Growth Through Green Innovations

- A Case Study of Cascades Djupafors

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ABSTRACT

The premise of this thesis is the need for research regarding the relation between social and natural values and the competitive advantage of a firm. The overall purpose of this thesis is to identify, describe and analyze how a firm can achieve competitive advantage from a transformation of social and natural values. In order to reach the purpose of this thesis a case study of Cascades Djupafors has been carried out which entailed personal interviews with a selection of the firm’s customers.

The theoretical framework involves a description of the creation of a sustainable business, process for creating societal advantage, the transformation of societal advantage to competitive advantage as well as an elaboration of the transformation process. The empirical study deals with the sustainable approach of Cascades Djupafors, their quest for a sustained business, their process from sustainability to competitiveness and an elaboration of Cascades Djupafors’ innovation developments.

In the analysis the theoretical framework is related to the results of the empirical study. It is discussed and analysed how Cascades Djupafors can create social and natural values as well as economic values which is continued by a discussion regarding the creation of a sustainable business. In addition, the organizational learning process at Cascades Djupafors is elaborated with focus on capability development.

It is concluded that a firm can transform social and natural values to competitive advantage by developing green capabilities to perform CSR activities that the customers value and thereby gain legitimacy. This can lead to a positive reputation which is linked to competitive advantage through the source of competitive advantage, i.e. green innovations. The competitive advantage allows a firm to set a premium price or increase its amount of sales which offers a possibility for increased financial outcome. At last, recommendations for further research within this field are presented together with specific managerial implications for Cascades Djupafors.

Keywords: social and natural values, CSR, green innovations, competitive advantage, resources and capabilities, societal advantage, legitimacy, organizational learning
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1 INTRODUCTION

In the first chapter we initially introduce the topic of this thesis. The research problem is discussed and further formulated through a main research question and four sub questions. The purpose of this thesis is presented which is followed by a presentation of our case company, Cascades Djupafors. The chapter is finalized with an account for the delimitations that has been used and an outline of the remaining thesis.

The premise of this thesis is the need for research regarding the relation between social and natural values and the competitive advantage of a firm. Social and natural values are described by Jansson (2007) as values that a firm can create for its customers through adopting corporate social responsibility (CSR) practises. There is a contradiction in previous research whether the relationship between CSR and financial outcome of a firm is positive, negative or absent. Husted and Allen (2007) call for further research of how firms can integrate CSR into their internal processes and corporate behaviour in order to develop and create resources and capabilities that leads to competitive advantage and superior financial outcome for a firm. The authors find that if firms do not integrate CSR into their business processes it will most likely remain a forced, often uncomfortable, appendix in order to avoid potential public relations disasters. Moreover, the authors describe that that there is almost no case-based research that explores how CSR should be managed in order to lead to competitive advantage. Furthermore, it is emphasized by Chen et al. (2006) that prior their study there was no studies focusing on the influence from green product and process innovation on corporate competitive advantage.

It is emphasized by several authors, for instance Chen et al. (2006), Ambec and Lanoie (2008), Vilanova et al. (2009) and Bonini et al. (2009) that an increasing number of firms integrate CSR activities into their business performance and commit to responsible business practises. According to Jansson (2007) there are possibilities for a firm to increase its competitive advantage by adopting CSR practises. A firm can gain legitimacy by offering stakeholders social and natural values that can lead to a positive reputation and thus create competitive advantage where a premium price can be set or sales can be increased. Chen et al. (2006) and Nidumolu et al. (2009) also consider the opportunities to increase a firm’s competitive advantage and manage growth from engaging in CSR activities. The authors emphasize that a firm can gain competitive advantage when it acts proactive and integrates
environmental and sustainability objectives and routines in its overall strategy and operations, i.e. the development of green innovative products, technologies and processes has a potential to increase financial outcome of a firm.

1.1 Research problem

As mentioned, there is a contradiction in previous research regarding whether adoption of CSR practices can be linked to the competitive advantage and the financial outcome of a firm, authors within this field either present a positive, negative or absent relationship. However, we find that the contradictive disagreement arises from several problems which will be further elaborated below.

Firstly, it is described by several authors, e.g. Bonini et al. (2009), Husted and de Jesus Salazar (2006), Garcia-Castro et al. (2010), Wood and Jones (1995), Waddock and Graves (1997) and Husted and Allen (2007), that extensive measurement problems are the source of the contradictive disagreement in previous research. Waddock and Graves (1997) and Garcia-Castro et al. (2010) mention that there is a lack of consistent and reliable measurement instruments to evaluate social performances which results in that it is hard to justify CSR activities in terms of financial impacts. For instance, it is complex to separate the financial impact deriving from sustainability activities from the financial impacts originating from other brand aspects. Husted and Allen (2007) account that there are too many variables influencing the financial performance of a firm and thereby it is difficult to isolate the impacts deriving from CSR. McWilliams and Siegel (2000) stress that the measurement model is not properly specified, e.g. some researchers do not include the additional costs of research and development that arises from CSR activities which result in that they will get a positive outcome that, according to the authors, is incorrect. Garcia-Castro et al. (2010) identify that although the measurement problems associated with CSR is highly observed and extensive research has been carried out to solve the problem a unified measurement system is far from well established within the literature. Thereby, it is impossible to establish a valid cause and effect relationship between CSR and financial performance. Secondly, Garcia-Castro et al. (2010) emphasize that the outcome from CSR activities are based on variables that are hard to observe, such as reputation, management style, managers’ values, customers’ preferences, ethical attitudes, policies and strategies. This is partly the basis for the contradictive disagreement in previous research since all these variables are, as mentioned, hard to observe.
since they are founded on customer apprehensions. Furthermore, Hillman and Keim (2001) emphasize that some previous studies are based on accounting measures. This way of measuring a firm’s performance is perceived as invalid since they do not capture the hard to observe variables, i.e. intangible values such as reputation and brand aspects. With accounting methods it is not possible to measure the values a firm creates for stakeholders rather they are more suitable when measuring tangible assets.

Lastly, it is emphasized by Garcia-Castro et al. (2010) that numerous of previous studies select their data sources from sustainability indexes, such as the Kinder, Lydenberg, Domini (KLD) index which rates firms in relation to their social performance. The authors describe that the results from studies based on the KLD index are unreliable since the firms that are top rated have in some cases self-selected themselves. Hillman and Keim (2001) argue that the rating in the KLD index is based upon information provided by the firm as well as information from the business press which also indicates that the firms can influence the rating score to some extent. Wood and Jones (1995) also point out the unreliability of research based on indexes, such as KLD and the Fortune magazine’s “most admired firms” index. It is described that these rankings are based on executives own assessments of theirs and others performances. Thus, these indexes are not useful for measuring social performance from a stakeholder perspective rather they reflect the corporate reputation from the managers own perspective. The studies based on these types of indexes often indicate a positive relationship between CSR and financial outcome of a firm, but since the nature of the indexes is unreliable these studies further nurture the ambiguous result and disagreement in previous research. Thus, there is a need for further research and we aim to bridge the current research gap and contribute with novel findings to increase the knowledge about the relationship between social and natural values and competitive advantage.

1.2 Research Questions

From the discussion of the research problem we have formulated a main question which we aim to solve with this thesis:

**MAIN RESEARCH QUESTION**

How can a firm transform social and natural values to competitive advantage?
This thesis is founded on the above main research question since we distinguish that there is a need for further research regarding the transformation process, i.e. whether the relationship between social and natural values and the competitive advantage of a firm is positive, negative or absent. As a result, we aim to study how a firm can increase its profit by transforming social and natural values to competitive advantage and we find the above mentioned main research question vital and foremost important to answer in order to fulfil the purpose of this thesis. In order to facilitate our solution to the main research question we have indentified and formulated four sub questions:

**FIRST SUB QUESTION**

How can a firm create social and natural values for their customers?

With the first sub question we aim to investigate how a firm can create social and natural values for their customers by performing internal and external activities. We perceive that this question will contribute to the solution of the main research question since it is fundamental to identify how social and natural values are created in order to understand the transformation process as a whole.

**SECOND SUB QUESTION**

What factors influences how customers value social and natural values created by a firm?

Through the second sub question we aim to establish which factors that influences how a firm’s customers value social and natural values. Our interpretation is that this discussion is relevant in order to distinguish the underlying factors that influence how customers perceive social and natural values and in order to make use of the first sub question, how a firm can create these values, the second sub question is essential.
The purpose of the *third sub question* is to describe and explain how a firm can create sustainable competitive advantage and thus achieve superior profit in relation to its competitors. Our perception is that an understanding of the creation of competitive advantage is essential in order to provide a solution to the main research question.

The *fourth sub question* aims to evaluate how a firm can adapt its activities in accordance to customer’s preferences for social and natural values in order to stay competitive. To connect the first and the second sub questions to each other we find this sub question central in this thesis. Consequently, we perceive that all the sub questions outlined above are fundamental in order to enable us to answer the main research question of this thesis since they will contribute with further insight and understanding for the research problem.

1.3 Purpose

The main purpose of this thesis is to identify how a firm can transform social and natural values to competitive advantage. In order to reach this purpose we will:

- **Describe** the concept of social and natural values as well as competitive advantage in order to create an increased understanding for the phenomena
- **Analyse** how social and natural values can be transformed to competitive advantage for a firm
- **Provide specific recommendations** to our case company Cascades Djupafor concerning how to manage a potential transformation of social and natural values to competitive advantage.
1.4 Case Company: Cascades Djupafors

In order to study how a firm can transform social and natural values to competitive advantage a medium sized firm, namely Cascades Djupafors will be used as a case company. According to Hägerstrand (26-11-2009) Cascades Djupafors is a board mill located in Ronneby in southeast Sweden. The firm produces carton board mainly used for industrial and commercial packaging boxboards. Cascades Djupafors was founded in year 1868 and was in year 1989 acquiesced by the Canadian firm Cascades Inc. that today have 120 production units all over the world. In order to gain logistic and technical benefits and to more efficiently serve the European market Cascades Djupafors together with the Italian board mill Reno De Medici established the European production and sales company Careo in year 2008. Cascades Djupafors serve the entire European market but the Scandinavian market is perceived as their home market. Cascades Djupafors’ customers are printing companies that convert the product and then sell it to their customers which mainly are firms within the food processing industry that require packages. In order to avoid misapprehensions we here clarify that even though we, in this thesis, conduct interviews with the customers’ of Cascades Djupafors’ customers they will hereinafter be termed merely Cascades Djupafors’ customers.

Hägerstrand (26-11-2009) stresses that Cascades Djupafors has during the last five years developed their environmental profile to a large extent, mainly by reducing their carbon dioxide emissions, optimizing the use of energy, implement water constrictions and developing several innovative environmental friendly products. Currently, Cascades Djupafors is investing in and developing a new type of environmental friendly barrier for carton board. The uniqueness of the new barrier is that the polyethylene which is the most commonly used component in barriers today will be replaced by an environmental friendly chemical composition. As a result, Cascades Djupafors’ competitiveness is based on offering perceived customer value that is different from their competitors, i.e. an environmental friendly profile. Thus, we find that Cascades Djupafors is a suitable case company for studying how a firm can transform social and natural values to competitive advantage and by interviewing Cascades Djupafors’ customers we aim to gain insight in their perceptions of social and natural values created by Cascades Djupafors.
1.5 Delimitations
We have, in this thesis, chosen to practise the delimitation of excluding the constituents of the CSR concept that deals with philanthropy and charitable giving when discussing CSR and financial outcome or competitive advantage. This decision is founded on that we find these constituents irrelevant for what we aim to study in this thesis. Further, we have applied a delimitation which implies that we will only involve one stakeholder of a firm, namely the customers. In the theoretical framework theories that are applicable on all stakeholders are included. For instance, when discussing legitimacy we are aware of that a firm can achieve legitimacy with more stakeholders than the customers, e.g. the government, media, shareholders, local citizens and employees, but only legitimacy with customers will be empirically applied and analyzed.

