



# Master's degree thesis

**LOG950 Logistics**

**Grande Fabrikker AS - A Case study of value creation  
in the furniture industry**

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**Molde University College**  
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## **Preface**

This master thesis contributes to a larger project called “Value Capture - Correct value chain positioning provides increased value capture”. The project is a collaboration between Møreforskning and Molde University College. The case company used in the project is Grande Fabrikker AS, which is a plate furniture manufacturer who deliver most of their products to publicly owned institutions such as schools and nurseries. The purpose of the research project is to identify potential areas that could strengthen Grande’s capabilities, so they are able to maintain their production and value creation in Norway.

The master thesis is the final part of my master’s degree in Logistics & Supply Chain Management at Molde University College. Over the years that has passed, I am able to I look back on a great time filled with joy, friendship and long nights with books and articles.

I would raise many thanks to my supervisor Bjørn Guvåg for guidance and wise words through this master thesis. I would also like to thank my co supervisor at Møre Forskning, Gabrielle H. Junge for motivation and academic input in the early phases of this thesis. Last but not least, this would not have been possible without help from Grande Fabrikker in form of Torbjørn Helden and Eivind Bale – so thank you very much for your efforts and patience.

NOTE!

Due to severe illness, this thesis were unfortunately postponed until November.

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## 1.0 Introduction

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The global furniture industry is a big international business. According to the CSIL report (2014) concerning the European furniture market, the production of furniture was estimated to be worth over 361 billion euros worldwide in 2012. The furniture industry has annually increased over the last decade with exception of the financial crisis in 2008 and 2009, making the furniture sector a driver for economic growth and employment levels. About one quarter of the world's furniture is produced in the European markets, making Germany, France, Italy and Poland among the top ten furniture manufacturers worldwide with a combined share of 17% of the total produced value. (Renda, A, Pelkans, J., Screfler, L. et al, 2014)

(Kaplinsky et al. 2003) characterizes the furniture industry to be a resource and labor intensive industry that has a large majority of small and medium sized enterprises (SME). The manufacturers of semi-finished wooden products represents a part of the upstream link in the value chain and accounts for about 85% of the employment and 77% of the value added in the value chain (CSIL, 2014) The furniture manufacture sector has over the last decade faced an increased challenge regarding the global competition (Buehlmann, U. et al, 2003b) estimated that about 40% of all wood furniture in USA is imports from foreign countries. The study revealed that smaller furniture companies with a relative high amount of labor costs saw a larger potential in increasing their competitive advantage by outsourcing labor than larger companies.

The global competition is mostly affecting manufacturing industries where a large part of the cost originates from higher salaries and cost of raw material. The Norwegian industry has one of the highest salaries on workforce such as craftsmen and professions that are not dependent on higher education<sup>1</sup>. The high amount of salary makes it more expensive to produce in Norway compared to producing in low cost countries such as Poland or Lithuania with lower amount of cost on salaries. One important aspect for domestic manufacturers in order to raise the margin of their products, is to not compete within the price segment, but focus on other competitive criteria's. Buxey (2000) explains that

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<sup>1</sup> <http://www.ssb.no/a/publikasjoner/pdf/sa77/kap.5.pdf>

Australian manufacturers is able to compete against the global manufacturers by increasing value creation for the customer through design, flexibility and delivery speed. One of the most famous method used to analyze competitive advantage in industries are value chain analysis.

Value Chain Analysis is all about sustaining competitive advantage in an ever-changing business environment. Competitive advantage does not only mean to match or surpass competition, but also identifying what is important for the customer and exceeding their expectation, while still making a satisfying profit. Central in the value chain literature is the companies' ability identify its core competency to create value. However, when analyzing the value chain there is a big difference between who is creating the value and who is benefiting of the value created. (Kaplinsky, R. & Morris, M., 2001)

The case company used in this research is a plate-furniture manufacturer that compete in the public Norwegian furniture market. In order to have complete control over all processes and to quality assure the whole value chain, it is important for the case company that the products are produced in Norway. However, in a highly competitive market where the municipalities have limited budgets, price is one of the most important aspect for the customers. Many of their competitors in the plate manufacturing industry have been forced to outsource their production to foreign countries in order to benefit from lower production costs, resulting in lower prices.

The case company is part of a complex supply chain which consist of many intermediaries. Complex supply chains increase the possibility for interruptions and lack of information and material flow from the end consumer to the producer. Further, the focused company has ambitions to increase their turnover from 38 to 70 million NOK in three years. This makes the basis for the research, which aims to link the case company to their customers and suggest improvements in the value chain in order for the case company to reach their goals and ambitions.



## ***1.1 Problem statement***

This study aims to identify sources of value creation to their customers and what Grande needs to improve in order to create more value for the customer. Investigating the value chain, this research will be able to identify who produces value for the customer and who reaps the benefit of the value created. Value chain analysis is important to see the advantages and disadvantages of a company that specialize in production and identify how well the producer is connected to the final markets.

The main research problem to be addressed in this study is:

**Assess the potential in the upstream value chain as an approach to improve and identify value creation for a Norwegian furniture manufacturer.**

Further, three research questions described below has the purpose of guiding this research to answer the research problem in a transparent way.

***Research question 1: How is the value added throughout the value chain of Grande and how is the value distributed?***

The purpose of using value chain analysis in this research is to identify the potential in the value creating activities performed in the value chain. Value chain mapping is used to get an overview over all the different activities performed in the value chain. The breakdown of the value added is based on calculations on a product series that generates the most revenue and contribute to the largest volume for Grande.

***Research question 2: How is Grande's performance compared to their competitors?***

In-depth interviews with the distributor will give indications on how Grande is performing compared to their competitors. The performance will suggest the largest areas of improvements and also identify the winning criteria when the distributor choose their sources of supply.

***Research question 3: What kind of upgrading strategies can improve Grande's value chain?***

The final research question aims to link the case study findings with the proposed literature and identify the potentials in the value chain at Grande. The proposed literature suggest using four different upgrading strategies to create more value to the customer, but also capture the benefits of the value created.

## 1.2 Outline of the thesis

The rest of the thesis consist of 7 consequent chapters, beginning with an introduction to the thesis and case company. These chapters (1 & 2) provides an overview over the case company's background, supply chain and strategies used in competing in the plate furniture market. These chapters will provide necessary contextual background information for the rest of the thesis.

The third chapter presents the analytical framework used in this research and has the purpose of introducing key concepts and literature used in the thesis. Further, the methodological chapter will describe the methods used to obtain the primary and secondary data, while further discussing the reliability and validity of the study.

The case study chapters (5) will present the case study findings and link them to the proposed research questions. The final chapter is the conclusion for my research, while further highlighting the limitations, theoretical considerations and suggestions for future research.

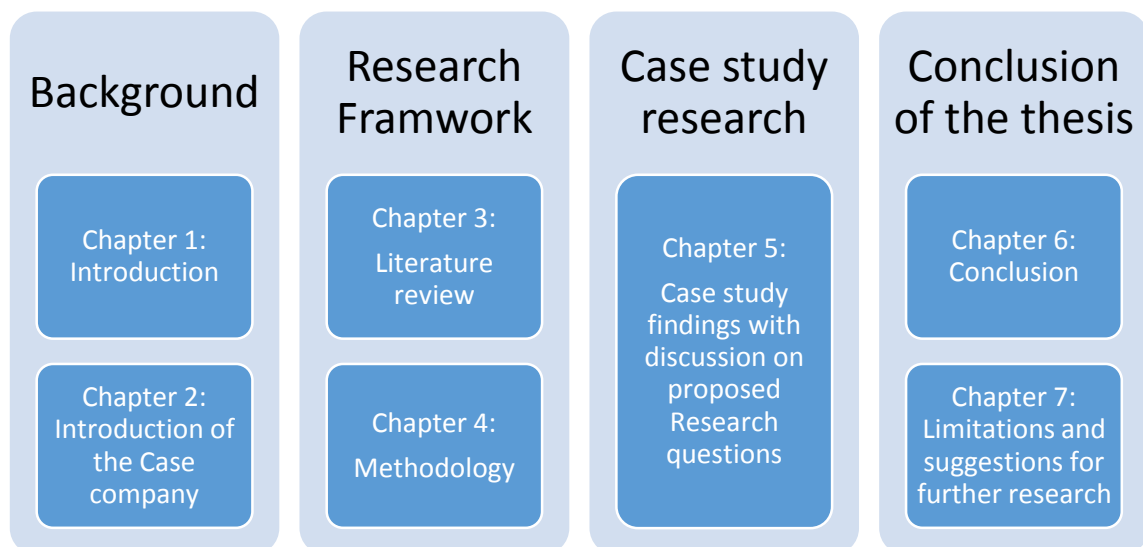


Figure 1: Outline of the thesis

## 2.0 Case company - Grande Fabrikker

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This chapter serves the purpose of introducing the case company used in this study and give contextual background for the rest of the thesis. The supply chain of Grande consist of several intermediaries and this chapter will provide an overview over their supply chain with a short description of each intermediary.

### 2.1 *Grande Fabrikker AS*

Grande Treware is a Norwegian furniture company located in Innfjorden and consist of a manufacturer, which serves to be the focus in this study, and a distribution channel.

Grande Fabrikker is a medium-sized manufacturer company that consist of about 40 employees. Their turnover in 2014 was estimated to be 37 million NOK<sup>2</sup>.

Grande Fabrikker distributes to domestic suppliers located in Norway, including Grande Interior, which operates as a distribution channel in the “Møre og Romsdal” region.

Grande delivers to publicly owned institutions such as schools, kindergartens and other institutions. Grande has been in business since 1954<sup>3</sup> and previously operated in other business segments such as the private market, ships industry and hotel industry. (Bruaset, O., 2004)

Grande Fabrikker is now an important producer in the public furniture market and has the ability to act as a turnkey supplier of furniture through collaboration with many secondary manufacturer, providing supplementary products such as chairs and accessories

Grande has divided their current business into four different business segments:

- School & kindergarten
- Health & institutions
- Office, conference, kitchen and wardrobe
- Special furnishing

Grande aims to be the leading supplier of plate furniture in Norway within the segment of school and kindergarten, and therefore this segments will be the main focus for the rest of

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<sup>2</sup> Semi structured interview with CEO Torbjørn Hjelden

<sup>3</sup> <http://www.grande.no/fabrikker/sider/kvalitet-siden-1954.html>

the thesis. Through the vision of Grande they believe they are able to create the best working and learning environments for the customers. The main goal of Grande is to be the largest and most effective producer of plate-furniture in Norway. Their business plan is to double their turnover in three years, from 37 to 70 million NOK<sup>4</sup>.

The season for production of the public plate furniture is highly intensive in the summer months, starting in March - April and last until the school year starts in August and September. The demand is relatively lower in the months between September and March contributing to a boom in the middle of the year. A plate furniture is relatively easy to make with the appropriate manufacturing machines, making the industry a highly competitive market with many suppliers and low margins.

In recent years, Grande has faced increased competition against foreign companies wanting to take part of their market shares. Most of the competition is from Scandinavian manufacturer (Sweden and Denmark), but in the recent years low cost countries such as Poland and Lithuania are also taking market shares. The management of Grande believes that making the product in Norway is creating value for the end customer because of two basic factors, quality and delivery time. Grande believes that the customer appreciates the quality from close environments, resulting in safer delivery times. The management believes it to be quality assurance to the value chain when their own employees do activities such as design engineering, construction and production in-house. Production in Norway is possible through a high degree of automation and clever constructions.

5

Grande deliver both standard and specific products tailored to the customers need and expectations. This master thesis has a limited time schedule and therefore only one product series are further used in this research. The production of the furniture is almost identical in each link and further explained in the case study findings. The system skap series was chosen based on sales volume and available calculations obtained from the case company.



