

Master's degree thesis

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The State of Sourcing in 2018 -

a Study of Selected Industrial Companies in Møre & Romsdal

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Skodje, 6th of June, 2018

Abstract

The aim of this thesis is to establish an up-to-date picture of the state of sourcing, focusing on the county of Møre & Romsdal. Substantial research has been conducted through the years, focusing on different aspects and considerations in outsourcing. However, this thesis examines drivers, risk & location considerations simultaneously, regardless of type of activity. Existing research is limited regarding an overall assessment of the outsourcing decision and considerations regardless of activity. However, the type of outsourced activity will also be assessed through case studies. In addition, the notion of backsourcing is of growing relevance today, and the study investigates a possible backsourcing trend as well.

A questionnaire and multiple case studies were used in this thesis to assess sourcing considerations in the county. The questionnaire was intended to reveal an overall picture of the different considerations, whereas the five case studies revealed in-depth information and connections between the considerations, which would not have become apparent in the questionnaire. Also, the case interviews served to assess the importance of outsourced activity for the firm, as it not recommended by existing literature that firms outsource key activities.

Based on the data collected through the questionnaire and the case studies, the findings suggest that the overall state of sourcing in Møre & Romsdal has not changed substantially. A comparison was made possible due to a similar study that was conducted in 2007. In addition, the study revealed that there may be universal considerations for outsourcing decisions, regardless of chosen activity. The notion that backsourcing a is trend, and might even be more prevalent than outsourcing, could not be confirmed.

The main contribution of this study contains an overall assessment of the outsourcing decision and a focus on the connections between different considerations. This research revealed that drivers, risk and location choices have not changed substantially over the last decade and are still in accordance with existing literature. Nevertheless, globalization might have an influence on drivers and risk, with a possible emergence of availability as a driver and reputation risk as a main risk consideration. Moreover, the study revealed that technological development may lead to backsourcing gaining momentum in the future.

Keywords: Outsourcing, Sourcing Considerations, Sourcing Decision, Norway

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1 Introduction

Outsourcing is a common decision for firms which concerns the question whether independent third parties should conduct tasks for the focal firm (Foerstl et al., 2016), where a substantial amount of research has been undertaken to cover this subject. Nevertheless, outsourcing has evolved over time and the question arises whether existing literature still covers outsourcing considerations and decisions sufficiently. Thus, the purpose of this study is to assess the state of sourcing in the county of Møre & Romsdal.

In the next sections I will outline the background for this thesis and introduce the research question. Furthermore, I will elaborate on the context of Møre & Romsdal and the relevance of the chosen topic. The chapter concludes in a description of the methodological approach and an outline of the thesis.

1.1 Background

The phenomenon of outsourcing emerged in the 1950's (Hätönen & Eriksson, 2009) and has since gained much importance and popularity. According to Hätönen & Eriksson (2009) the history of outsourcing can be divided into three distinct chapters: the Big Bang era, where outsourcing started and gained momentum in the 1980's,; followed by the Bandwagon era, where other firms started outsourcing as well after seen positive experiences; leading up to the era of barrier-less organizations after the turn of the millennium, where the focus evolved to changing the paradigm. This short history illustrates the evolution of outsourcing "traditional outsourcing" and "transformational outsourcing". This paper is nearly ten years old and the question that arises is whether outsourcing has evolved further, or whether the era has changed as some suggest that backsourcing is gaining momentum today.

In Norway, there is no lack of firms that outsource. In recent years, there have been several instances of firms deciding to outsource different activities to third parties. In 2007, 47% of Norwegian firms had outsourced IT and back office services, whereas 6% were in the process of outsourcing (Solli-Sæther & Gottschalk, 2007), and the authors expected a significant increase in outsourced activities over the next few years. There has not been a follow-up study in recent years, which investigated this prediction.

Some recent outsourcing instances in Norway were:

- In 2014, Statoil decided to move several different activities concerning IT, finance and property management to three foreign companies to reduce cost, increase flexibility and increase competitiveness (NTB, 2014)
- Statkraft has decided to outsource its IT-services to an Indian company, after considering American companies as well, and states reduced cost and competitiveness as reasons (Lorentzen, 2017; Statkraft, 2018)
- Several shipowners and shipyards outsource production of hulls, where alone the last two years 60 hulls were produced for Norwegian firms in other countries (Larsen, 2017)
- Storebrand decided to outsource IT-services to Evry Norge, which is located in Norway, stating increased flexibility as the main reason (Finstad, 2018)

Norway is an expensive country with high wages, taxes etc. This can make it problematic to compete with other firms that have outsourced part of their activities internationally. In 2015, Kværner realized this issue, as the firm could not secure contracts. The solution was to outsource more of the production to low-cost destinations, in this case Poland and China (Nissen-Meyer, 2015). Only one year later, Kværner backsourced steel production from Dubai to Norway, stating that technology improvements have made it cheaper to produce in Norway (Stensvold, 2016b). Increased competitiveness in Norway due to technological advances is not the only reason for firms to take activities back in-house. Statoil decided to backsource part of the outsourced activities due to security concerns, only three years after the initial decision (Tomter et al., 2017).

Backsourcing is the reversal of an outsourcing decision and it seems that it becomes more important. These cases illustrate that outsourcing still is a phenomenon, but that backsourcing is occurring as well. The last few years, several firms have backsourced production from low-cost countries such as China or Eastern Europe (Stensvold, 2016c). The phenomenon has occurred so often in recent years, that the question arises whether this is an emerging trend (Stensvold, 2016a).

There has been little research in Norway that has mapped considerations such as risk and drivers in outsourcing decisions. Solli-Sæther & Gottschalk (2007) conducted this type of research but focused only on IT and back office services. Other studies conducted have also

limited themselves to a certain area of activities (Lacity et al., 2008; Kinkel & Maloca, 2009; Peslak, 2012). Limited research is available concerning outsourcing decisions in isolation, regardless of outsourced activity. Nevertheless, it may be possible to uncover the most important overall drivers and risks in such an important decision. Also, there has been no formal study that has tried to ascertain whether backsourcing is a growing trend in the country. Newspapers tend to display this phenomenon as a trend (e.g. Stensvold, 2016c), but there is little empirical evidence. This thesis aims to fill gaps concerning the most important considerations in outsourcing decisions and illustrate linkages between them, as well as trying to gain insight into changes in sourcing that occur in Møre & Romsdal.

1.2 Research question

In light of previous research, researchers predicted certain trends and changes in future sourcing decisions. For instance, Solli-Sæther and Gottschalk (2007) indicated a tendency for increased outsourcing in the future. Today, another trend may be emerging as backsourcing appears to become more popular for firms. Thus, the primary objective for this paper is to analyze the situation today and answer the following research question:

What is the state of sourcing among firms in Møre & Romsdal today?

This research question can be split into two parts, the main considerations and changes that have occurred or are planned. Thus, two sub-questions emerge:

- 1. What are the main considerations in outsourcing decisions?
- 2. What changes have occurred in the last five years and what are future considerations?

In order to answer the research question, I will conduct a limited questionnaire to gain an overall insight into the considerations of outsourcing, such as risk and drivers. In addition, the questionnaire will aim to uncover whether changes have occurred or are planned in a five-year time span. To answer the question as to the nature of changes that may have occurred, a survey will not be sufficient, thus a complementary case study of selected companies is needed. The case studies will also provide important insight and information concerning considerations and their importance, which cannot be uncovered with a questionnaire.

The purpose of this research is to gain an overview over the state of sourcing. It is interesting to determine outsourcing considerations and whether backsourcing is a trend. The answers to these questions are of importance for the Norwegian industry as it concerns available jobs and wealth creation in the country. Mapping of outsourcing considerations such as risk and drivers can be used to promote outsourcing through providing solutions to the most prevailing concerns or increase backsourcing through reducing benefits that may be achieved in outsourcing. In addition, it is interesting to investigate whether there exist universal considerations for outsourcing decisions, regardless of activity.

1.3 Context

Like the rest of Norway, many firms in Møre & Romsdal county outsource activities. For instance, the two shipping companies Bourbon Offshore and Farstad shipping decided to outsource activities to other countries, in the latter case the Philippines (smp.no, 2014; Høyberg, 2016). The children's furniture company Stokke has located the main office in Ålesund, but the firm does not have any production in Norway. All production, manufacturing and logistic functions are outsourced to third parties internationally (Langva, 2015). Outsourcing might be an important factor when it comes to the question whether a Norwegian firm is able to compete or not. Norwegian shipyards, several of which are located in Møre & Romsdal, lost the bidding when Fjord1 needed to build two new ferries and the job was outsourced to Turkey (Behrentz, 2016). One consideration in this decision was cost (Behrentz, 2016), where Norway does have a disadvantage. Still it is not always the case that a Norwegian firm needs to outsource to be competitive. The thruster producing firm Brunvoll is one example, where the firm aims to produce as much as possible in-house in Molde (Stensvold, 2016d).

Another trend which might be emerging in the county is backsourcing. Several companies cite advances in automation and robotization as main factors for taking production back from foreign countries (Stenvaagnes, 2013; Stensvold, 2016a). Instances are the shipyard Kleven and the winch producer IPHuse (Bjørgum & Thalberg, 2012; Stensvold, 2016c). Robotization is on the rise, leading to fewer employees and thus reduced cost, which the firm Plasto has utilized fully and even has managed to outcompete Chinese competitors (Seehusen, 2014; Stensvold, 2017). This focus on technology allows companies to keep production in-house in

Norway with highly advanced robots, for instance at Ekornes ASA (Klingenberg, 2014) and Brunvoll (Stensvold, 2016d). This might lead to a decrease in outsourcing operations, since firms do not have to consider outsourcing as a competitive option in strategy formation. Nevertheless, such firms still outsource certain activities, and the aim of this study is to uncover the main considerations behind that decision.

The development of technology and automatization gives rise to the question whether the outsourcing phenomenon is on the decline, giving way to backsourcing or insourcing as the strategy of choice. Møre & Romsdal county is an interesting location to study this issue, since there are several substantial and internationally competitive firms present, many of which have differing sourcing strategies.

1.4 Relevance of topic

The question of which sourcing strategy is optimal for the firm is ever present. The topic is highly relevant today, with advances in technology enabling Norwegian firms to take production back home and still being able to compete (e.g. Stensvold, 2016a). At the same time, advances in infrastructure and communication technology make it easier to source from any place in the world and still being able to obtain products, information and updates quickly.

There is limited research on the outsourcing phenomenon, which does not differentiate between production or IT outsourcing. This thesis aims to fill this gap in literature and to study the outsourcing phenomenon as a whole. It is interesting to ascertain which drivers, risks and location choices are most important overall, regardless of the outsourced type of activity. Nevertheless, type of outsourced activity will be assessed through case studies. Research is limited on the connections between the main considerations of the outsourcing decision. Type of activity, drivers, risk and location cannot be decided or analyzed in a vacuum, rather all these factors are closely connected. These four considerations encompass all of the most important factors for firms and will be focused on in this thesis.

Lastly, backsourcing is a very relevant topic today and an ever-present phenomenon in newspapers (Stensvold, 2016a; Stensvold, 2016c; Haugan, 2017). This thesis will address this question only marginally as the main focus is on the outsourcing phenomenon. Nevertheless,

both decisions are closely connected, which means that to gain insight into outsourcing decisions it is important to assess the presence of the backsourcing phenomenon in the county as well.

1.5 Methodological approach

The methodological approach in this thesis is twofold. A questionnaire was sent out to a limited number of firms to gain insight into the state of sourcing in the county. The questions covered different sourcing considerations and their importance, and whether any changes in sourcing have occurred or are planned. Simultaneously, case studies of five different firms were conducted which have taken differing outsourcing decisions, to investigate reasons and important factors underlying these decisions.

This dual approach was chosen due to the complementary properties of quantitative and qualitative studies (Saunders et al., 2009) and the fact that both methods yield important insights into the outsourcing phenomenon. The questionnaire serves as an overall assessment of the theoretical framework, whereas the case studies grant insight into connections and important considerations.

The overall research question in this thesis is not limited to an industry or type of outsourced activity, rather it limits the scope of research to the county of Møre & Romsdal. This approach was chosen due to time and monetary restrictions, which made it impossible to study the whole country. There was no limitation on type of outsourced activity, because sourcing decisions are of importance regardless of outsourced activity.

1.6 Outline of thesis

This thesis contains 7 chapters, which are described briefly in the paragraphs below.

Chapter 2 presents the theoretical background and framework used in this thesis. The structure is based on the four important considerations for outsourcing: activities, drivers, risk and location. In addition, the chapter starts with clarification of concepts and the sourcing decision itself. It concludes with a summary of the theoretical framework and the key findings.

Chapter 3 examines the methodology employed in the thesis. First, the research design is elaborated upon, followed by research method and data collection, focusing on both approaches utilized, qualitative and quantitative. In addition, the chapter covers secondary data, data reduction and assesses validity and reliability of the study.

Chapter 4 introduces the five different firms which were part of the case study. The chapter elaborates on the firms' histories, products and sourcing strategies. It grants an overview to gain a picture of the firms and serves as a context for the findings.

Chapter 5 contains the data analysis for this thesis. In this chapter, the findings of the case interviews and the questionnaire are analyzed separately. The first four parts are based on outsourcing considerations and display & analyze the findings of the case interviews. The next part analyzes the questionnaire and the data analysis chapter concludes with views on backsourcing based on the case interviews.

Chapter 6 discusses the findings of the case interviews and the questionnaire simultaneously and follows the same structure as the previous chapter, dividing activities, drivers, risk & location. In addition, the chapter includes a section which discusses changes in sourcing the last five years and future considerations. The discussion is rooted in the key findings of the theoretical framework presented in chapter 2.

Chapter 7 presents the conclusions & implications of this thesis. The chapter is divided into three main parts. First the conclusions for the two sub-questions are presented, which is followed by the main conclusion of the research question, and the third part contains implications & limitations of the thesis. Part three includes managerial and theoretical implications, as well as recommendations for future research.

2 Theoretical background and framework

This chapter establishes the theoretical framework, which will be used throughout the thesis. First and foremost, it is of importance to clarify different sourcing concepts and to establish the appropriate terminology, and to describe the sourcing decisions that can be taken by firms. The main part of this chapter centers around the four main considerations concerning sourcing decisions: activities, drivers, risk and location. These considerations are described separately. Finally, a summarized theoretical framework table is presented which contains the key findings.

2.1 Clarification of concepts

Sourcing includes many different concepts and aspects. Sometimes different definitions such as outsourcing and offshoring are used interchangeably, without regard for the differences in definitions. Therefore, it is crucial to define the different aspects of sourcing correctly and establish a terminology that is used throughout the paper.

2.1.1 Insourcing

Insourcing refers to the practice where outsourcing has been evaluated but internal use was confirmed to achieve the same objective, thus the activity is still completed internally (Hirschheim & Lacity, 2000).

Hirschheim & Lacity (2000) conducted case studies concerning insourcing of IT and concluded with four alternative approaches to insourcing: internal managers are enabled to cut costs, managers defend insourcing and the value of the activity is confirmed. The last approach is termination of outsourcing contracts, effectively instigating a backsourcing process.

2.1.2 Outsourcing and offshore outsourcing

Outsourcing is the process where activities, assets and/or people are contracted out or sold to a third-party supplier, who manages and provides the assets/services for an agreed fee and time period (Kern & Willcocks, 2002). This process makes the firm dependent on the supplier to sufficiently provide the service or product and the supplier may be located anywhere.

In offshore outsourcing the activity is outsourced to an international location, which often is cheaper (Peslak, 2012). Additionally, it is possible to define nearshore outsourcing, which indicates that the chosen country geographically close, or onshore outsourcing in the home country (Schniederjans et al., 2015).

2.1.3 Backsourcing

Backsourcing is the practice of taking a previously outsourced activity back in-house, where all management of skills, activities and assets are returned in-house (Veltri et al., 2008). This action encompasses all or part of the outsourced activities (Veltri et al., 2008; Foerstl et al., 2016), and can be considered as a type of insourcing (Schniederjans et al., 2015).

2.1.4 Offshoring and reshoring

Outsourcing is concerned with independent parties conducting tasks for the focal firm, whereas offshoring refers to the activities' location being outside the home country of the firm (Foerstl et al., 2016). Outsourcing and offshoring are often interrelated and not mutually exclusive but can be differentiated by ownership and location (Foerstl et al., 2016).

Offshoring refers to the practice of U.S and European companies relocating their business processes overseas to countries with lower cost without significantly reducing quality (Venkatraman, 2004). This definition focuses on U.S. and European firms, but this is not entirely the case, since firms in other location also can relocate business to lower cost countries or for other reasons.

Reshoring denotes the relocation of the activity to geographically closer locations, either domestic or nearshore countries. The reshoring decision is the reversal of a previous decision to offshore, where the definition does not take ownership mode into account and can be applied to all or a part of offshored activities (Foerstl et al., 2016). This definition includes two distinct geographical decisions: backshoring, which is relocation to the home country; and nearshoring to a geographically close country (Foerstl et al., 2016).

2.1.5 Shoring and sourcing

The difference between shoring and sourcing can be illustrated as follows: outsourcing addresses the question whether in-house activities would best be carried out by someone else, whereas offshoring asks whether the activity should be done somewhere else (Venkatraman, 2004). An offshoring operation that includes starting up an own business in a foreign country

is a variant of insourcing and cannot be considered outsourcing (Schniederjans et al., 2015), since the firm is still performing the activity internally instead of employing a third party.

This paper is concerned with sourcing decisions, thus outsourcing and backsourcing are the appropriate terms for the rest of the paper. Still, it is important to be aware of the other definitions and the differences to understand the sourcing concept accurately. The different sourcing and shoring combinations are illustrated in the figure below.



Figure 1: Different Sourcing and Shoring Concepts adapted from Shao & David (2007)

The line of outsourcing is of interest in this thesis, regardless of location. In addition to domestic outsourcing and offshore outsourcing, backsourcing is of relevance. Backsourcing is illustrated by the arrow and illustrates the reversal of outsourcing to insourcing.