In this thesis we have also chosen to practise an empirical delimitation since we base our empirical study solitary on Cascades Djupafors’ Swedish customers and thus foreign firms have been excluded from the study. The delimitation is founded on that we are striving to conduct personal interviews with Cascades Djupafors’ customers due to the extensive advantages with this technique and thereby only Swedish based firms has been included due to the geographical convenience. Additionally, we have only included a selection of Cascades Djupafors’ customers within the food processing industry. The optimal condition is obviously to include all customers of the firm in various industries in order to get fully comparable results but within the extent of a master thesis this is not implementable.

1.6 Outline of the Thesis
The forthcoming outline of this thesis (figure 1) is initiated with an account for all the methodological applications that have been used in this thesis. Thereafter the theoretical framework is presented which is followed by the empirical chapter where the empirical findings are described, using a similar structure as the theoretical framework. In the next chapter the theoretical framework is related to the results of the empirical study in an analysis. After that we give account for the conclusions of this thesis and provide an answer for the main research question. In the final chapter the limitations for this study is presented and we provide recommendations for further research within this field. Lastly, we present specific managerial implications for the case company Cascades Djupafors.
MAIN QUESTION
How can a firm transform social and natural values to competitive advantage?

THEORETICAL FRAMEWORK
Sustainable business
Process for creating societal advantage
Transformation of societal advantage to competitive advantage
Elaboration of the transformation process

EMPIRICAL FINDINGS
Cascades Djupafors’ sustainable approach
Cascades Djupafors’ quest for a sustainable business
Cascades Djupafors’ process from sustainability to competitiveness
Elaboration of Cascades Djupafors’ innovation developments

ANALYSIS

CONCLUSIONS

RECOMMENDATIONS

Figure 1: Outline of the thesis
2 METHODOLOGY

In the following chapter the methodological applications that have been used in this thesis will be presented. We give account for the abductive research approach, the explanatory scientific approach, the qualitative research method, the conducted literature review, the case study as a research strategy, the case selection process and the empirical data collection. All of Cascades Djupafors’ customers that were interviewed are presented and lastly we discuss the quality of this research in terms of validity and reliability.

2.1 Abductive Research Approach

According to Dubois and Gadde (2002) the link between theory and practise can be described by three main research approaches: inductive, deductive and abductive. In this thesis we use an abductive research approach, however, the deductive research approach has functioned as a starting point because we first became aware of the research problem of this thesis in the literature. It is described by Yin (2009) that by having a deductive approach the research is founded on existing theories and thus the theoretical framework functions as guidance when determining what data to collect and how to analyze it. Merriam (2009) emphasizes that when using a deductive approach the research is based on a theoretical framework whence the researcher deduct or derive one or several hypothesis in order to confirm, dismiss or revise the theory. As mentioned, as we initially became aware of the problem with the transformation of natural and social values in the literature our starting point of this thesis is naturally a deductive approach where we base and guide the forthcoming data collection on existing theories.

Alvesson and Sköldberg (2008) find that the deductive approach can result in that an ever valid truth is determined rather than explained which creates an outcome where underlying factors can be neglected, which is described as the main weakness of this approach. Considering the main weakness of the deductive approach, we find that in order to establish how social and natural values can be transformed to competitive advantage it is essential to continuously move back and forth between the theoretical framework and the empirical findings since it offers us a wider understanding for the phenomenon. Dubois and Gadde (2002) describe the abductive research approach as systematic combining, which is characterized by continuous movement between the theoretical framework and the empirical findings. Hence the theories are sequentially refined as they are confronted with the empirical
reality; as a result both parts evolve simultaneously which is especially suitable for generating new theory. As mentioned, when having a deductive approach research is conducted to confront the abstract theories with the empirical reality, but by having an abductive approach this comparison is continuous throughout the entire process which offers the researcher opportunities to gain increased understanding. Further, we base the usage of an abductive approach on that Dubois and Gadde (2002) outline that continuous movement between the theoretical framework and the empirical reality is especially suitable when conducting case studies since it contributes to the in-depth understanding and insights of both theoretical and an empirical aspects of a phenomenon that can be gained by case studies.

2.2 Explanatory Scientific Approach

It is explained by Scholz and Tietje (2002) that there are three main scientific approaches that can be used to conduct research: exploratory, descriptive and explanatory. In this thesis we find it most suitable to use an explanatory scientific approach, however, to apply this approach we need to go through stages of the descriptive scientific approach. The explanatory approach is chosen due to that Scholz and Tietje (2002) describe that this approach is used for theory testing in qualitative methods and to explain the relationship between cause and effect, for instance to understand under which circumstances x causes the effect y. In the analytical phase of this thesis the explanatory approach will be used in order to link the empirical evidence to the theoretical framework and thus explain the outcome of the study and to determine whether and how social and natural values can be transformed into competitive advantage for a firm. Furthermore, Scholz and Tietje (2002) emphasize that the descriptive approach has its starting point in the theoretical framework where events are described by existing theories; this guides the researcher in the empirical data collection and description of the specific research problem. As mentioned, to come to the analytical stage where an explanatory approach can be applied we find it required to go through stages of descriptive approach. The descriptive approach will be apparent in the initial phases of this thesis, when the research problem as well as when the theoretical framework and empirical findings are described.

2.3 Qualitative Research Method

Merriam (2009) describes two research methods, qualitative and quantitative, that are used for understanding, designing and conducting research studies. In this thesis we apply the
qualitative research method since we find it most suitable in order to achieve the purpose of this thesis. It is explained by Merriam (2009) that the qualitative research method focuses on creating an understanding for the context as a whole and how the diverse parts functions together as one context. This understanding is gained by studying how individuals interpret and evaluate their experiences in situations that are parts of a specific context. Interviews, observation and analysis are described as useful tools for gathering data when using the qualitative research method since these tools offers an increased understanding for underlying data and hidden aspects that are critical in order to understand the entire context. In this thesis we aim to determine whether and how a firm can transform social and natural values to competitive advantage which requires a wider understanding for the whole context of the concepts CSR and competitive advantage of a firm. We find that the qualitative method offers this understanding and thereby it is the most suitable method for us to use in this thesis.

Merriam (2009) emphasizes that the main weakness of the qualitative research method is that the empirical data collected and analyzed can be influenced or limited by the researchers or interviewees subjective views and interpretations and thereby the reliability of the study can be limited. Denscombe (2009) also states that the reliability of a qualitative study is limited and argues that the researcher must clearly give an account for all selections and underlying reasoning that the study is based upon. We are aware of the limitations with the qualitative research method and when collecting the empirical data we seek to avoid being influenced by subjective views and instead we aim to present the data as objectively as possible. However, we find that this method is the foremost suitable in order to achieve the purpose of this thesis.

2.4 Literature Review
It is stated by Merriam (2009) that a literature review of the research topic facilitates the shaping of the research problem and decisions relating to the study for prospect researchers that have limited knowledge about a specific area. In the initial phase of this thesis a literature review was conducted in order to increase the validity of this study and since we had insufficient insight and knowledge about the specific research field we found a need to develop our knowledge base. Merriam (2009) describes that to conduct a literature review is to make an overview of the topic in order to identify major studies, theories and issues that can contribute to the researcher’s knowledge base. The first step is to check bibliographies, indexes and abstracts that refer to specific aspects of the topic. The second step is to select
which resources that should be obtained in full length. The selection can be based on criteria regarding whether the author of the source is an authority in the topic, year of publication, relevance of the content and quality of the source.

We systematically reviewed CSR related publications from the period 2005-2010 mostly in A-rated journals. Academy of Management Perspectives, Academy of Management Review, California Management Review, Harvard Business Review, Journal of Business Ethics, Journal of Corporate Citizenship, McKinsey Quarterly, MIT Sloan Management Review, Organization Science, Scandinavian Journal of Management and Strategic Management Journal was reviewed. CSR and profitability was key words that were used to identify publications of interest which resulted in a first draft of around 60 articles that was obtained in full length. We found that articles based on empirical evidence mostly corresponded to our topic and therefore selected about 30 articles that met that criterion. In addition, some more articles from authors that can be seen as the authority within the topic was identified since they repeatedly was situated in the obtained articles.

2.5 Case Study as Research Strategy

Yin (2009) presents five major strategies for conducting research: experiments, surveys, archival analyses, histories and case studies. In this thesis we have chosen to apply case study as research strategy. According to Yin (2009) a case study is preferably based on how and why research questions with an explanatory focus in order to examine contemporary events where the researched behaviours can neither be manipulated nor controlled. The possibility to directly observe events and to interview individuals involved in an event is described as the main strengths relating to the source of evidence in a case study. Furthermore, Merriam (2009) argues that a case study strategy offers a wider understanding for the researched phenomenon since it is studied in its real-life context. Yin (2009) states that the case study method is relevant when studying a complex phenomenon since an extensive description and analysis is needed. In this thesis we focus on research questions of explanatory art and mainly involve the questions of how and since we are studying a complex phenomenon in its real life context we find that the above arguments of Yin (2009) and Merriam (2009) reinforce our decision to use a case study when studying how a firm can transform social and natural values to competitive advantage.
Merriam (2009) emphasizes the importance to consider the weaknesses related to the chosen research strategy since all strategies involve certain questionable aspects. Yin (2009) discusses that the outcome of a case study offers a weak basis for scientific generalization since only one or a small number of cases are studied. In this thesis we do not aim to achieve statistic generalizable results since we are aware of that studying one case offers a weak basis for scientific generalization. Rather, we aim to reach conclusions that to some extent are valid as an expansion and development of prior empirical findings. We base our theoretical framework on articles and books that have empirical findings supporting their conclusions. Also, we base the theoretical framework on articles and books that base their findings on several cases in order to be able to speculate that our findings in this thesis can, to some extent, be analytic generally valid (this is further discussed in 2.9.3).

Further, Yin (2009) describes that case studies often are criticized due to the lack of rigidity in the research depending on that the researcher has been disordered, has ambiguous or subjective views influencing the study or that there is a lack of systematic procedures. In order to maintain the credibility of this thesis and avoid subjective opinions we aim to explicitly express and support our objectives and statements. Moreover, Yin (2009) mentions that case studies usually are time consuming to conduct and the outcome is often massive reports that are difficult to read but due to present existing technologies and methods for conducting reports we interpret that this will not be of major disadvantage or an explicit weakness in this thesis. Nevertheless, Merriam (2009) emphasizes that when studying a complex phenomenon the strengths of using a case study as a research strategy is superior the weaknesses and limitations connected to the method since in comparison to other research strategies this is the one that in depth can explain a complex phenomenon. Even when taking the above mentioned limitations into account, we find that the case study method is the foremost suitable for this thesis due to that the nature of the phenomenon we are studying, how natural and social values can be transformed to competitive advantage, is complex and consist of multiple variables that are crucial for understanding the phenomenon.

2.5.1 Case Study Design
According to Yin (2009) there are four types of case study designs (figure 2). In order to establish which type to apply the researcher firstly needs to determine whether a single or multiple cases should be studied. Secondly, the researcher needs to consider if the analysis is
holistic or embedded. In order to address our research questions in this thesis and test the existing theory we use a single case study design with a holistic unit of analysis (type 1).