Figure  
2: Systemskap series

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<sup>4</sup> Unstructured Interview – Torbjørn Hjelden

<sup>5</sup> <http://pcon-catalog.com/grande/oppbevaring/systemskap/>

## 2.2 Supply chain of Grande

The supply chain of Grande, as illustrated in figure (3) consist of many intermediaries, which is broken into six different categories: designer, suppliers of raw material, primary manufacturers, secondary manufacturers, distributors and end customers. This section will briefly explain all the different intermediaries in the supply chain of Grande.

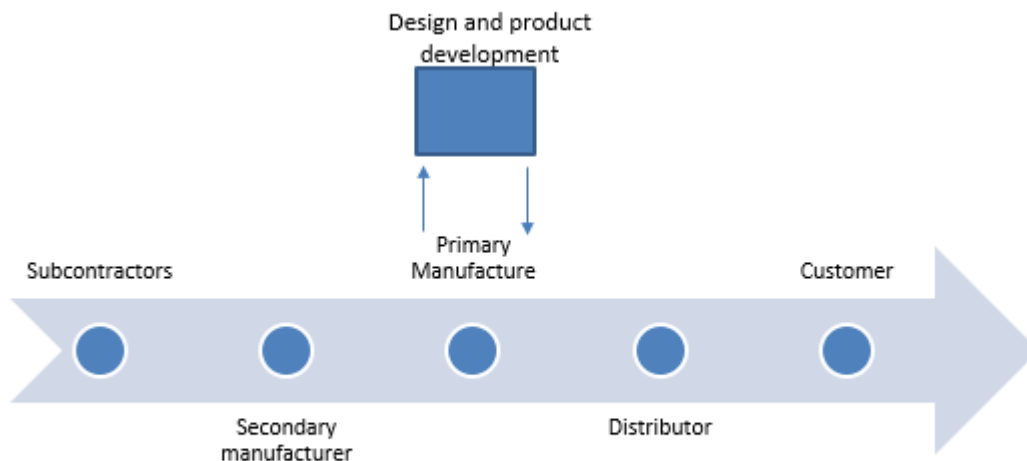


Figure 3: The supply chain of Grande

### Design and product development

Grande is in collaboration with Offinn, which is a leading supplier of furniture and fitments to schools, kindergartens and other public institutions. Offinn plays an important part in the design on the products delivered by Grande. Offinn is a small organization with close collaboration with designers that focuses on developing furniture with high quality, where functionality and ergonomic are the most important factors. Offinn contributes with product catalogues and in some cases, showrooms displaying products made by Grande.<sup>6</sup>

### Suppliers of raw material

The products delivered by Grande consist of four main types of raw materials. The product in focus in this research consist of particleboards, screws, edge lists, glue and paint lacquering. The raw materials are purchased in large quantities from suppliers located in Spain, Germany and smaller suppliers in Norway.

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<sup>6</sup> <http://offinn.no/Offinn/>

### **Primary Manufacturer**

Grande constitutes the role as the primary manufacturer in the supply chain and converts the raw material (inputs) into finished products (outputs) (Smith, M. et al 2009). There are many stages in the production, most of them automated through machines, but maintained by the people. The most central processes occurring in the production include planning, sawing, welding, polishing, painting, paste on edge lists and packaging.

### **Secondary Manufacturers**

Secondary manufacturers refers to the suppliers of other products related to the main products such as chairs, cracks, handles, binders, etc. Grande is also a provider of kitchen furniture, and the secondary manufacturers in this product category supplies the kitchen sink and handles.

### **Distributors**

Grande delivers to distributors represented in every county in Norway. The main objective for the distributors is to find solutions for the end customer with all the necessary products and guidance in form of drawings and samples. The distributor acts as a sales organ and most of them have their own assembling department. Grande is a supplier to about 30 distributors in total and Grande Interior is one of the largest with over 30% of the total revenues. The distributors serves as the primary focus in this research because they are choosing the source of suppliers and not the end customer.

### **Customers**

The business segment Grande is aiming towards is the public environments that mostly consist of publicly owned institutions such as schools, kindergarten, hospitals and other institutions. For the distribution channel, the customers can either be entrepreneurs working with a large project or the local municipality providing furniture to schools or hospitals. (Grande Strategy Document)

### 3.0 Literature review

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The purpose of this chapter is to introduce the analytical framework used in the value chain research and the justification of the use of literature. I will start by explaining the basics behind the value chain concept and value creation, and the rationale why it is of importance to use such an analysis in my thesis. The framework developed in this chapter has the purpose to serve as a structural foundation by introducing research questions and limitations to my thesis.

#### 3.1 Value chain analysis

Value chain analysis is mainly a descriptive tool to identify sources of competitive advantage. One of the most central components in the value chain analysis literature is the value chain concept and definition of value. The literature on value chain research has been developed by a various amount of researchers and for different purposes, contributing to complexity and confusion on this topic. This section will explain the means of using value chain analysis in this study

The method of analyzing the value chain for improvements originates from Michael Porter (1985). The core idea of his approach were to use the chain of activities as a strategic tool to understand how the company should pursue two generic strategies. Porter emphasized that a company should focus on either being the leading firm on cost or invest in differentiating from the competitors. Porters described the internal value chain in the company by introducing two important business categories, the primary and supporting activities in the firm. (Porter, 1985)

Gereffi (1994) further developed the global commodity chain concept which describes the transnational processes and linkages required to transform inputs into outputs. The Global commodity chain framework also consist of key structures such as geographic location and governance, and serves to be the key foundation for the modern global value chain concept. The global value chain literature is often used in development studies in order to analyses the international trade and power between the different actors in the chain and will therefore not be applied further in this research. (Gereffi G. &., 1994)

Kaplinsky & Morris (2001) argues that the development of value chain analysis has turned the concept to be used as analytical tool and not only provide a heuristic framework for the

generation of data. The change of value chain analysis has made it to be a key strategic descriptive tool that has the ability to change the focus of the company. One important distinction in the value chain research is that it makes the company focus on the value creating activities and capturing initiatives, and therefore drawing the attention away from a solely focus on the physical transformation of the product. (Kaplinsky, R. & Morris, M., 2001)

In this research, the methodology of value chain research method used by Kaplinsky et al (2001, 2003 & 2009)) is adapted in order to answer the research problem and questions. One important distinction in value chain research is what part of the value chain the researcher choose as the point of entry. The point of entry will define which activities in the value chain that are going to be the primary subject of research. Once the point of entry has been defined, the next step is to map the value chain in order to identify key actors and activities in the chain.

### **3.2 Definition of Value creation**

The value term is a subjective term in the literature. The term has caused confusion among several authors and economists arguing about the correct definition of value in terms of value creation and value capture (Pitelis, 2009). This section serves the purpose of explaining the definition of value in terms of value creation.

The term value added is explained by Kay (1993) as the differences between the firms' outputs and inputs, meaning what the firms is selling the goods for, and their costs associated with selling the products. The value added should be measured in the means of productivity and efficiency. (Kay, 1993)

Porter (1985) describes value in competitive terms, as the amount the customer is willing to pay for what the firm is providing. (Reve, 1992) Further emphasize that value creation should be focused in every section in the value chain and is not only created in the internal value chain of the company. To realize the potential of increased value creation, the companies need to prioritize four sources of value creation.

The first source of value creation is generated from strategic understanding. The creation of value has little meaning if the company does not understand the strategic and



competitive situation. (Reve, 1992) Explains that a manufacture can be the most effective of producing, but if the product is no longer demanded it makes no sense producing it anymore. Therefore, the most important aspect of value creation in strategic understanding comes from knowing the competitive terms and the perception of the market. Problems often occurs because a company does not understand the different forces in the market that impacts the company.

The second source of value creation originates from having customer focus. Reve and Grønhaug (1992) emphasizes that customer focus means to look into the other end of the value chain and identify the needs and demands from the customer. Closeness to the customer and the ability to adapt to their needs is the most important source of value creation which also strengthen the customers' relationships.

Reve and Grønhaug (1992) points out that the demands from the customers must be turned into internal technology and competency development in order to create value to the customers. Having better technology and good practices of safeguarding competency is how a company can gain competitive advantage over the competitors. Research and development is key in order to secure the company for the future competitive requirements from the customer. Competency development is a continuous process to systemize experiences and learning among the organization.

The final sources of value creation originates from the Human Resources and capabilities possessed by the company. Reve and Grønhaug (1992) points out that production, quality, safety and environment is solely dependent on the people that employed to control the means of production. Further, the qualities and capabilities possessed by the people employed in the firm are highly dependent on the organization of these to succeed.

### ***3.3 The value chain concept***

The first concept of the value chain adapted in this research refers to the value-creating activities within a firm and explains how the value chain is able to identify sources of competitive advantage from these activities. Porter's (1985) value chain model is an important and useful measure of tracking the input (raw material) to outputs (finished

products) and illustrates how the value chain activities in the firm contributes to the creation of value

However, (Dekker, 2003) describes the value chain concept in broader terms with emphasize that a company is part of a link set of activities.

*“The linked set of value-creating activities all the way from basic raw material sources for component suppliers through the ultimate end-use product delivered into the final customers’ hands”* (Dekker, 2003, s. 4)

In this research, both concepts of value chain research has been adapted. The internal value chain concept will describe the activities at the focused company in this research, while the second concept is included because the research seeks to map linked set of activities to see where value is created and captured in the chain.

### 3.3.1 Porters Value chain

Porter focuses on the internal value chain analysis of the firm and consist of both value activities and a margin. Porter distinguish between the primary activities (inbound logistics, operations, outbound logistics, marketing/sales, and after sales) and activities used to support the primary activities (infrastructure, HR, technology development and procurement). Porter’s model is included in this study because, by separating these functions, we are able to draw the focus away from the physical transformation of the products and focus on the value created through the activities of the firm. (Porter, 1985)

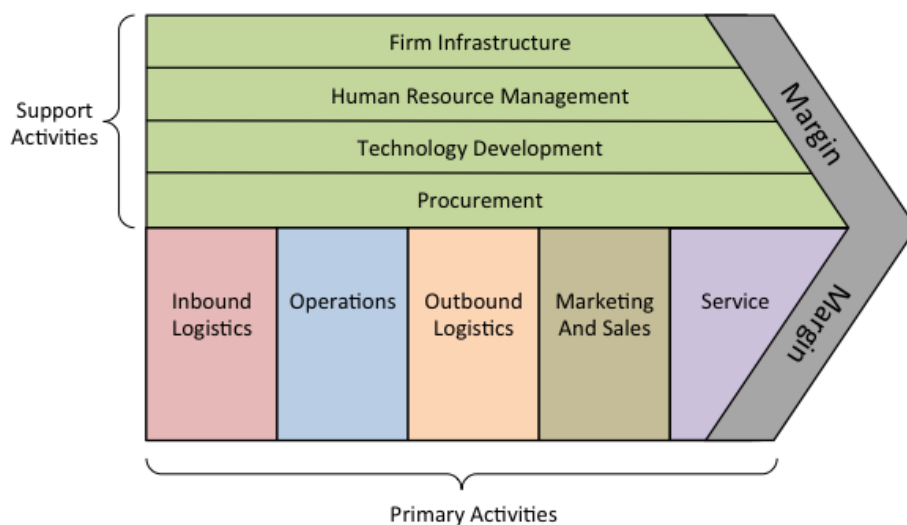


Figure 4: Porter's value chain

The **Primary activities** consist of five categories and relate to the physical movements of goods, the transformation of input to output, the sale and to the support of after sales activities. (Porter, 1985) divides the categories into:

- **Inbound logistics** involves activities such as material handling, warehousing, inventory control, vehicle scheduling and return to suppliers. These activities are all associated with receiving, storing and spread the inputs to storages further treated by the operations department.
- **Operations** are activities such as production, packing, assembling, equipment maintenance, testing, printing and facility operations. Operations involves activities that are associated with transforming inputs into the final product.
- **Outbound logistics** are activities such as finished goods warehousing, material handling, delivery vehicle operation, order processing and scheduling. Concerning inbound logistics, the activities associated with outbound logistics are collecting and physically distributing the product to the suppliers.
- **Marketing and sales** are activities such as advertising, promoting, sales, quoting, channel selection, relations and pricing. Marketing and sales involves building a platform for the customer to buy the products and guide them to purchase the right products.
- **Service** are activities such as installation, repair, training, and parts supply and product adjustment. Service is the final primary activity category and is of importance because it maintains the value of the product after the sales are completed.