2.2 Sourcing decision

The first step of the sourcing decision is the question that addresses "make or buy" (Veltri et al., 2008). The following reasoning is based on Veltri et al. (2008) and the authors' illustration of the sourcing decision displayed in the figure below. If the "make" option was selected, the firm moves along the line of insourcing and continues to carry out the activity internally. The decision that is of relevance in this paper is the decision to "buy" and the firm opts to outsource the activity.

The firm then continuously monitors and evaluates this decision and can either continue to outsource or decide to backsource, thus taking the activity back in-house and effectively insource the activity.



Figure 2: Sourcing decision (Veltri et al., 2008)

Any activity in a firm can be insourced or outsourced, but only outsourcing requires contracting and agreements with a third party (Schniederjans et al., 2015). Communication infrastructure development makes continuous contracting and control over distances easier and thus, the option of offshore outsourcing is increasingly viable (Venkatraman, 2004).

It is important to note the connection between insourcing and outsourcing decisions, which leads to the possibility of analyzing insourcing and outsourcing drivers and risk simultaneously. An outsourcing advantage is an insourcing disadvantage and vice versa (Schniederjans et al., 2015).

2.3 Activities

Firms can outsource different activities such as IT, manufacturing or R&D. Typically, the more potential for competitive advantage an activity yields and the more important the activity is, the less likely it is to be outsourced (Insinga & Werle, 2000; Barthélemy, 2003). In addition, the authors suggest that internal capability is also of importance when deciding which activities to outsource and which sourcing strategy to employ. This thesis will mainly

focus on the potential for competitive advantage, as inclusion of internal capabilities and subsequent suggestions of proper action are beyond the scope of this paper.

According to Insinga & Werle (2000) it is possible to develop a framework along potential for competitive advantage and internal capabilities. Activities are grouped into four categories: commodity, basic, emerging and key. Key activities which offer significant potential for competitive advantage should never be outsourced, whereas commodity and basic activities can and should outsourced. Activities that often are outsourced are readily available in the marketplace and are needed to be able to compete and function as a player in the market. The figure below illustrates the classification of activity considering the potential for competitive advantage.



Figure 3: Assessing the Potential for Competitive Advantage of Activities and Internal Capability to Perform it (Insinga & Werle, 2000)

Barthélemy (2003) compiled a list of seven deadly sins in outsourcing. The first sin he describes is outsourcing an activity that should not be outsourced. He underlines the importance of an initial assessment concerning the activity's competitive advantage and cost structure. Even if outsourcing often is linked with cost reduction, this is not always the case. It can be difficult for firms to exactly identify its competitive advantage and which activity should be outsourced. The author suggests to separate core from non-core activities which could prove difficult. For instance, there may exist core and non-core IT activities simultaneously, and it may not always be obvious where the competitive advantage for a firm

lies. Outsourcing non-core activities enables the firm to focus on what it does best, and improved performance and cost reductions may be achieved by outsourcing to a specialized vendor.

Lacity et al. (2008) suggest that identifying non-core activities is not synonymous with the possibility to outsource the activity, but suggest to analyze additional business, economic and technical factors. These factors include considerations such as the degree of integration of the activity with other in-house activities and whether outsourcing truly is cheaper.

2.4 Drivers

Transaction cost theory is often used to explain sourcing decisions (Hätönen & Eriksson, 2009; Roza et al., 2011; Foerstl et al., 2016). This theory is based solely on costs and states that if costs are lower when contracting in the market than producing internally, the activity should be outsourced. Especially in the 80's and 90's the motive to cut costs was the main driver for outsourcing (Hätönen & Eriksson, 2009). On one hand, costs such as labor costs decrease when outsourcing, but on the other hand, transaction costs increase due to factors such as increased uncertainty and contracting costs (Roza et al., 2011). Thus, sourcing drivers and motives are not solely based on cost considerations, but include other facets, which will be elaborated on below.

2.4.1 Insourcing

Insourcing is common in the early stages of a firm, but may limit growth of the firm over time (Schniederjans et al., 2015). Still, this does not mean that all firms start to outsource activities as they progress in their life cycle. Drivers include full control over activities and a loyal workforce in the firm as employees identify with the firm (Schniederjans et al., 2015). However, insourcing may lead to issues concerning a competitive cost and price level in production and labor (Schniederjans et al., 2015). Other drivers of insourcing concern all possible risks the firm might encounter when outsourcing an activity. Outsourcing risk is discussed in the next section. Management can use outsourcing evaluations to confirm that continued insourcing is the most viable option (Hirschheim & Lacity, 2000).

2.4.2 Outsourcing

Value creation and competitive advantage are important concepts for every firm. There are different motives and drivers, which can lead a firm to outsource activities such as: lower cost, access to new markets, flexibility, quality, external pressure etc. (Solli-Sæther & Gottschalk, 2007). In Solli-Sæther & Gottschalk (2007)'s study concerning outsourced IT and back office activities in Norway found that access to resources & competence was deemed most important, followed by focus on core competencies and lower production cost, illustrating that cost is not the only driver for outsourcing decisions. Another reason why cost is a driver which should be investigated with care is the fact that several hidden and unexpected costs may occur in outsourcing (Barthélemy, 2003).

Kinkel & Maloca (2009) conducted a quantitative analysis concerning offshoring motives for production and manufacturing firms. The paper did not differ between offshore insourcing and offshore outsourcing. However, the findings are still relevant as offshoring and outsourcing often share the same drivers, but embody different practical implementations by firms. Nevertheless, there are some differences, since offshoring encompasses physical presence of the firm, which make drivers such as access to markets and customer vicinity more important in offshoring. By far the most important driver was reduced labor cost in all investigated years (1999, 2003, 2006). This motive was followed by market opening, capacity bottlenecks and vicinity to customers across all years. Even if the study was conducted in Germany, it still holds international significance, as production and manufacturing firms tend to share similarities across countries.

Operational benefits were identified to be achieved most often in outsourcing back office functions and include reduced operating costs, improved quality, better control, flexibility and access to resources (Lacity et al., 2008). Operational benefits can be viewed as drivers of the outsourcing decision as these are factors a firm wants to achieve when deciding to outsource an activity.

2.4.3 Backsourcing

Kinkel & Maloca (2009) investigated drivers for backshoring to Germany which implies relocation of the activity to the home country, regardless of ownership mode. Backshoring and backsourcing have similar motives, thus their findings can be applied here. Flexibility was identified to be the most important driver by far in 2006, whereas quality issues was the most important motive in 2003. This indicates an increasing focus on speed and changes in customer needs. Coordination costs, insufficient infrastructure and lack of qualified personnel were other backshoring drivers for German firms. The authors state that their findings support the notion that backshoring decisions are short-term reactions to issues in supply chain management rather than strategic choices.

Backsourcing is not necessarily only a short-term reaction, but can also arise due to changes in circumstances, arising opportunities or a redefinition of the outsourced activity (Veltri et al., 2008). Contracting issues are a driver for backsourcing decisions as are internal changes in the firm and external changes in the environment (Veltri et al., 2008; Solli-Sæther & Gottschalk, 2015). Since contracting can pose a risk in outsourcing, it is apparent that it is a driver for the reversal of the decision. Solli-Sæther & Gottschalk (2015) compiled a summary of reasons for backsourcing, which is shown in the table below.

Reason for backsourcing	Examples
Problems with contract	Higher than expected production costs
	Unanticipated transaction costs
	Lower service quality than expected
	Loss of control over resources and service functions
	Large knowledge gap between client and vendor
Benefits from changes in internal	Changes in the management knowledge of outsourced functions
organization	Changes in the management attitudes towards offshored functions
	Changes in the skill levels of employees
Benefits from changes in external	Changes in the external market
environment	Changes in society
	Changes in access to skilled local labor

Table 1: Reasons for Backsourcing (Solli-Sæther & Gottschalk, 2015)

It becomes evident that backsourcing drivers are risk factors in outsourcing decisions. For instance, contracting issues, higher cost and lower quality are risk factors to consider when outsourcing, while simultaneously these factors are drivers for backsourcing decisions.

2.5 Risk

Sourcing decisions encompass different forms of risks which are important when assessing the different options available for a firm. Risk influences type of outsourced activity, location and form (outsourcing, joint venture, offshoring etc.).

Risk can take many different forms, but overall risk is associated with adverse events that lead to the outcome being different than planned or desired (Manuj & Mentzer, 2008). Without risk, the outcome of an outsourcing operation would be known beforehand, but this is impossible due to different risk factors influencing the operation which cannot be known or assessed correctly (Manuj & Mentzer, 2008). The authors also stated that risk is composed of two components: potential losses if the risk is realized and the probability of these losses. Thus, risk is relative to these dimensions, as well as subjective interpretation and risk avoidance tendencies.

Risk management is crucial in firms and outsourcing typically has many risks. It is important to assess possible risks in outsourcing decisions before attempting to do so and establish management strategies (Manuj & Mentzer, 2008). Concerns can be connected to quality, control issues, culture and infrastructure (Solli-Sæther & Gottschalk, 2007). Solli-Sæther & Gottschalk (2007)'s study revealed that insufficient service quality posed the highest risk for outsourced IT and back office services, followed by lack of expertise about the firm and high turnover at the supplier.

Risk is also connected to the choice of location, including factors such as security, regulations, property rights and macroeconomic events (Farrell, 2006) which are often politically influenced risks and connected to the stability in a country (Bremmer, 2005). In addition, location specific risk includes language, cultural differences and geographical distance (Stanczyk et al., 2017). These risk factors can be mitigated to a certain degree by conducting a thorough analysis of potential sourcing locations and assessing which one poses the least risk for the firm (Farrell, 2006). For instance, property rights are known to be weak in China, thus if this is of high concern for the firm, China would not be a suitable location.

In a comprehensive literature review Stanczyk et al. (2017) identified several categories of risk and uncertainties firms face when outsourcing: environmental uncertainties, network uncertainties, organizational uncertainties, internal barriers and decision-making biases. The categories illustrate that outsourcing affects all sides of a firm and risk assessment needs to be thorough. Importance and relevance of the different risks will differ between firms, the choice of location and outsourced activity.

Contracting is a potential risk factor that emerges when deciding to outsource a business function, since a poor contract can lead to failure in outsourcing (Barthélemy, 2003). A good

contract is crucial for success, because it states all important aspects of the relationship between parties. Risk can be decreased substantially, if firms spend a sufficient amount of time and other resources on contract negotiations (von Branconi & Loch, 2004). Nevertheless, a contract can never be completely exhaustive, since there may always be unexpected and unforeseen events.

Contracting is closely connected with Barthélemy (2003)'s suggestion of the second deadly sin: selecting the wrong vendor. Selecting a proper vendor is crucial for outsourcing success and the wrong vendor might encompass many possible risks in connection with sourcing. Firms do not always outsource to cut costs, and the best suited third party might be more expensive, but simultaneously encompass fewer risks. Close and long-term relationships with selected suppliers can be advantageous and reduce risk in outsourcing operations.

2.6 Location

The choice of location defines which form of outsourcing is chosen: domestic/onshore outsourcing, nearshore outsourcing or offshore outsourcing (Shao & David, 2007; Foerstl et al., 2016). Each location choice has its own benefits and costs, which should be evaluated. Choice of location is also closely related to which risk factors emerge. For instance, risks such as time and cultural differences do not arise in onshore outsourcing but become more prominent the more distant the chosen location becomes. Drivers and motives behind the outsourcing decision also play a role when deciding on a location. For instance, if flexibility and control are more important than cost savings, a geographically close country is more attractive, even if it could lead to higher labor costs.

There are many considerations a firm has to take into account when deciding on an outsourcing location. Farrell (2006) suggests six important factors that should be thoroughly investigated: cost, availability of skills, market potential, risk profile, environment and quality of infrastructure. Availability of skills refers to an available skill pool and a highly qualified work force which was identified as the most important driver for outsourcing by Solli-Sæther & Gottschalk (2007).

The chosen activity also has an influence on location choice. In alignment with the factors mentioned above, Jensen & Pedersen (2011) classified Western Europe, Central and Eastern

Europe (CEE), North America and Asia along location attributes concerning cost levels, human capital, business environment and interaction distance. The authors' study concluded with a connection between activity and chosen location. Their results indicated that IT flows to Asia and CEE, whereas more advanced services and R&D flow to Northern America. Lacity et al. (2008) on the other hand, suggest that nearshoring was an emerging trend in 2008 and would become more prevalent due to the benefits that accompany nearshoring such as: less travel costs, cultural compatibility and no time-zone issues.

2.7 Summary

In summary, outsourcing decisions are heavily influenced by drivers, risk, location and chosen activity. All these considerations are interconnected and cannot be viewed independently. First, the chosen activity and drivers are closely connected and indicate what a business aims to achieve through outsourcing a certain activity. Following this decision, risks and location choices have to be analyzed jointly to arrive at an appropriate outsourcing decision.

In addition, the firm could arrive at the conclusion that insourcing is the appropriate choice. Also, backsourcing, and thus the reversal of the outsourcing decision is an ever-present possibility for a firm. The table below sums up the key findings from the chapter, which will subsequently be used in the formation of the questionnaire and interview guide used in the case studies.

Topic	Key findings
Activities	According to (Insinga & Werle, 2000) it is possible to classify
	activities as follows:
	- commodity
	- basic
	- emerging
	- key
	5
	Divide core from non-core activities and outsource only non-core
	(Barthélemy 2003)
Drivers	Solli-Sæther & Gottschalk (2007) and Lacity et al. (2008)suggest the
	following drivers for outsourcing.
	- lower cost
	- access to new markets
	- flexibility
	quality
	- quanty
	- external pressure
	focus on core competencies
	- locus on core competencies
	Solli Sother & Cottschalk (2015) suggest these drivers for
	backsourging:
	contracting issues
	- contracting issues
	- benefits from changes in automal organization
D'.1	- benefits from changes in external environment C_{11} C_{12}
KISK	Solit-Sætner & Gottschalk (2007) and Stanczyk et al. (2017) among
	others propose the following risk factors:
	- quality issues
	- loss of control
	- language and cultural differences
	- contracting issues
	- infrastructure
•	- distance and longer delivery time
Location	Farrell (2006) suggests six considerations when choosing a location:
	- cost
	- availability of skill
	- market potential
	- risk profile
	- environment
	- quality of infrastructure
	There is a connection between the outsourced activity and location
	choice (Jensen & Pedersen, 2011)

Table 2: Summary of the Theoretical Framework

3 Methodology

This chapter provides an overview over the techniques used in the study. First, it is of importance to assess the research design and method that are fitting for this thesis. To gain an overview over the state of sourcing in Møre & Romsdal, a limited questionnaire was conducted which is an appropriate method to obtain quantitative data concerning a topic. Nevertheless, sourcing is a complex phenomenon, which requires further insight. This supports the notion of case studies. As both quantitative and qualitative methods are chosen, data collection encompasses two separate sections that elaborate on the questionnaire and case interviews. Finally, validity and reliability are assessed and discussed for both methods respectively.

3.1 Research design

Ultimately, research design has the purpose to outline how empirical evidence is generated in order to solve the research question in the best possible way (Lee & Lings, 2008; Ghauri & Grønhaug, 2010). Research design can also be seen as the overall strategy to obtain wanted information which influences data collection method and data collected (Ghauri & Grønhaug, 2010).

Three different categories of research design can be identified: exploratory, descriptive and causal; which is also called explanatory (Wilson, 2004; Saunders et al., 2009; Ghauri & Grønhaug, 2010). The research question in this paper is descriptive, as it aims to describe the state of sourcing. Descriptive research describes what happens, without necessarily providing an explanation to the phenomenon (Wilson, 2004). Typically who, what, where, how and when questions are of descriptive nature (Wilson, 2004). The research question asks "what", as do both sub-questions. However, the case studies grant additional explanations and insights into the topic, and thus fall into the category of causal research. This type of research is used to study relationships between variables and to isolate causes and effects (Saunders et al., 2009; Ghauri & Grønhaug, 2010). In this case, the relationships between the investigated considerations and the nature of the firm affect decisions in sourcing.

Causal and descriptive research are not mutually exclusive, where many studies fall into a continuum between both extremes (Wilson, 2004), and both operate with well understood and

structured research problems (Ghauri & Grønhaug, 2010). This further supports the use of a descriptive and explanatory research design as the research question and sub-questions fulfill these criteria. The combination of describing the phenomenon of sourcing and also exploring linkages between the different considerations in sourcing can be classified as a descripto-explanatory study (Saunders et al., 2009). Nevertheless, the main focus in this thesis is descriptive, since the aim is to establish a picture of the sourcing state in the county.

Research philosophy is another important matter as it explains the way researchers view the world, and thus influences research strategy and method (Saunders et al., 2009). This study adopts an interpretivist philosophy as opposed to positivist philosophy. Interpretivism is based on the notion that it is important to accept the subjectivity of all social actors and that reality is relative to everyone experiencing it (Saunders et al., 2009). This approach is mirrored in the research question which aims to study sourcing decisions. According to Saunders et al. (2009), business situations are unique and a function of particular circumstances and individuals at a certain point in time. Sourcing decisions are highly dependent on circumstances in the market and the individual firm. Also, the decisions depend on traits of employees in charge, since perceptions are subjective. If another individual was in charge at a given time, it is possible that other sourcing decisions would have been made. Based on this reasoning, the study follows an interpretivist approach, accepting subjectivity and less emphasis on laws and generalization of findings.

In addition to research philosophy, the concepts of induction and deduction are also of importance. Deduction is a process that starts in theory, generates hypotheses, collects data and concludes with generalizations (Lee & Lings, 2008). Induction is the opposite approach, moving from observations to theory generation (Lee & Lings, 2008). The emergence of social sciences made way for induction as researchers became critical of establishing cause-effect links without attaching weight to subjective interpretations (Saunders et al., 2009). This thesis does not aim at testing predetermined hypotheses, since it examines the current state and affairs in sourcing and needs to take subjective interpretations of individuals into account.

The core of this thesis lies in inductive reasoning which is the "systematic process of establishing a general proposition on the basis of observation or particular facts" (Ghauri & Grønhaug, 2010, p. 16). For instance, the notion of the backsourcing phenomenon is based on observations and not in established theory, also supporting inductive research. In addition,

inductive research is suitable when there is little existing literature, a new topic or much debate (Saunders et al., 2009). As this thesis investigates the current state of sourcing, there is little research available on the topic, but much debate around emerging phenomena and trends.