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Figure 2: Basic types of designs for case studies (Yin, 2009:46)

It is expressed by Yin (2009) that a single case study design is appropriate when the case represent the critical case in testing a theory and thus can be used to confirm, challenge or extend the existing theory. A single case can represent significant contributions to knowledge and theory building and findings of alternative set of explanations can guide and redirect future research within the field. A holistic design is beneficial to use when the underlying theory of the case study is of holistic nature where the aim is to examine the global nature of an organization. Our expectation is that a holistic single case study will extend the existing literature and expectantly offer redirection for further research. In our selected case of Cascades Djupafors we will analyze the firm as a whole and evaluate customers’ perception of the firm and their preferences for products specifications.

Yin (2009) points out that single case study design might be problematic if the researched case not turns out to fulfil the predefined criteria. A stated dilemma with a holistic case study design is that operational details of the specific phenomenon can be overseen by the researcher which can result in that the entire case study is conducted on an exaggerated abstract level without any clear measurements or data. When applying the selected case study design we are aware of the stated implications but apprehend that the opportunities to extend the existing literature leverage the plausible negative effects.
2.6 Case Selection Process

Merriam (2009) mentions that in order to collect relevant empirical data the researcher needs to consider where, when, whom and what to observe which is called the case selection process. In a case study this process includes the selection of research site, time and people. The case selection process constitutes by a number of options that needs to be evaluated in order to identify the appropriate case for the study. As mentioned, we have chosen Cascades Djupafors as the case to study and following we will give account for the case selection process of this thesis.

According to Merriam (2009) probability and non-probability are the two basic types of sampling, the former is foremost suitable in quantitative research and is not justifiable for qualitative research. Non-probability sampling methods are logical to use when the collected data will be used to solve qualitative problems and to discover what occurs, why it occurs and the relationships between occurrences. In this thesis we use the non-probability sampling to select the case since we conduct a qualitative study with the aim to study a specific relation. Further, Merriam (2009) describes that if the researcher aims to discover, understand and gain insight from the case the most appropriate and most common form of non-probability sampling is called purposeful sampling. Thus an information-rich case from where the most can be learned about the main research problem must be selected. It is essential to determine which selection criteria that will be used to choose the right object to study and the criteria have to reflect the purpose of the study. There are numerous types of purposeful sampling that can be used after the criteria is formulated but two of the most common types are theoretical and convenience sampling which is used in this thesis. Merriam (2009) describes that by using theoretical sampling the researcher initially chooses a case for its obvious relevance to the research problem. The use of Cascades Djupafors as a case company in this thesis is foremost based on that the firm has during the latest five years developed their environmental profile to a large extent which is unusual within their industry. Thus, we find Cascades Djupafors as suitable in order to identify how a firm can transform social and natural values to competitive advantage. Convenience sampling, as the name implies, entail a case that is

![Figure 3: Case selection process in this thesis](image-url)
selected since it is of convenience for the researcher based on e.g. location and availability of interviewees. Cascades Djupafors has partly been selected because of its convenient location in southeast Sweden which is the same area as the Linnaeus University from where this thesis is conducted. It is also convenient for us to use Cascades Djupafors as a case company since we have, in previous courses at Linnaeus University, established a relation with the marketing and sales manager of the firm.

2.7 Empirical Data Collection

According to Yin (2009) there are six main sources of evidence that are commonly used for case studies: documentations, archival records, interviews, direct observations, participant observations and physical artefacts. The different sources are described as complementary to each other and thus a reliable case study should include several sources of evidence. Merriam (2009) also stresses the importance of using several sources of data in order to increase the understanding of a case. In this thesis interviews and observations have been used as main sources of evidence which will be further discussed shortly. Merriam (2009) presents two main categories for dividing the sources of evidence in the empirical data collection: primary and secondary. However, in this thesis we have only used primary data since we find it most suitable to use since we aim to collect empirical data that are specifically connected to our research questions.

2.7.1 Interviews

The main method for collecting primary data in a case study is described by Merriam (2009) as interviews. In this thesis primary data have been gathered through qualitative interviews conducted with Susanne Hägerstrand, the marketing and sales manager at Cascades Djupafors. As a complement, interviews have also been conducted with the manager of Cascades Djupafors, Björn Sandberg. We have also carried out eight personal interviews with a selection of Cascades Djupafors’ existing and potential customers in the food processing industry (as described in the introduction, when discussing Cascades Djupafors’ customers it is the customers of their customers we are referring to). The selection of interviewees at Cascades Djupafors as well as the selection of which of Cascades Djupafors’ customers to include and whom within the firms to interview will be discussed shortly in the sections 2.7.1.1 and 2.7.1.2.
According to Yin (2009) interviews are characterised as the foremost suitable method for gathering data in a case study since the data collection can be focused directly on the topic and information connected to the research problem can be gathered effectively. Further, interviews are described as well suited for case studies in the sense that detailed information and insight in real-life events can be gathered. Merriam (2009) argues that interviews provide the most useful information and sometimes it is the only way to get the desired data. This source of evidence is also described as especially suitable when feelings, thoughts, intensions and preferences are studied. Based on Yin’s (2009) and Merriam’s (2009) argument above we have decided to use interviews as the main source of evidence in this thesis since we find that it is the most suitable method for collecting empirical data needed because the data is to a large extent built upon thoughts, values and preferences.

According to Merriam (2009) interviews can be conducted in several ways mainly depending on the amount of structure required and three main types are presented: highly structured, semistructured and unstructured interviews. As will be outlined in detail below, we have chosen to use semistructured interviews. Merriam (2009) expresses that semistructured interviews is the most frequent used interview method within qualitative research since it enable open-ended questions where the interviewee can define the phenomenon with its own words and thereby the researcher can gain a wider understanding for the problem studied. It is illustrated by Kvale (2009) that semistructured interviews are characterized by open and flexible questions where the researcher can control the main topic of the discussion but at the same time attendant questions can be asked and interesting sub issues can be followed up. We decided to record all interviews that we conducted with Cascades Djupafors’ customers and then transcribe them in order to assure that the reproduction of the interviews were correct. It was visual that the interviewees were not critical towards the recording and in order to avoid restrictive answers from the interviewees we informed them about how the material would be used and processed.

2.7.1.1 Interviews with Cascades Djupafors

As mentioned, in this thesis we have chosen to interview Hägerstrand, the marketing and sales manager of Cascades Djupafors. The initial contact with Hägerstrand was established already before the start this thesis when we collaborated with Cascades Djupafors during a previous course at the Linnaeus University. During that course we conducted the first personal
semistructured interview with Hägerstrand on the 26th of November 2009 which partly entailed overall background information about the firm and their sustainable and environmental work, this information has also been used for this thesis. The information from this interview has offered us a deeper insight in the firm which has facilitated further interviews with the firm. Furthermore, on the 8th of March 2010 we had a personal meeting with Hägerstrand in order to further discuss the topic of this thesis and to set up common goals and interpretations. Another personal semistructured interview with Hägerstrand was conducted on the 30th of March 2010. In addition, as complement to the personal interviews a number of semistructured telephone interviews has been conducted with Hägerstrand, more precisely on the 18th of December 2009, on the 12th of January 2010, on the 10th of May 2010 and on the 21st of May 2010. The semistructured interviews with Hägerstrand was more designed towards an unstructured than structured way, because we wanted to give Hägerstrand the possibility to more freely express herself under the interview. Hägerstrand was chosen as interviewee due to the fact that she, as the marketing and sales manager, has extensive knowledge about Cascades Djupafors relations with their customers, marketing activities and she also has been involved in and has experience of their environmental and sustainability work.

As mentioned earlier, we have also chosen to interview Sandberg, the manager of Cascades Djupafors. We conducted a personal semistructured interview with Sandberg on the 30th of March 2010 and additionally we conducted a semistructured telephone interview with him on the 10th of May 2010. The semistructured interviews with Sandberg were, on the same premises as the interviews with Hägerstrand, designed towards a more unstructured than structured way. Sandberg was chosen due to his engagement for and involvement in Cascades Djupafors’ environmental and sustainability work. Sandberg is also the project manager of Cascades Djupafors’ new product development of a carton board with an environmental friendly barrier which further reinforced our selection to interview him.

2.7.1.2 Interviews with the Customers of Cascades Djupafors

As already mentioned, we have chosen to conduct eight semistructured personal interviews with a selection of Cascades Djupafors’ existing and potential customers in the food processing industry, including the following firms: Almondy AB, AB Annas Pepparkakor, Delicato AB, Domstein Enghav Sverige AB, Göteborgskex AB, Herrgårdsstoppen AB, Lantmännens and Tingstad AB. The questions in the semistructured interviews are more
designed towards a structured than unstructured character with the aim of providing us with useful information that is needed to study how social and natural values can be transformed to competitive advantage. All these firms were chosen since they use packages made of carton board with a polyethylene barrier for their products and thereby they are potential customers for the new product with an environmental friendly barrier that Cascades Djupafors’ is developing. These interviews gave us an empirical understanding for how green products are valued by Cascades Djupafors’ customers and we aimed to investigate whether they perceive an added value from green products in order to establish if social and natural values can be transformed to competitive advantage for a firm. To facilitate this understanding we focused on Cascades Djupafors’ new product development, namely the green barrier, during the interviews. Also, when focusing on a specific product development it is more likely to manage an establishment of cause-and-effect connections between adoption of CSR practises and competitive advantage of a firm. Further, we decided to interview these firms instead of Cascades Djupafors’ primary customers which are, as mentioned, printing firms that convert the product and then sell it to the firms that we have interviewed. This selection was done due to that the printing companies mainly functions as an intermediary that purchases what has been specified by the firms that we have interviewed. Thus, in order to establish how green products are valued we find it most suitable to interview the customers of Cascades Djupafors’ customers since they are the decision makers in a purchasing situation (the firms we decided to include and the interviewees will be further described in the section 2.8).

2.7.2 Observations
Additionally, observations have been used as a source of evidence in this thesis in order to deepen the information gathered from the interviews. It is described by Yin (2009) that since a case study takes place in the natural setting of the case this offers an opportunity to conduct observations of the settings which is useful in order to gather additional information about a topic. To attend a meeting or observe work in a factory are described as two ways to conduct observations and the author stress that in order to increase the validity of the study it should be more than a single observer making the observation. For this thesis we conducted two observations. First, on the 26th of November 2009 we visited the factory of Cascades Djupafors and observed the environmental improvements carried out in the production. This observation gave us deeper understanding of what the firm had carried out within the environmental field and how it has affected their production. Second, we attended a seminar with focus on sustainability on the 28th of April 2010 that was arranged by Cascades
Djupafors in collaboration with the Ronneby municipality and the Blekinge Institute of Technology. Observing this seminar gave us a wider understanding for how Cascades Djupafors communicate their environmental friendly profile and how it is apprehended by different actors within the industry.

2.8 Presentation of the Customers of Cascades Djupafors

As mentioned, we have chosen to conduct eight personal interviews with a selection of Cascades Djupafors’ existing and potential customers in the food processing industry, including the following firms: Almondy AB, AB Annas Pepparkakor, Delicato AB, Domstein Enghav Sverige AB, Göteborgskex AB, Herrgårdstoppen AB, Lantmännen and Tingstad AB. The interviewee at each firm was chosen on the premise that he or she was the individual at the firm that had knowledge about the firm’s purchasing decisions concerning packages and what the firm valued in a purchasing situation. Further, we reassured that all the interviewees also had knowledge about the practical environmental and sustainability work at their firms as well as the fundamental values and norms. A short presentation of these firms will be followed, we will also give account for whom within the firm that we have interviewed.