**Support activities** consist of five important subcategories who serves the purpose of aiding the primary activities:

- **Procurement** refers to the activities a company performs in order to obtain the resources necessary to operate or manufacture. Procurement involves finding

vendors and negotiating. The cost of procurement is often small in terms of total costs, but often has a large impact on the total cost and differentiation.

- **Technology development** are activities related to processing and managing information and protecting companies' knowledge and technology. Technology development is a key factor to obtain competitive advantage in some industries such as electronics and car industries.
- **Human resource management** consist of activities involved in maintaining human capital, recruiting the right personnel and training of existing employers. (Porter, 1985)

However, as important it is to look at the value creating activities within the firm, it is equally important to see the company as a part of a linked set of actors in chain. The next section will describe how the furniture industry value chain consist of many intermediaries and how these interacts between each other.

### 3.3.2 The value chain in the furniture industry

(Kaplinsky, R. & Morris, M., 2001) describes the complete value chain in the furniture industry as *“The full range of activities which are required to bring a product or service from conception (involving a combination of physical transformation and the input of various producer services), through the different phases of production, delivery to final consumers, and final disposal after use”*. (Kaplinsky & Morris 2001, p.4)

(Kaplinsky, R. et al 2003) illustrates all the different stages in the value chain in the furniture industry from the forestry sector to the recycling and final disposal of use.

The value chain involves all the obtained inputs to make outputs, as the forest need seed and water in order for it to grow. The sawmill sector acquire trees in order to make plates,

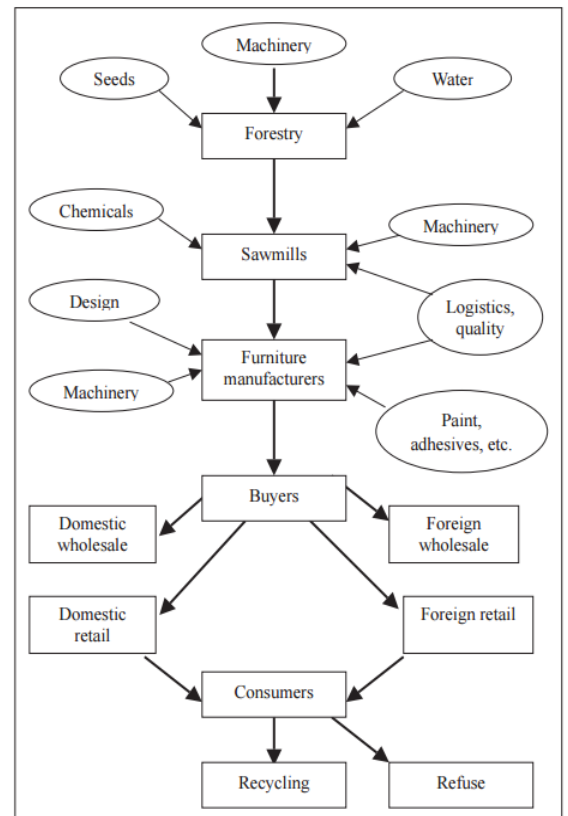


Figure 5: The value chain in the furniture industry

but also chemicals to make the product more durable. The plates transported to the manufacturers, in order for them to design and produce furniture.

I have limited the thesis due to time constraints and lack of data from sub suppliers, therefore making the focused part in the furniture value chain, the upstream links of activities - from the furniture manufacturing of finished goods to the distributors and all the way to the final customer.

### 3.3.3 Value chain mapping

As companies are increasingly becoming more global, all the links in the value chain become more complex, making visualizing and managing them even harder than before. This makes room for processes that simplifies the value chain, making knowledge more transferable among the organization. One way to visualize the complexity and links in the value chain is to map the chain from the customer and back to the suppliers of raw material. (Gardner, J. & Cooper, M., 2003)

Cooper and Gardner (2003) argues that value chain mapping should be distinguished from process mapping and network design mapping. This research takes into consideration to get an overall overview over the whole chain of activities in the upstream value chain.

#### SAMPLE MAP OF A HYPOTHETICAL SUPPLY CHAIN

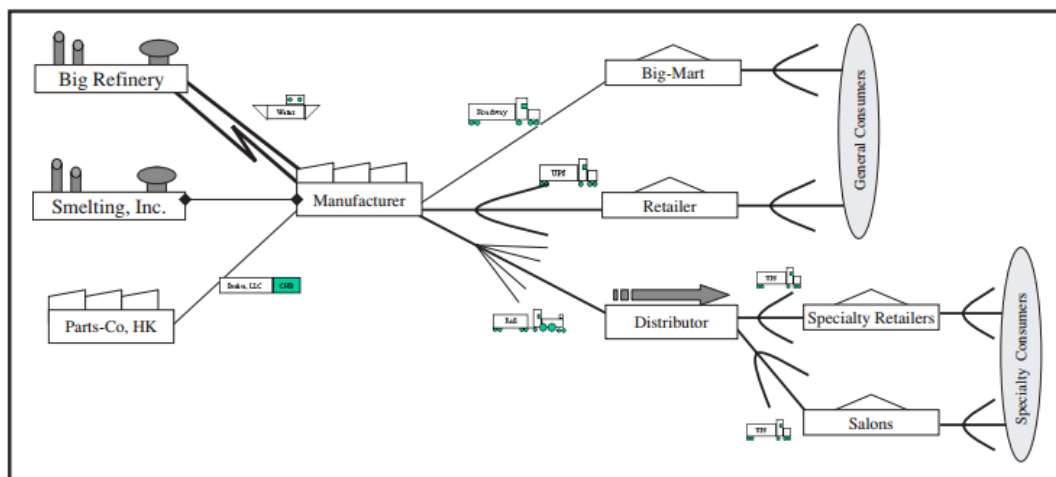


Figure 6: Strategic supply chain mapping approaches 2003 - p.57

The mapping technique applied in this research is from the suggest literature from Cooper and Gardner (2003). The key elements of using this of map is listed below:

- Takes into considerations both the upstream and downstream value chain, but focuses only on the activities performed in the upstream value chain.
- The perspective choose the manufacturing as central in the map, but starts from the final consumer and all the way back to the suppliers of raw material
- Shows no process depth
- Shows no visual description of other products than the focused product

(Gardner, J. & Cooper, M., 2003)

### ***3.4 Upgrading in the value chain***

Gereffi, (1994 & 2011) introduced four opportunities in the value chain for firms in developing countries referred to as upgrading strategies. The opportunities serves the purpose of providing a firm an upgrading strategy in order to increase their efficiency and outputs, and be able to enter markets channel where they can capture more of the value created. However, the literature developed by Gereffi involves governance and is best suited for companies operating in global value chains which is not applied further in this research (Gereffi G. &., 1994; Gereffi G. , 2011)

The phenomenon of upgrading is central in order to identify and understand factors that will make improvements in the processes and products that arises from the activities performed by the company. However, it is important to view upgrading in a wider perspective than only identifying factors at the level of the company, but capture upgrading processes that involves other actors in the value chain. This refers to the functional reconfiguration of which companies does certain activities in the chain, but also identifies initiatives to move to other chains. The phenomenon of upgrading in the value chain is therefore also applicable for local firms in the value chain that is not operating in a global value chain (Kaplinsky et al. 2003)

The upgrading strategies are divided into four different categories to cover both the internal activities in the company and the linkages between the different actors in the chain:

**Process upgrading** is the first strategy and refers to increasing the efficiency of internal processes by optimizing the production in the company. The goal for upgrading the processes is to increase the output and reduce costs in terms of waste.

Value stream mapping is a lean management method that is suited for conducting a process upgrading strategy within a company (Womack, J. & Jones. D, 2010). This research has not adapted the value stream method and has therefore limited the investigation of internal processes. This research will however give suggestion based on the previous research (Productivity analysis, 2004) with a value stream mapping approach made in the company.

**Product upgrading** is the second upgrading strategy and relies on improving old products in terms of its quality and durability - or introducing new products. The product development can be utilized either within the individual links or in cooperation with the others in the value chain. The product upgrading is often demands from changes in end-markets and therefore creates more value for the value by increasing the unit value for the product. (Kaplinsky & Readman, 2009)

**Functional upgrading** is the third upgrading strategy and relies on changing the mix of activities performed in the company in order to increase the value added. The purpose of mixing the chain of activities is to entry into a higher value-added chain to capture more of the value. Upgrading the functionality in the value chain will eliminate several levels in the value chain, thus improving the information flow through the chain. (Kaplinsky, R. & Morris, M., 2001)

**Chain upgrading** is the final upgrading strategy and relies on moving into a completely new value chain. With the right manufacturing equipment, there is a possibility to enter into completely new markets. (Kaplinsky, R. & Morris, M., 2001) explains that Taiwanese firms were able to move from making transistors radios to calculators, before entering the TV and computer monitor markets.

### ***3.5 Critical success factors***

The furniture industry consist of several different market segments, each containing different sets of characteristics that describes the final market and order priority. Kaplinsky & Morris (2001) refer to the market characteristics as critical success factors (CSF) and these are unique within each different market segments. They further argue that each market segment contains a distinctive set of critical success factors that change over time in accordance to customer demands and needs (Kaplinsky, R. & Morris, M., 2001)

Prior to the 1970s the key challenge for industrial manufacturers was mainly the price of the products, but as markets has grown into the global era and become more competitive, other characteristics will become more important. Gazo & Quesada (2007) discovered that achievements on delivery time was one of the most critical success factors for furniture manufacturers. Kaplinsky and Morris further suggest design, product innovation and after sale services as important CSF for the furniture industry.

Gazo & Quesada (2007) states in the methodology on determining CSF that it is important to describe each critical success factor in details before questioning them the respondents. Further suggestions is that each industry consist of three to six critical success factors in order to determine the success of a company. (Kaplinsky, R. & Morris, M., 2001) suggest using a scale from one to seven in order to score the importance of each success factor where one is not important and seven is extremely important. The next step is to sort the CSF as either “order qualifying” or “order winning”. An “order qualifying” criteria is factors the producer need to achieve in order to participate in the market or framework agreement. The “order winning” criteria is factors that leads to the producer being chosen as the source of supply. (Kaplinsky, R. & Morris, M., 2001)

How the CSF has been applied to this research is further described in the next chapter and serves the purpose of introducing the research methodology and design for this study.



## 4.0 Research Methodology

The methodology is a framework for obtaining the material required to answer the research question. This chapter serves the purpose of explaining why a qualitative case study approach was chosen as the foundation for this research, while further outlining the data collection method and discussing the quality of this research.

### 4.1 Research design

Ellram (1996) states that the basics of research methodologies is classified in accordance to what type of data is used and how the researcher chooses to analyze the proposed data. Ellram differentiates between empirical and modeled type of data. The researchers following an empirical approach focus on collecting data through direct or indirect observations from the real world, while the researchers emphasize on manipulating real world data artificially by a model using the modeled type of data. (Ellram, 1996)

This study has followed an empirical approach on collecting data, because the focus has been on observing a phenomenon in a real life context at Grande, not compromising the data artificially through a model. (Ellram, 1996) further differentiates between two types of analysis, where one is primarily quantitative and the other is primarily qualitative. The table below illustrates the basics of research methodologies through the types of data and the types of analysis.