3.2 Research method

Research method refers to data collection in a systematic, focused and orderly way to obtain information which can be used to answer the research question (Ghauri & Grønhaug, 2010). There are two main methods of collecting data: qualitative and quantitative methods (Wilson, 2004; Ghauri & Grønhaug, 2010). The difference does not lie in the quality of data collected, but in the procedure (Ghauri & Grønhaug, 2010), where each method is best suited to obtain different information (Lee & Lings, 2008; Ghauri & Grønhaug, 2010). Quantitative research involves collecting information from a larger sample, employ measurements, statistical analysis and generalization of data (Lee & Lings, 2008; Ghauri & Grønhaug, 2010). On the other hand, qualitative research involves a small sample, focus on understanding a phenomenon, deeper insight and non-quantifiable findings (Lee & Lings, 2008; Ghauri & Grønhaug, 2010). These methods can be mixed, as both are used to obtain different kinds of information (Lee & Lings, 2008).

This thesis contains two sub-questions which need to be answered. Both sub-questions can be answered through the use of a quantitative research approach which is typical for a descriptive research question. However, it is also important to investigate details and connections to understand the phenomenon, which is difficult to study quantitatively (Ghauri & Grønhaug, 2010). These are typical facets of qualitative research, where the case studies provide additional insight and explain as to why the different considerations are of importance and underlying reasons for changes and future considerations.

Employing several methods is part of triangulation, indicating the use of several angles to gain a more accurate picture of the problem and ensuring that data is interpreted correctly (Lee & Lings, 2008; Saunders et al., 2009). Triangulation is necessary to gain a better picture of the state of sourcing, as the research question requires quantitative and qualitative insight. Using several data collection methods is referred to as multi-method (Saunders et al., 2009) and the main reason for using this method is to gather data on the different aspects of the

research question. The questionnaire is used to complement the case studies on a macro level and to gain more insight into the relative importance of different considerations, whereas the case studies provide deeper insights. A multi-method approach is also suitable when research aims to explain causal links, which are too complex for surveys (Yin, 2009). In this case, the causal links between drivers, risks and sourcing decisions are too complex to be uncovered with quantitative measures. In addition, the quantitative data provides an overall context for the qualitative data collected (Lee & Lings, 2008).

3.2.1 Choice of research method: questionnaire

Considering the nature of the research question, a questionnaire was chosen as an appropriate research method to complement the case studies and to gain an overview of sourcing in the county. A questionnaire refers to a technique where all respondents are asked to answer a specific set of questions in a certain order, which is an effective way to obtain a description of a situation through quantitative analysis (Saunders et al., 2009; Ghauri & Grønhaug, 2010). Thus, a questionnaire is a suitable method to answer a descriptive research question. The information required is a description of considerations and decisions. Such questions can be asked in the same fashion with predetermined answers.

One important aspect to consider is the way a questionnaire is administered. There are many different possibilities such as face-to-face and telephone administered questionnaires which include an interviewer, or self-administered surveys such as postal or online (Wilson, 2004; Saunders et al., 2009; Ghauri & Grønhaug, 2010). Due to advances in technology, online questionnaires have been growing in importance (Wilson, 2004). Today, it has become normal to send out questionnaires via the internet and an online questionnaire was administered, where the link was made available through e-mail. This method was chosen due to time and cost effectiveness which are advantages of online surveying. On the other hand, it is easy for respondents to dismiss the request, fail to receive the email or the wrong person is contacted (Wilson, 2004).

3.2.2 Choice of research method: case study

The sourcing phenomenon is extremely complex, and all considerations are interrelated, which requires a more detailed analysis. The topic at hand is nearly impossible to analyze outside of its natural setting and as sourcing decisions differ from firm to firm, it is wise to investigate the phenomenon through case studies as well (Lee & Lings, 2008; Ghauri &

Grønhaug, 2010). A case study "*investigates a contemporary phenomenon in depth and within its real-life context*" (Yin, 2009, p. 18), especially in instances where the boundaries between the phenomenon and the context are blurred (Saunders et al., 2009; Yin, 2009) which is true for the sourcing phenomenon. In addition, the case studies also provide explanations and reasons underlying the different considerations and decision made by firms.

First, it is important to define the unit of analysis, which helps to distinguish between context and the phenomenon, and also aids in determining the scope of data collection (Yin, 2009). This thesis aims to investigate sourcing, but as this is an abstract concept it needs specific cases to represent the phenomenon (Yin, 2009). Thus, five selected companies will serve as the cases investigated. The unit of analysis is also crucial when determining whether the study encompasses holistic or embedded cases (Yin, 2009). Embedded cases occur when several subunits within a case are studied as opposed to a holistic design, where the whole case is treated as one unit (Yin, 2009). This thesis treats firms as holistic, single units, regardless of the firms' real composition, since the research question concerns sourcing decisions made by a firm.

Another decision that needs to be made is whether a single or multiple case study should be conducted (Yin, 2009). This thesis contains a comparative case study. A number of firms are studied with regards to the same set of variables and asked the same type of questions, making it possible to systematically compare the cases and explore different dimensions (Ghauri & Grønhaug, 2010). In this thesis, five firms were chosen for case studies, to highlight different strategies, possibilities and views concerning sourcing decisions. Even if firms operate in the same area, or even the same industry, sourcing decisions differ widely.

3.3 Data collection

Data is collected in two different ways, a questionnaire and semi-structured case interviews, where the next sections will cover both data collection methods. In addition, secondary data was used in connection with the case studies to gain a deeper understanding of the case firms.

3.3.1 Questionnaire design and distribution

The first step of data collection in a questionnaire is to identify what and whom to ask (Ghauri & Grønhaug, 2010). As to what to ask, the questionnaire was designed based on the key findings in chapter 2. When deciding whom to ask it is important to ensure that the respondent possesses the necessary knowledge to answer the question (Ghauri & Grønhaug, 2010). If respondents do not have the necessary knowledge they might guess an answer which reduces reliability and is known as uninformed response (Saunders et al., 2009). To reduce this issue the questionnaire was distributed to individuals within the organization which most likely have the knowledge required. This was done by assessing the position of the individuals and sending the questionnaire directly to them via e-mail.

The design and wording of a questionnaire are of importance, where the questions should be simple & concise in language, only concern one dimension and be specific (Saunders et al., 2009; Ghauri & Grønhaug, 2010). All these guidelines were considered when the questions were formulated. It is important that the questions are not diffuse, suggest one right answer or are open for different interpretations by the respondents (Saunders et al., 2009) as this can lead to misunderstandings and invalid data. Jargon should be avoided (Saunders et al., 2009), but since sourcing is the main concept investigated, definitions were included concerning outsourcing and backsourcing to decrease individual interpretations. Also, if the language is complicated or difficult to understand, the possibility is higher that respondents will not answer at all (Ghauri & Grønhaug, 2010). To confirm that the questions were unambiguous, polite and not leading, the questionnaire was sent to a lecturer with prior experience with such studies, and my supervisor. This served as a pilot-test for the questionnaire.

Three main forms of questions can be identified: open-ended questions, closed questions and rating questions (Wilson, 2004; Saunders et al., 2009). Closed questions have predetermined answers, which the respondents must choose from, whereas open-ended questions allow respondents to answer in their own words (Wilson, 2004). It is important that closed questions provide an alternative for each respondent and that the answers are mutually exclusive
(Saunders et al., 2009). In accordance with that, one issue that needs to be considered in closed questions is the possibility of an "escape route" in a question (Ghauri & Grønhaug, 2010). Ghauri & Grønhaug (2010) suggest to not include answers such as "do not know", but this may lead to uninformed responses, since the respondent might not have the knowledge required. Thus, a "do not know" option was included. The last form are rating questions, where respondents are asked to assign a numerical answer to a question (Wilson, 2004; Saunders et al., 2009). This type of question is often used to collect opinions on a scale such as very important – not important (Wilson, 2004; Saunders et al., 2009).

Another consideration is the order of questions. There is no absolute way to design a questionnaire, but generally easy-to-answer questions should be placed first (Ghauri & Grønhaug, 2010). In addition, similar questions should be grouped together and classification questions such as demographic information should be last (Wilson, 2004). These guidelines were followed when designing the questionnaire and the pilot-test revealed that the grouping of questions was appropriate.

All three forms of questions were included in this questionnaire. First, the question whether the firm sources is asked to establish whether the firm is classified to participate in the questionnaire. Following, the respondent is asked to scale his/her own perception on the importance of drivers and risk factors in sourcing. In addition, the respondents are asked to tick off locations the firm sources from. Third, the respondents are asked whether there occurred successes and/or failures in outsourcing. The next parts of the questionnaire concern past and future decisions. Here, a mix between closed and open-ended questions are used. The closed questions are concerned with future considerations and whether, or not, the firm has made certain decisions in the past, whereas the open-ended questions are optional to answer and request reasons if a decision was made. The questionnaire concludes with classification questions concerning industry and the respondents position in the firm. Appendix 2 includes the whole questionnaire in Norwegian and shows the exact formulation and design.

It is crucial to include a covering letter when a questionnaire is sent out. The covering letter has the purpose of encouraging respondents to answer (Wilson, 2004) and should explain the purpose of the study (Saunders et al., 2009). Since the covering letter serves as an introduction to the questionnaire and aims at encouraging responses, great care was taken in its formulation. The letter included my name and affiliation, the purpose of the questionnaire

in this thesis, assurance of confidentiality and thanked the respondent in advance for taking time to answer.

Due to limitations, the questionnaire was distributed to a limited sample of firms in the county. 35 firms were contacted which were deemed to represent the county in an adequate manner by myself and my supervisor. Several of the firms contacted are of substantial size and represent different industries present. One issue that arises is that the sample is not completely randomized as it would have proven very difficult to reach the appropriate respondents in such a sample. Thus, a limitation of the study is that the sample is not entirely representative of the county and care must be taken when making generalizations.

3.3.2 Case study data collection

An interview is considered one of the most important sources of data in a case study and can be classified as a guided conversation (Yin, 2009; Ghauri & Grønhaug, 2010). It is a well-suited method when the case concerns a behavioral event (Yin, 2009) as is the case in this study. Interviews encompass a more fluid setup than a questionnaire, since there is a line of inquiry, but the questions asked are adaptable and open (Yin, 2009). Case study interviews can be classified as in-depth, focused and along the lines of a formal survey (Yin, 2009). The type used in this thesis is a focused interview. As opposed to in-depth interviews, focused interviews are often completed in a relatively short time and usually require only one meeting (Yin, 2009). Due to the nature of the interviews, an interview guide needs to be well specified, and the interview itself will follow the guide more than an in-depth interview would (Yin, 2009). This method was chosen due to time restraints and because a multiple case study was chosen, thus limiting the scope and depth of each case. The focus of this thesis is to establish an overview concerning sourcing decisions, as opposed to an in-depth analysis of one firm.

3.3.2.1 Semi-structured interview

The way the interviews were conducted is classified as a semi-structured interview. This type of interview differs from unstructured interviews in such a way that the respondents, sample size and questions concerning the issue have been determined beforehand (Ghauri & Grønhaug, 2010). On the other hand, semi-structured interviews do not use fixed response categories and a standard format of interviewing, which is used in structured interviews (Ghauri & Grønhaug, 2010). Semi-structured interviews are well suited for explanatory

research (Saunders et al., 2009) as this method is not fixed to a certain order of questions and is adaptable to the situation. In this study it is beneficial to add flexibility, since this provides the opportunity to follow up interesting thoughts and explanations (Saunders et al., 2009). Most of the questions asked were open-ended, allowing the respondents to answer as they wish and gave the opportunity to reveal useful information (Saunders et al., 2009).

Five semi-structured interviews were conducted in the course of data collection and are summarized in the table below. All interviews were conducted face-to-face, except in the case of Brunvoll, where a telephone interview was conducted. Nevertheless, the use of an interview guide ensured that all data collected is comparable. In addition, all respondents represent a particular firm and have been give an ID-code, which will be used to refer to information obtained in the interviews in the following chapters.

ID-code	Company	Respondents position	Time and date
ЕК	Ekornes ASA	Sourcing & Supply Chain Director	23. March 2018
			10:00 - 11:30
PL	Plasto AS	Managing director	10. April 2018
			09:30 - 11:00
WL	Wonderland	Sourcing & Logistics Manager	10. April 2018
			11:00 - 13:00
			(included lunch)
BV	Brunvoll AS	Group CEO	13. April 2018
			09:00 - 10:00
ST	Stokke	VP Innovation & Supply Chain	20. April 2018
			08:15 - 09:15

Table 3: Overview of the Case Interviews

3.3.2.2 Interview guide

The formulation of an interview guide is of utter importance when conducting semi-structured interviews. This guide helps to assure consistency with established theory and aids in obtaining the needed data (Ghauri & Grønhaug, 2010). Also, it is not advisable to let a respondent talk freely and without guidelines in a semi-structured interview as it would lead to much irrelevant information and lack of needed data (Saunders et al., 2009). The interview

guide follows the same structure as the theoretical framework in this thesis to ensure that all important topics were covered. In addition, general questions about the respondent were used to start the interview and a closing question gave respondents the possibility to address topics which might not have been covered earlier. Nevertheless, the interviews were conducted with flexibility, giving rise to jumping back and forth between the different topics.

The interview guide, which is shown in Appendix 1, was used for all five case interviews to ensure consistency and to simplify subsequent analysis of the data.

3.3.3 Secondary data

Secondary data concerns information that was collected by others for a different purpose and include newspaper articles, books, journals, rapports and websites (Ghauri & Grønhaug, 2010). In this thesis, secondary data was used for a preliminary assessment of the sourcing phenomenon in the county. In addition, secondary data was helpful to identify firms which were particularly suitable for case interviews and to gain insight into the case firms through their web sites and rapports. Also, newspaper articles were utilized to gain a better understanding concerning the context of this thesis and the case firms, as well as a complementary source of information in the case studies. Moreover, secondary data was used to confirm information collected in the case interviews where possible to avoid misinterpretation.

3.4 Data reduction

The aim of data reduction is to condense collected data through summarizing and simplifying information (Saunders et al., 2009). One way to reduce data is to create an interview summary (Saunders et al., 2009) which was done with data collected in the case studies. Notes were taken during the interviews and subsequently organized into categories in accordance with theory. An attempt was made to analyze all case interviews in the same manner and to code the gathered information the same way across all interviews. This was achieved through organizing the data along the structure of the interview guide. Data which was relevant for several categories, for instance risk and location, was noted separately and included in the analysis where appropriate.

Another way of reducing data is to display and summarize data collected with diagrams and tables (Saunders et al., 2009). This method was applied as well, to analyze data. It is useful to display summarized accounts in graphs, especially concerning information that was collected with the questionnaire. In addition, tables were used to illustrate connections between the different cases and display decisions and choices in an orderly fashion.

3.5 Validity and reliability

Before analyzing the findings and drawing conclusions, it is important to assess the reliability and validity of the data collected through the questionnaire and the case studies. I will assess these concepts in turn for both data collection methods after presenting definitions of the concepts.

Internal validity is concerned with whether we measure what was intended to be measured (Saunders et al., 2009; Ghauri & Grønhaug, 2010).

External validity is concerned with whether the findings are generalizable (Lee & Lings, 2008; Yin, 2009), where generalizability refers to applicability of the findings across settings, firms and time (Ghauri & Grønhaug, 2010).

Reliability refers to whether the results would be the same if the same study was conducted over again (Yin, 2009). In other words, if the measurement used is consistent and stable (Lee & Lings, 2008; Ghauri & Grønhaug, 2010).

3.5.1 Validity and reliability in the questionnaire

The first step of assessing validity in a questionnaire is to investigate whether the questions appear to make sense, which is called face validity (Saunders et al., 2009). This questionnaire does not aim to discover complex constructs that require several measures, such as satisfaction or loyalty would, rather the questions are straight forward and easy to understand. Thus, face validity is of no concern. In addition, internal validity is established due to the straightforward nature of the questions, which assures that the questionnaire assesses what was intended (Saunders et al., 2009). This confirms reliability as well, since a reliable questionnaire ensures that data is collected consistently (Saunders et al., 2009). Reliability is of limited concern in this case as there is little room for individual interpretation of the

questions or misunderstandings. Nevertheless, the importance of drivers and risk are open for individual assessments and thus, reliability for these two considerations is reduced.

Internal validity, as well as reliability, in questionnaires depend heavily on structure and question design and formulation, thus pilot testing is useful to assess validity and reliability (Saunders et al., 2009). All formal guidelines and suggestions were followed in the design and formulation of the questionnaire. Also, definitions for outsourcing and backsourcing were included to establish a unanimous understanding of the concepts. The questionnaire was pilot-tested by my lecturer and my supervisor, both of whom have sufficient insight and understanding of the topic. Both were suitable to review the questionnaire and assessed the questionnaire as internally valid and reliable.

Generalizability, or external validity, is a concern for this questionnaire. The respondents were not chosen with probability sampling, rather it could be classified as a convenience sample (Saunders et al., 2009). The process of selecting respondents was based on assertions of appropriateness by the supervisor and myself. All included firms were deemed relevant for the questionnaire and the sample is regarded as moderately representative of the county. Some external validity is established, since the sample used includes several industries and sizeable firms in the county. Another issue concerning generalizability was the low number of responses, with only nine full answers. Due to these factors generalizability of the findings in the questionnaire is extremely limited.

3.5.2 Validity and reliability in the case studies

Internal validity in case studies can also be termed truth value (Guba, 1981) as it investigates whether the information obtained is credible and true. Credibility of the responses was ensured by interviewing respondents which have the necessary position and knowledge about the firm. Nevertheless, it is important to remember the aspect of objectivity, or neutrality of the responses (Guba, 1981). Case interviews are subject to biases, context, motivations, interest and image of inquirer and respondent (Guba, 1981; Yin, 2009). The fact that the case interviews were about the firm, rather than the respondents him- or herself, made it easier to obtain objectivity, since the respondents did not feel the need to lie as to protect himself. Nevertheless, as an employee it may be possible that the interviews were focused on positive achievements, instead of complete honesty concerning all outsourcing decisions and possible failures. In addition, only one key respondent was interviewed in each company, who has his

or her own background, views and opinions. Three of the respondents have a position concerning supply chain & logistics, whereas the remaining two were directors. These differences influence responses, but since the case of interest is the whole firm, bias is reduced as the respondent does not talk about himself. Findings that concern considerations of risk and drivers were also triangulated with the help of questionnaire results, which increased validity of the individual responses.