2.8.1 Almondy AB

Almondy AB was, according to Cramér (12-04-2010) established year 1982 in Torslanda, Sweden. The firm bakes and sells frozen cakes to retailers and large-scale catering establishments and over 80% of the total sales is exported to customers in Scandinavia, Europe, America and Asia. The firm’s turnover is about 400 million SEK per year. A personal interview was conducted with Glenn Cramér, Production Director at Almondy AB, on the 12th of April, 2010.

2.8.2 AB Annas Pepparkakor

According to Martinsson (07-04-2010) AB Annas Pepparkakor was established in year 1963 in Stockholm, Sweden. The firm mainly produce a seasonal associated cookie, namely ginger thins. Last year, 2009, the firm’s turnover was 170 million SEK and half of the turnover comes from exports. A personal interview was conducted with Per Martinsson, the Purchasing Manager at AB Annas Pepparkakor on the 7th of April, 2010.
2.8.3 Delicato AB
Delicato AB was, according to Vidlund (06-04-2010) established in year 1948 in Stockholm, Sweden. The firm sells confectionary products mainly to retailers, restaurants and large-scale catering establishments in the Scandinavian market. Last year, 2009, the firm’s turnover was 280 million SEK. A personal interview was conducted with Hans Vidlund, the Purchasing Manager at Delicato AB on the 6th of April, 2010.

2.8.4 Domstein Enghav Sverige AB
It is described by Rytterstig (14-04-2010) that Domstein Enghav Sverige AB was established year 1972 in Kungshamn, Sweden. Domstein Enghav is originally a Norwegian firm and thereby their head quarter is located in Oslo, Norway. The firm produces ready cocked fish meals that are sold to retailers and large-scale catering establishments in the Nordic market. The firm’s turnover is about 310 million per year. A personal interview was conducted with Ewa Rytterstig, responsible for Quality Environment and R&D at Domstein Enghav, on the 14th of April, 2010.

2.8.5 Göteborgskex AB
Göteborgskex AB was, according to Nasr (14-04-2010) established in year 1888 in Kungälv, Sweden. The firm produces cookies, crackers and wafers that are mainly sold to retailers in Sweden, Norway, Finland, Germany and America. The firm’s turnover is about 1 billion SEK per year. Personal interviews were conducted with Lena Nasr, the Packaging Developer and Ingemar Olsson, the Purchasing Manager at Göteborgskex AB on the 14th of April, 2010.

2.8.6 Herrgårdstopp AB
It is described by Jonsson (20-04-2010) that Herrgårdstopp AB was established in year 1997 in Strömsnäsbruk, Sweden. The firm mainly produces cream buns that are sold to retailers in the Scandinavian market. The firm’s turnover was last year, 2009, 12 million SEK. A personal interview was conducted with Morgan Jonsson, the Manager of Herrgårdstopp AB, on the 20th of April, 2010.

2.8.7 Lantmännien
Lantmännien was, according to Johansson (07-04-2010), established in the end of 19th century in Sweden. Lantmännien is an economic association that is owned by their members, i.e. Swedish farmers. One part of Lantmännien’s business areas is producing food, e.g. pasta,
bread and chicken that are sold to retailers in Sweden, Norway, Denmark and Germany. Lantmännen’s turnover last year, 2009, was 35 billion SEK whence 15 million SEK was constituted by the food sector. A personal interview was conducted with Martin Johansson, responsible for Sustainable Development at Lantmännen, on the 7th of April 2010.

2.8.8 Tingstad AB
According to Miver (12-04-2010) Tingstad AB was established in year 1958 in Gothenburg, Sweden. The firm purchases packages from various parts of the world and then distributes the packages to restaurants and hotels in Sweden, i.e. the firm thus act as an intermediary. Tingstads turnover is about 1.1 billion per year. A personal interview was conducted with Martin Miver, the Manager Key Account Horeca at Tingstad on the 12th of April 2010.

2.9 Research Quality
Yin (2009) describes that it is essential that the research quality is reliable:

“Because the research design is supposed to represent a logical set of statements, you can also judge the quality of any given design according to certain logical tests”

(Yin 2009:40)

According to Yin (2009) validity and reliability are the central criteria for an evaluation of the research quality within qualitative research. Moreover, Merriam (2009) argues that validity and reliability can be achieved through the conceptualization of the study and by giving attention to in what way the data is collected, analyzed and interpreted and how the findings are presented. Furthermore, the methodological discussions of research quality in this thesis are primary based on the view held by Yin (2009). We have chosen to mainly apply the description from this author since the descriptions of validity vary among different authors, however, Yin (2009) base his view on a deductive approach to research which coincides with the starting point of this thesis and thereby we find this most suitable to use. Where the literature by this author is not sufficient additional sources will be used to make the research quality discussions complete.
2.9.1 Internal Validity

It is mentioned by Yin (2009) that *internal validity* deals with establishing a causal relationship, e.g. to describe why event x leads to event y. Merriam (2009) describes that internal validity concerns how the research findings match the reality and if the findings are plausible based on the collected data. Triangulation can be used in order to reassure the internal validity of research. In qualitative research three types of triangulation are common: multiple methods, multiple sources of data and multiple investigators. In this thesis we use *multiple methods* of data collection since we use both interviews and observations as sources of evidence. This is done in order to increase the possibility to obtain consistent and dependable data as well as data that match the reality as understood by our interviewees. Thus, we check the findings from the interviews with Hägerstrand against observations done in their factory and at the seminar. Furthermore, we use *multiple sources of data* when interviewing both Hägerstrand and Sandberg at Cascades Djupafors and then comparing the results and checking that their different points of views coincide. In this thesis we also use *multiple investigators* since both of the authors of this thesis participated in the empirical data collection. After the empirical study was conducted we discussed the findings and compared our different interpretations in order to assure that our findings were in accordance with the information provided by the interviewees. As a result, by using the concept of triangulation the internal validity of our findings is increased. Furthermore, Merriam (2009) describes that *peer examination* can also be used in order to sustain the internal validity of research which implies that a third person, e.g. a colleague, family member or a committee, reads and comments on the findings. In this thesis we have applied peer examination in the sense that during the conduction of this thesis we have continuously been in contact with our supervisor and he has read through and commented on each part of the thesis. In addition, after finalizing the first three chapters of this thesis we had a seminar where two colleagues read and commented on our thesis. In this sense, we find that the usage of peer examination has increased the internal validity of this thesis.

As mentioned, internal validity concerns the match between research findings and the reality and Merriam (2009) discusses that interpretations of reality is accessed directly through observations and interviews since the researcher is the tool for collecting and analyzing the data, reality is thus closer matched and the internal validity is higher than if another tool for gathering data was involved. In order to decrease our deprivation of capturing an objective reality and to determine the quality of the data we have used various sources and methods in
accordance to the concept of triangulation and peer examination, as described above, to verify that the findings from this thesis is internally valid. Additionally, we use various literatures to support the given theoretical framework. Thus, we consider that although our subjective prejudices can impact this thesis the support for internal validity will leverage the human malfunction. Furthermore, since the interviews conducted with Cascades Djupafors’ customers focus on a specific product development it is more likely to manage an establishment of cause-and-effect connections between adoption of CSR practises and competitive advantage of a firm and thereby the internal validity is increased.

2.9.2 Construct Validity
According to Yin (2009) construct validity implies the identification of correct operational measures for the concepts that are studied, i.e. the constructs are translated to common language. Construct validity thus seeks to identify agreements between the theoretical concepts and the measuring procedure. We aim to present convincingly and accurate findings by using multiple sources of evidence, which has previously been discussed under 2.9.1, chain of evidence and have key informants to review the case study report. Yin (2009) describes that the tactic to increase construct validity by maintaining a chain of evidence concern the process to allow the reader of the study to follow how the evidence has been derived from the research questions to the final conclusions and vice versa. To assure the chain of evidence we constantly refer to the source from where any data is collected and clearly state with whom, where and when we have conducted interviews. Additionally, the interview questions was formulated in a way that does not require the interviewee to be familiar with the theoretical concepts of, for instance, sustainable competitive advantage, social and natural values and CSR. We also gave the interviewees the opportunity to review our empirical findings to assert that we have made the right interpretations of their answers.

Yin (2009) expresses that there is a challenge to ensure construct validity in a case study since the researcher is unable to make objective judgments when collecting the data and does not succeed to develop adequate operational set of measures. Construct validity is foremost related to quantitative studies and therefore a minor problem when writing this qualitative thesis, nevertheless, we had these obstacles in mind and aimed to decrease biases and subjective opinions.
2.9.3 External Validity

Yin (2009) describes that external validity deals with how generalizable the findings of the case study are and this issue is, as mentioned, seen as the main weakness with case studies since the conclusions usually are based on a small number of cases. Merriam (2009) mentions that even though generalization is seen as problematic in case studies the researcher can adopt a number of strategies in order to increase the external validity of the results. To have a rich and thick description of the settings of the study together with detailed information about the findings and the underlying evidence is described as the most common used strategy to increase the degree of analytic generalization in a case study. Another way to increase the external validity of the findings is to strive to have maximum variation in the sample, in other words to seek diversity in the sample and thereby allow a greater range of application for the findings. To increase the external validity of this thesis we focus on providing detailed descriptions of the settings of the study as well as the empirical base for our findings. When selecting whom of Cascades Djupafors’ customers to interview we also strived to find diversity among the firms, for example regarding type of product produced, size and geographic location of the firm in order to maintain the external validity of our findings.

Nevertheless, we are aware of the limited possibility to achieve statistic generalizable results and thus this is not the objective of this thesis. Rather, we aim to reach conclusions that to some extent are valid as an expansion of prior empirical findings and that offer some achievement of analytic generalization. Yin (2009) describes that the researcher of a case study can strive to find results that to some extent are analytic generalizable, i.e. that they can be generalizable to a broader theory. As mentioned, we solitary base our theoretical framework on articles and books that have empirical findings supporting their conclusions which was reassured by the conducted literature review. Besides, we base the theoretical framework on articles and books that base their findings on several cases in order to be able to speculate that our findings in this thesis can, to some extent, be analytic generally valid for a theory expansion.

2.9.4 Reliability

It is expressed by Yin (2009) that the objective with reliability is to reduce the risk of errors and prejudices of a study to ensure that the research findings are replicable, i.e. that the same findings and results will emerge if the study is repeated. Merriam (2009) supports this objective and adds a discussion that triangulation, peer examination and audit trail are
frequent used strategies to ensure reliability. Due to the fact that triangulation and peer examination also increase validity it has been discussed under the section 2.9.1 and only the premises of audit trail will be considered here. Merriam (2009) explains an audit trail as the process of where the researcher in detail describes how the study was conducted and the data analyzed. In order to enhance the reliability of this thesis the relevant audit trail is presented in this chapter of methodology. To assure that the interviews are recounted correctly and to minimize the risk of misgiving facts and loss of details all interviews was recorded and transcribed. Furthermore, the guide that was used during the interviews with Cascades Djupafors’ customers is attached in this thesis to further enhance the reliability. The interview guides from the interviews with Cascades Djupafors are not attached since they, as mentioned, were designed towards a more unstructured way were be mainly had identified different areas of interest. Additionally, the previous discussion of how we use triangulation and peer examination to increase the validity is also valid to ensure the reliability of this study. Merriam (2009) argues that reliability is problematic in qualitative research where the aim is to study how people interpret a phenomenon, since human behaviour is never static the probability that the same results would appear again if the research was repeated is coincidental. However, this discussion does not discredit the results of the study and a consideration for the researcher is therefore to convince outsiders that the results are consistent and dependable on the collected data. We apprehend that within the field that this thesis is founded in the reliability is plausible if the market conditions remain the same, however, we strive to assure that our findings are consistent with the collected data and therefore find that our study can be considered dependable.
3 THEORETICAL FRAMEWORK

In the following chapter the theories that the theoretical framework consists of is presented. The concept of sustainable business is initially described and thereafter a review of the process for creating societal advantage is followed. Thereafter the transformation of societal advantage to competitive advantage is discussed and followed by an elaboration of the transformation process. At last, the chapter is finalized with a theoretical summary.