		Types of Analysis*	
		Primarily Quantitative	Primarily Qualitative
Type of Data	Empirical	Survey data, secondary data, in conjunction with statistical analysis such as: factor analysis cluster analysis discriminant analysis	Case studies, participant observation, ethnography. Characterized by: limited statistical analysis, often non-parametric
	Modeling	<ul style="list-style-type: none"> <li>• simulation</li> <li>• linear programming</li> <li>• mathematical programming</li> <li>• decision analysis</li> </ul>	<ul style="list-style-type: none"> <li>• simulation</li> <li>• role playing</li> </ul>

Figure 7: Ellram (1996) p.96 - Basic Research Design

Quantitative and qualitative methods share similar characteristics and is often confused with each other. Holme and Solvang (1986) argues that there are not an absolute distinction between qualitative and quantitative research as they share a common purpose, both aiming to contribute to a better understanding of the society we live in. However, the methods differentiates at how the researcher wants to analyze the data. Putting it simply, the quantitative method converts data into numbers and quantities, often by statistical analysis and models. The qualitative methods focus on the researchers understanding and interpretation of the data and is often expressed verbally to create an understanding of complex problems. Qualitative and quantitative research methods is not in competition with each other, but rather complements each other strengths and weaknesses. (Holme, I. and Solvang, B., 1986)

Ellram (1996) argues that empirical data can be quantitative, qualitative or a mix of both. The Quantitative method of analyzing the data relies often on hypothesis and the results are in the form of numerical and quantifiable terms. When performing the quantitative method on empirical data, the data tend to be less predictable and controllable, making modelling data not as popular in empirical research. The qualitative method of analyzing empirical data is suitable for this study because the aim is to understand a complex problem with an interpreted in-depth analysis of the phenomenon at the case company which is further explained in the next section. (Ellram, 1996)

#### **4.2 Case study**

Yin (1994) defines cases studies as:

“.. An empirical inquiry that investigates a contemporary phenomenon within its real-life context, especially when the boundaries between phenomenon and context are not clearly evident” (Yin 1994, p.13)

Case study has been a common research strategy in many fields of science and economics. The differences between the research strategies is how the researcher choose to collect and analyze the empirical evidence. The case study contributes to the researcher’s knowledge and desire to understand a complex social phenomenon in a real life context (Yin R. , 1994)

One central aspect in case studies is the unit of analysis which is defined as the “who” or “what” the study is focused about. The unit of analysis is closely related to the types of research questions that are proposed in the study. The purpose of this study is to assess and investigate the upstream value chain in the furniture industry, in order to identify the potential for improvements in terms of value creation. This research will use the upstream value chain as the unit of analysis in order to identify value creation for the end customer. (Yin R. , 2010)

(Ellram, 1996) further distinguish between four primary objectives of qualitative research, as they can be exploratory, explanatory, descriptive or predicative. In exploratory research, the interest of the researcher is to get to know a topic of interest and to increase the understanding of the proposed topic or phenomenon. The researcher has often an idea of the topic and seeks to understand more about it in an attempt to set further groundwork for future studies. However, if the groundwork is already established and the topic needs more information, a descriptive research is suitable for providing additional data. This research has adapted a descriptive case study research design to answer the research problem.

#### ***4.3 Data collection methods***

According to Yin (1994), the data collected in case studies may consist of many different sources of data. Yin further explains that all sources of data has strengths and weaknesses, and a good case study wants to use as many as possible. To strengthen the quality and validity in this study, several sources of data has been collected for analysis. One important principle when using multiple sources of data is the term of triangulation, further discussed in the final chapter revolving the research quality.

Yin (2010) distinguish between primary and secondary data in case studies. Primary data consist of sources gathered for a specific analysis, including surveys, interviews or observation. Secondary data consist of sources gathered by other people for other means than the exact research and includes data from journals, books, sales statistics, etc (Yin R. , 2010)

The next sections serves the purpose of introducing the data collection methods used to obtain valuable inputs in form of secondary and primary data.

### 4.3.1 Secondary data

The secondary data used in this research plays an important part of the research and was necessary in order to get the contextual background for the questions in the interviews.

Secondary data gathered in this research consist of:

- Calculations on the cost of Systemskap series
- Sales reports with sales volumes,
- Documents (strategy document 2015 and Value stream mapping report from 2004)
- Direct observations in the factory.

The calculations on the Systemskap series is the main source of secondary data and includes the cost of raw material prices, time used on making the product and transportation cost. The calculations were necessary in order to map the value chain and identify how the values were distributed by looking at the net outputs from the product. The Systemskap series were chosen as the main product for the analysis because it represents one of the largest part of the annual sales volumes and consisted of raw material obtained from many different subcontractors.

Stake et al (1994) characterize a good qualitative case studies when “the main researcher is spending substantial time, on site, personally in contact with activities and operations of the case, reflecting , revising meaning of what is going on (Stake et al. 1994)

To understand if the research problems and proposed literature was of relevance to the research, significant time was spent at Grande, making direct observations a valuable secondary data by identifying opportunities and constraints in a real-life context. Most of the time spent at Grande was under supervision from the chief of production, making him a valuable asset to my research by asking questions related to my research without having to book a formal meeting.

The strategy documents outlined their strategy, vision and future goals and were useful when constructing the interviews with the management at Grande and understanding the strategic context of their industry.

### 4.3.2 Primary data

This section explains the seven-stage model for conducting the interviews and the results that followed. According to (Yin R. , 1994), the most appropriate and useful source of obtaining data in qualitative research is from the interviews conducted on respondents with key information about the research topics. The rationale for using interviews as the primary source of data in this research is that it targets directly to the case study topics and serves the purpose of giving valuable insights into information we previously did not have described and investigated.

Interviews can take many forms, but the interview methods used in this study is semi-structured interviews. Semi structured interview a reliable technique to get large amount of relevant qualitative data quickly. Characteristics to a semi-structured interview approach is that the researcher follows an interview guide, but is able to follow up with questions if the respondent is talking about relevant topics outside the planned interview schedule.

(Marshall, C. & G.B. Rossman, 1999)

#### 4.3.2.1 Interview inquiry

Kvale & Brinkmann (2009) suggest an method of interviewing that consist of seven steps Each step from the Seven-stage interview model suggest by (Kvale & Brinkmann, 2009) is described in details below:

**The first step** in the process was to clarify the focus in the thesis and formulate a purpose for the investigation. In the initial phase of the research, background information of the case company and meetings between Grande and researchers from Møre Forskning shaped the theoretical approach for the research. The focus in the initial stage was to get a general overview of the structure and functioning of Grande and identifying the “what” and “why” in the investigation. The “what” in the research-involved activities in the upstream value chain that generated value creation. There has previously been conducted a value chain analysis at Grande with focus on strategy, but the research was conducted without emphasizing volumes and calculation on their prices. The “why” the research was conducted was initially to contribute to this research with a deeper depth within the products delivered by Grande and to link the focal company to the end consumer.

**The second step** involved designing and planning the interviews. The proposed literature and first meeting with Grande formed the first interview with the management at Grande that consisted of the CEO and the production manager. The interviews split into two different interviews because there were certain topics that required information on the operational level where the CEO could not contribute with valuable information.

The interviews with key personnel at Grande emphasized on the internal value chain and different strategies in the company. The interview guide can be found in the attached appendix listed in the bottom of the thesis

The interviews with the chosen distributors was emphasizing the activities performed in the upstream value chain and the contribution of value creation for them and the end customer. The respondents was asked to rank Grande to their competitors to identify improvement areas and aim for the rest of the thesis. The key purpose of the interviews was to gather as much information as possible that would be of value to the research and to Grande Fabrikker.

**The third step** was to gather information about the chosen distributors and end consumer, further deciding if the interview should be conducted over phone or in person. A common challenge in qualitative studies is the amount of interviews or subjects needed to answer the research question. Kvale & Brinkmann (2009) responds to this challenge with “interviews as many subjects as necessary to find out what you need to know”.

The amount of distributors chosen for the interviews was the six largest distributors and represents about 60-70% of the total sales volume<sup>7</sup>. The respondents contributing from the furniture manufacturer was key personnel responsible for sales operations and production. After conducting the interviews, I find the amount of respondents sufficient to answer the proposed research questions.

**The fourth stage** is the interview situation. This study resulted in nine semi-structured interviews, where three of the respondents was with the management at Grande, and the remaining six respondents was with the six largest distributors to Grande in terms of volume. Four of the respondents agreed to conduct the interviews at their workplace and

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<sup>7</sup> Interview with Torbjørn Hjelden

face to face. However, due to long distances and limited budget, the remaining interviews were conducted over telephone. Before the interviews took place, an email was sent out to the respondents containing general information and what they needed to prepare before the interview. An application on the telephone recorded all the interviews that were conducted face to face, while a computer recorded the interviews over telephone. The interviews lasted between forty to fifty minutes.

**The fifth stage** was the transcription of the conducted interviews. By transcribing the interview, the researcher will transform the interview material from oral form to written text. The transcription process happened the same day as the interview were conducted in order to secure valuable information. (Kvale & Brinkmann, 2009)

**The Sixth stage** involved making themes and interpreting the respondents' answers in the interview. Analyzing the transcribed interviews and linking it to the literature and proposed research questions were the key objective to this thesis.

**The final stages** in an interview inquiry is verifying and reporting the quality of the research. Below is the list of interviews and meetings that has taken place during this research. The research quality in terms of reliability and validity is further discussed in the next section

Year	Month	Specific Date	Category	Description	Place	
2014	November	11.nov	Briefing	1. meeting with an introduction to Grande	Innfjorden	
	December	16.des	Scope for Master thesis	Discussion with supervisor Bjørn Guvåg and leader for the research project	Molde	
2015	January	19.jan	Scope for research project	2. meeting with Grande with reasearchers from Møreforskning	Innfjorden	
	February	24.02 - 26.02	Price list	Discussion about product groups		
	March	09.mar			CEO Grande	Innfjorden
		09.mar			Eivind Bale	Innfjorden
		23.mar			Grande Interiør	Innfjorden
		27.mar		Interviews	Kontormiljø	Molde (Phone)
	April	07.apr			Fagerhaug & Olstad	Molde (Phone)
		08.apr			Tre og Stål	Molde (Phone)
09.apr			Sørлие		Molde (Phone)	
14.apr			Senab	Molde (Phone)		
November		Analysis				

Figure 8: Meeting protocol

#### ***4.4 The Research process***

This research has been through many processes and this section aims to briefly discuss the choices made along the way. The initial approach for the research were a “make or buy” approach with emphasis on global value chains and different sourcing strategies. However, the choice of including these concepts was determined to be of little relevance, and the rationale is that the topics would have been too broad for the master thesis. I found the literature on global value chain connected to Grande to be of little relevance, as their core business is at the domestic market and they have not adapted any strategic goals to grow into an international organization. Although, it may be argued that most of their raw materials are procured from foreign companies, downstream suppliers was not the focused part in this research.

The research consist of four research phases lasting from October 2014 to November 2015. The first phase of this project was to develop research questions and obtain background information on the problem in Grande. A presentation of the proposed research were conducted in December and the rest of the first phase involved obtaining relevant literature and limiting the rest of the thesis. The third phase involved interviewing Grande’s executive director in order to understand the characteristics of the furniture market, strategies applied by Grande and his own thoughts about Grande as a manufacturer and value creator. Grande’s executive director provided contact information on the selected suppliers and they were interviewed shortly after. The final phase of the project were analyzing the findings and material collected through the project and linking it with the proposed literature.