Applicability, or external validity, of the case study findings is strengthened through a multiple case study. Five different firms were investigated which increases generalizability of findings across different settings. Nevertheless, according to Guba (1981) dependence on situational variations decreases external validity. Generalizations should be enduring, which is not the case with these findings as they are situational.

Reliability in case studies is concerned with consistency of the findings (Guba, 1981). The question that arises is whether the answers would be consistent if the interview was repeated with the same, or similar, respondents and context (Guba, 1981). For this reason, the interview guide is included in Appendix 1 and the theoretical framework used is displayed in chapter 2, making it possible to repeat the case interviews. In addition, all interviews and transcripts were conducted by myself and written down, which secures consistency across the different interviews.

4 About the case companies

Outsourcing decisions are dependent on the context a firm is situated in and thus, it is of importance to introduce each case firm separately. It is useful to have an understanding of the firm concerning products, strategies and its main focus. Each introduction will include a few illustrative pictures that provide additional insight into the firm. Improved understanding and knowledge of the firms will make it easier to interpret the findings in this thesis and place the findings in an appropriate context. The order in which the case firms are introduced will also be used in the next chapter when analyzing the findings of the case studies.

4.1 Ekornes ASA

The company was founded in 1934 by Jens E. Ekornes and started with producing furniture springs. Over the next few years, the firm experienced growth and the first Svane mattresses were sold in 1937, whereas the firms most known brand today, Stressless, entered the Norwegian market in 1971 (Ekornes, u.d.-a). This led to a substantial expansion and growth period for the firm. The picture below depicts the Stressless chair and a Svane bed to better illustrate the firm and the products. Two different kinds of Stressless chairs are depicted, one with a wooden base and one with a metal base. This difference will be mentioned several times throughout the rest of the paper.



Figure 4: Some of Ekornes ASA's products (Pictures: Google)

Today, Ekornes ASA is the biggest producer of furniture in the Nordic region, with the brands Ekornes, Stressless, Svane and IMG (Ekornes, u.d.-b). Stressless is by far the most important brand for Ekornes ASA, which stood for 74,5% of revenues in 2017 (Ekornes, 2017).

Ekornes ASA owns exclusive brands, where the brand itself and quality is most important (EK). This policy was started in 1970, when the firm decided to reduce the number of retailers from about 1.200 to 200 (Ekornes, u.d.-a) at that time. This focus is still apparent today as the firm chooses retailers carefully, following several guidelines (Ekornes, u.d.-c). The importance of the brands is obvious in Ekornes ASA's business idea: "*We need to live the brand*" and in the firm's vision of creating known brands globally with a focus on comfort and quality (Ekornes, u.d.-c).

The main production is carried out in the five factories located in Norway, based on innovation and technology development to ensure competitiveness (Ekornes, u.d.-c). For instance, the company has developed a new robot which can sew which enables the firm to keep the activity in-house, rather than experiencing the need to outsource (Klingenberg,

2014). In addition, the firm has one factory in the US, one in Thailand and two in Vietnam (Ekornes, 2017). Globalization is evident as Ekornes ASA sells its furniture on a global market and more than 50% of all employees are located outside of Norway (EK). To achieve global sales, the firm utilizes 3.500 - 4.000 retailers world-wide, which are selected following strict guidelines.

The firms main sourcing strategy is centered around many suppliers, reducing dependence on a single source (EK). The outsourced components are highly standardized and there are many available sources that can produce these, thus enabling the firm to bargain and switch suppliers with short notice, should the need arise. Outsourcing of standardized components increased at a similar pace as product lines expanded, since the firm needed more and different parts for furniture (EK). In addition, the firm opts to outsource activities such as parts of IT and warehouse operations.

4.2 Stokke

Stokke's history starts in Ålesund in 1932. Then, the firm produced buss seats and furniture for adults. The first piece of children's furniture was released in 1972, the iconic TrippTrapp chair. In the following decades, the firm released several other children's products, such as the Xplory stroller in 2003. In 2006 Stokke decided to exclusively focus on premium children's furniture within segments such as chairs, baby carriers, strollers, home textile and grooming equipment (Stokke, u.d.-a). The picture below shows some of Stokke's core products and illustrates the firm's differentiation through design and innovativeness.



Figure 5: Some of Stokke's Products (Pictures: Google)

The core concept Stokke follows is based on designing products which are in the child's best interest (ST). The firm differentiates itself by focusing on design; especially functionality, ergonomics and comfort. Pride is taken in the fact that all products are designed with the child in mind which can be illustrated by the high and parent facing stroller, or the carefully designed baby carrier that was developed with right hip placement as an important factor (ST).

Stokke was a family-firm across three generations until 2014. That year, the company was sold to a South-Korean entrepreneur for a rumored 3 billion NOK (NRK, 2013). The main reason for the purchase was access to brands with high growth potential in Asia, where South-Korea has been one of the fastest growing markets for the Xplory stroller (Langva, 2015). However, Europe is still the main market for the Xplory stroller today (ST). This change in ownership gave way for some new principles and strategies, including increased e-commerce and a larger focus on Eastern markets (Langva, 2015).

The firm sells its products through selected retailers in over eighty countries. In addition, Stokke has opened three flagship stores to further the goal of "*becoming the leading global brand of premium products for children*" (Stokke, 2016). Stokke's production choice is very interesting, since all production is outsourced (Langva, 2015). The firm itself does not produce anything in-house, but rather focuses on design, product development and the brand (ST). Still, even if operations are outsourced, Stokke experiences a demand for professional integrity to ensure that no negative side effects for customers emerge, due to this way of organization, production and logistics (Langva, 2015).

Stokke's sourcing strategy is mainly based on long-term supplier relationships (ST). The company takes care in supplier selection and uses stocks to counteract fluctuations in orders (Langva, 2015). To be successful, Stokke believes that the firm and the supplier need to experience a "win-win" situation. Also, since the firm does not produce in-house, good relationships are important when designing and testing new products (ST). Mainly, Stokke employs a single-source strategy, with a few exceptions such as the production of the TrippTrapp chair and textile sourcing. Another strategy that Stokke employs is kitting, where final assembly of certain components and limited customization takes place at the warehouses, to decrease finished-goods stock and be more flexible (ST). For instance, brown or black colored handles for the Xplory stroller are added at the warehouse.

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4.3 Wonderland

The company started out as Westnofa in 1969, founded by five furniture producers in the region and the first mattress was produced in 1971 (Wonderland, 2016). Between 1972 and 2004 the firm was owned by Stokke Fabrikker AS, and in 2000 Wonderland was established as an own division within Stokke, apart from Westnofa. After Stokke sold Wonderland, ownership changed several times, with the firm effectively becoming independent in 2015, when management bought all shares (Wonderland, 2016). In 2017 a local firm became the main shareholder for Wonderland (WL). Today, Wonderland is known for its quality beds and mattresses, and prides itself with being the first producer of continental beds in Norway (Wonderland, u.d.-a). The firm is comparatively small to its largest competitors, but nevertheless profitable and with a known brand (WL).

Wonderland's mission is to build and deliver personalized beds with unique characteristics and design (Wonderland, 2016). This mission encompasses the fact that the firm is focusing on quality products instead of high volume. Thus, the firm does not produce in bulks with substantial stocks, alternatively focusing on assembly to order, with investments in equipment and facilities to achieve this production philosophy optimally (WL). Wonderland has one factory in Åndalsnes, where all beds are produced (Wonderland, u.d.-a). The production site includes the factory which is semi-automated, and a finished goods inventory at a separate location (Wonderland, 2016). This set-up is not as effective as it could be, thus Wonderland plans on expanding to combine the production site and inventory into one location, to be able to benefit of robotization and optimizing goods flow (WL). One benefit of Wonderland's location is closeness to several suppliers of semi-finished goods used in production (Wonderland, 2016). This sourcing strategy reduces lead times, increases effectiveness and lowers cost in comparison to distant suppliers. The picture below shows the two separate locations Wonderland utilizes today, and also illustrates the products.



Figure 6: Wonderland's Location and Products (Pictures: Wonderland, 2016; Google)

The sourcing strategy employed focuses on single-source European suppliers and building long-term relationships with them (WL). These relationships help Wonderland to be more flexible and to receive orders on time. Effectiveness is also increased as the firm and suppliers have a common understanding concerning the end market and work towards the same goals (WL). The suppliers are seen as strategic partners and Wonderland can benefit from innovation, process & product development and competence at the suppliers due to this strategy. Another reason for single-sourcing is the wish to be a substantial customer for the suppliers to achieve better conditions and prices (WL).

4.4 Plasto

Plasto was founded in 1942 by Odd Stenerud and started with producing knobs, subsequently starting production of plastic ball point pens in 1953. 1955 was a key year in the firm's history, when Plasto O. Stenerud was registered and bigger plastic injection molding capacity was built (Plasto, u.d.-a). Norway Penholder was sold to Stenerud's brother. Moving forward, new and technical customers demanded increased quality and documentation. Thus, more advanced products were made. In 1969 Plasto built a factory in Åndalsnes and registered the name we know today, Plasto AS, in 1979 (Plasto, u.d.-a).

Today, Plasto AS produces plastic injection molded products in many different forms and sizes ranging from 0,1 gram to 120 kilos (Stensvold, 2017), with 120 kilos being extremely sizeable for plastic components (PL). The firm does not manufacture finished products, but components which will be used further by customers (PL). Plastic injection molds can be compared to a waffle iron, where the molten plastic is shot into the molds with high pressure to cast the product (PL). Close cooperation with customers is important, since design and optimization of the final product are key processes for Plasto (Plasto, u.d.-b).

The picture below illustrates Plasto's automated production process and shows some of the plastic components that are produced.



Figure 7: Plasto's Production (Pictures: Google)

The production process starts with a customers' need or computer model of the component in question (PL). Thereafter, the plans are sent to the mold producer for a product and price proposal, which Plasto receives in turn. The proposal is analyzed by specialists in-house and the right supplier is chosen based on price and quality considerations. New injection molds have to be made for each customer, and thus it is important to share knowledge and strategies with the suppliers (PL).

Robotization and automatization are of critical importance for Plasto AS and its modern and effective production enables the firm to run without employees present (Plasto, u.d.-b). Today, there are more robots than employees in the production at Plasto, increasing effectiveness and competitiveness (Smart-Industri, 2017a). For instance, a robot reduced the need from four employees to only one, effectively saving money on labor cost (Seehusen, 2014). The firm has become more competitive and cheaper than Chinese competitors, which led to backsourcing efforts together with the customer (PL). Several reasons support the fact that Plasto has regained production of aquaculture components for customers: the existence of a substantial home market, technology is developed in Norway and leading actors are located there as well. All these factors give Plasto a comparative advantage which is necessary to produce competitively.

It is important for Plasto to have long-term relationships with suppliers as the firm is dependent on sharing knowledge and information to receive molds in accordance with the customers' needs. The firm's philosophy is also based on not owning other firms, as the firm sees cooperation as a better approach to work together over long distances (PL).

4.5 Brunvoll

The brothers Andreas and Anders Brunvoll founded Brødr. Brunvoll Motorfabrikk in 1912, and were subsequently joined by the third brother, Artur Brunvoll, when the company moved to Molde in 1918 (Brunvoll, u.d.-a). Since then, Brunvoll has evolved from manufacturing low-pressure diesel engines and controllable pitch propellers for fishing vessels, to a world leading supplier of thruster systems. These thruster systems are used to maneuver vessels and keep a steady position when needed. Brunvoll is a specialized niche-player, where competition is substantially larger and operates with a broader product specter (BV). The picture below shows a thruster, the production site and illustrates how advanced the products are.



Figure 8: Illustrative images for Brunvoll (Pictures: Stensvold, 2016d)

Brunvoll is known for precision, experience and expertise in the field and is a single-source supplier providing fully integrated solutions. "*Trusted world wide*" (Brunvoll, u.d.-a) is the firm's vision, reflecting the focus on service and quality, rather than low cost. The business concept revolves around design, manufacture, marketing and service of complete systems (Brunvoll, u.d.-a). Last year, the firm purchased a complementary firm, which enables Brunvoll to deliver even bigger and better package solutions for ships (BV). In addition to the physical product, which can be classified as "heavy-duty", Brunvoll also offers maintenance, support and service throughout the products long life-span. Quality and delivery accuracy is of utter importance for customers in this market, since down-time due to failure or delays is very costly (BV). Brunvoll operates in the high-end section of the market and has several repeat customers owing to the firm's high quality standards (Stensvold, 2016d).

The main focus is on ships sizing from 50-70m and longer, which experience advanced needs. A question that arises in connection is *"What are the customers' requirements?"* (BV). The case interview revealed several examples of different customers and their respective needs. Shuttle tankers which pump oil have an advanced requirement concerning positioning and control, since there are huge consequences connected to mistakes and failure. Cruise ships are big windbreakers which have the need to maneuver into narrow harbors. Mega yachts need to operate silently, whereas military vessels need to operate even if they are subject to extreme tremors. These examples illustrate that Brunvoll has chosen to operate in several different niches, about seven or eight, and compete globally.

Innovation is key and the firm counts on digitalization, automatization and robotization (Smart-Industri, 2017b). This fact is reflected in Brunvoll winning the prize for "Norway's Smartest Industrial Company" in May 2017 (Norsk-Industri, 2017). The main reason for winning this prize was that Brunvoll is able to compete in the international market with production in Norway, where especially digitalization has helped to create new business models and effective production (Norsk-Industri, 2017). Production in Norway is to the contrary of competitors, several of which produce in, or outsource to China, sometimes even the whole product.

Brunvoll takes pride in its insourcing strategy. In the 90's Norway experienced a growing trend to outsource production, but Brunvoll's management decided against this (Smart-Industri, 2017b). Today, it proves a profitable decision and Brunvoll produces all core components itself in Molde. This includes every step from steelwork to electrical installations (Smart-Industri, 2017b). One important factor enabling Brunvoll to keep production in-house and survive is modernization of machines, which he firm does continuously (Stensvold, 2016d). Also, automatization and robotization is key, where Brunvoll is building human competence and is in the process of using welding robots for more advanced operations (Stensvold, 2016d). Nevertheless, Brunvoll outsources some components, where the main strategy is based on close and long-term relationships with suppliers to ensure high quality and standards (BV).

5 Data analysis

This chapter analyzes the findings of the case interviews and questionnaire in relation to the research question *"What is the state of sourcing in Møre & Romsdal today?"*, which was stated in chapter 1. In order to organize the findings, this chapter is divided into parts based on the main considerations for outsourcing, followed by a separate analysis of the questionnaire and lastly analyzes views on backsourcing. The ID-codes used in the analysis represent the responses of the different case firms and were presented in Table 3, Chapter 3.

5.1 Activities

5.1.1 Display of activities

The case firms outsource different activities to varying locations. The table below summarizes the different activities that are outsourced by the various case companies, but the list is not exhaustive as the firms did not state all outsourced activities, rather the respondents mentioned the activities that were deemed most interesting and important.

Case company	Activities
Ekornes ASA	Aluminum & plastic components, metal working, IT, warehouse
	operations
Stokke	Production, IT helpdesk, warehouse & logistics operations
Wonderland	Accessories, parts of IT, cleaning, laminating, quilting and seaming
Plasto	Injection mold production, IT, plastic granulate
Brunvoll	Class B components, Class C components, some administrative
	functions such as canteen and cleaning, raw materials

Table 4: Display of outsourced Activities in Case Firms

Ekornes ASA mainly outsources highly standardized components, whereas the most important production activities, design and product development are conducted in-house. One important activity that is kept in-house is the cutting of leather which is also the most expensive material in the products. Other in-house activities include veneer and foam production. The firm expanded its product line and choices which increased the number of different components needed. For instance, chair bases were originally made of veneer, but now there are also aluminum frames available. In turn, this led to the need to source more components externally as it is unfeasible to produce each component in-house. IT operations were outsourced to a third party about two years ago, whereas warehouse operations have been outsourced long ago.

The most interesting part of Stokke's outsourcing strategy is that the firm has outsourced all production to third parties. Even if the firm is a furniture company, it does not view production as a core activity. Product development, marketing and the internal sales organization are defined as core activities for Stokke. Production is still an important activity, but the brand is seen as the firm's main asset. Therefore, core activities that relate directly to the Stokke brand are kept in-house. In addition, other activities are outsourced such as the IT helpdesk and warehouse operations & logistics.

Wonderland purchases components and finished goods which are not linked directly to the firm's core activity of producing mattresses. Night stands, electronics for adjustable beds and frames are examples. The firm can be classified as an assembly plant with the main activities of casting pocket springs and seaming beds. The most wage intensive activities are outsourced which cuts payroll costs to 9%. Wonderland has entered an agreement with a third-party supplier, who can seam beds for the firm if the need arises. Laminating and quilting are other activities that are outsourced, whereas many of Wonderland's competitors quilt in-house as this is an important part of the final product. Quilting refers to the crisscrossed top layer of a mattress.

Plastic granulate, which is the raw material Plasto uses, is not produced internally and sourced from big chemical concerns. IT server service is an outsourced activity which has never been deemed as important and was outsourced early on. The most important activity for Plasto is injection molding and thus is conducted fully in-house. The critical tasks associated are also kept in-house and defined as automatization, robotics and competence. Machines are produced externally, but further developed and adapted in-house. A very important activity which is outsourced to a third party is production of the actual injection molds, which are of utter importance, as these are needed for the plastic injection.

Brunvoll does not outsource components that are classified as core components but opts to source standardized parts such as cogwheels and bearings. Such components are classified as Class C components and internal production development does not take such components into account. The reason why these components are outsourced rests on the comparative advantage

a supplier has, since specialized knowledge and competence is needed in addition to substantial investments in equipment. Components which Brunvoll classifies as class B components are favorably produced in-house but are outsourced when necessary. These components can be produced parallel, internally and externally. IT is not an activity which is outsourced, as it is deemed a core-activity. It is an integral part of the systems solutions Brunvoll delivers and is of too high importance to be outsourced. In addition, raw materials such as steel are purchased externally, due to practical reasons.