3.1 Sustainable Business

Jansson (2007) describes that all firms aim to create economic value within the economic sector which is done by creating customer value, i.e. improve quality, decrease costs or reduce time, in a profitable way. But in order to create a sustainable business a firm needs to see beyond the economical aspect and also consider the creation of social and natural values, according to the following formula (figure 4):

\[
\text{SUSTAINABLE BUSINESS} = \text{ECONOMIC VALUE} + \text{SOCIAL VALUE} + \text{NATURAL VALUE}
\]

Figure 4: Formula for creating a sustainable business (Jansson, 2007:83)

A sustainable business not only creates economic value according to Jansson (2007), it also creates a societal advantage since business is conducted in a responsible way so that the living standards of future generations are not compromised. To create social and natural values a firm needs to gain legitimacy from stakeholders which is done by adopting a wider socially responsible behavior when developing their business. Social values are created through being socially responsible which involves taking a wider perspective that goes beyond the production of a firm’s products and that is not business related. Natural values are separated from social values in the sense that these values are concerned with preserving and protecting the natural environment and resources, thus the needs of future generations is concerned. Nevertheless, social and natural values can also contribute to economic value by the creation of more satisfied customers and thus these three types of values are interrelated.
López et al. (2007) argue that in order to create a durable business firms pays increased attention to concepts such as environmental managing, brand reputation, customer loyalty and corporate ethics that are constituents of common CSR activities. Through these concepts, the authors declare that a firm that carries out CSR related activities aim to develop a sustainable business and thus strives to achieve sufficient profit and to satisfy the requests of its stakeholder in various ways, i.e. create value. Bonini et al. (2009) stress that a firm that aspire to create a sustainable business needs to offer values to the stakeholders, at the same time as the stakeholders depends upon the firm to provide critical benefits which creates a relationship that functions as a contract between the firm and the stakeholders.

3.2 Process for Creating Societal Advantage

As mentioned, societal advantage is created via conducting business in a responsible way so that the living standards of future generations are not compromised. Jansson (2007) presents a figure, matching strategy for societal advantage (figure 5), a six stages process that clarify how a firm can achieve societal advantage.

![Figure 5: Matching strategy for societal advantage (Jansson, 2007:150)](image)

Jansson (2007) describes that the process for creating societal advantage starts with the establishment of an appropriate matching strategy. A matching strategy implies that a firm develops a strategy in order to relate the firm’s internal environment, including its resources and capabilities, with its diverse external environment, consisting of various stakeholders, by making them compatible. A matching strategy should be directed towards a firm’s main local
stakeholders who first need to be identified. In order to ensure a long term success the interests of these groups should be integrated in the strategy of a firm. Thus, in order to identify the main stakeholders and the relations between them an evaluation of a firm’s current strategic situation precedes the development of a matching strategy. To gain legitimacy a firm claim towards its stakeholders that their activities and behaviours are socially responsible. If the stakeholders can benefit from these activities and thereby find them valid they justify and approve the activities and thus legitimacy is given to the firm. As a result, the stakeholders give legitimacy to a firm by accepting the activities that is the foundation for the claim for social responsibility, thereby involvement of the stakeholder’s interests in the matching strategy is crucial to claim responsibility. By carrying out socially responsible activities a firm can create social and natural values that the stakeholders can benefit from since it relates to their norms and values. The outcome is that by offering these social and natural values a sustainable business with a societal advantage is developed. The higher the social and natural values are and the better a firm meet the objectives of the stakeholders the higher the societal advantage is. How to claim and justify social responsibility, create stakeholder value and gain legitimacy will be further illustrated below since they are fundamental cornerstones for creating a societal advantage.

3.2.1 How to Claim or Justify Social Responsibility

As earlier described, by creating a societal advantage through gained legitimacy a firm claim towards its stakeholders that their activities and behaviours are socially responsible. If the stakeholders find these activities valid they are justified by the stakeholders and thus legitimacy is given to the firm. However, the challenge is how a firm can manage this and what activities that should be carried out in order to justify social responsibility.

Creating a societal advantage by a socially responsible behaviour can be further elaborated by introducing the concept of CSR as first presented in the introduction chapter. Carroll (1979) describes that the concept of CSR has developed for several decades and already in the 1930s businessmen’s where educated in the new sense of social responsibility. Cetindamar and Husoy (2007) argue that even though CSR has been developed for several decades it is just recently that the concept got a central position within research, businesses, governments and non-governmental organizations. McWilliams and Siegel (2001) express that the essence of the CSR concept is that firms have a wider responsibility that goes beyond their obvious economic interests as a business and thereby they should engage in social and natural
activities. Vilanova et al. (2009) emphasize that the concept of CSR has been approached from different perspectives within research and theory building, for instance CSR has been discussed in terms of social performance, business ethics, corporate governance and corporate citizenship. Jansson (2007) describes that by carrying out CSR activities a firm can demonstrate trustworthiness, credibility, responsibility, respectability or reliability towards their stakeholders and thus create social and natural values.

3.2.2 Stakeholder Value
As outlined above, a key to gain legitimacy from stakeholders is to relate the social responsibility activities to their norms and values and confirm that they benefit from the activities in some way. Freeman and McVea (2001) explain that to ensure long term success of a firm a stakeholder approach is needed, a key issue is to manage and integrate the relationship with those stakeholders that have a risk in the firm. Hillman and Keim (2001) distinguish a firm’s primary stakeholders as those who have invested capital or human or financial value in the firm and thus bear some kind of risk, e.g. customers, shareholders, employees, suppliers, the government or communities. Without the primary stakeholders the firm would not exist. In order to survive and stay profitable a firm need to create and distribute sufficient value to maintain each primary stakeholder group as part of the stakeholder system.

Jansson (2007) distinguishes that a firm can demonstrate responsibility by relating itself and the actions carried out to specific norms and values of their stakeholders. Grant (2010) stresses that it is critical that the values created by a firm can be connected to stakeholders benefit and creation of stakeholder value which always is connected to improved perceived quality, decreased costs or reduce time. Jansson (2007) describes two different ways a firm can demonstrate responsibility towards their stakeholders, depending on what change situation that is most suitable. On the one hand, a firm can integrate the norms and values of their stakeholders in its CSR strategy and thereby the firm change and adapt its activities to the values of their stakeholders. On the other hand, a firm can influence the norms and values of their stakeholders and thus try to change the view held by the stakeholders. Furthermore, a key feature for creating societal advantage is the stakeholders experienced benefits or sacrifices. The acceptance from stakeholders depends on to what degree the firm can match the expectations held by the stakeholders, the more they match the more the stakeholders can benefit from the activities carried out. To what degree a firm manages to be perceived as
responsible is dependent on the degree of benefits or sacrifices experienced by the customers which in its self can determine the level of legitimacy given to the firm.

### 3.2.3 Legitimacy

Jansson (2007) emphasizes that legitimacy, together with CSR, is the main factors for becoming a sustainable business and achieve societal advantage. The matching strategy is directed by the quest for legitimacy. Legitimacy is given to a firm based on the actions that the firm undertake, but it is not given automatically, rather the firm demonstrate to stakeholders that the undertaken CSR activities are in accordance with their norms and values. If the stakeholders consider these actions to be valid the firm has gained legitimacy. In a similar way as a firm can gain legitimacy from its stakeholders it can also maintain or repair legitimacy by demonstrating social responsibility in accordance to its stakeholder’s norms and values. A firm can also lose its legitimacy which creates a societal disadvantage.

McWilliams and Siegel (2000) declare that stakeholders apprehend voluntary CSR activities carried out by firms as gifts or a guarantee of that the firm is socially and naturally concerned. Barnett (2007) describes that CSR activities strengthens a firm’s relationship with important stakeholders which increases the trustworthiness as well as decreases transaction costs of the firm that in turn will benefit from financial gains. In addition, Bonini et al. (2009) stress that a firm need to gain broad legitimacy from the society it operates in to be able to create long term economic values.

### 3.3 Transformation of Societal Advantage to Competitive Advantage

Jansson (2007) explains that in order to financially gain from its societal advantage a firm needs to transform it into a competitive advantage. If societal advantage results in that a firm earns higher profit in comparison to its competitors it has positively affected the competitive advantage. Grant (2010) defines competitive advantage as:

“When two or more firms compete within the same market, one firm possesses a competitive advantage over its rivals when it earns (or has the potential to earn) a persistently higher rate of profit”

(Grant 2010:211)
3.3.1 Transformation Process

Jansson (2007) presents a figure, *transforming societal advantage into competitive advantage* (figure 6) that illustrates how the transformation process from societal advantage to competitive advantage occurs in a four step process.

![Figure 6: Transforming societal advantage into competitive advantage (Jansson, 2007:152)](image)

Jansson (2007) describes that in order to transform *societal advantage* to competitive advantage the *intangible resources* of a firm plays a crucial role. Reputation is an intangible resource, as a result of achieved legitimacy with customer, which is difficult for competitors to duplicate. A positive reputation can also derive from commercial intangible resources, such as the brand of a firm which also can be a result of engagement in CSR activities. Reputation is therefore perceived as a joint resource that originates either from legitimacy or commercial resources. A commercial intangible resource is for example the firm’s brand. As a result, reputation is the link between resources that build a firm’s social or natural values and the resources that build economic values. This special feature of a firm’s reputation enables the establishment of a link between societal advantage and the competitive advantage. Improved reputation, as a result of achieved legitimacy with customer, can be transformed to competitive advantage through the source of competitive advantage, i.e. *differentiation* or *cost advantage*. A good reputation can turn out to be the source of differentiation advantage if it makes pricing concessions achievable, develop strategies for product differentiation or enhance strategic flexibility which result in that a firm can set a premium price or increase their amount of sales. A good reputation can also be a source of cost advantage mainly through better use of natural resources that leads to cost efficiency or satisfied employees that take advantage of economy of scale in the production unit. Consequently, from differentiation or cost advantage a firm can achieve a competitive advantage and thereby earn higher profits.
than its competitors. When combining the figures of matching strategy for societal advantage and transforming societal advantage into competitive advantage it becomes prominent that legitimacy and reputation is well connected in the sense that an established high reputation can assist the progress of achieving legitimacy. Reputation earned from one activity can thus be transferred to another activity. A firm can, for example, take advantage of a global reputation for being environmentally concerned to facilitate local legitimacy. The resource-based view of a firm including resources and capabilities together with sources of competitive advantage will be extensively discussed below since they can be perceived as important building blocks of how to transform societal advantage to competitive advantage.

3.3.2 Resource-based View of a Firm

Intangible resources, one of the main constituents of the figure described above, derive from the concept of the resource-based view of a firm. Grant (2010) describes that, in the 1990s, the view of strategy analysis shifted from a focus on external environment as a source of profitability to that the source of profit is to be identified internally within the firm. The foundation of a firm’s strategy derives from the internal development of resources and capabilities which also can be identified as the main source of competitive advantage. A strategy based on resources and capabilities is known as the resource-based view of the firm and the essence of this view is that the uniqueness of each firm is the key to profitability. In order to achieve profitable results according to the resource-based view the differences and the unique strengths of a firm should be exploited. Barney (1991) expresses that the resource-based view imply that a firm’s ability to perform superior than its competitors depends on the inimitable combination of resources over time. Below the resources of a firm as well as capabilities will be further elaborated.