#### ***4.5 Research quality***

All research projects are dependent on two important factors for evaluating the quality of the data collected. These factors are referred to as the reliability and validity that reflects the degree of consistency and accuracy of the measurements and findings in the research study. This section serves the purpose of discussing the measures this research have provided in order to ensure a high amount of research quality in this thesis. (Denzin, 1994)



### **4.5.1 Reliability**

The consistency of any research is addressed by the reliability of the researcher. This means that a research is reliable if another researcher is able to repeat the same methodology performed in the study and still receive the same results. (Abbott, L. & Mckinne, J., 2013). The key purpose of having a reliable study is to minimize errors and biased information by documenting each step in the research you are conducting

(Yin R. , 1994) suggest that the researcher should conduct the study as operational as possible and solving the questions as if someone is looking over your shoulder. Having a research guideline with an operational approach will contribute to transparency through each step and lead the auditor to the same answers if he repeats the process.

The measures that contributes to reliability in this research is that each reference to the literature can easily be tracked by clicking the name of the author. Each reference is linked to the bottom of the page where a list of all references to the literature can be found. The procedure where primary and secondary data has been collected is described in the previous chapter and copies of the interview guide and calculation can be found in the attached appendix at the end of the thesis. This measures is incorporated to the research for it to be as transparent and traceable as possible for the reviewer.

### **4.5.2 Validity**

The quality of any research is also dependent on the validity of the measures in the study. Abbott & McKinney (2013) defines validity as the accuracy of the research, questioning if the researcher is measuring what he is supposed to measure. (Yin R. , 1994) address that every good research design consist of three types of validity; external validity, construct validity and internal validity.

(Ellram, 1996) describes the external validity to reflect the accuracy of case study findings and if it contributes to the generalization of the data in the study. Ellram (1996) further argues that this issue must be addressed during the design of the research and that lack of generalizability is the greatest criticism of case studies. Single case studies lacks the generalization of data because it only involves one single case.

(Yin R. , 1994) suggest that generalization of data can to some extent be achieved by linking the research to existing literature and relevant theories. This research has included a chapter explaining the theoretical framework obtained in this thesis and the review of literature relevant for answering the research topics. The methodology for this research has previously been conducted in relating articles and papers from Kaplinsky et al (2001, 2003, and 2009).

The second issue of validity in research design quality is referred to as construct validity. (Ellram, 1996) explains that construct validity is closely related to reliability due to being an important part of the data collection phase. There are three main elements associated with construct validity:

- Multiple data sources (triangulation)
- Establishing a chain of events
- Draft reviewed by key informants

The first element in construct validity refers the triangulation of data by using multiple sources of data. This issue has been dealt with by interviewing three respondents at Grande and six respondents of the distributors. Other means of dealing with triangulation is collecting data directly by Grande in form of Calculations on existing products. The second element is dealt with by organizing the thesis with an introduction, description of the case company, relevant scientific literature and concluding case study findings. The third element is not further dealt with due to time limitations. (Ellram, 1996)

The final type of validity is the internal validity in the research. (Ellram, 1996) argues that this issue is irrelevant in all other studies except explanatory studies, where the researcher is trying to demonstrate outcomes caused by an independent variable. Therefore this issue is not dealt with in this research.

## 5.0 Case study findings and discussion

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This chapter serves the purpose of introducing the findings in this case study. The first section describes the mapping of the value chain, with focus on the primary and supporting activities that are within the focused company. The next section describes the included distributors and their comparison of Grande. The final section reveals the order qualifying and order winning criteria's from the different distributors and what contributes to value for the customer.

### 5.1 Internal Value chain at Grande Fabrikker

The first section will pay attention to the internal value chain at Grande and explain in detail all the different activities performed in-house at the manufacturing company. With regards to Porters Value Chain explained in the research literature, the activities are split into two different categories called the primary and supporting activities. (Porter, 1985)

#### **Primary Activities**

The primary activities serves to be the focus of this study and consist of the categories listed below:

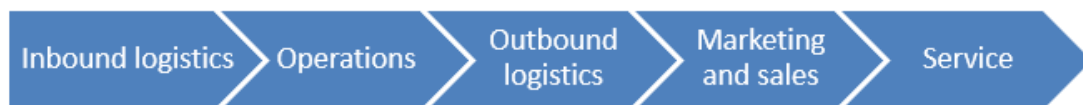


Figure 9: Primary activities

#### **Inbound logistics**

Grande receives goods from the suppliers of raw materials on a monthly schedule based on their production forecasts. The raw materials are then examined to see if there are any damages or missing materials. If the delivery is correct, the materials are then goods receipt and placed on the appropriate storage areas. However, if the delivery is not correct – the suppliers of raw material are notified and becomes responsible of compensating the missing or damaged materials.

The inventory control is managed according to the season of production and what type of products that is being produced. Communication between the different departments such

as purchasing and operations is crucial in order to have the right amount of stock and place the materials at the correct storage location for effective production. Previously, there has been problems where materials are placed on the wrong storage location. This problem causes the production workers to waste time looking for the materials and also slowing down the production. According to the responsible person for purchasing and production at Grande, this problem has been decreased, but is still an area that need improvements.

## **Operations**

The main objective for Grande Fabrikker as a furniture manufacturer is to convert the raw materials into semi-finished and finished goods. The raw materials used to produce furniture at Grande is particleboards, edge strips, screws, hinges and lacquer paint. The production is divided into three departments in order to bring raw materials into finished goods. Most of the customer value is increased in this steps since the core objective is for Grande is to produce the furniture. The value adding processes in the production is divided into the following three parts: machine department, surface processing and assembling.

The first part of the production is the machine department and this is where the particleboards are divided, pressed and veneered. Large plates of Particleboards are further brought into an automated saw that cuts the particleboards into the appropriate size for manufacturing. The next step for the particleboard plates are listing of edge strips, before being polished and sanded by the polishing department.

The second part of the production is the surface processes department, which concerns the refinishing of all the surfaces including the edge lists. UV-coating paint is applied to the plates in order to customize the plates into the desired colors and design. The plates are painted in accordance to if the product are standardized or made specific for a customer.<sup>8</sup>

The final part of the production is the assembly department which is divided into two divisions. The assembling consist of either standard products (flat packs) that are made to order and specific production that are produced to order. After the products are assembled and wrapped in packaging, they're further transported to the finished goods area.

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<sup>8</sup> Productivity analysis Grande – Tekna 2004

## **Outbound logistics**

When the products are produced in accordance to an order, the next step is to store the products at areas for outbound transport to the distributors. The storage facilities are relatively small compared to the total size of the company, and therefore is Grande prioritizing to ship the products as fast as possible. The products are usually transported in large bulks as most of the furniture are part of larger projects, where large areas of the schools or kindergarten are being furnished. The products can either be shipped to the distributor's storage or it can be shipped directly to the customer. The transport is carried out by an external company which are shipping the goods on a weekly schedule.

## **Marketing and sales**

Most of the sales originates from framework agreements made through Offinn which serves to be a sales network for Norwegian furniture and interior distributors. The sales and marketing activities takes place in the same department at Grande. The design of the products are developed in close collaboration with Grande Fabrikker and the Norwegian designers linked to Offinn.

## **Service**

The final part of the primary activities performed at Grande is the post sales service departments that serves the purpose of assuring that the customer is satisfied with the products. The service department enhance the value on the product by assuring product guarantees, warranties and repair services. Grande does not have dedicated service unit, but handles most of the complaints by the responsible production unit.

## **Support Activities**



*Figure 10: Support activities*

The support activities has not been the focus for this research, but is included to highlight the sources of value creation in activities supporting the primary activities.

### **Firm infrastructure**

The business strategies is mainly performed by the CEO and the management team. The production related strategies is executed by the production managers. The ERP system at Grande Fabrikker is Visma Global, however the planning of completion of orders is done by one single person and is based on gut instincts and experience. This is a large weakness in both their system and consistency of orders as the orders does not have any planned delivery time except the ones made by the responsible at Grande.

### **HR**

Grande does not have any single HR department due to their smaller size, but have employees with extra emphasize on health, safety and environment regulations. Most of the workforce at Grande has been working there for more than ten years, however due to seasonal demands many new workers are hired before the summer as substitutes. The recruitment are done by the general managers.

### **Technology and development**

The technology at Grande comes in the form of manufacturing equipment. According to their production manager, the manufacturing equipment is obtained through Italian suppliers and they are in negotiation of purchasing new cutting and polishing machines in order to meet the business requirements. Having the right machinery is recognized as a crucial factor to enhance competitiveness, as it delivers efficiency and productive gains. (CSIL, 2014) argues that large investments in technology for the German and Italian wood furniture manufacturers has made the companies to gain competitive advantage in terms of woodworking machinery technology because of their laser edge banding.

The product development happens to some extent in collaboration with the distributors, but is mostly maintained at within the Offinn organization.

### **Procurement**

Grande does not have any dedicated persons doing the purchasing, as all raw materials are procured in large quantities from foreign and domestic companies by the plant manager according to their forecasts. The particleboards are bought in large quantities from Spain while the rest of the raw material are bought from minor suppliers from Germany, Lithuania and Norway.

## 5.2 Overview over Grande's value chain in the furniture industry

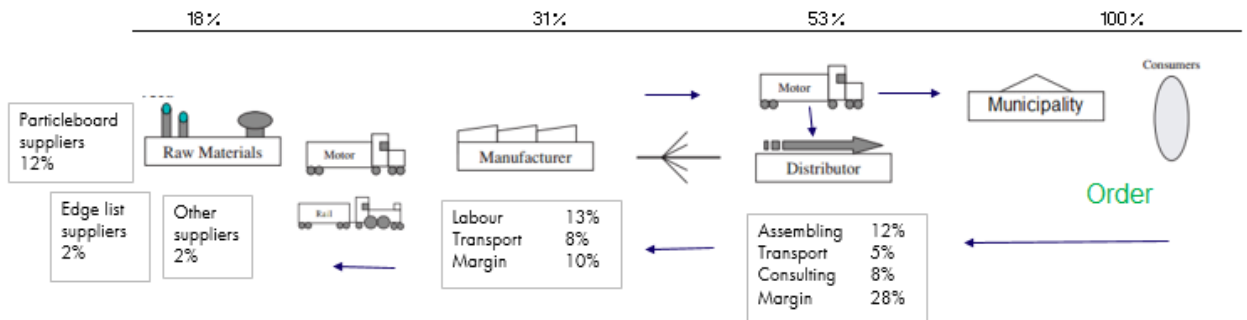


Figure 11: Mapping of the value chain of Grande

The calculations of net output values from the “System skap series” has been adapted in order to map the value chain from the consumer and back to the raw material suppliers. The mapping starts with the end customer, which in this value chain serves to be a school or kindergarten. The order process starts with an entrepreneur or responsible procurement agent from the municipality approaching several distributor in their area. The distributors contributes with guidance and layouts according to the customers’ demand.

The customer then place the order to the distributor, which further sends it to Grande by mail. The production then plan their production in accordance to available material and production capacity and sends back an order confirmation containing the delivery time. After the furniture is produced and transported to the distributors, the next step is to assemble the products in accordance to the needs of the customer. All the distributors have their own assemble team in-house. The assembly department have the responsibility for reporting missing items or damages at the products. The complaints are then sent to Grande which coordinates the compensation accordingly through after sales activities.

**Research question 1:** *How is the value added throughout the value chain of Grande and how is the value distributed?*

The value added is split into three different parts; distribution channel, Grande fabrikker and suppliers of raw material. The value added table shown below indicates that most of the value is captured in the upstream value chain with a combined share of 84% of the value creation.

<b>End customer</b>	<b>100 %</b>
<b>Distrution</b>	<b>53 %</b>
Transport	5 %
Assmebling	12 %
Consulting	8 %
Distributor margin	28 %
<b>Grande Fabrikker</b>	<b>31 %</b>
Labour	13 %
Transport	8 %
Margin	10 %
<b>Suppliers of raw material</b>	<b>16 %</b>
Chipboard suppliers	12 %
Edge lists	2 %
Other suppliers	2 %

The distribution channel captures most of the value created and contributes for about 53 % of the total value added. The important value creating activities in the upstream value chain consist of the assembling department (12%), the sales department contributing with consultancy and layouts (8%), transportation of the goods (5%) and the distributor margin (28%). The cost associated to the distribution channel is labor cost, furniture products and discounts given to the customer. This is subtracted from the distribution margin.