5.1.2 Analysis of activities

The case study revealed that several firms outsource critical activities and components to third parties. The table below illustrates the outsourced activities of the firms, classified according to Insinga & Werle (2000)'s suggestion of classification based on potential for competitive advantage.

Firm	Key activity	Emerging activity	Basic/commodity activity
Ekornes ASA		Х	Х
Stokke		Х	Х
Wonderland	X	Х	Х
Plasto		Х	Х
Brunvoll		Х	Х

Table 5: Classification of Outsourced Activities based on Insinga & Werle (2000)

All firms agree on Insinga & Werle (2000)'s suggestion that commodity and basic activities should be outsourced. It was difficult to assess the practical difference between commodity and basic activities, thus these two were grouped together. Every case firm defines several activities as unimportant and has therefore decided to outsource those. IT is one such activity (EK, WL, ST, PL) which is outsourced to varying degrees. Cleaning services & canteen (WL, BV), as well as purchasing raw materials (PL, BV) are other such examples.

All case firms state that core activities are retained in-house in accordance with Barthélemy (2003)'s suggestion of proper actions. Simultaneously, it may seem that several firms choose to outsource critical activities which have a high potential for competitive advantage, which is not in accordance with existing literature (Insinga & Werle, 2000; Barthélemy, 2003). Wonderland, for instance, chose to outsource quilting which can be classified as a key activity and is in fact carried out in-house by most competitors, due to the importance of this activity.

This activity has a high potential for competitive advantage for Wonderland, especially since many competitors perform quilting in-house. Nevertheless, this does not mean that Wonderland has decreased its competitive advantage, since the firm utilizes a specialized supplier and has understood the fact that outsourcing is more cost and quality effective. The firm's decision rests on the assessment that internal capabilities are not sufficient enough and it would be cost intensive to conduct this activity in-house. Even if existing literature suggests not to outsource key activities, Wonderland's strategy has proven successful in this case.

It may also appear that Stokke's decision to outsource production, is to outsource a significant potential for competitive advantage (Insinga & Werle, 2000). However, Stokke does not define production as a core activity, even if traditional thinking connects a furniture firm with furniture production. The firm rather focuses on activities concerning the brand. Production might thus be defined as an emerging activity for Stokke. This strategy has worked well for the firm and illustrates that it is not always obvious to distinguish between core and non-core activities, and where competitive advantage can be found (Barthélemy, 2003).

Barthélemy (2003) underlines that it may be difficult to separate core from non-core activities as the same activity might encompass both. Wonderland and Ekornes ASA for instance, have understood this and decided to outsource only a part of the IT functions. Some parts are deemed acceptable and necessary to outsource, whereas others are better kept in-house to fulfill crucial functions.

Brunvoll follows Insinga & Werle (2000)'s suggestions of classifying activities when deciding what to outsource. The firm employs an outsourcing strategy which illustrates how different activities should be treated, with the firm's classification of Class B and Class C components. Key activities are always retained in-house, whereas commodities and basic activities are outsourced. In between, emerging activities can be found, where the firm produces in-house whenever possible and does not lose internal capabilities.

Economic factors that concern whether outsourcing truly is cheaper, as well as technical considerations questioning the integration with other in-house activities (Lacity et al., 2008), are also used to decide if activities are suitable for outsourcing. Plasto outsources production of injection molds, which can be seen as a critical activity. Nevertheless, the firm identified plastic injection molding as the core activity and mold production is not an activity that is fit for in-house production. Economic considerations have shown that it is cheaper to outsource

the activity, and there is no technical connection between injection mold production and Plasto's in-house activities. Thus, this activity can be classified as an emerging activity which has a potential for competitive advantage, but the firm does not have the internal capabilities needed to perform in-house at the same level as outsourcing achieves.

The same reasoning is true for Ekornes ASA. As their portfolio of products expanded, so did the need for different materials and components. Most key activities are still maintained in-house such as leather cutting, whereas other parts of production have been outsourced due to misfit between existing technology and the components needed. Also, outsourcing proved to be a cheaper alternative than investing in equipment and competence. Nevertheless, Ekornes ASA is aware of the activities that are classified as core activities internally and does not outsource such. In addition, many different parts and components are used to manufacture Ekornes ASA's products which makes it very complex to differentiate between key and emerging activities and to identify activities that truly are core activities. This difficulty for Ekornes ASA can be illustrated by Stokke's choice to outsource all production, where all parts and components have been deemed non-core.

5.2 Drivers

5.2.1 Display of drivers

Drivers differ for the case firms, but there are several drivers that reoccur such as access to knowledge and focus on core competences. The following paragraphs summarize the main drivers for all case firms.

Many of Ekornes ASAs' product components are outsourced, due to necessity and access. It is not feasible for Ekornes ASA to produce all components internally due to the many different components needed, and it would decrease the focus on core competences. Metal processing is one instance where the firm would have to invest a substantial amount to be able to produce in-house. Producing in-house would be unnecessarily expensive and the possibility of lowering cost drives outsourcing decisions. Lower cost helps the firm to obtain a margin that is as high as possible which is important to keep the firm's competitive position. Another crucial driver for Ekornes ASA is availability. This driver led to some IT functions being outsourced, since certain services need to be available at all times. The same is true for warehouse operations. The amount of commitment and skill to obtain such a level of availability would be much harder for the firm internally.

Stokke decided early on to outsource production to third party suppliers. The driver for this decision was the firm's desire to have access and freedom to choose materials, technology and locations, which enabled Stokke to obtain suppliers that fulfill the firm's need optimally at the right locations. Another important driver is the wish to be able to focus on the firm's core activities and excel in those. The more a firm produces internally, the more spread competences become, whereas Stokke wanted to be able to focus solely on the chosen core activities. For Stokke, it is not that much cheaper to outsource activities and therefore cost is not a main driver. This case illustrates that other considerations than cost are very important drivers for outsourcing decisions.

The main concept of Wonderland's value chain is centered around assembly to order. This means that flexibility is the main driver for outsourcing and third-party production, since it enables Wonderland to adapt to rapidly changing market conditions and meet short orders. Cost is another driver for Wonderland as it can be more efficient to outsource than to produce in-house. The third-party supplier in Poland delivers sewing services when capacity issues arise. Access to competence and focus on core competence can be seen as drivers which led the firm to source electronic and wooden components from external suppliers. These components would require vast investments and expertise, thus the option to produce in-house would not be feasible.

Plasto lists several drivers that led to outsourcing. The most important outsourced activity is mold production, where cost, capacity, competence and clusters were important drivers. The firm does not have the capacity to produce molds in-house, especially not since demand occurs periodically. In-house production would be costly as well, and thus outsourcing is a better option. In addition, Plasto can utilize specialized suppliers, with the necessary resources and competence to produce high quality products. These suppliers may be located in knowledge rich clusters, such as the mold producer in China, which is another driver for the firm to outsource. "Unimportant" activities, such as IT, are also outsourced, giving Plasto the opportunity to focus more on core activities.

Brunvoll pursues an insourcing strategy to ensure, retain and develop competence internally. Nevertheless, some drivers led to a limited amount of outsourcing. Class B components are outsourced in accordance with capacity issues and no activities are outsourced due to cost considerations. One important driver in this case is the possibility to retain a stable work force, even if demand fluctuates. The activities and Class C components which are outsourced, are deemed "unimportant" and are generally standardized which suggests that the main driver for the decision is the ability to focus on core activities. In addition, several specialized components, such as cog wheels, would be unfeasible to produce internally due to cost, knowledge required and other practical reasons, thus access to knowledge and resources is a driver to outsource such activities as well.

5.2.2 Analysis of drivers

The table below summarizes the different drivers for the case firms and illustrates the importance of drivers across all cases.

Firm →	Ekornes	Stokke	Wonderland	Plasto	Brunvoll
Drivers	ASA				
Access to resources and	Х	Х	Х	Х	Х
knowledge					
Focus on core	Х	Х	Х	Х	Х
competencies					
Lower cost	Х		Х	Х	
Flexibility		Х	Х		
Capacity bottlenecks			Х		Х
Availability	Х				

Table 6: Display of Outsourcing Drivers in Case Firms

All drivers identified, except availability, are in accordance with Solli-Sæther & Gottschalk (2007)'s findings in 2007. In addition, the drivers can be classified as operational benefits that can be achieved in outsourcing, as proposed by Lacity et al. (2008). I will analyze each driver in turn.

Access to resources and knowledge appears to be the main driver for outsourcing decisions in the case firms. All stated, to varying degrees that access is important. Stokke required access to raw materials and wanted the freedom to be able to choose freely materials, technology and location without being bound. Brunvoll and Plasto outsource advanced technological activities, where it is important to gain access to specialized knowledge. It can be difficult to find the right knowledge and capabilities in Norway for an acceptable price, thus it is a relevant possibility to search abroad. The need for competence led one firm to a specialized cluster in China (PL), whereas the other chose to stay close to home (BV). One driver the case

interview at Plasto revealed was the existence of a cluster, which can be classified as a driver to obtain relevant competence and information. Clusters have a tendency to attract similar firms as there are benefits associated with being located in a cluster.

Another revelation was the connection between access to resources & knowledge and quality. Several firms stated that it would be exceedingly difficult to produce and maintain the high quality required if all activities were conducted in-house (EK, WL, BV). The respondents did not differ between the quality and access drivers, rather it appears that the need for quality is rooted in the access to knowledge driver. Brunvoll for instance, outsourced specialized production and parts not only due to the need for knowledge, but also because of an awareness that quality would be better. The same is true for Ekornes ASA. The firm is aware of the fact that additional activities conducted in-house would demand quality controls, where sufficient quality could be difficult to maintain. Thus, the firm opts to access specialized suppliers to ensure quality. Wonderland's decision to outsource quilting is also based on a mix of these two drivers. The firm realized that access to relevant competence is more profitable and ensures better quality than having to build competence in-house. It appears that the case firms equate access to competence with access to quality.

Focus on own core competences is another central driver for the case firms. All respondents mentioned that focus on core competences was a factor that led to outsourcing. Especially Stokke found early on that production would not be a part of the firm's core competence and opted to outsource instead. Other firms are aware of the limitations that not all activities can or should be done in-house, which led to outsourcing of certain components and services to be able to focus on what is deemed most important (EK, BV, WL, PL). This driver can also be seen as the central reason for not outsourcing certain activities as well. Activities that fall under the category of core activity are not outsourced, due to the firms' wish to focus on and maintain these core competences.

Lower cost is still a central thought for firms when deciding to outsource but has its limitations as a driver. Firms pay attention to costs in connection with outsourcing, where three out of five case firms have mentioned cost as a driver (EK, WL, PL). One interesting case is Brunvoll which actively pursues a high-quality insourcing strategy. Cost is never a driver for outsourcing activities, and the firm also does not source from low-cost destinations. One reason that was uncovered during the interview is that there may be substantial hidden costs when deciding to outsource activities. The action might seem very profitable in theory, but it is difficult to accurately estimate costs associated with factors such as governance over distances, control & follow-ups and long lead-times in case of mistakes. Thus, cost may be an unreliable driver for firms, and these possible problems connected to the cost driver are also mentioned by Barthélemy (2003) as a deadly sin in outsourcing. In the case of Plasto, cost was an important driver to outsource mold production, since this activity is extremely costly. Not only was cost a driver which led to outsourcing in general, but was also a reason why China was chosen. Norway, for instance, was very expensive and did not have a sufficient price/quality equation or an industry cluster. For Wonderland, cost is a driver in outsourcing considerations, especially for labor intensive activities. It is more efficient and cheaper for the firm to outsource these activities, and cost is an important consideration when deciding on a supplier.

Only Wonderland mentioned flexibility as a driver for outsourcing which was the most important driver for the firm overall. Short order times and the chosen strategy of assembly to order make it important for Wonderland to optimize and effectively govern the value chain. Flexibility also influenced location choices, since flexibility diminishes with increased physical distance and increased lead-times. In a sense, Stokke also experiences flexibility as a driver for outsourcing. It was not mentioned explicitly in the case interview, but freedom to choose materials, technology and location was mentioned. The wish for flexibility might be classified as a driver for Stokke as outsourcing enables the firm to choose freely.

Capacity bottlenecks is a driver which led Brunvoll and Wonderland to outsource activities when necessary. This driver was not part of the study conducted by Solli-Sæther & Gottschalk (2007), since the survey only concerned IT and back office services, which does not experience capacity issues in the same manner as production activities do. Nevertheless, this driver was identified by Kinkel & Maloca (2009) concerning production in Germany. Both case firms maintain the activity in-house but employ additional third-party suppliers when the need for additional capacity arises. This also illustrates that outsourcing is not necessarily an either-or decision. It is possible to outsource when the need arises, and still keep competence in-house.

One driver that was uncovered in the course of the case interviews was global availability. Ekornes ASA outsourced parts of IT due to this driver. Passwords for instance, need to be available constantly and the firm found that it cannot take Norwegian time, work hours and holidays into account as the firm operates globally. Thus, this activity was outsourced to a third-party supplier to ensure availability. The same reasoning is applied to warehouse operations, where the firms need of a globally available supply chain is better fulfilled by a specialized third party, rather than attempting this activity in-house.

5.3 Risk

5.3.1 Display of risk considerations

All firms face risk in outsourcing operations. Several risk factors are of importance for all case firms, and the following paragraphs present the different risk considerations for the different case firms.

Ekornes ASA defines its outsourcing strategy as relatively low risk as it mainly concerns generic outsourcing. The outsourced components can be produced by many third parties which means that the firm does not have to expose itself to risk to a high degree. Quality issues is one risk Ekornes ASA faces and works to mitigate through controls. In addition, the firm sources from many different suppliers and follows a policy of maintaining at least 2-3 suppliers for the same component at all times. One crucial risk consideration for Ekornes ASA concerns scandals and problems connected to reputation and factors that can threaten the firm's service to customers. The world we live in consistently becomes more transparent through globalization and the internet. If there was a scandal connected to a supplier, this would reflect badly on Ekornes ASA and poses a risk which needs to be avoided.

One important risk for Stokke is closely connected to the choice of outsourced production. Insufficient capacity at the supplier, or orders that are not delivered, comprises a relatively big risk. Therefore, the firm chooses to establish relationships with suppliers where the firm is in the "optimal zone", where the orders are not as substantial that the supplier becomes dependent on Stokke but are not as small that Stokke loses all influence. Another risk for the firm is quality which is controlled regularly. Quality risk impacts the brand directly and thus, it is important to mitigate this risk, since the brand is Stokke's most important asset. Insufficient quality is closely connected to reputation risks and scandals, which might occur if the wrong supplier is selected. Other risks are connected to Stokke's choice to source globally. Cultural issues are a concern as the firm wants to involve suppliers early on when developing new products. This is due to missing in-house production and Stokke does not want to develop products that are difficult to manufacture for suppliers. Working with global suppliers includes the risk of language barriers and the firm meets issues related to miscommunication.

Wonderland identifies market shifts and delivery capabilities of suppliers as important risk factors. Market risk is dynamic and has to be evaluated continuously, which includes considerations based on competitiveness. Risk evaluations are conducted often and an important control questions for the firm is *"What will happen if…?"*. Quality is also a risk factor for the firm, but actively mitigates the risk by long-term thinking, relationships with suppliers and proactively identifying problems. In addition, the firm works continuously on streamlining contracts to meet an intensifying market, where elements such as late fees are increasingly more common. Wonderland views market and political risk as dynamic and these are assessed regularly as well.

Plasto characterizes risk as relatively low due to experience, and the firm has never experienced not to receive an order. Risk includes considerations concerning time, cost and product performance. Injection molds are high quality products which should last for a long time. Plasto can also meet risks in supplier relationships due to their relatively small size, which makes it important for the firm to be an attractive customer for suppliers. Contracting and use of third-party suppliers can be a plus for Plasto with regards to risk, since responsibility and risk are shared among the parties. Chinese culture is very relationship-oriented, and it is important to use time and resources to understand the culture and build relationships to decrease cultural risk. Most of Plasto's risk considerations are focused around the sourcing of injection molds, since other outsourced activities, such as raw material production, are classified as commodities.

Risk considerations are closely connected to Brunvoll's "produce in Norway" strategy. The firm utilizes suppliers which are located as close as possible and does not outsource to low-cost locations. Quality issues poses the biggest risk factor for the firm. Thus, closeness and control are used to mitigate risk. It is important for the firm to have control over the value chain and assure quality as reports of mistakes spread fast in the maritime industry. Brunvoll tries to avoid single-source outsourcing. All important components should have two suppliers,

one main supplier and one subcontractor. Even if single-sourcing is avoided, good supplier relationships with the few selected suppliers is of importance for the firm.

5.3.2 Analysis of risk considerations

Risk considerations differ among the case firms which makes it difficult to quantify the views on risk among the firms, but there are some similarities. All case respondents classified outsourcing risk as relatively low. Nevertheless, all firms are exposed to different risks and the table below summarizes the risk considerations for the case firms.

Type of risk	Ekornes ASA	Stokke	Wonderland	Plasto	Brunvoll
Insufficient	Х	Х	Х	Х	Х
quality					
Reputation	Х	Х			
Insufficient		Х	Х		
capacity					
Location	Х	Х	Х	Х	Х
specific risk					
Other			Market	Time	
			Political	Cost	
			Contracting	Product	
				performance	

Table 7: Risk Considerations of the Case Firms

One factor that emerged in combination with risk assessment, is the relationship with suppliers. Selecting the wrong vendor is the second deadly sin proposed by Barthélemy (2003) and received a substantial amount of attention by the respondents when talking about risk and attempts to mitigate risk. Supplier relationships were not mentioned as an important risk consideration, rather it is a method for firms to mitigate risk in outsourcing. However, firm size can lead to issues in supplier relationships (ST, PL) which is one concern firms try to avoid through careful selection of fitting suppliers.

One decision in outsourcing that needs to be made by firms, is to decide whether to employ a single-sourcing or multi-sourcing strategy. Wonderland mainly uses a single source for the components and points out that single-source is an easier strategy to maintain. The same main strategy is utilized by Stokke, but the firm keeps multiple sources concerning the TrippTrapp chair, since this is the most important product for the firm and several sources reduce risk. Brunvoll on the other hand, relies on a double-sourcing strategy to ensure deliveries and mitigate risk. Single-sourcing strategies typically focus more on close supplier relationships, whereas multi-sourcing reduces risk in connection with an insufficient supplier.