3.3.2.1 Resources of a Firm

Grant (2010) states that resources are productive assets of a firm and three types are identified: tangible, intangible and human resources. The tangible resources of a firm are the financial and physical assets that can be found in a firm’s financial statements. To fully value the financial and physical assets the potential to make economical use of the resources in the most profitable way must be evaluated. The firm’s intangible resources are patents, copyrights, culture, brand name and others forms of reputational assets which are described as the foremost valuable resources for a firm. The intangible resources are hard to measure since they do not appear on the financial statement and as a consequence they are often undervalued.
by the firm. The brand name is illustrated as the most valuable resource since it enables the firm to gain profit by setting a premium price or diverse its products range. The human resources are the knowledge, skills and effort the employees offer to the firm. As for the intangible resource, these are hard to measure since they do not appear on the financial statement. However, the stability of the firm is the foundation for comprising the employees as a resource since they are not owned by the firm and free to move from one firm to another. Barney (1991) argues that the resources of a firm that are most likely to result in competitive advantage are those that meet the following criteria: being valuable, rare, inimitable and the organization must deploy these resources effectively. Resources that meet these criteria are for instance reputation, corporate culture, long-term relationships and knowledge assets. Grant (2010) discusses that the nature of a firm’s resources determine whether they provide a basis for competitive advantage or not. The main determinations are the scarcities of the resources together with their relevance to the key success factors in the market.

3.3.2.2 Organizational Capabilities
Grant (2010) describes that few resources are valuable of their own. Rather, a firm’s resources need to be combined in order to create organizational capabilities. An organizational capability can be defined as a firm’s ability or capacity to deploy resources to perform a certain activity or achieve a desired outcome. All capabilities are not equally valuable for establishing a firm’s competitive advantage. Selznick (1957) uses the term distinctive competences to describe those activities that a firm perform particularly well in comparison to its competitors and that thus are the most valuable in order to achieve a competitive advantage. Hamel and Prahalad (1990) use the term core competences for describing those capabilities that are the most valuable for a firm. A core competence is distinguished as an activity that contributes to superior customer value, or the efficiency to deliver customer value, and those competences that offers a foundation to enter new markets.

Russo and Fouts (1997) also emphasize that competitive advantage arise from within the firm where valuable and inimitable assets such as the capabilities and competences of a firm, and the ability to manage them in order to create a superior performance, determine the competitive advantage of a firm. Grant (2010) stresses that profits arising from resources and capabilities not only depend on whether they provide a firm with competitiveness but also on for how long the competitive advantage can be sustained. Sustainable competitive advantage depends on the durability of the resources and capabilities as well as on competitors’ ability to
imitate the competitive advantage. Some resources are more durable than others, i.e. brands are more durable than equipment and proprietary technologies. Hence, durable resources provide a more secure basis for competitive advantage. Furthermore, imitable resources and capabilities are transferable or replicable. A resource or capability that is transferable can be mobilized between firms while inimitable resources and capabilities are those that are entirely firm specific or have a value that depreciates on transfer, e.g. natural resources or organizational capabilities. Replicable resources or capabilities are possible to copy and build up by competitors while less easily replicable capabilities are based on complex organisational routines. However, even if a resource or capability is replicable a firm can benefit since the resource or capability has been accumulated over a long period of time which implies disproportionate costs for competitors to replicate.

3.3.3 Sources of Competitive Advantage

One of the main constituents of the figure transforming societal advantage into competitive advantage developed by Jansson (2007) is sources of competitive advantage. Grant (2010) argues that a firm need to establish and sustain competitive advantage in order to be profitable. There are two ways for a firm to achieve higher rates of profit or potential profit in comparison to competitors, namely cost and differentiation (figure 7).

According to Grant (2010) these sources of competitive advantage represent two fundamental different approaches to business strategy. One the one hand, a firm can different itself through offering products or services that are identical with those supplied by competitors but that have a lower price which offer the firm a cost advantage. The aim of a firm to pursue cost
advantage is to become the cost leader in the industry or industry segment that the firm operates in, this require the firm to exploit all sources of cost advantage and to offer standard products without additional features. On the other hand, Grant (2010) describes that a firm can supply a differentiated product or service that the customers are willing to pay a premium price for or increase their amount of purchases, if the price of these products covers the additional costs spent on the development of the differentiated product the firm possess a differentiation advantage. When a firm offer products or services that the customers value as unique, beyond merely a low price, the firm has achieved a differentiated position compared to its competitors. The key strategic elements of a firm that competes through differentiation are focusing on branding, advertising, design, service, quality, innovation and new product development. In order for a firm to develop a differentiation advantage organizational resources and requirements of e.g. marketing abilities, product engineering skills, cross-functional coordination, creativity and research capability are required. The characteristics of a firm’s resources and capabilities are fundamental to which of the strategies it will pursue. Furthermore, firms with low cost or differentiation strategies are distinguishable in terms of market position, resources and capabilities, and organizational characteristics. Porter (1980) uses the term cost leadership to describe cost advantage and argue that cost leadership and differentiation strategies are mutually exclusive, i.e. a firm that attempt to pursue both strategies will get stuck in the middle and most likely achieve low profitability and lose their high margin business. A firm that is stuck in the middle might also experience an indistinct corporate culture and a conflicting set of organizational arrangements and motivation system.

3.3.3.1 Innovation as a Source of Competitive Advantage

As mentioned above, a firm can gain competitive advantage through innovation and new product development which is described as one of the key strategic elements of differentiation advantage. Following, the new product development as a source of competitive advantage aspect will be further elaborated with a focus on green innovations.

It is described by Grant (2010) that the chance to create competitive advantage can emerge either externally or internally to the firm. Competitive advantage generated internally often derives from innovation, i.e. development of new products and/or processes are commonly embodied by new technological developments. The key to competitive advantage is strategic innovation where superior value is created for customers by new product or process development. Often strategic innovations involve creating a new industry for an existing
product or development of new customer segments for an existing product. However, the most successful type of strategic innovation is described as innovations that provide a firm with new sources of competitive advantage. By launching products or processes that can offer customer value in a novel sense a firm can different itself from its competitors. Chen et al. (2006) also discuss innovation as a source of competitive advantage although with a focus on green innovation which is described as hard or software innovations that are associated with green products or processes, for example technological developments in energy saving, waste recycling or green product designs. Investing in green innovations positively influences a firm’s competitive advantage and the more a firm invests, the stronger the competitive advantage of the firm is. Through green innovations firms can improve the productivity of resources which can leverage the costs of being environmental friendly. Furthermore, Nidumolu et al. (2009) describe that sustainability and socially responsible actions should be the foundation of organizational and technological innovation because it will enable the firm to achieve competitive advantage by rethinking business models, products, technologies and processes. The authors describe that sustainability should not be viewed as a burden or a disadvantage for firms, rather sustainability can lower costs by better use of inputs and add additional revenue for a firm by developing new products and create new business opportunities. According to Porter and van der Linde (1995) a firm can improve its productivity by using inputs, for example raw material, energy and labour, in a more efficient manner. The authors declare the following findings:

“The data clearly show that the costs of addressing environmental regulations can be minimized, if not eliminated, through innovation that delivers other competitive benefits”

(Porter and van der Linde 1995:125)

Porter and van der Linde (1995) describe that the additional competitive benefits involved in developing innovative solutions are possibilities to lower costs and improve product quality through technological developments and possibilities to increase the competitiveness of a firm. For instance, pollution is not only harmful for the environment it can also be a form of inefficiency or economic waste and hence environmental improvement and competitiveness can be linked. Moreover, Chen et al. (2006) emphasize that a firm that pioneers in green innovations can enjoy first mover advantage that offers a possibility to take a premium price, reach new markets and develop their corporate image.
3.4 Elaboration of the Transformation process

The above described process of how to transform societal advantage to competitive advantage will be further developed below with focus on three strategic features relating to the process. First, the link between CSR and financial outcome of a firm will be discussed since, as specified in the introduction chapter, there is a contradiction in previous research whether the relationship between CSR and financial outcome of a firm is positive, negative or absent. Secondly, the development of capabilities will be further elaborated since it is stressed by Grant (2010) that the process of developing and creating resources and capabilities are of critical importance in order for a firm to stay competitive. Lastly, the concept of organizational learning will be presented. According to Bontis et al. (2002) sustainable competitive advantage can derive from a firm’s capability to learn and Jansson (2007) describes that in order to create new knowledge in accordance to the constantly changing external environment a firm’s capability to learn is of critical importance.

3.4.1 Corporate Social Responsibility and Financial Outcome

As mentioned, there is a contradiction in previous research whether the relationship between CSR and financial outcome of a firm is positive, negative or absent. Russo and Fouts (1997), Bouquet and Deutsch (2008), Bonini et al. (2009), Trudel and Cotte (2009), Lopez et al. (2007), Vilanova et al. (2009), Lankoski (2009), Orlitzky (2003), Waddock and Graves (1997) indicate that the relationship between CSR and financial outcome is positive. Russo and Fouts (1997) mention that the positive relationship is especially visual in industries with high growth rate. It is suggested that firms operating in an industry with low growth rate can push the industry forward through finding new ways to enhance industry growth by taking environmental and social initiatives. Bonini et al. (2009) point out that CSR create value for firms in numerous ways, but there are two ways associated with increased financial value. First, it is described that a firm can grow via CSR since it creates access to new markets, innovations and differentiation possibilities. Second, a firm can increase its financial outcome since CSR can result in improved reputation, increased workforce efficiency and effect customer’s willingness to pay a premium price. Waddock and Graves (1997) present that the social performance of a firm is positively linked to prior financial performance, meaning that a successful firm has more resources to spend on CSR and thereby they can attain a higher standard. Besides, the social performance of a firm is also positively linked to future financial performance which supports the theory that CSR itself leads to financial performance. Orlitzky et al. (2003) further investigated Waddock and Graves (1997) arguments and their
conclusion was equivalent with the primary results. Additionally, it is pointed out that a firm’s reputation appears to be an important mediator enabling the positive relationship between CSR and the financial outcome. Bouquet and Deutsch (2008) examine the relationship between socially responsible acts and the multinationality of a firm. The authors determine that the relationship has a U-shaped form, meaning that in the initial phase the firm will not increase their multinationality but as the amount of social responsible acts increases the multinationality is enhanced which contributes to increased profits. Lankoski (2009) indicates that the only part where the relationship between social and financial performance is obvious is within a firm’s own production unit since social actions undertaken in the production tend to increase revenue and simultaneously decrease costs. Social actions undertaken outside a firm’s own production unit can also increase revenues but at the same time these tend to increase the costs of a firm. Thus, the economic performance will vary depending on the balance between revenue and costs. Hillman and Keim (2001) emphasize that in order to create a link between social issue involvement and increased competitiveness the activities of a firm must be related to primary stakeholder’s interests. Barnett (2007) also discusses the outcome of CSR engagement in terms of relationship with stakeholders. The author argues that a firm’s trustworthiness is increased by CSR activities and the relationship with stakeholders is thereby strengthened which can result in decreased transaction costs and financial gain. From this point of view, CSR can be seen as an investment for a firm.