Grande Fabrikker which serves to be the manufacturer of furniture contributes with 31% of the value added. The cost associated with the value added is transport cost, labor cost and price of raw material. In the end, the margin of Grande ends up with a margin of 10% of the standard systemskap series. The suppliers of raw material accounts for about 16% of the total value added to the standard systemskap series. However, particleboard suppliers contribute for most of the value added and capturing over 12% of the value added.

### 5.2.1 Distributors

This section will present the sixth largest distributors included in this research and briefly describes their geographically location, which market segment generates most of their income and how much of their turnover originates from the products delivered by Grande Fabrikker.



### **Distributor 1**

The first company is located in northern part of Norway and serves as a distribution channel for the regions surrounding Trondheim. The distributor consist of about 40 employees and has a turnover for about 100 million NOK per year. Most of their trade is foreign, making only 20% of their suppliers Norwegian. Their largest business segment is on the public markets with municipalities and contracts as their largest customers. About 60% of their total turnover originates from the public environment customers. Grande is one of many suppliers and serves to be about the sixth largest supplier on the public environment market

### **Distributor 2**

The second company is located in the southern part of Norway and serves as a distributor for the areas surrounding Rogaland. The distributor consist of about 10 employees with a turnover for about 25 million NOK annually. Most of their trade is from the Nordic countries (Sweden, Denmark and Norway). The Public environment sector generates over 80% of their income, where Grande serves as their largest supplier of Kitchen and furniture. According to this distributor, Grande's highest competition is from a Scandinavian supplier in Denmark named Holmris.

### **Distributor 3**

The third company is located in six different offices in the areas surrounding the southern part of Norway. With over 18 employees working with sales, their turnover is calculated to be about 70 million NOK annually with their entire business segment on the public sector. The distributor has a wide range of suppliers, but of the estimated 100 suppliers, only 15% is Norwegian. Grande is considered to be one their core suppliers of furniture through their framework agreement with Offinn, with tight competition from Helland, EFG and Business seating.

### **Distributor 4**

The fourth company is located in Østfold and delivers to customers surrounding Østfold and southern part of Akershus. The majority (70%) of their sales is from the public sector that mainly consist of hospitals, schools, public areas and company canteens. With a turnover of 110 million NOK, the fourth supplier is one of the largest suppliers of furniture. However, from the total revenues, only 20% are generated from Norwegian

suppliers. Grande accounts for about 10% of their turnover from the public sectors and mainly delivers furniture to schools and kindergarten.

### **Distributor 5**

The fifth distributor acts as the distribution channel in the Møre and Romsdal district, and is located in the same building as Grande Fabrikker. About 70%, their turnover is generated from Norwegian suppliers, making Grande Fabrikker one of the largest within the school and kindergarten sector. Most of their customers are governmental customers, such as municipalities and certain industry clients. The largest competitors to Grande Fabrikker is suppliers like EFG, Scandinavian Business Seating, Svenheim and Haag

### **Distributor 6**

The final distributor is located in Buskerud and delivers products to public environments and business companies located in the areas surrounding Buskerud and Vestfold. About half of their total turnover (18 mill. NOK) comes from Norwegian suppliers, where Grande also serves to be one of the largest.

In summary, most of the distributors have a large share of their volumes at Grande Fabrikker. However, the customers are also purchasing with other suppliers, which makes them able to compare Grande Fabrikker to other suppliers of furniture. The next section presents the comparison on several chosen categories that are important to answer the research questions and statements.

## **5.2.2 Comparison**

The distributors were asked to compare Grande against all the other suppliers from a scale to one to five. If the distributor gave Grande “three” on a chosen category it indicates that Grande is equal to most of the other suppliers. However, the distributor was also able to list if Grande was better or worse than their competitor by giving the score two or four. If Grande received one or five, it meant that they were the best or worst supplier in the chosen category.

The categories chosen to compare Grande to their competitors are price, quality, delivery safety, service, innovative solutions and design. The categories are chosen in collaboration

with Grande and suggestions from the literature on the furniture industry. (Kaplinsky, R., Memedovic, O., Morris, M., Readman, J., 2003)

**Research question 2:** *How is Grande's performance compared to their competitors?*

### **Price**

Grande is scoring equal to most of the other customers in the price category, meaning that they have a normal price compared to their competitors. Two distributor highlights that Grande gives them slightly better price than their competitors, but adds that this is only in certain situation where the distributor is in tight competition. Since many of the competing suppliers have lower costs by outsourcing their production or supplying from other countries, the price score reflects being average. Grande is also not having any strategies being the cheapest supplier of furniture, further reflecting the price score.

Table 1: Price



### **Delivery Safety**

Delivery safety is described as if the customer receives the products at the right time, but also in correct quantity. The distributors see Grande as one of the worst manufacturing companies delivering the products in the time. Many of the distributors reveals that Grande delivers the correct amount, but too often have delays on the agreed delivery times.

Further, many of the distributors acknowledge that the ERP-system at Grande does not handle delivery times – therefore being dependent on one responsible to compute the delivery times. This problem is a large concern to most of the distributors for further source of supply and is further discussed in the next chapter. This category is reflecting that delivery time is the largest area that Grande needs to improve.

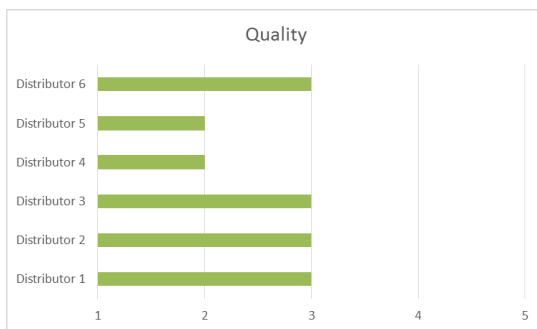
Table 2: Delivery Safety



## Quality

The quality of the products is measured when the distributors receives the products and assembles to see if there are any damages caused by manufacturing mistakes. The quality is also measured over time to check the durability of the products. Many of the distributors reveals that they goes back to customer to see if there are any damages on the products. In the quality category, the distributors gives Grande an average score compared to other furniture manufacturers, further suggesting that making the products in Norway do not enhance the value or quality on the products.

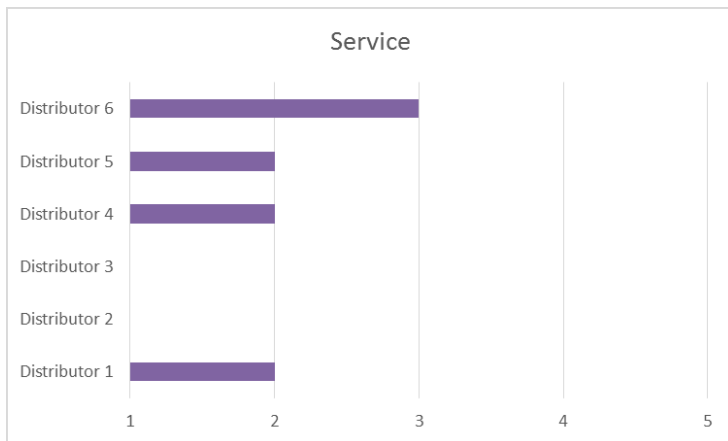
Table 3: Quality



## Service

The service category describes how well the manufacturing is responding if there is something wrong with a delivery or warranty issues regarding a product. Comparing Grande to the other manufacturing companies in the service category, it reveals that they are one of the best suppliers with handling service. However, many of the distributors argues that the warranty issues often are cumbersome and takes too much time, but Grande is generally good at after sales activities.

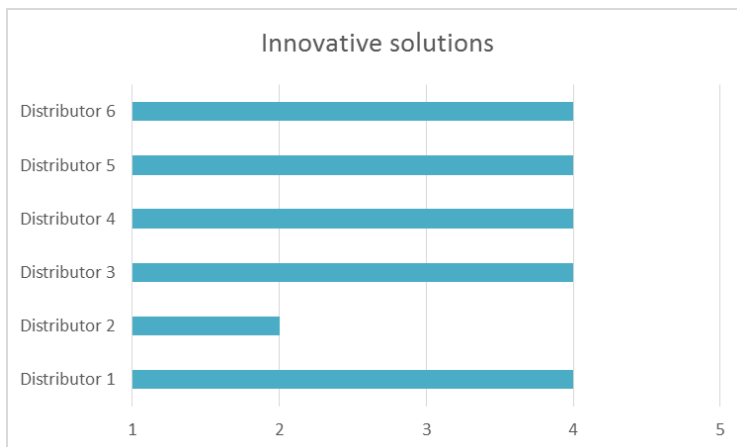
Table 4: Service



### Innovative Solutions

The purpose of introducing the innovative solution category is to see how well Grande is performing in terms of innovativeness and their creativity when it comes to solving specific supplier problems. In terms of the innovativeness score, the distributors are ranking Grande worse than their competitors, and mostly blame their ERP-system constraints.

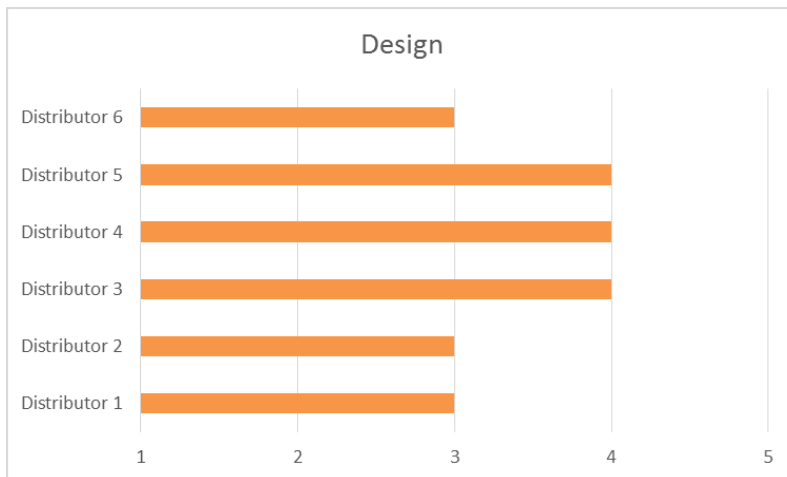
Table 5: Innovative Solutions



### Design

The score on the design category indicates that Grande delivers mostly standardized products without too much variation. The distributors argue that Grande is mostly equal to the other manufacturers in the design category. The design is described as boring in terms of shape and flexibility, but advanced in terms of colors.

Table 6: Design



The results of comparing Grande to their competitors shows that the two main potential areas for improvements are delivery times and innovativeness. As stated in the introduction, the management of Grande believes that making the product in Norway can be considered a competitive advantage against their competitors. They believed that Norwegian production increased the quality of the products and securing delivery times. However, the comparison shows that producing in Norway is not automatically giving any advantages in form of reduced delivery time or quality of the products. However, the distributors emphasize that the reason for choosing Grande as their primary manufacturer is that they have long relationship with the manufacturing company and Grande knows how to treat the customers through services.