All case firms except Ekornes ASA stated that close and well-established supplier relationships are essential when sourcing from a third party. These relationships provide a feeling of security and reduces sourcing risk in the eyes of firms. Plasto has an ongoing relationship with a Chinese supplier that has lasted for years. It is important for the firm to have a close relationship with the supplier of molds, since knowledge and strategy has to be exchanged between the two parties. Stokke is dependent on suppliers when developing new products, where a good relationship is of importance and reduces risk. Ekornes ASA, on the other hand, classifies the outsourced activities as generic as there are many available suppliers who can deliver the product and thus, does not spend substantial amounts of time on supplier relationships. Suppliers are changed frequently due to considerations based on cost, quality, reputation etc.

One crucial risk factor that was identified among several case firms concerns product and service quality, which is in accordance with Solli-Sæther & Gottschalk (2007)'s findings of important risk factors. Insufficient quality is a substantial risk for firms, since a poor-quality component or raw material might have consequences for the whole product. In Brunvoll's case quality is of utter importance as one bad cogwheel could ruin the whole product and lead to considerable costs for the firm. For the furniture manufacturing firms, quality issues are related to reputation problems and in Stokke's case also safety, since the product is meant for children.

A risk concern that surfaced in the case studies was concerned with reputation. Especially in the case of Ekornes ASA, reputation risk was mentioned as a crucial risk factor. The interviewee explained that the world is getting smaller and use of the internet leads to spreading news and information at an incredible speed. If there occurred a problem at a supplier, such as child labor or animal cruelty, a scandal could result in substantial damage to the firm's reputation. Thus, it is of utter importance to ensure that third parties follow all rules and regulations in order to avoid reputation damages. This is also a reason that Ekornes ASA employees several suppliers, to be able to switch suppliers immediately, if problems arise. Reputation concerns were also mentioned in the case interview at Stokke in the same manner.

Contracting is a crucial risk in outsourcing (Barthélemy, 2003), but few case interviews displayed this issue as relevant and several firms stated that there are few formal contracts in place (ST, WL). However, a good contract may help to mitigate capacity related risks which

were mentioned by Stokke and Wonderland, where both voiced concerns of not receiving orders or insufficient capacity at the supplier. Both firms have alternative strategies in place to reduce this risk, either through careful selection of suppliers with regards to size (ST) or supplier relationships (ST, WL). Wonderland is aware of the importance of a good contract and the firm now actively tries to establish formal contracts with suppliers. The positive facet of risk sharing through contracts was mentioned in one case (PL), but the overall focus for the case firms rather seemed on good relationships than writing an exhaustive contract.

Risk considerations are also closely connected to the chosen location. All case firms had identified countries which would be unsuitable for outsourcing operations due to different risk concerns. Some firms had concerns connected to distance (WL, BV), whereas danger for child labor in Bangladesh led to several firms excluding the location (EK, ST). Political instability in Vietnam (ST) was also mentioned as a concern.

Location specific risks as proposed by Stanczyk et al. (2017) were also mentioned during the interviews. Language issues can lead to misunderstandings and poorer relationships with suppliers (ST) and cultural differences were also mentioned as a risk concern (ST, WL). Especially Chinese culture was cited as a risk factor and several firms stressed the importance of learning about the culture and to establish relations to ensure successful sourcing operations (PL, ST). Cultural risk when sourcing from China has proven real for Wonderland, who attempted to source from the location but met too many problems.

5.4 Location

5.4.1 Display of location choices

Location choices are closely connected to the activity the firm has decided to outsource, drivers and risk assessments in in relation to different countries. The table below summarizes the chosen locations for the different case firms.

Firm	Domestic	Nearshore	Offshore outsourcing
	outsourcing	outsourcing	
Ekornes ASA	Norway	Europe	China, Vietnam, India,
			Brazil
Stokke	Norway	Eastern Europe,	China
		Hungary, Netherlands,	
		Germany, Europe	
Wonderland	Norway	Denmark, Belgium,	
		Poland, Sweden,	
		Germany	
Plasto	Norway	Portugal,	China
		Austria/Germany, EU	
Brunvoll	Norway	Nordic region,	
		Germany, Spain	

Table 8: Display of Locations chosen by Case Firms

China, Vietnam, India, Brazil, Europe in general and Norway are locations Ekornes ASA sources from. Several components such as bolts and aluminum are sourced from Asia, whereas leather is sourced from Brazil. In Norway, Ekornes ASA has a few suppliers in very close proximity, such as the producer of packaging carton. The reason these locations were chosen are closely connected to the countries' traits and risk evaluations. China has become an enormous factory, where it is natural for Ekornes ASA to source components from. In addition, China has strict laws concerning employees and a ban on child labor. This makes China relatively safer to source from. Brazil is the main location Ekornes ASA sources leather from, because Brazil is a country that produces a lot of meat and thus, leather is available.

Stokke sources from several locations, based on different needs and considerations. Locations in Eastern-Europe were chosen due to availability of raw materials and both part and main

production takes place there. Textiles are produced in China as it is labor intensive work, which is cheaper there and the country has an available work force. Also, China hosts a textile industry which makes it a favorable location. Stokke outsources assembly and plastic components to the Netherlands and Hungary. The Netherlands is an important location for Stokke as the main warehouse is located there, which is run by a third party. The reason for this location choice is that the Netherlands is a central country which is known and wellestablished as a central port in Europe. Moreover, production of the Stokke Xplory stroller is located there, since it is a high-quality location for a complicated product and Stokke's main market for the product is in Europe. Location choices of suppliers and warehouses is closely connected, since the firm employs kitting in its production/sourcing strategy, rather than maintaining a substantial finished-product stock.

Wonderland's location choices are centered around the driver for flexibility. Several suppliers are located close to the firm itself and the important activities of quilting and laminating are outsourced to a firm in Ålesund, about 1,5 hours away. Other sourcing locations include Denmark, Belgium, Poland and Sweden. Wonderland does not source critical components from China but utilizes an agent in Denmark that sources a few components from China. The chosen locations are close and influenced by the availability of suppliers and industries. Belgium for instance, has a textile and latex industry and thus, these components are sourced from that location.

Cost and competence are reasons for Plasto's locations choices, where the cost/benefit ratio is of importance. Injection molds are mainly produced in China, at a specialized location. In addition, Plasto utilizes a supplier from Portugal to a lesser degree to produce molds. Raw materials are sourced from Europe, mainly the EU. Occasionally, the firm sources raw materials globally. Austria/Germany are the main sourcing locations for machines, since these countries have specialized industries and excellent competence. IT is an activity where Plasto has chosen domestic outsourcing i.e. a third-party supplier in Norway.

Brunvoll sources from Norway, the Nordic region in general, Germany and Spain. Most of the sourcing activity in the Nordic region takes place in Norway, but cogwheels for instance, are bought from Finland. Location choices are heavily related to Brunvoll's insourcing strategy. None of the chosen locations are low-cost sourcing countries but are known for quality and are close to the firm. Spain is the only instance where the chosen location is farther away, but

the decision is based on the existence of an industrial & maritime cluster, as well as the fact that several customers are located there.

5.4.2 Analysis of location choices

In accordance with Farrell (2006)'s suggestions, several overall factors were identified to be crucial when deciding on a location. However, the suggested factors concerning market potential, quality of infrastructure and environment were not mentioned as factors that influenced location choice. Infrastructure was mentioned in one case in combination with risk, but was not deemed very important. I will analyze the remaining factors of cost, availability of skills and risk profile in turn.

Cost is an interesting factor in connection with location choices. Several of the case firms state that it was an influencing factor (EK, ST, PL) but not the main consideration in choosing a location. Especially China has become a questionable location concerning cost. Cost levels, especially wages, are on the rise and the country has experienced tripled wages over the last ten years (EK). That, and several other changes have led to China not being a low-cost destination any more. Nevertheless, several of the case firms still source from China, as it is still less expensive than Norway and other advantages make China a suitable location. Stokke still outsources textile production to China, because in addition to cost, the country also hosts a textile industry. Overall, cost is a consideration for firms when deciding on possible location choices, but it is not very high on the priority list, especially when a firm needs to make trade-offs. Even if China still is cheaper than Norway, locations such as Bangladesh and Vietnam have become more low-cost. Nevertheless, these locations have risk considerations firms take into account such as the presence of child labor in Bangladesh (EK, ST) and political uncertainties in Vietnam (ST).

Availability of skills was identified by Solli-Sæther & Gottschalk (2007) as the most important driver, and it is also a crucial factor for case firms when deciding on a location. The reason why Plasto sources injection molds from China is largely based on the available skill pool at the chosen location, since there is a whole district dedicated to this activity. The activity demands specialized employees and tools which are not readily available. The same reasoning was employed when the firm decided to source machines from Germany/Austria. These locations have a specialized and advanced industry, which is of importance, as the machines needed are highly technological and are adapted to the firm's needs. In addition, Plasto customizes and employs own technology after delivery which requires cooperation with the supplier. Belgium, on the other hand, hosts a textile industry, which made the country a suitable sourcing location for Wonderland. Oftentimes a firm has to choose from locations which have the available skills, rather than in accordance with other considerations. In addition to an available skill pool, availability of resources is also used as a consideration for location choices. Stokke for instance, outsources production of the TrippTrapp chair to Eastern Europe, since there are birch trees in abundance which is the main raw material.

Risk profiles of countries include many different considerations of the case firms. In the case interviews it was uncovered that risk profiles are used to exclude locations, rather than to include locations. In connection with risk considerations, quality of infrastructure was mentioned as a factor which led Stokke to exclude India as a possible location. The country does not have a sufficient infrastructure, which would have led Stokke to require larger stocks to counteract this risk. Other examples of excluded locations due to risk are mentioned in the previous section concerning risk.

The chosen activity has a substantial influence on choice of location. The chosen case firms do not source activities from the locations investigated by Jensen & Pedersen (2011) but nevertheless, their findings are supported in the case interviews which suggest that there is a close connection between chosen activity and location. Existence of specialized industries and clusters lead firms to choose locations which fit the outsourced activity, such as textile in Belgium and China. None of the case firms stated that IT was outsourced to the Ukraine, even if the country is a known location for this type of activity.

The case studies did not reveal that nearshoring has become more prevalent as Lacity et al. (2008) proposed, but it is a sourcing strategy employed by Brunvoll and Wonderland. Nearshoring is necessary for Wonderland to achieve flexibility in sourcing. If the firm sources critical components from locations such as China, it would increase lead-times substantially or require a bigger stock. These issues are solved by Wonderland's sourcing strategy focusing on European locations. Even a few hours make a difference for the firm, thus Poland is a preferred sourcing location instead of countries such as Turkey. In addition, China is culturally distant from Norway which is a risk Wonderland chooses to mitigate. In Brunvoll's case, quality, control and security are prevalent concerns. These factors are easier to obtain with domestic or nearshore outsourcing, with lower physical distances and cultural

similarities. Also, Norway and other Nordic locations are typically high-cost and high-quality which is in accordance with Brunvoll's strategy.

Stokke utilizes the logic of cultural compatibility in nearshoring (Lacity et al., 2008), when deciding on the location for production of the Xplory stroller. Originally, the stroller was produced in Norway, but was moved to the Netherlands after the firm gained confidence concerning the new product. Cultural compatibility was one reason why the Netherlands were chosen as a suitable location. In addition, the firm needs to work with suppliers when developing a new product which is easier to accomplish in domestic or nearshore outsourcing, rather than a distant location. Other location considerations such as time differences or distance are of lesser concern for Stokke.

5.5 Questionnaire

Data collected through the questionnaire faces substantial limitations and restrictions, mainly due to the limited number of answers. In total, only 14 answers were collected, where nine had responded that the firm outsources and thus, were qualified to answer the whole questionnaire. The numbers in the parentheses, which can be observed in the graphs, indicate the amount of answers if one or more respondents chose the "do not know" category, which further decreases the response rate for certain questions. Nevertheless, this option was better than forcing respondents to answer questions they did not have sufficient information about.

Another issue that arises is the possibility that some of the answers in the questionnaire were given by respondents who also participated in the case study. All of these limitations make it unreliable to generalize data from the questionnaire, but it can be used to a certain extent to confirm data collected through the case studies. In addition, the questionnaire was based more thoroughly on the theoretical framework and can give indications concerning relevant drivers and risk considerations.

All respondents had relevant positions in the firm and were qualified to answer. The respondents were distributed across several industries, where four respondents belong to the furniture industry and one respondent belonged to logistics & transport industry, maritime industry, process industry, service & trade industry and one other respectively. Location choices are illustrated in the table below.

Location	Number of respondents
Norway	6
Eastern-Europe	5
Other countries in Europe	5
China	2

Table 9: Display of Location Choices in Questionnaire

Other location choices such as India, other locations in Asia, USA or Canada, Southern America and Africa were not chosen. The choices indicate that onshore outsourcing and nearshore outsourcing are the most prevalent strategies in the county.

The most important drivers uncovered in the questionnaire are illustrated in the figure below, where access to resources and competence ranked most important. Flexibility ranks second with lower cost but was not a central driver mentioned in the case studies. Focus on core competences ranks fourth, with only minute differences between all four of the most important drivers. Other drivers suggested by existing literature are ranked relatively less important, where only access to workforce comes close to the other drivers. In comparison with Solli-Sæther & Gottschalk (2007)'s findings the drivers for flexibility and focus on own core competence have changed place. However, the four most important drivers remain the same and there are too small differences to ascertain whether there really has occurred a change in the importance of these two drivers. Access to new market still ranks least important, as it did in 2007. This might be explained by the fact that outsourcing does not give direct access to new markets, but instead grants firms connections with third parties in other locations, thus there are other and better possibilities for firms to gain access to new markets.



Figure 9: Importance of Different Drivers

Successes achieved in outsourcing are closely related to drivers for outsourcing and are illustrated in the figure below. In accordance with Lacity et al. (2008), operational benefits in outsourcing are achieved for firms in the county. Highest success was reported to involve access to competent personnel and cost savings. These were also ranked as the most important drivers, which demonstrates that firms take care when aligning drivers and outsourcing strategies as a whole. Improved quality was reported to entail the least successes for firms which can have several reasons. One possibility is that firms do not aim to achieve improved quality but aim to keep quality standards.



Figure 10: Successes Achieved in Outsourcing
When analyzing the importance of different risk considerations, only risk of insufficient quality stands out in importance. A summary of the different considerations is displayed in the figure below. Other risk considerations rank considerably lower, where time difference is by far the least important. Simultaneously there were five risk factors which were answered with "I do not know" once, which might indicate that several factors are less relevant for a firm overall. Solli-Sæther & Gottschalk (2007)'s findings also uncovered insufficient quality as the most substantial risk concern, whereas loss of control ranked fifth. Loss of control ranked second most important in this questionnaire, but one reason is that two of the risk considerations the authors included; "lack of competence about the firm" and "high turnover at the supplier", which ranked second and third respectively, were not included in this questionnaire as these risks appear specific for IT and back office services, rather than outsourcing in general.



Figure 11: Importance of Different Risk Factors

Outsourcing operations are never without risk, and issues occur occasionally. Several issues that might occur were investigated in the questionnaire and are displayed in the table below. As the number of responses is small, the answers cannot be generalized to give an indication of how common the issues are overall. Nevertheless, the questionnaire suggests that most issues that occurred were connected to poorer quality. As this is the most important risk consideration as well, it illustrates that not all risks can be avoided completely. Increased and

hidden costs are also issues that have been experienced, which is a deadly sin proposed by Barthélemy (2003) and also mentioned in the case study with Brunvoll as a problem to be aware of.

Issue occurred	Number of respondents
Poorer quality	4
Conflict with third-parties	3
Increased cost for service/product	3
More time used	3
Unexpected/hidden costs	2
None	2
Other	Uncertain delivery times

Table 10: Issues Occurred in Outsourcing

Part four of the questionnaire covered changes over the last five years, which are summarized in the table below. Seven respondents stated that the firm has outsourced new functions the last five years, indicating that outsourcing is still a common practice in the industry. However, five firms have backsourced functions in the same time period, showing that backsourcing is also a relevant occurrence in the county. Eight firms have changed suppliers due to different reasons. The case interviews suggested that good and long-term relationships are of importance in outsourcing operations, which is contradictory to these results. Still, the questionnaire did not uncover the length of the relationships that were terminated, but reasons for the changes among others were: cost, quality, flexibility, shorter lead-times and incompetence at the supplier. These reasons are in accordance with possible risks in outsourcing. In addition, the questionnaire covered changes in locations as well, where the main reasons were in accordance with the reasons to change suppliers. One reason stated was consolidation, where the firm opted to order more products from fewer suppliers which led to a better price/quality ratio.

Changes the last five years	Number of respondents that answered yes
Has the firm outsourced new functions	7
the last five years?	
Did the firm change suppliers for the	8
outsourced function the last five years?	
Did the firm change location of the	6
outsourced function to another country	
outside Norway the last five years?	
Has the firm backsourced part or all of	5
the outsourced functions the last five	
years?	

Table 11: Changes in Sourcing the Last Five Years

Questions concerning future considerations, which are displayed in the table below, revealed that the same number of firms consider outsourcing and backsourcing over the next five years. These results indicate that both decisions might be of equal importance within a firm, but it is not possible to assess reasons or type of activity that is considered for each sourcing decision. The case studies offered some additional insight concerning the backsourcing phenomenon, which is covered in the next section.

Respondents that answered yes
5 (2 did not know)
2 (4 did not know)
5 (1 did not know)

Table 12: Future Sourcing Considerations

5.6 Views on backsourcing

The interviewees had different views and opinions on backsourcing, but the phenomenon was not spread among the case companies. Still, several respondents stated that they indeed view backsourcing as a trend in Norway, whereas one stated that it rather seemed the trend was towards reduced outsourcing, instead of backsourcing.