Nevertheless, some authors do not point out a positive relationship between engagement in CSR activities and financial outcome of a firm. Makni et al. (2009) argue that in the short run social responsible initiatives results in lower profits and reduced wealth for stakeholders. Lopez et al. (2007) also specify that during the first years a firm adopt CSR practices it will have a negative impact on the financial outcome. McWilliams and Siegel (2000) determine that CSR has a neutral impact on the financial outcome of a firm. CSR engagement is correlated to high investments in R&D which often has been excluded in the previous research indicating a positive relationship between CSR and financial outcome. Furthermore, McWilliams and Siegel (2001) indicate that firms must via a cost-benefit analysis determine what level of CSR that is most suitable in order to both maximise profits and meet the demand of stakeholders. However, the findings indicate that even though a firm carry out the optimal level of CSR activities they will have higher costs which will leverage the increased revenue from these actions and hence the relationship will remain neutral.
3.4.2 Development of Capabilities

Developments of capabilities are, as described earlier, of critical importance in order for a firm to stay competitive. According to Grant (2010) capabilities are not basically outcomes of the resources that they are based upon, for instance, numerous of firms that demonstrate exceptional capabilities do not have the greatest resources and vice versa. Jansson (2007) describes that there is a particular capability that relates to change, development or creation of new capabilities, namely the dynamic capability in the form of an organizational learning process. This learning capability is focused on adapting to different local markets and the changing external environment:

“Learning capabilities are a critical dynamic capability for an MNC that constantly needs to adjust its stock of organizational capabilities to different local markets and to create new knowledge within the changing external environment”

(Jansson 2007:209)

According to Jansson (2007) the capability to learn and adapt to the changing external environment is critical for a firm in order to constantly manage its competitive advantage. Dynamic capabilities are developed by establishing routines for change based on learning, which will be further developed in the section regarding organizational learning (3.4.3). Timlon (2005) emphasizes that developing capabilities is concerned with the issue of learning how to perform routines in a novel way that includes a modification and reorganization of the existing routines. Jansson (2007) describes that the key is to continuously change capabilities in order to create a sustainable competitive advantage.

However, Grant (2010) mentions that the critical resource of a firm is described to be the manager who plays an important role in shaping and encouraging critical capabilities and development of them. An interesting aspect of capability development is the time dimension. The core competences of a firm have often developed over a period of time and sequentially the firm has learned how to perform the capability particularly well. However, the author describes that the more developed the capabilities are and the more time that has gone by the harder it is for the firm to adapt to new challenges and circumstances since their repertoire is narrower. With Grant (2010) statements in mind, it is questionable how a firm can develop new capabilities and thereby meet changing requirements and new challenges. According to
Grant (2010) there are two main approaches concerning how a firm can develop new capabilities, either via external acquisition or internal development. External acquisition implies that the firm acquire another firm that already has the desired capabilities or firm can take part in a strategic alliance where two parts with mutual goals collaborate and thus a firm can gain access or acquire the capabilities developed by the partner firm. Internal development of capabilities involves the challenging task of integrating the different resources of a firm in order to achieve a desired result. The author describes that a suitable approach to develop capabilities internally is to do it systematically and focus on the efforts of each business unit or group together with a sequential development. Through an incremental development of a limited number of capabilities simultaneously it is more likely that the firm will succeed in meeting new requirements and adapt to new challenges.

3.4.3 The Organizational Learning Process

Bontis et al. (2002) argue that sustainable competitive advantage can only arise from an organization’s capability to learn, as stated earlier. Organizational learning is considered by Crossan et al. (1999) to be a dynamic process of strategy renewal that occurs over time and across several levels of an organization. The authors have developed the 4I framework of organizational learning (figure 8) which implies that renewal requires the organization to explore new learning possibilities and exploit previous acquired learning by recognizing and managing the tension between exploration and exploitation. In order for renewal to be strategic the organizational learning must encompass the entire organization including individual, group and organizational levels which are linked together by the related sub processes of the 4I’s: intuït̄ing, interpreting, integrating as well as institutionalization. Intuït̄ing and interpreting occur at the individual level, interpreting and integrating occur at the group level while integrating and institutionalizing occur at the organizational level. Insight and

Figure 8: The organizational learning process (Crossan 1999:532)
Innovative ideas occur on the individual level rather than on the organizational level, nevertheless, the generated individual knowledge need to be shared, put into action and common meanings developed in order to be accepted on the organizational level. Clearly, the processes are sequential and some have a spillover effect on the next level while other processes are fixed at one stage, e.g. intuition and interpretation are solely human attributes and can therefore not spill over to the organizational level. The specific transference of learning from the individual to organizational level will be more extensively presented below in relation to the four sub processes.

3.4.3.1 Intuiting

Intuiting, as Crossan et al. (1999) describe it, is a sub-conscious process at the individual level which entail similarities and differences of pattern and possibility recognition. Intuition is tacit knowledge that is difficult to transfer between individuals since it is a matter of subjectivity and it is deeply rooted in the individual’s experiences and thereby complex to share. However, Kleysen and Dyck (2001) argue that intuition is not only a matter of subconscious perception because it is possible that external circumstances can impact the individual process of generating new ideas, i.e. new ideas might arise consciously from a combination of an attention to customer needs, market opportunities and end-user's ideas and not alone from intuition. If the external environment is overseen the need for exploration of new learning might be perceived as low for organizations and thereby neglected. Crossan et al. (1999) emphasize that there is a difference between expert and entrepreneurial intuition. Expert intuition support exploitation and provides insight in the important process of pattern recognition, however, it is mostly past pattern oriented than entrepreneurial expertise which is more concerned with innovation and change. Entrepreneurial expertise supports exploration and is future possibility oriented and lead to the ability to make novel connections, perceive new relationships and recognize new possibilities between the different sorts of patterns which in turn generate new insights. Intuition is the starting point for new learning but in order for it to have commercial success the learning most be effective at all levels. Entrepreneurs often experience difficulties when describing their intuitive insights with literal language to others, since the phenomenon is new, metaphors are used to explain and transform the intuitive insights. Metaphors thus mark the beginning of the interpretation process.
3.4.3.2 Interpreting
Crossan et al. (1999) explain that the process of interpreting starts when conscious elements of the individual learning process has surfaced and other individuals develop more explicit connections, cognitive maps, of what was previously merely intuitions. A common language to transform the metaphors is crucial both for the enablement of individuals to develop cognitive maps and for the development of shared meaning and understanding. Bontis et al. (2002) unite learning at the individual level which captures both the processes of intuiting and interpreting as the competence, capability and motivation that the individuals posses in order to undertake required tasks. Crossan et al. (1999) argue that the focus of interpreting is in the change of individuals understanding and actions, when individuals interact a shared understanding of what is possible develops and the interpretive process becomes integrated when it reach further than the individuals and becomes embedded in the workgroup.

3.4.3.3 Integrating
It is illustrated by Crossan et al. (1999) that the focus of integrating is coherent and collective actions, but in order for the coherence to evolve a shared understanding among the members of the group is required. According to Bontis et al. (2002) group learning entail the process of sharing individual interpretations to develop a common understanding. Crossan et al. (1999) explain that shared understanding, mutual adjustments and negotiated actions occur and develop through shared practices, continuous interactions and conversations with the advance mutual language in the group. In this sense, language is a tool to preserve what has been learned but the language must also evolve in order for organizations to learn and renew. When the members of a group engage in conversations and dialogues new and deeper shared understanding can evolve. Further, Bontis et al. (2002) specify that the process of integrating includes elements such as effective group work and productive meetings and the group need to be prepared to share successes as well as failures, encourage diversity and have skills in effective conflict resolution.

3.4.3.4 Institutionalizing
Crossan et al. (1999) state that institutional learning does not immediately capture the ongoing learning at the individual and group level since it takes time for the learning to transfer from individual to group and from group to organization before the learning finally becomes institutionalized. Since some of the individual and group learning in the form of informal
rules will become embedded in the organization’s structures, strategies and routines the process of institutionalizing occur at organizational level. Additionally, Bontis et al. (2002) argue that the individual and group learning need to be transferred into the non-human aspects of the organization in order for the embedded learning, in the form of rules and routines, to endure even if the individuals leave the organization. Crossan et al. (1999) express that institutionalized learning most commonly endure for a long period of time and changes are only made infrequently in organizations although the underlying processes of intuiting, interpreting and integrating occur continuously. Too much organizational changes are therefore usually perceived as radical rather than as the incremental process it actually is. As the environment changes the institutionalized learning may no longer be appropriate because the gap between what the organization needs to do and what it has learned to do mismatch. When the gap becomes wider organizations most commonly rely on individual learning and initiatives but the critical challenge of renewal is to recognize and manage the tension between feedback of exploited embedded institutional learning and exploring new learning that are feed forwarded through the processes of intuiting, interpreting and integrating.

According to Bontis et al. (2002) the simultaneous activities of feed forward and feedback are elements of strategic renewal that harmonizes continuity and change at the organizational level. Crossan et al. (1999) explain that in the feed forward process tacit knowledge is converted to explicit knowledge through a shift from individual learning and interpreting to integrated group learning. The feed forward process facilitate the flow of new ideas and actions from the individual to the organizational level via the group, at the same time as previous learning are fed back from the organization to the group and individual level which affect how the employees act and think. Institutionalization can easily drive out intuition in the feedback process and obstruct the adaptation of new learning unless the institutional order is destroyed or set aside in order to allow unproven and subjectively based experimentation to surface. Thus, it is vital for an organization to manage the process of transforming individual innovative ideas to institutionalized organizational routines through a learning process in order to gain sustainable competitive advantage.

### 3.5 Theoretical Summary

Below a summary of the theoretical framework will follow and the main research question as well as the four sub research questions will be answered theoretically.
The first sub question deals with how a firm can create social and natural values for their customers. According to the theory a firm can create social and natural values for their customers by adopting a wider socially responsible behavior when developing its business. To be socially responsible implies that a firm takes a wider perspective that goes beyond the production of goods and services and integrates social and environmental concerns in its operations and interaction with stakeholders. By carrying out CSR activities a firm can demonstrate e.g. trustworthiness, responsibility and reliability towards their customers and thus create social and natural values.

The second sub question deals with the factors influencing how customers value social and natural values created by a firm. The theoretical framework indicates that there are two factors influencing how customers value social and natural values created by a firm. The first factor regards how well the customers’ norms and values are integrated and managed by the firm. This can either be done by that customer current norms and values can be integrated in a firms CSR strategy and thereby the firm will adapt their activities to customers’ norms and values. Or, a firm can influence customers’ current norms and values and thus try to change the view held by the stakeholders. The second factor concerns how well the values created by a firm are connected to customers benefit and creation of customer value. If a firm manages to create customer value and is perceived as responsible legitimacy is given to the firm.

The third sub question concerns how a firm can achieve sustainable competitive advantage. The theoretical solution is that a firm can create sustainable competitive advantage by developing a differentiation advantage that derives from innovation, i.e. development of new products and processes that create superior customer value. The key to competitive advantage is green innovations where sustainability and responsible actions is the foundation of the innovation. Green innovations will enable a firm to achieve competitive advantage by rethinking business models, products, technologies and processes. Moreover, competitive advantage is often gained by pioneering in green innovations. By being first on the market a firm can enjoy first mover advantage which offers a possibility to take a premium price, reach new markets and develop their corporate image that result in gained competitive advantage. Moreover, by developing its valuable, rare and inimitable intangible resources and capabilities a firm can create a sustainable competitive advantage that is durable and long-lasting.
The fourth sub question deals with how a firm can adapt its activities in accordance to customers’ preferences for social and natural values in order stay competitive. According to the theory a firm can adapt its activities in accordance to customers’ preferences for social and natural values by constantly develop its capabilities which entails both exploiting previous acquired knowledge and exploring new knowledge. This occurs through an organizational learning process where a firm sequentially learns how to adapt its activities to customers’ changing and diverse preferences. Furthermore, by developing dynamic capabilities that are constantly changing a firm can capture customers’ changing preferences and requirements in order to stay competitive.