### ***5.3 Critical success factors***

The Critical success factors in the furniture industry chosen in this study originates from suggestions from the research conducted by (Kaplinsky, R. & Morris, M., 2001). As mentioned in the literature review, the CSF should be sorted as either “order qualifying” or “order winning”. An “order qualifying” criteria is factors the producer need to achieve in order to participate in the market or framework agreement. The “order winning” criteria is factors that leads to the producer being chosen as the source of supply. (Kaplinsky, R. & Morris, M., 2001)

The distributors were asked to emphasize the selected critical success factors on a scale from one to seven according to how important the criteria was to their choice of supplier. The selected CSF included in this research are listed below:

- Price
- Quality
- Innovativeness
- Delivery safety
- Service
- Produced in Norway

The factors categorized as “order qualifying” is the price category. If a customer approached the distributors and there was no framework agreement in place, the most common choice was to establish a tendering in order to compare prices of different producers. About three or four different producers were chosen from the tender. The price is therefore not an order-winning attribute, but is very important to qualify for the orders.

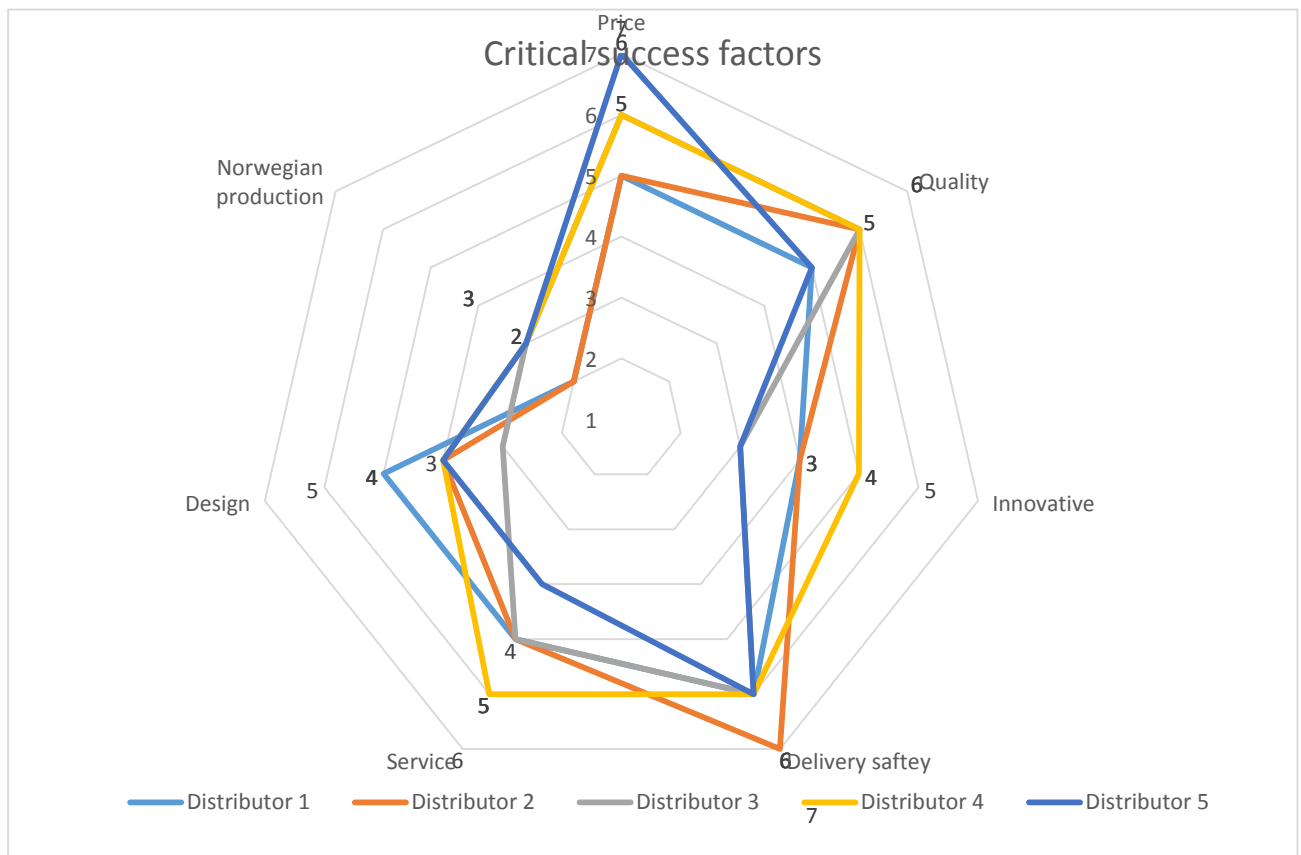


Figure 12: Critical Success Factors

The critical success factors for the distributors indicates that delivery safety is the most important aspect when choosing a supplier. The first hurdle for the manufacturer is the price category as this is considered to be quite important, but mostly when participating on the tendering agreements. Once the manufacturing company has passed the price barrier the other factors that are considered to be important is quality of the products and after sales service provided by the manufacturing companies. Quality is important because the products shall withstand rough treatment over time and bad quality of the products only cause trouble for the distributors because they have to make a warranty issue therefore wasting time

The factor revolving the product being made in Norway does not matter for any of the distributors. The product being produced in Norway would have made a difference if quality or delivery safety would have been significantly been better, however many of the distributors reveals that this is not the case. It is further noted that most of the companies producing in foreign markets have faster delivery times than Grande.

The factors revolving the design of the products is also not as important within the school furniture segment, as most of the end consumers are students and teachers that are not interested in the design of the products. However, many of the distributors are also operating in other furniture markets and they argues that within these markets – the design is one of the most important criteria when choosing their source of supply.

#### ***5.4 Upgrading strategies***

The potential in the value chain can be described in accordance to four different upgrading strategies outlined in the literature review and becomes the foundation for the third research question.

- *Process upgrading*
- *Product upgrading*
- *Functional upgrading*
- *Chain Upgrading*

(Kaplinsky, R. & Morris, M., 2001)



**Research question 3:** *What kind of upgrading strategies can improve Grande's value chain?*

This research has discovered that most of the value creation for the customer comes from delivering the products at the right time. The first thing Grande needs to identify why they have one of the worst performances in terms of delivery safety. The first upgrading strategy refers to the processes that increase the efficiency of production. The literature suggest that the case company should look into the internal processes to minimize waste and increase their output by the increasing the efficiency.

The second upgrading strategy refers to upgrading the products at Grande. One of the suggested product upgrades would be to implement a new ERP-system – or to develop a new delivery system for improving delivery time schedule. This would generate more value to the customer because of improved lead times.

The functional upgrading strategy suggest that Grande should enter into a higher value added function in the value chain. Referring to the value added table, the most value adding activities are the assembling department. However, this activity is not easily incorporated into the value chain of Grande, because the distributors already has developed it in –house and believes it to be one of the most important activities performed in their company.

The chain upgrading strategy suggest that Grande should move into new markets within the furniture industry. By moving into new markets Grande will face opportunities of increasing their margin through differentiation through designs on the products. The design category is not as important in the public plate furniture market and therefore

## 6.0 Conclusion

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This research has adapted the value chain analysis approach to the furniture industry in order to describe the potential in the upstream value chain for a domestic furniture manufacturer. The value chain mapping proved that over 84% of the value added and value capture happens in the upstream chain of activities, indicating that most of the potential in the chain of activities lies between the manufacturer and distributor.

The first step in this research was to outline the internal value chain at Grande Fabrikker with emphasize to their value creating activities. This showed that Grande combines several departments such as purchasing with production, HR with the sales distribution team, etc. The interviews with the respondents at Grande revealed that the constraints in the internal value chain was linked to their existing ERP-system which is not able to provide accurate delivery times. Further, purchasing was not prioritized, even though the particleboards counted for about 12% of the total value added. Small changes in the prioritizing of purchasing on particleboards will increase the margin for Grande Fabrikker.

The next step in this research involved comparing the focused company with their competitors to see where they had the largest area of improvements. The comparison resulted in that Grande had the lowest score in the delivery safety and innovativeness category, but was one of the best suppliers in after sales services. Further, the distributors were asked to outline their critical success factors for source of supply. The most important factors for the distributors were delivery safety, price, quality and after sales services. Further argued is that the price factor was important to qualify for an order, but delivery guaranties, quality of the product in terms of durability and service was the factors that determined the choice of supplier for the distributor.

The findings in the case study suggest that after sale services and long relationship to the distributors creates the most value for the distributors and is the reason why Grande is chosen as their main supplier of furniture. To assess the potential in the value chain, upgrading strategies were applied to which Grande could upgrade their position in the value chain. The proposed upgrading strategies suggested that Grand should enter into a new value chain within the furniture industry to raise the margin of their products through differentiation on design.

## 7.0 Limitation & Further research

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The first limitation to this study is that it only contains one single company. This study is only conducted on one Norwegian furniture manufacturer and therefore lacks enough data to make generalizability of the study possible.

Another limitation to the study is that the Norwegian furniture industry lacks both available literature and generalization of data. Most of the literature on the furniture industry is adapted from similar countries such as Sweden and Denmark. The limited time frame for the master thesis resulted that only the distributors were interviewed and not the end customer, although it can be argued that the end customer is not responsible for the choice of source of supply. The distributors were used to assume the data from the end customers.

This research only takes the activities performed in the value chain as a source to obtain value creation. However, there would be advisable to include a resource based view approach to look into the core competencies possessed by the Grande and other companies in the value chain. The value chain mapping conducted in this research is only considering the overall overview and not the single value creating processes that are in the focused company. Suggestion for the next study will be to include all the value adding and non-value adding activities.

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**Unpublished data:**

Productivity analysis at Grande – TEKNA. 23.03.2004	not attached
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Strategy documents 2012 – 2015	not attached
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## Confidentiality Agreement



Høgskolen i Molde

### **SUPPLEMENTARY AGREEMENT/CONFIDENTIALITY AGREEMENT** (Supplement to Point 5 of the Standard Agreement)

This agreement is between

Fredrik Wamshed.....(Student(s)).

H.I. MOLDE..... (Faculty Advisor at Molde University College),

Grande fabrikk as..... (Company/Institution),

and Molde University College/MSc logistics Program Coordinator. This is a supplement to the Standard Agreement, which defines the use of specifications and results reported in a Master's degree thesis in accordance with the study plan for the Master's degree program in Logistics at Molde University College.

1. As stated in Point 5 of the Standard Agreement the parties named above agree to limit access to the Master's degree thesis for .... Year(s) from the date of this agreement. The limit should be 1 to 5 years, for longer confidentiality periods, contact the program coordinator for a special agreement.
2. The reason for keeping the thesis results confidential is so that the company/institution can avoid giving away information that would give others a competitive advantage.
3. The thesis must be submitted to Molde University College. It will be kept in a secure room in the main archive at the College during the period agreed upon. The thesis can be borrowed during this period if a written request is submitted and the company/institution gives permission. Academic staff members can access the thesis after signing a declaration of secrecy. After the period of confidentiality is ended the thesis will be placed in the library for general use.
4. Four copies of this agreement must be signed so that each party will have a copy. The agreement is valid when it has been approved and signed by the program coordinator or Dean at Molde University College.
5. The confidentiality agreement does not exclude members of the academic staff from being present at the final oral presentation of the thesis.

Place Im fjøder.....

Date of last signature 24.11.15.....

Fredrik Wamshed  
Student(s)

GUVÅG BJØRN  
Faculty Advisor

Tobias Bredde  
Company/Institution

Agreement approved by:

\_\_\_\_\_  
Program Coordinator/Dean

# Standard Agreement



Høgskolen i Molde

## STANDARD AGREEMENT

This agreement is between

Freddie Wamstad.....(Student(s)).

HI MOLDE..... (Faculty Advisor at Molde University College),

GRANDE FABRIKKER AS..... (Company/Institution),

And Molde University College/MSc Logistics Program Coordinator, concerning the use of specifications and results reported in the Master's degree thesis in accordance with the study plan for the Master's degree program in Logistics at Molde University College.

1. The student will complete the work assigned for the Master's degree thesis in cooperation with the company/institution  
(Optional): HØRE-FORSKNING.....

