blir oppdaget på i organisasjonen?
- Hvordan var tidsaspektet? Hvor lang tid tok det fra muligheten ble oppdaget og til den ble kommunisert i organisasjonen?
- Hadde klyngen noe å si for oppdagelsen?
- Hvordan ble muligheten kommunisert i organisasjonen? Hvorfor?

Beslutningsprosess rundt muligheten

Målet er å avdekke handlingsmønstre, prioriteringer og faktorer som påvirker en avgjørelse.

- Hvordan var beslutningsprosessen rundt avgjørelsen?
- Hvem i organisasjonen avgjorde at dere gikk/eller ikke gikk for muligheten?
- Hvem har påvirkningsmulighet/innflytelse?
- Må en avgjørelse ha konsensus, flertall eller kan sjefen skjære gjennom?
- Hva må ligge til grunn for å fatte en avgjørelse, og hvordan arbeider dere for å få dette på plass?
- Hvorfor valgte dere å ta/ikke ta muligheten? Bare økonomisk, relasjoner, nye markeder, innsikt?
- Var avgjørelsen basert på langsiktige eller kortsiktige aspekter?
- I hvor stor grad har dere et rammeverk for å ta denne typen avgjørelser? Ev. er beslutningsprosessen tilfeldig?
- Var klyngetilhørigheten relevant når man tok denne beslutningen?

Ferdig med eksempelet, mer generelle spørsmål følger. Kan ha fått svar på en del av dette allerede:

Markedsorientering

Målet er å finne ut hvor stor grad selskapet er markedsorientert, og hvilke kultur elementer som er viktigst.

Hvilke typer muligheter har dere flest av? (nytt produkt, nytt geografisk marked, oppkjøp e.l.)

Kundeorientering

- Hvordan arbeider dere mot kundene deres?
- Egne personer som er kundeansvarlig?
- Mye kontakt kontinuerlig, eller kun ved prosjekter?
- Hvilke avdelinger/personer er involvert?
- Hvilke tiltak skjer når kundene endrer seg eller gjør nye ting i markedet?
- Hvordan måles kundetilfredshet?
- I hver avdeling, selskapet som helhet?

Konkurrenter

- Hvordan arbeider dere mot konkurrentene deres?

- Diskuterer dere konkurrentenes strategi?
- Velger dere muligheter som spiller på deres styrker eller ser hva konkurrentene ser på?
- Hvilke avdelinger/personer er involvert?
- Hvilke tiltak skjer når konkurrentene "beveger seg"?

Samarbeid på tvers av avdelinger

- Har selskapet gjort noen tilpasninger for å bli mer orientert mot kunder og konkurrenter?
- Hvordan deles informasjon mellom avdelingene?
- Hvordan er flyten av ansatte mellom avdelinger?
- Har alle avdelinger spesifikke mål eller jobben man mot felles mål?
- Belønnes man deretter?

Profitability

- Må alle avgjørelser gi positiv avkastning?
- Har dere en grense for når prosjekt skal kunne gi avkastning?

Long-term focus

- Er det en maks-horisont for når en mulighet må være lønnsom?
- Har dere en grense for hvor lang tid det kan ta før en investering må gi positiv avkastning?
- Trenger dere nye muligheter, eller er det nok å opprettholde eksisterende kundeforhold?

Beslutningsprosesser

Målet er å avdekke hvordan beslutningsprossene er og hvilke faktorer som er prioritert når dere tar en avgjørelse.

- Har dere et rammeverk som følges når man tar strategiske beslutninger?
- Hvem avgjør hva som er aktuelt å arbeide videre med?
- Hvordan påvirkes dere av andre selskapers avgjørelser?
- Være i forkant?
- Vente å se hva nr 1 i markedet gjør?
- Har størrelse noen påvirkning?
- Hvilke nivå er involvert?
- Benytter dere ekstern kunnskap/revisjon eller andre for å bekrefte informasjon om en mulighet før dere inngår avtale om et prosjekt/kontrakt?
- Hvem er deltagende ved strategiske avgjørelser?
- Hvordan sikres det at alle meninger om saken kommer frem?

Klyngespesifikt

Målet er å finne ut hvordan klyngetilhørigheten påvirker oppdagelsen av nye muligheter, og hvilke fordeler og ulemper klyngetilhørigheten medfører.

- Hvor viktig er klyngen for at dere er konkurransedyktige?
- Hva oppfatter dere som det viktigste ved å være en del av en klynge?
- Hva oppfatter dere som det mest negative med å være del av en klynge?
- Hvilken posisjon oppfatter du at selskapet deres, XXX, har i klyngen? Tar dere initiativ, eller følger dere i stor grad andre?
- I hvor stor grad både samarbeider og konkurrerer dere med en og samme bedrift?
- I så fall, hvordan løser dere dette "paradokset"?
- Gir klyngen størst fordeler lokalt, regionalt eller globalt?

- Blir flesteparten av mulighetene gjort tilgjengelig gjennom eller utenfor klyngen?

Avslutningsvis

Målet er å avdekke noen siste momenter som ikke har kommet frem under resten av intervjuet. Noen av spørsmålene her kan dermed falle bort om vi allerede har fått svar på dem eller de har mistet sin relevans jamfør tidligere svar ovenfor.

- Hvor mye investerer dere i å være markedsorientert/følge med på omgivelsene/markedet?
- Hva hindrer dere i å investere enda mer?
- I forhold til andre bedrifter i klyngen, tror du dere er mer eller mindre opptatt av å følge med på kunder og konkurrenter?
- Investerer dere i markedsorientering fordi det gir dere et konkurransefortrinn, eller fordi dere føler det er noe dere må?