Stokke is the only case firm interviewed that has effectively backsourced an activity during the last five years. Consumer care e-commerce (a part of customer service) was mainly outsourced to Romania, but the firm decided to take the activity back in-house to Stokke's

customer service location in Germany. Early on, this activity was outsourced to enable the firm to get started instantly. The activity concerned e-commerce and the customer service associated with it. Stokke experienced uncertainties concerning growth in e-commerce and did not want substantial fixed costs tied up in the activity. Since customer service already was an in-house activity, Stokke used the possibility to build internal expertise and implement e-commerce consumer care, as well as achieving a synergy with existing customer service. This synergy with existing activities was one of the considerations Lacity et al. (2008) proposed to investigate when considering to outsource. In Stokke's case it was deemed necessary to outsource the activity, but over time the possibility for internal integration became sufficient to take back the activity. Backsourcing was not a short-term reaction due to issues as suggested by Kinkel & Maloca (2009), rather it was a strategic choice made by the firm to adapt to the increased importance of the activity and the opportunity of a synergy.

The decision is also in accordance with the drivers proposed by Solli-Sæther & Gottschalk (2015) and Veltri et al. (2008) concerning changes in management knowledge and opportunities, since Stokke needed time to adapt existing knowledge and functions. The firm also found that backsourcing was cheaper than outsourcing due to the synergy with an existing activity. In addition, consumer care is important for Stokke as it is a part of the brand experience, where it is crucial with high quality of service. The importance of the activity increased over time, when e-commerce expanded in size and thus, becoming more relevant for Stokke to take back in-house. Stokke also concluded that the third party did not deliver the expected quality, which is another backsourcing driver (Kinkel & Maloca, 2009; Solli-Sæther & Gottschalk, 2015).

Backsourcing does not necessarily include returning a complete activity back in-house, but can encompass parts of an activity (Veltri et al., 2008). Wonderland plans on utilizing technology and automatization to improve efficiency, which in turn will enable the firm to take certain functions in-house. The backsourcing effort focuses on the possibility to be able to purchase semi-finished products instead of finished components.

Several of the interviewees view technology development as an important driver for backsourcing considerations (PL, WL, EK, BV). Automatization is evolving, which leads to hourly wages decreasing in importance as fewer labor hours are needed (BV, PL, EK). Ekornes ASA and Brunvoll have developed advanced robots to aid in production and reduce required labor hours for production (Klingenberg, 2014; Stensvold, 2016d). In the case of Ekornes ASA the decision to build an advanced sewing robot enabled the firm to keep the activity in-house, instead of experiencing the need to outsource the function to be competitive. On the other hand, Wonderland did not invest in such advanced technology and chose to outsource excess capacity to a third party. The ability to keep activities in-house can demonstrate the increased possibilities for firms to take back a previously outsourced activity as well, due to technological advances. At Plasto, backsourcing of mold production can become a viable option if metal 3D printing evolves further and thus, makes in-house production cheaper and more effective than outsourcing.

Backsourcing considerations include several concerns for firms. One concern mentioned was the lack of competent employees available, if an activity was backsourced (EK). The case firms have high quality and product standards, which also need to be kept if the activity is produced in-house. Closely related is another concern, which involves the presence of industries and clusters (PL). Outsourcing has decreased available suppliers of raw materials and knowledge. If an industry has disappeared, it is much more demanding to take activities back home. The reason for this is that an existing industry ensures access to qualified personnel, knowledge and needed materials. Thus, backsourcing may be more relevant if there still exists an industry which can be revived. Another factor to consider is that capital needs to be available to implement a backsourcing strategy which may prove difficult for firms (BV).

All firms agreed that backsourcing is a relevant topic, but there are still many concerns and considerations which make this option less relevant for firms than it may appear. Also, backsourcing does not necessarily mean that the firm insources back to Norway, as was the case with Stokke. One interesting statement in a case interview was: "*What is back?*" (ST). This statement clarifies that firms operate on a global scale, where sourcing is a part of strategy, regardless of the kind of sourcing employed. Backsourcing can take place on a global scale, where firms might backsource activities to international owned locations, regardless of a firm's original "home".

6 Discussion

This chapter discusses the findings uncovered in the previous chapter. I will follow the same structure starting with activities followed by drivers, risk and location. However, the case interviews and the questionnaire findings will be discussed simultaneously, and I will discuss overall changes in the last five years and future considerations. However, it is important to keep the limited sample of the questionnaire in mind and thus, differences in findings and importance of drivers and risk factors may be influenced by this factor.

6.1 Activities

Existing literature suggests that firms outsource activities that are non-core and do not yield a potential for substantial competitive advantage (Insinga & Werle, 2000; Barthélemy, 2003). In addition, internal capability of the firm, technical factors and the degree of possible integration are also relevant factors (Insinga & Werle, 2000; Lacity et al., 2008).

The findings suggest that firms outsource commodity and basic activities overall. Such activities are usually readily available and are needed to be able to compete (Insinga & Werle, 2000). Raw materials are typical commodities and services such as canteen, cleaning and certain IT functions are necessary to be in business. The decision to outsource such functions can be explained with the firm not wanting to tie up resources and employees in activities that are deemed "unimportant" and non-core.

All case firms agree on maintaining core activities in-house which requires a thorough analysis of the business. It appears that the border between core and non-core activities can become blurred at times, but the firms follow defined strategies, which explain the decision to outsource seemingly key functions such as production in Stokke's case or mold production in Plasto's case. In Wonderland's case, the firm opted to outsource an activity that is deemed a core activity by competitors. However, the firm is aware of the importance of this activity and employs a close and well-known supplier. The decision to outsource activities that should not be outsourced is an issue which often leads to outsourcing failure (Barthélemy, 2003), but since all case firms have outsourced the functions over long periods of time, it appears that the firms are well aware of core and non-core activities in their respective businesses and which activities are most important to keep in-house. Nevertheless, there may be many cases in the

county where core activities have been outsourced leading to failure, as there is a thin line between success and failure in outsourcing activities.

One interesting finding is the impression of necessity to outsource. The case interviews revealed at times that the firm argued for not having another choice than to outsource the function, due to financial reasons, capacity or lack of knowledge. The necessity to outsource is not apparent in existing literature as it is more of a practical action, than one based on thorough consideration. Some activities might be of importance to a firm and might even be a key activity, but practically the firm is unable to implement the activity in-house. One example is that wooden bases are manufactured in-house at Ekornes ASA, whereas metal bases are outsourced. This decision was based on the practical notion that the firm cannot conduct all important activities in-house and needs to make trade-offs. The same reasoning is employed at Wonderland. The firm is aware that quilting is defined as a key activity at several competitors and its importance, but it is necessary for the firm to outsource the function, due to many considerations e.g. cost, capacity and quality.

6.2 Drivers

Solli-Sæther & Gottschalk (2007) identified access to resources and knowledge as the most important driver followed by focus on core competencies and lower production cost in 2007. Flexibility ranked fourth and improved service quality fifth. Also, all of these drivers are in accordance with the operational benefits Lacity et al. (2008) listed as goals for outsourcing. The findings suggest that, a decade later, the drivers for outsourcing are still the same. Even if the study conducted in 2007 only covered IT and back office functions, it appears that outsourcing drivers may be the same across all functions. All four of the most important drivers have remained the same, and the questionnaire in this thesis suggests that there are only minute differences in the importance of those four main drivers. However, overall importance may differ in connection with the chosen activity in question.

Access to resources and competence was ranked most important by the case firms and in the questionnaire. This finding suggests that firms try to achieve certain standards in outsourcing which may be more difficult to obtain in-house due to an increased specter of activities. Another possible reason for the importance of this driver in the county is that there may be a lack of competent personnel available or that there is an insufficient supporting industry for

certain activities, which might provide the firm with the required knowledge to produce in-house. These two concerns were also mentioned as possible problems that might occur if a firm backsources, and thus illustrates the reversed reasoning concerning outsourcing and backsourcing.

In addition, the case study findings suggest that access to quality is incorporated in the overall driver for access to resources & competence which indicates that, in reality, these two drivers are treated as one overall. This may be a reason why improved quality ranked overall less important in this questionnaire than it did in 2007. Another possible reason for the difference is that it may be easier for firms to assess improved quality for IT and back office services which were investigated by Solli-Sæther & Gottschalk (2007), since such services usually have been conducted in-house before the activity was outsourced. On the other hand, production activities might have been outsourced from the beginning due to reasons such as lack of equipment, cost, etc. However, it is also possible that a firm tries to keep quality standards of outsourced activities, rather than improve them. These factors may explain why improved quality was a more important driver in 2007, than the findings in this study suggest. Nevertheless, the findings are limited due to the small number of responses

The findings from the case studies and the questionnaire suggest that outsourcing enables firms to focus on their core competences and thus, it is an important outsourcing driver which reaffirms the findings from the 2007 study. Outsourcing allows firms to keep in-house standards and focus on activities that are deemed most important, rather than experiencing a diluted focus on too many activities. In addition, the case study findings suggest that focus on core competences is also utilized as an insourcing driver for core activities.

Lower cost ranked third in the 2007 questionnaire and received the same amount of importance in this thesis. This finding confirms that the outsourcing motives have evolved from the 90's, where lower cost was the main motive (Hätönen & Eriksson, 2009), but has not further changed in the 2000's. Cost is still an important driver, but has not been the main driver for some time. This fact was mentioned several times in the case studies, where respondents highlighted that cost by itself is not a sufficient driver in outsourcing decisions but needs to be considered in connection with other drivers.

Flexibility is a driver with varying importance. The case studies did not reveal it to be a main driver for several firms, while it ranked second most important in the questionnaire. In 2007, flexibility was also identified as an important driver, ranking fourth. It appears that flexibility depends on the firm's overall sourcing strategy, for instance the use of finished product stocks or assembly to order. Thus, it is a driver which varies in importance for firms. The finding in this thesis are nevertheless indicating that flexibility is an overall driver for outsourcing decisions in firms.

Global availability was identified as a driver for one case firm (EK), which concerns the firm's ability to be available globally at all times. The finding suggest that outsourcing drivers may evolve due to globalization. Today, globalization is apparent and thus, availability becomes more important for firms. In this thesis, global availability was a crucial driver mentioned by Ekornes ASA, which led to outsourcing of functions such as IT and logistics to adapt the supply chain to global needs. This finding lacks further confirmation as the driver was only mentioned in one case study.

6.3 Risk

Several researchers propose different categories for risk, which should be investigated with regards to outsourcing decisions (e.g. Stanczyk et al, 2017). The case study findings reveal that risk assessment is subjective and suggest that firms are aware of risks associated with outsourcing. However, it does not appear that firms have defined risk management strategies in place, which is suggested to be of high importance by existing literature (Manuj & Mentzer, 2008).

Overall, the risk of insufficient quality was ranked most important, and reaffirms Solli-Sæther & Gottschalk (2007)'s findings. This risk consideration received most attention by interviewees and ranked significantly highest in the questionnaire. Several other risk considerations received similar lower scores in the questionnaire and were not mentioned much in the case interviews, even after follow-up questions. The overall findings in this thesis support the notion that the importance of different risk concerns has not changed substantially the last ten years.

The findings suggest that supplier relationships are employed to reduce risk. Arguments were made for single- and multi-sourcing strategies, and the benefits for each strategy were mentioned. Close, long-lasting relationships are a benefit of single-sourcing and can reduce risk in sourcing through cooperation and knowledge sharing. On the other hand, multi-sourcing enables the firm to mitigate risk through the ability to change supplier immediately if problems arise. The findings also suggest that it is possible engage in a double-sourcing strategy which enables a firm to develop close relationships but simultaneously has the possibility to switch suppliers immediately.

Even if writing a poor contract was proposed to be a deadly sin in outsourcing (Barthélemy, 2003) the findings do not suggest that a large amount of resources and time is spent on contracting. This risk ranked sixth out of ten in the questionnaire and several case firms revealed that there were relatively few formal and exhaustive contracts in place with suppliers. This finding can suggest that contracting can be supplemented with other risk mitigation strategies, such as supplier relationships.

One risk factor that emerged in the case studies concerned reputation. Globalization and the internet lead to scandals spreading fast and wide, which could ruin firms' reputations. This risk factor was not covered in Solli-Sæther & Gottschalk (2007)'s study, possibly due to lower internet use. In addition, the study covered IT and back office services, which might be less exposed to such a risk due to lower risk of child labor and no possible animal cruelty. However, other possible reputation risks such as unethical work practices and bad employee treatment are still relevant. The systematic literature review conducted by Stanczyk et al. (2017) concerning risk factors in global outsourcing only included one mention of threat to a firm's reputation as a risk factor, which was under the heading of hidden costs. This finding might suggest that reputation risk considerations are becoming more important in accordance with communication development and globalization. In addition, firms experience an increased pressure of CSR and individuals pay more attention to firm behavior today than previously.

The findings confirm that risk is closely connected to location choice as suggested by existing literature (Farrell, 2006). Firms actively mitigate risks by excluding locations that might pose unnecessary risk for the firm. Such risks encompass possible ethical issues, distance or culture differences. The questionnaire supports the finding that firms avoid risk through location

choices, since language and time differences were ranked the two most unimportant risk factors. This finding could also be explained by the fact that communication technology has advanced to a level where instant information is available and thus, time differences can be omitted with technology. Language barriers are on the decrease, due to the internet and English starting to evolve into a global language. Therefore, language differences might become less important in the future, but are still a relevant topic today, as mentioned in one case.

6.4 Location

Location choices can be divided into several categories depending on the chosen country: domestic outsourcing, nearshore outsourcing and offshore outsourcing (Shao & David, 2007; Foerstl et al., 2016). The findings indicate that domestic outsourcing is the type chosen most frequently in the county. All case firms practice domestic outsourcing and Norway was also the most answered outsourcing location in the questionnaire with 66% of respondents.

Nearshore outsourcing is more difficult to quantify, as near is a relative term. All case firms source from European locations, but with varying distances. 55% of respondents in the questionnaire stated Eastern-Europe or other locations in Europe as sourcing locations respectively. The findings show that European sourcing is a common practice for firms in Møre & Romsdal, but whether firms define the chosen location as nearshoring is more difficult to ascertain. The case studies revealed that certain business strategies demand nearshore locations and that it is a central consideration in sourcing strategy formation overall. Nevertheless, the importance and definition of nearshore outsourcing depends on subjective considerations of individual firms.

The findings reveal that the most important considerations for location choices are availability of skill, cost and risk profile. Especially availability of skill was uncovered in the case studies to be an important factor, in combination with the presence of an industry or cluster. Risk profiles of countries are also assessed, but the findings suggest that risk is predominantly used to exclude locations, instead of used to include locations with lower risk.

One interesting finding concerns China as an outsourcing location. The country used to be a low-cost, labor-intensive outsourcing location, but the case studies show that the situation has

changed, and that China is not seen as a low-cost destination any more. Still, several of the case firms and questionnaire respondents outsource to China, since it is still cheaper than Norway, the country hosts specialized industries and has a substantial work force. This finding supports the notion that availability of skill and risk profile are more prevalent considerations than cost. It was uncovered that China is seen as a relatively safe country to source from, as opposed to other low-cost countries which might encompass issues such as child labor. Thus, several case firms still opt to source from China instead of saving on cost.

Jensen & Pedersen (2011) suggested a connection between chosen activity and location, which is supported by the findings in this thesis. Even if the case firms did not outsource activities to the locations investigated by the authors, the case studies revealed that there is a clear connection between the outsourced activity and the chosen location. In one instance, the case firm was asked why the location was chosen, which was answered with: *"because the country is known for this activity and there is an industry present"* (WL). This answer illustrates the importance of fit between activity and location. This may also limit firms to certain locations, instead of being able to freely choose the location which might fit better with regards to e.g. cost and distance.

6.5 Changes in the last five years and future considerations

Several newspaper articles called backsourcing a trend in Norway and Møre & Romsdal in recent times (e.g. Stensvold, 2016c). The case studies revealed that firms are well aware of the phenomenon and several respondents indeed called backsourcing a trend in the county. However, several concerns and issues make backsourcing less prevalent in the case firms, with only one instance of backsourcing that has occurred the last five years. In that case, the activity was taken back in-house, but not to Norway.

The questionnaire, on the other hand, suggests that backsourcing is a common occurrence in the county, with five out of nine respondents stating that the firm has backsourced functions the last five years. The same number of respondents also stated that the firm considers to backsource functions in the next five years. Thus, the findings are inconclusive concerning the phenomenon in the county. It is clear that backsourcing is a relevant topic for firms and an occurrence that happens frequently. However, it is uncertain whether it is a trend and whether backsourcing is starting to overtake outsourcing as a strategic choice. Especially technological

development seems to be a factor that is important for backsourcing considerations and might prove to be the main driver for backsourcing decisions in the future.

The case study findings did not indicate a rising amount of outsourcing in the county, with only one instance of increased outsourcing that has occurred the last five years. However, the questionnaire revealed that seven out of nine respondent firms have outsourced additional functions the last five years and five respondent firms consider to outsource additional functions the next five years. The findings suggest that outsourcing is not a phenomenon that is decreasing in the county, rather that it is a common and frequent phenomenon.

The findings concerning outsourcing and backsourcing trends are ambiguous. The case study findings suggest a steady level of sourcing that occurs in the county with few changes, whereas the questionnaire suggests that outsourcing and backsourcing happen frequently, with a similar amount of decisions made. The findings indicate that backsourcing is not a phenomenon that has increased in the last five years in comparison to outsourcing, but that these sourcing decisions happen simultaneously and might concern different activities in firms. However, the questionnaire did not cover type of activity; thus, it is not possible to accurately assess the connection between sourcing decisions and activity.

Another interesting finding in the questionnaire is the notion that the same number of respondents consider outsourcing or backsourcing of functions in the next five years. It is not possible to ascertain whether the firms which consider outsourcing are the same firms that consider backsourcing, but nevertheless it appears that both decisions are equally prevalent in the county. It does not appear that backsourcing is more common than outsourcing in the county or that outsourcing is declining.

7 Conclusion and implications

The following sections will cover conclusions for the two sub-questions and an overall conclusion for the research question in this thesis. The conclusions are based on the analysis in chapter 5 and the consecutive discussion in chapter 6. In addition, this chapter will address limitations of the study and include managerial and theoretical implications with recommendations for future research.

7.1 Conclusion to the sub-questions

7.1.1 Main considerations for outsourcing

The first sub-question is *"What are the main considerations in outsourcing decisions?"* This sub-question was subsequently divided into different topics which in sum constitute the four main outsourcing considerations. The main conclusions concerning the different considerations are displayed in the table below.