The title of the thesis is: GRANDE FABRIKKER AS - A CASE STUDY OF VALUE CREATION IN THE FURNITURE INDUSTRY

2. The student has copyrights to the thesis. Those copies of the thesis submitted for evaluation along with descriptions and models, such as computer software that is included as part of or as an attachment to the thesis, belongs to Molde University College. The thesis and its attachments can be used by the College for teaching and research purposes without charge. The thesis and its attachments must not be used for other purposes.

3. The student has the right to publish the thesis, or parts of it, as an independent study or as part of a larger work, or in popularized form in any publication.

4. The company/institution has the right to receive a copy of the thesis with attachments, and the College's evaluation of it. The company/institution will have three (3) months from the time the thesis is submitted to the College for censoring to determine whether a patent is possible and to apply for a patent for all or part of the results in the thesis. The specifications and results in the thesis can be used by the company/institution in its own activities.

5. An additional confidentiality agreement may be entered into between the parties, if the company/institution sees this as necessary.

6. Each part of the agreement should have one copy of the agreement. The final signature should be from the Program Coordinator/Dean validating the agreement.

Place.....Oslo.....

Date of final signature.....24.01 - 2015.....

Freddie Wamstad  
Student(s)

BJØRN GUNÅG  
Faculty Advisor

Solbjørn Hydden  
Company/Institution

ARILO HOEF  
Program Coordinator / Dean



## Appendix 1 - Interview Value Chain Analysis

### Inngående Logistikk

1. Beskriv de aktiviteter som utføres i organisasjonen med hensyn til mottak og lagring av inngangene sendinger på dere lagringssystemer.
2. Hvor effektiv er kommunikasjonen mellom anskaffelse divisjon og de ansvarlige for inngående logistikk?
3. Hvordan bruker Grande disse materialene når de har blitt lagret? Hvor effektiv er kommunikasjonen mellom inngående logistikk divisjon og deres operasjonelle avdelinger?
4. Hvor mye rå materialer og lager trengs for den daglige driften av Grande?
5. Hvordan er prosedyren for å lage reutr til leverandører? Hvordan er det relevant informasjon kommuniseres innad i bedriften med tanke på hjelp av innkjøpt materiale til de ansvarlige for inngående logistikk, og til de som er ansvarlige for å kjøpe varene?

### Produksjon

6. Hvor mange forskjellige typer bearbeiding prosessen finnes det i Grande? Hvordan kommuniserer de med hverandre? Er de plassert i samme anlegg?
7. Når de forskjellige prosessene har blitt endret slik at det passer til de spesifikke kravene til produktet, hva er de ulike monterings aktiviteter som foregår i Grande? Hvordan samordner dere disse aktivitetene?
8. Når produktet har nådd sluttfasen i produksjonsanlegg, trenger du å pakke den? Hvis ja, hvilken enhet i organisasjonen er ansvarlig for emballasje? Hvor effektiv er informasjonsflyten mellom de ulike produksjonsenhetene?
9. Hva slags aktiviteter foregår for å garantere effektiviteten av maskiner, og som er ansvarlig? Hvor effektiv er kommunikasjon mellom den personen eller avdelingen som har ansvar for vedlikehold og de som er ansvarlige for de ulike produksjonsfunksjoner?

### Utgående Logistikk

10. Når produktet er ferdig, trenger du å lagre det? Hvis ja, hvor bra anlagt er dine lagringsprosedyrer med aktivitetene og arbeidet i salgsavdelingen?
11. Hvordan er en ordre kommunisert fra salgsavdelingen til utgående logistikk avdeling i organisasjonen? Er sammenhengen mellom salg og utgående logistikk optimalisert?
12. Hvordan er leveransene planlagt i Grande? Er denne prosessen i tråd med leveringsfrist garantien gitt til kunder ved salgsavdelingen?

13. Hvilke typer levering system har du på plass? Er leverings aktiviteter utført av ulike avdelinger i din bedrift? I så fall ville det være mulig å bedre organisere dem?

#### **Marked og salg**

14. Hvilken type markedsføring teknikker er på plass? Hvem er involvert i avgjørelsen? Hvordan påvirker de mengdene som produseres av Grande?

#### **Service**

15. Hvor effektiv er kommunikasjon mellom installasjon team og utgående logistikk?

16. Hva slags garanti er det du tilbyr? Er dette i tråd med deres overordnet strategi?

17. I hvilken grad er ditt produkt tilpasset kundene?

#### **HR**

18. Hvordan fungerer rekrutteringsprosessen i Grande?

19. I hvilken grad kan de opplæringsaktiviteter i organisasjonen forsterke og blande med annen støtte og primærvirksomhet?

#### **Innkjøp**

20. Hvordan skjer innkjøp i Grande?

21. Hvem kjøper inn materialene? Hvor kjøpes det fra?

#### **Infrastruktur**

22. Beskriv hvordan den daglige ledelsen av selskapet påvirker den måten som de andre aktivitetene i selskapet utføres? Har de har en aktiv rolle i den daglige rutinen for din organisasjon?

23. Hvordan er din strategiske plan blir implementert i organisasjonen? Hvem er ansvarlig for gjennomføringen av den?

## Appendix 2 - Interview Distributors

1. Kan du fortelle meg litt om hvilken rolle du har i bedriften?
2. Kan du fortelle meg litt om bedriften din med tanke på
  - a. Hva slags kunder dere har?
  - b. Markedsområde: (privat, offentlig, skole osv.)
  - c. Størrelse på bedriften deres?
  - d. Hvilke Strategier dere har?
3. Hva skiller dere fra andre konkurrenter?
4. Kan du fortelle meg litt om leverandørene deres?
  - a. Hvor stor andel er norske?
    - i. Hvor i Norge er de konsentrert?
  - b. Hvor stor andel er utenlandske?
5. Kan du rangere de viktigste leverandørene?
6. Kan du fortelle meg litt om hvilken betydning Grande har for dere?
  - a. Hvor stor andel av det dere selger blir produsert av Grande?
  - b. Hvilke produktgrupper leverer Grande mest av?
7. Hvis vi skal sammenligne Grande med andre leverandører, hvordan er Grande på en skala fra 1-5 på:
  - a. Pris
  - b. Leveransesikkerhet
  - c. Kvalitet
  - d. Service
  - e. Innovasjon
  - f. Design
8. Har du noen konkrete forbedringspunkter som Grande eller andre leverandører kan bli bedre på?
9. Har du noen konkrete forbedringspunkter som du kunne gjort annerledes?
10. Hvor mye av leveransen din skjer i utlandet? (Volum prosent)
  - a. Hvordan er kvaliteten på produktene du kjøper fra utlandet sammenlignet med de norske?
  - b. Hvordan er leveransesikkerheten til de utenlandske aktørene?
11. Hvordan ser du for deg at markedet er om 5-10 år med tanke på?
  - a. Potensielle kunder
  - b. Potensielle konkurrenter
  - c. Leveranse (norsk eller utenlandsk)
  - d. Substitutter
  - e. Dine eksisterende konkurrenter?
12. Hvor opptatt er kundene dine av: (Skala fra 1-7, der 7 er ekstremt viktig)

- a. Pris
- b. Kvalitet
- c. Nyskapning
- d. Varen levert til riktig tid
- e. Varen produsert i Norge
- f. Service

13. Hvor viktig er følgende kriterier for deg, med tanke på valg av leverandør: (Skala fra 1-7)

- a. Pris
- b. Kvalitet
- c. Nyskapning/Innovasjon
- d. Leveransesikkerhet
- e. Design
- f. Varen produsert i Norge
- g. Service

14. Kan du fortelle meg om alle aktiviteter som skjer i bedriften din? (Fra ordre til sluttkunde. Eks. montering, oppfølging, reklamasjon)

- a. Hvilke av disse aktivitetene er viktigst for bedriften din?
- b. Hvilke aktiviteter føler du kunden verdsetter mest?

15. Kan du fortelle meg litt om hvilke tilbakemeldinger du får fra kunden din?

- a. Bli denne tilbakemeldingen videreformidlet til produsenten?
- b. Hvordan blir denne informasjonen videreformidlet?

16. Kan du fortelle meg om det er noen aktiviteter som du ser på som litt tungvint fra leverandørens side?

- a. Kunne noen av disse aktivitetene ha blitt gjort annerledes fra leverandørens side?
- b. Eksempler: unødvendig transport, for mye pakking, dårlig rutine på reklamasjon, feil boring.

17. Hvilke produktgrupper ser du på som viktigst i fremtiden?

- a. Hvorfor er de viktige?

18. Kan du fortelle meg litt om hvordan et skap selges?

- a. Fortell meg litt om forhandlingen med kunden din?

19. Fortell meg litt om forhandlingen med Grande?

- i. Er forhandlingen ulik med andre leverandører?
- ii. Føler du at du har gode avtaler med Grande?
- iii. Handler forhandlingene om margin eller pris?

## Appendix 3 – First interview

### Interview Torbjørn Hjelden – Daglig leder Grande

1. Kan du fortelle litt om din rolle i Grande?
  - a. Hvor lenge har du jobbet i Grande?
2. Hva produserer Grande?
  - a. Hva slags type møbler, produktkategorier
3. Hvordan produserer Grande?
  - a. Hva kjøpes inn fra eksterne aktører og hva lages i bedriften?

### Grande Trevare

4. Når ble Grande delt inn i en salgsavdeling (interiør) og en produksjonsavdeling (fabrikker)?
5. Og hvorfor ble det gjort?
6. Har Grande en klar strategi? Har Grande en kostnads

### Marked og konkurranse

7. Hva slags marked operer Grande i?
  - a. Offentlig, privat, kombinasjon?
8. Hvordan ser du på konkurranse det er i dette markedet?
9. Hvilke er de største konkurrentene til Grande?
10. Hva gjør konkurrentene til Grande?
  - a. Produserer de i Norge? Eller utlandet?
11. Vet du om andre muligheter i dette markedet?

### Kunder

12. Hva slags kunder har Grande?
13. Hvor er kundene til Grande geografisk konsentrert?
  - a. De største kundene
14. Hvorfor tror du kundene velger Grande?
  - a. Hvilke kriterier er det viktigste for kunden? Er det pris, kvalitet, pålitelighet? Osv.
15. Hva slags verdier skaper Grande?
  - a. Med verdier så mener jeg hva tror du kunden er villig til å betale for.
  - b. Vet du hvilke av disse verdiene som er de viktigste for kunden?

### Fortid

16. Hvis vi ser litt tilbake så har dere operert i andre marked før, type skipsinnredning, hotell osv. Hvorfor operer dere ikke i de markedene nå?
17. Ser du muligheten for å gå inn andre markeder?

### Fremtid

18. Hvilke utfordringer står Grande ovenfor i dag?
19. Hva slags ambisjoner har Grande?
  - a. Har Grande noe ambisjoner for å vokse i andre marked?



## Project 16 - Global sourcing – what to buy and what to make?

# GRANDE.

### Value Chain Development for a company in the furniture industry

In its most basic form, a value-added chain is the process by which technology is combined with material and labor inputs, and then processed inputs are assembled, marketed, and distributed. A single firm may consist of only one link in this process, or it may be extensively vertically integrated. A key issue is to decide which activities and technologies a firm keeps in-house and which should be outsourced to other firms, and where the various activities should be located.

Grande, a Norwegian owned company, designs, produces and delivers furniture. Their main customers are public owned institutions such as schools and nurseries (preschool). Grande is looking for master students in logistics to help them reconsider their positioning strategy in the value chain, ultimately to decide if certain activities should rather be outsourced.

The furniture industry is a highly competitive sector. The various competitive forces are different in the different industry segments, but within some segments, like the plate furniture industry, the competitive intensity is high which also reflects in pressure on prices and margins. At the same time, there are significant difference between the various players in the value chain in terms of who produces values (value creation) and who reaps the benefits (value capture).

Due to company specific elements the candidates should master Norwegian language.

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