Consideration	Findings					
Activities	Outsource non-core activities in accordance with strategy					
Drivers	Access to resources and competence, focus on core competence,					
	lower cost, flexibility					
Risk	Insufficient quality, exclusion of locations					
Location	Domestic outsourcing is most utilized, a connection between					
	activity & location					

Table 13: Summarized Findings concerning Main Considerations for Outsourcing

One conclusion is that all outsourcing considerations are closely connected and cannot be viewed in a vacuum as they influence each other. Especially the case interviews uncovered that there are clear connections between all considerations and the final outsourcing decision that is made by firms. The most important driver identified is access to resources and competence, which coincides with the importance of availability of skills in the chosen location. In addition, industries and clusters influence location choices, which is in accordance with this driver. The existence of industries also leads to a connection between activity and location, as firms opt to outsource functions to existing industries to achieve the desired level of skill and quality in the outsourced function. Domestic outsourcing is most common, which

can be explained by reduced risk in domestic outsourcing as opposed to international operations.

An interesting conclusion is that the findings in this thesis coincide with the findings by Solli-Sæther & Gottschalk (2007). In this thesis, the outsourcing phenomenon was investigated regardless of activity, but nevertheless, the drivers appear to be the same. This conclusion indicates that there might exist universal drivers for outsourcing considerations in general. Universal risk considerations appear to occur as well. Insufficient quality was identified to be the most important risk factor which is present for every outsourced activity.

Cost does not appear to have been a main consideration for the case firms concerning outsourcing for some time, where the focus has shifted to availability of resources & knowledge and increased focus on core competences. However, the cost driver still ranked high in the questionnaire and a conclusion that can be drawn is that cost is still an important consideration, but in combination with other drivers. In addition, a main concern for firms in the county is quality, which can explain the high degree of domestic outsourcing employed by firms, as Norway typically is a country with high quality, illustrating that cost is influenced by other considerations.

Based on the findings, a conclusion that may be drawn concerns an evolution of drivers and risk factors in accordance with globalization and communication technology development. One driver that was mentioned concerns global availability, whereas an additional risk factor concerning reputation emerged as well. Reputation risk is not an entirely new risk factor, but it appears that this risk is gaining importance today. This might indicate that outsourcing considerations are evolving to adapt to a changing world.

7.1.2 Changes and future considerations

The second sub-question "*What changes have occurred the last five years and what are future considerations?*" covers overall changes and trends in the county. This sub-question investigates changes and future plans of firms to examine possible trends in the county.

One conclusion based on the findings is that outsourcing is not a phenomenon that is declining in the county. Firms still employ outsourcing strategies to varying degrees in accordance with the existing business strategy in the firms. Outsourcing is a sourcing strategy that is used frequently, and firms consider to increase outsourcing over the course of the next five years. Improved communication technology and the internet make it easier for firms to communicate worldwide and to receive information instantly, which in turn supports outsourcing operations.

However, another conclusion that can be drawn is that backsourcing indeed is a present topic in the county. Several firms have backsourced functions the last five years, and a number of firms consider to backsource in the future. Firms are aware of the benefits backsourcing yields, but are skeptical due to factors concerning access to skilled employees, cost and technology.

Technology development increases the relevance of backsourcing and is another conclusion that can be drawn. Automatization and robotization enable firms to decrease the number of employees needed to carry out certain jobs and may simplify certain activities. Thus, production might become more effective which can lead to free capacity and backsourcing. In addition, new technology might enable firms to take back activities which would not have been possible to carry out in-house before. These developments make backsourcing a more viable strategy for firms in the future.

7.2 Conclusion to the research question

The research question combines both sub-questions and is as follows: "*What is the state of sourcing among firms in Møre & Romsdal today*?". The main conclusion that can be drawn from the findings in this thesis is that there has not occurred a significant change in outsourcing considerations the last decade. Even if previous research was based on outsourced IT and back office services in Norway, the findings in this thesis revealed that outsourcing considerations for all activities in Møre & Romsdal are still in accordance with existing literature.

Based on the findings, a conclusion is that outsourcing considerations have evolved to a level in the early 2000's, which is still prevalent today. Nevertheless, the findings indicate that globalization and technology development influence considerations in the county, leading to an increased focus on availability and reputation than previously.

Another conclusion that can be drawn is that backsourcing is a relevant topic for firms, equivalent to outsourcing. The findings do not confirm that backsourcing is a trend and that

outsourcing is on the decline. Rather, both phenomena appear frequently in Møre & Romsdal and are considered and implemented simultaneously in firms, concerning different activities.

The findings show that firms are aware of the backsourcing phenomenon but are skeptical as to how much of a trend backsourcing is in the county. In the future however, with technological developments, it appears that backsourcing will become more prevalent in the county. In addition, these advances will enable firms to carry out more functions in-house, which might lead to decreased outsourcing efforts.

7.3 Implications and limitations of the study

7.3.1 Limitations of the study

No research is conducted without limitations, and this is true for this thesis as well. The aim of this thesis was to establish a picture of the state of sourcing in Møre & Romsdal, focusing on considerations and changes. However, limitations occurred in connection with both research methods used.

First, the use of qualitative case studies limits the generalizability of the findings collected through the interviews. Generalizations that can be drawn from the cases is limited, but the use of five case studies makes the findings more applicable in general. However, the purpose of the case studies was to gain deeper insight into the subject and the findings were supported by existing literature and the questionnaire.

Moreover, the inductive qualitative approach applied in the case studies is based on subjective views and opinions. I tried to clarify concepts and standardize questions in the interview guide to avoid misinterpretations, but there is a possibility for misinterpretation of the answers. In addition, three of the interviewees wanted to check my notes for mistakes (BV, PL, WL), which reduced the risk of misunderstandings in these cases. Also, some responses in the questionnaire were based on subjective opinions as well, such as the ranking of drivers and risk.

One substantial limitation in this thesis is connected to data collected through the questionnaire. The questionnaire was distributed to a limited sample and the responses yielded only nine complete answers. This is a very low number of responses with regards to the number of firms in the county, thus making it difficult to draw generalizations for

Møre & Romsdal based on these numbers. Nevertheless, the findings can be used to give an indication of the state of sourcing in the county. Also, the contacted firms were not completely randomized, but chosen in an attempt to represent the county as best as possible. The reason for this decision was the difficulty of reaching the right respondents in a randomized sample.

7.3.2 Managerial implications

The context of this study is perceived relevant, since sourcing considerations and decisions are of utter importance to firms. Sourcing has become a common occurrence in the county, with regards to both domestic and international sourcing. An assessment of the main considerations in outsourcing and the overall state of sourcing in the county yield several managerial implications which can be of use. In addition, it is important to be aware of the situation and which trends are on the rise in a firm's environment.

First, the identification of drivers can help managers to become more aware of important reasons to outsource functions and whether the drivers selected are commonly used in outsourcing considerations. The finding that cost is not a crucial driver in the county any more can lead managers to realize that outsourcing might not be the most cost-effective solution, but that new technology or effectivization should be investigated as well.

Second, the ranking of the most important risk factors can help managers to identify which risks to be aware of and enable them to take active precautions to mitigate such risk, for instance through supplier relationships. The risk factors are closely connected to the type of activity that is considered for outsourcing, where the findings in this thesis might aid managers in identifying the right activity to outsource. In addition, domestic outsourcing is the most used form of outsourcing in the county, indicating that firms do not necessarily need to utilize international outsourcing to be competitive.

Another implication for managers is the overall assessment of sourcing considerations and it is recommended that all considerations are evaluated simultaneously. It is useful for managers to see the connections between activities, drivers, risk & location considerations and how all of these are interconnected and influenced by the other. This may aid managers in determining possible outsourcing operations as a whole. The conclusion that backsourcing might not be a common trend in the county yet, can yield insight for managers that there is no external pressure to instigate a backsourcing process. A recommendation for managers is to be aware of technological developments in the firm's environment and to closely evaluate a backsourcing decision as there are concerns and problems attached to such a decision.

7.3.3 Theoretical implications and recommendations for future research

The purpose of this study was to establish a picture of the state of sourcing in the county and to complement and reaffirm existing literature on the outsourcing topic. Many outsourcing studies limit the kind of activity, whereas this thesis only limited the geographical scope, yielding insights into the phenomenon in general. The following theoretical implications and recommendations for future research can be drawn from this thesis.

First and foremost, the overall findings of outsourcing considerations in this thesis are in accordance with existing literature and do not indicate any substantial change in the last decade. Moreover, this thesis encompassed all outsourced activities, which might indicate the existence of universal outsourcing considerations across the types of outsourced activities. Future research can solidify the existence of universal outsourcing drivers and risk considerations.

A possible contribution to existing literature is the identification of the driver concerning global availability. This driver was of substantial importance for the respondent in one case interview and several outsourcing decisions were made based on this driver. Existing literature is limited on the firm's need to be available globally. Future research is needed to confirm the emergence of a driver concerning globalization or whether global availability is part of another outsourcing driver.

Another contribution to theory might be the increased importance of reputation risk. Firms are aware of communication technology development and the subsequent spreading of issues and scandals that might occur. This risk factor was discussed during two case interviews and was deemed extremely important. Especially scandals in connection with bad suppliers was mentioned as a risk factor that needed to be avoided. However, future research is needed to assess the overall importance of this risk factor and also to shed more light on reputation risk in outsourcing, as existing literature is limited. In addition, research should be conducted to assess the connection between globalization, communication technology development and the increased risk for scandals & loss of reputation.

This thesis also investigated the claim that backsourcing is a trend in Møre & Romsdal. The findings confirm that backsourcing is becoming a common occurrence in the county, and that firms are well aware of the phenomenon. Nevertheless, there are still many concerns connected to the phenomenon and it is too early to call backsourcing a trend. A recommendation for future research is to establish whether backsourcing indeed is increasing and the possible effects on outsourcing decisions. In addition, another suggestion for future research is to assess the importance of technology development as a driver for backsourcing in the county.

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Appendix 1: Interview guide

Interview guide

General

1. Can you give a brief presentation of yourself and the firm?

2. Can you describe how the firm conducts outsourcing and its structure?

Activities

1. Can you tell me which activities the firm has outsourced?

1.1 Would you classify these key/core activities?

3. Has the firm chosen to outsource more/less activities the last five years?

3.1 What were the reasons?

Drivers

1. Who or which events led the firm to outsource?

2. What do you think are the most important drivers for the firm's decision to outsource?

3. Can you tell me about whether there have been any successes in outsourcing, which were related to the drivers?

Risk

1. How does the firm identify risk related to outsourcing?

1.1 Do you analyze the potential of losses and the probability of the event occurring?

2. Which are the most crucial risk factors in outsourcing for the firm in your opinion?

3. Has the firm excluded possible locations due to risk factors?

3.1 If yes, which and why?

4. Can you describe if the risk assessment of locations and outsourcing has changed the last five years?

Location

1. Which locations/countries does the firm source from?

1.1 What are the reasons?

2. Have there been any changes in location and/or suppliers the last five years?

2.1 Can you describe the reasons?

3. Can you mention if there are connections between the chosen location and the outsourced activity?

Backsourcing

1. In your opinion, is backsourcing a relevant topic for the firm?

2. Has the firm backsourced any activities the last five years?

2.1 If yes, what were the reasons/drivers?

3. Will the firm backsource any activities in the next five years?

Closing

1. Is there anything else you would like to add?

Appendix 2: Questionnaire in Norwegian

Sourcingundersøkelse

Velkommen til sourcingundersøkelsen!

Denne undersøkelsen vil ta omtrent ti minutter å besvare og består av seks deler. Den første delen kartlegger om bedrifter outsourcer. Deretter følger spørsmål som ber deg om å rangere viktigheten av forskjellige drivere og trusler, i tillegg til kartlegging av land. Den neste delen handler om suksesser og problemer i outsourcing. Del fire tar for seg tidligere beslutninger, etterfulgt av framtidige beslutninger. Helt til slutt er noen få kartleggingsspørsmål om industri og stilling i bedriften.

Alle svarene er helt anonyme og vil bare brukes i sammenheng med oppgaven. Tusen takk for at du deltar i undersøkelsen!

Med vennlig hilsen,

Bianca Hammer

Din identitet vil holdes skjult.

Les om retningslinjer for personvern. (Åpnes i nytt vindu)

Outsourcing er en prosess hvor aktiviteter, eiendeler og/eller mennesker er flyttet eller solgt til en tredjeparts leverandør, som leverer disse tjenestene eller produkter til en avtalt pris og tidsperiode.

1) * Har bedriften på nåværende tidspunkt outsourcet noen forretningsfunksjoner enten nasjonalt eller internasjonalt?

O Ja, vi har outsourcet

O Vi er i prosess med å outsource, men har ikke implementert beslutningen helt ennå

O Vi diskuterer outsourcing, men har ikke tatt noen beslutninger enda

O Vi har vurdert outsourcing, men har bestemt imot det i nærmeste framtid

O Nei, vi har ikke diskutert outsourcing i bedriften

Sourcingundersøkelse

2) 1	* Til hvilke land har bedriften outsourcet?
	Norge
	Øst-Europa
	Andre land i Europa
	Kina
	India
	Andre land i Asia
	USA eller Kanada
	Sør-Amerika
	Afrika
	Annet

3) * Gitt din erfaring med outsourcing, vennligst indiker hvorvidt disse drivere er viktige:

	1			5		
	(Ikke				(Svært	
	viktig)	2	3	4	viktig)	ikke
Lavere kostnader	0	0	0	0	0	0
Tilgang til nye markeder	0	0	0	0	0	0
Tilgang til arbeidskraft	0	0	0	0	\circ	0
Tilgang til ressurser og kompetanse	0	0	0	0	0	0
Fleksibilitet	0	0	0	0	0	0
Forbedret kvalitet	0	0	0	0	$^{\circ}$	0
Press fra konkurrenter	0	0	0	0	0	0
Akseptert praksis i bransjen	0	0	0	0	$^{\circ}$	0
Fokus på egen kjernekompetanse	0	0	0	0	0	0

4) * Gitt din erfaring med outsourcing, vennligst indiker hvorvidt følgende trusler er viktige:

	1 (Ikko			Vet		
	viktig)	2	3	4	viktig)	ikke
Uttilstrekkelig kvalitet	0	0	0	0	0	0
Tidsforskjell	0	$^{\circ}$	0	$^{\circ}$	\bigcirc	0
Avstand og lengre leveringstid	0	0	0	0	0	0
Utilstrekkelig infrastruktur	0	$^{\circ}$	0	0	0	0
Tap av kunnskap og kompetanse	0	0	0	0	0	0
Juridisk/kontraktuell risiko	0	$^{\circ}$	0	0	$^{\circ}$	0
Språkforskjeller	0	0	0	0	0	0
Mangel av kompetanse hos leverandør	0	$^{\circ}$	0	$^{\circ}$	\bigcirc	0
Tap av kontroll	0	0	0	0	0	0
Politisk usikkerhet	0	$^{\circ}$	0	$^{\circ}$	$^{\circ}$	0

5) * I hvor stor grad har bedriften oppnådd noen av de følgende suksesser ved outsourcing:

	1 (lite suksess)	2	3	4	5 (stor suksess)	Har ikke opplevd noe suksess
Forbedret kvalitet	0	0	0	0	0	0
Tidsbesparelser	0	0	0	0	0	0
Kostnadsbesparelser	0	0	0	0	0	0
Økt fokus på kjernekompetanse	0	$^{\circ}$	0	0	0	0
Forbedret konkurransedyktighet	0	0	0	0	0	0
Tilgang til kompetent personell	0	0	0	0	0	0

6) * Har bedriften opplevd noen problemer i forbindelse med outsourcing?

Økte kostnader for tjenesten/produktet

- Uforventede/skjulte kostnader
- Lengre tidsbruk
- Dårligere kvalitet
- 🔲 Konflikter med tredjepart
- Ingen
- Annet

7) * Har bedriften outsourcet nye funksjoner de siste 5 årene?

- 🔿 Ja
- O Nei
- Vet ikke

8) * Har bedriften byttet leverandør for outsourcede funksjoner de siste 5 årene?

- ⊖ Ja
- 🔿 Nei
- O Vet ikke

Det er valgfritt å besvare dette spørsmålet.

9) Hvis bedriften har valgt å bytte leverandør, hva var grunnen til det?

10) * Har bedriften byttet lokasjon av den outsourcede funksjonen til et annet land utenfor Norge?

- 🔿 Ja
- O Nei
- O Vet ikke

Det er valgfritt å besvare dette spørsmålet

11) Hvis bedriften har byttet lokasjon til et annet land, hva var grunnen til det?

Backsourcing beskriver prosessen hvor tidligere outsourcede aktiviteter retuneres internt i bedriften. All ledelse av ferdigheter, aktiviteter og eiendeler blir internalisert. Denne prosessen omfatter enten deler eller alle tidligere outsourcede aktiviteter.

12) * Har bedriften backsourcet noen eller alle av de outsourcede funksjoner de siste 5 årene?

🔿 Ja

O Nei

O Vet ikke

13) * Vurderer bedriften å outsource nye/ytterligere funskjoner de neste 5 årene?

🔿 Ja

O Nei

O Vet ikke

14) * Vurderer bedriften å flytte outsourcede funksjoner til et annet land nærmere Norge de neste 5 årene?

⊖ Ja

O Nei

O Vet ikke

Backsourcing beskriver prosessen hvor tidligere outsourcede aktiviteter retuneres internt i bedriften. All ledelse av ferdigheter, aktiviteter og eiendeler blir internalisert. Denne prosessen omfatter enten deler eller alle tidligere outsourcede aktiviteter.

15) * Vurderer bedriften å backsource funskjoner de neste 5 årene?

🔿 Ja

O Nei

O Vet ikke

16) * Hvilken industri tilhører bedriften?

 \sim

Velg ... Velg ...

Bank og finansindustri Elektro og energiindustri Fiskeriindustri Gjenvinningsindustri Kjemisk industri Logistikk og transportindustri Maritim industri Møbelindustri Næringsmiddelindustri Olje- og gassindustri Prosessindustri Service og handelsindustri Tekstilindustri

17) * Hva er din stilling i bedriften?

18) Er det noen andre forhold ved sourcing du ønsker å kommentere?

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