The main research question deals with how a firm can transform social and natural values to competitive advantage. It is described in the theoretical framework that by taking a wider social responsibility when developing its business and engage in CSR activities that relates to customers norms, values and interests a firm can demonstrate responsibility towards their customers and hence create social and natural values. If these actions are directed towards creating customer value i.e. improved perceived quality, decreased costs or reduce time, a firm can gain legitimacy from its customers. Having legitimacy customers can result in a positive reputation which can be viewed as an intangible resource for the firm. A positive reputation can also derive from other intangible resources, such as the brand of a firm which also can be a result of engagement in CSR activities. This feature of a firm’s reputation makes it possible to link social and natural values with competitive advantage. Improved reputation, as a result of achieved legitimacy with customer, can be transformed to competitive advantage via the source of competitive advantage, i.e. differentiation or cost advantage. A good reputation can be a source of differentiation advantage, e.g. pricing concessions is achievable and the firm can set a premium price or increase their amount of sales. A good reputation can also be a form a cost advantage, e.g. that resources are used in a more efficient way which lower the costs of a firm. Thus, from differentiation or cost advantage a firm can achieve a competitive advantage and thereby earn higher profits than its competitors.
4 EMPIRICAL FINDINGS

In the empirical chapter, data from the interviews with our case company Cascades Djupafors together data from the interviews with a selection of Cascades Djupafors’ potential and existing customers. The empirical findings are presented with a similar structure as the theoretical framework in order to increase the understanding of the reader. At last, the chapter is finalized with an empirical summary.

4.1 The Sustainable Approach of Cascades Djupafors

According to Hägerstrand (10-05-2010) and Sandberg (10-05-2010) Cascades Djupafors’ fundamental focus as a business is to create a positive economic outcome and be profitable. Nevertheless, Hägerstrand (26-11-2009) describes that Cascades Djupafors nowadays have an extensive focus on sustainability since they have developed an environmental profile to a large extent during the latest five years.

“The environmental work itself started right after the big storm, called Gudrun, in the beginning of 2005. It created a huge disaster in the forests and the threes had fallen so it looked like matches in the woods. [...] This made us start to think what we could do to have less impact on the environment and the climate change”

(Hägerstrand, 26-11-2009)

According to Hägerstrand (26-11-2009) Cascades Djupafors initially paid attention to sustainability by investigating their carbon dioxide flows and examining what impact their products had, which was a process that involved investigating several diverse parts of their production including inputs and outputs. Sandberg (28-04-2010) emphasizes that the firm also evaluated their use of energy and they participated in an energy saving program called Programme for Improving Energy Efficiency in Energy Intensive Industries (PFE) which is a five year program with the aim to make effective use of energy. Hägerstrand (26-11-2009) illustrates that producing carton board requires a large amount of water and thereby Cascades Djupafors decided to implement water constrictions and managed to reduce their water consumption by one third. Furthermore, Hägerstrand (26-11-2009) describes that the firm has both Forest Stewardship Council (FSC) and Programme for the Endorsement of Forest Certification schemes (PEFC) certificates which are more or less equal certifications that
implies responsible and sustainable use of the forests which are requested differently on various markets. Due to these certificates, Cascades Djupafors only purchase raw material from certificated forestry’s. In addition, Hägerstrand (10-05-2010) expresses that already four years before Cascades Djupafors started to focus on sustainability they obtained the certificates International Organization for Standardization (ISO) 90001 and 14001. The result of the above described processes of developing Cascades Djupafors’ sustainability approach was a flow chart (figure 9) were all carbon dioxide emissions was mapped and measured.

“It is bits and pieces that were put together and in the end it resulted in that we made a flow chart were we can see the CO2 that we use from the wood that goes to pulp and then to the mill and then out to storage or to customers. [...] Everything that we use is measured. This was the base for going further with the EPD certificate to reveal are CO2 outlets”

(Hägerstrand, 26-11-2009)

Figure 9: Flow chart of Cascades Djupafors carbon dioxide emissions (Hägerstrand, 26-11-2009)

Hägerstrand (26-11-2009) stresses that the firm struggled to find a third part audit trail in order to affirm the results and in the future be able to communicate the sustainable
improvements the firm have managed. Eventually the manager of Cascades Djupafors got in contact with the Swedish Environmental Management Council and together the two parties developed the *Environmental Product Declaration* (EPD) certification which nowadays functions as a climate declaration where customers can get measureable and verified information of various products. Moreover, Hägerstrand (26-11-2009) describes that Cascades Djupafors major changes towards becoming a sustainable business resulted in that they were rewarded as the Best Green Supplier 2008 by the Swedish Environmental Management Council with the following motivation:

"**Djupafors Cascades AB is awarded the price Best Green Supplier 2008 for its serious, credible and innovative environmental work. Despite the fact that the company operates in highly competitive branch, it has managed to transform environmental problems and economic problems to profitability and environmental benefits. Cascades Djupafors AB has made great efforts to reduce emissions of carbon dioxide, energy savings and lowering water consumption and contributed to influence other companies in the same direction through creative communication with an open attitude and honest intentions"**

(www.environdec.com/pageID.asp?id=160&newsId=411, 05-05-2010)

In addition, Sandberg (28-04-2010) describes that Cascades Djupafors have, together with Blekinge Institute of Technology and Ronneby Municipality, arranged an environment and climate seminar in 2009 and 2010 where issues such as environmental labelling within the industry were discussed. Cascades Djupafors merely experience advantages when it comes to being environmental friendly and having a sustainable approach. Through making the firm more effective they have decreased their costs of for example energy use and transportation at the same time as Cascades Djupafors has been given a lot of attention in media.

**4.2 Cascades Djupafors Quest for a Sustained Business**

Below Cascades Djupafors’ demonstration of environmental friendly behaviour, Cascades Djupafors’ Customers’ approach to sustainability, customers’ values influencing a purchasing situation as well as customers apprehension of Cascades Djupafors will be presented.
4.2.1 Cascades Djupafors Demonstration of Environmental Friendly Behaviour
As outlined above, Cascades Djupafors has carried out extensive environmental and sustainability work during the last five years which have developed their company profile to a large extent. Hägerstrand (10-05-2010) describes that after Cascades Djupafors developed this profile they started to demonstrate and communicate this concept to their customers, the aim was to create a demand from customers and inform them about the optional certificates so that they would influence their suppliers, i.e. Cascades Djupafors’ customers, to purchase carton board from Cascades Djupafors. The outcome of this demonstration was that several firms started to request the environmental certificates, for instance FSC marked products, from Cascades Djupafors. As described earlier, Cascades Djupafors developed the EPD certificate together with the Swedish Environmental Management Council. Sandberg (30-03-2010) emphasizes that this collaboration was initiated by him and Cascades Djupafors as a firm since they wanted to develop the climate discussion one step further and develop a certification including carbon dioxide emissions since this absent within this industry at that time.

“There are a lot of different marks for environmental things and recycling, for example it’s the swan, the EU flower, der Grüne Punkt in Germany, but there is nothing relating to CO2 at all. So therefore it was really interesting when we started with the EPD certificate and to find something relating to the climate impact”

(Hägerstrand, 26-11-2009)

Sandberg (30-03-2010) illustrates that the environmental and sustainability work at Cascades Djupafors is an ongoing process that implies that they continuously try to minimize their negative impact on the climate and environment. An example for this is that Cascades Djupafors, as stated in the introduction chapter, is currently developing a new environmental friendly carton board barrier which will be further described in the section 4.3.3.

4.2.2 Cascades Djupafors’ Customers’ Approach to Sustainability
Through interviews with a selection of Cascades Djupafors’ customers we find that all the interviewed firms mention that their fundamental norms and values include responsibility in one way or another, to follow restrictions concerning e.g. recycling and to fulfil certificates as British Retail Consortium (BRC) and ISO standards and collaborating with responsible
partners appear to be given. According to our empirical study a majority, more precisely 45%, of Cascades Djupafors’ customers appears to have a high interest in issues concerning sustainability, climate and environment, 32% appears to have a medium interest while 23% appears to have a low interest in these issues (figure 10).

![Pie chart showing customer interest levels](image)

**Figure 10:** The customers’ interest in issues of sustainability, climate and environment

Cramér (12-04-2010) emphasizes that Almondy follow all fundamental restrictions concerning the environment and they have established an environmental policy that for instance implies that they only collaborates with suppliers that have an environmental profile and to strive for using resources in a more efficient way. Göteborgskex as well as Annas Pepparkakor have taken the environmental work one step further and they go beyond the restrictions required by law. Nasr (14-04-2010) and Olsson (14-04-2010) argue that Göteborgskex have chosen to not only settle with the ISO standard when it comes the environment. With internal environmental auditors that have been externally educated the entire organization gets inspected during a one year period in order to improve their environmental work.

"With only an external revision we would most likely be able to ‘get away’ with some failing routines without any adjustments, but with the internal revisions we improve routines so that all employees start to think about the environment and get well informed and aware”

*(Nasr, 14-04-2010)*

Martinsson (07-04-2010) describes that beyond the environmental work that comes from the certificates required by law. Annas Pepparkakor has an external consultant hired by their
mother company that visit the firm every month. The aim with these additional revisions is to have a higher focus on continuous realistic improvements and develop processes and raw material suppliers which are not demanded from the certification. However, Annas Pepparkakor wants to follow the environmental trend, but not lead it. The firm does not want to be seen as focused on environmental friendliness, rather their norms are to be seen as a firm that provides safe and high qualitative products that the customers want to repeatedly purchase. In contrast to Annas Pepparkakor, Domstein Enghav is very focused on the environment which, according to Rytterstig (14-04-2010), is natural within their branch since they are dealing with living raw material, i.e. fish products. The firm always strives to be a leader within the environmental field and a norm within the firm is to not be harmful for the environment and instead have a high environmental standard. Domstein Enghav launched Domstein’s Commitment to Sustainability in 2009 which involves that the firm guarantees that the products marked with this certificate has been handled and processed in a sustainable way. For instance, the certificate involves that the raw material is fully traceable throughout the entire value chain, the raw material comes from sustainable fish stocks, they use fishing methods that are gentle for the marine environment and all transportations have both low fuel consumption and carbon dioxide emissions.

“It is very important for us that we don’t steal from the nature, but rather think about that there is a renewable part as well. The environment is a central part of our future world and we still have a lot to do, environment and climate is very up to date”

(Rytterstig, 14-04-2010)

According to Vidlund (06-04-2010) Delicato wants to be a part of the environment which is also one of their core values driven by their owners. The packages that Delicato are using today have a polyester window, so that the customer can see the actual product inside the package. Since polyester has to be separated in the recycling process the firm searches for complementary materials and an environmental friendlier alternative for their current packages. However, he emphasizes that it is problematic for them to have an environmental friendly approach since they are in the candy or confectionary segment where the customers do not demand environmental friendliness to a large extent. It is described by Johansson (07-04-2010) that Lantmännen strives to be a leader within the environmental field since it is natural for them due to the fact that they are an economic association that is owned by their
members, i.e. Swedish farmers. For instance, Lantmännen continuously aim to decrease the climate impact from their products and they have participated in industry collaborations in order to develop a climate labeling for their products. Furthermore, some of Cascades Djupafors’ customers do not assess sustainable norms and values to a large extent. Jonsson (20-04-2010) describes that Herrgårdstoppen can not engage in environmental friendly activities except from pre-separation at source in their production unit. Miver (12-04-2010) expresses that since Tingstad is selling packages they are not able to profile themselves as environmental friendly since they are dealing with consumer goods that are disposed right after usage. However, they strive to adapt to the environment as much as possible to preserve the nature for coming generations by launching environmental friendly alternatives.

Several of Cascades Djupafors’ customers, more precisely 43%, apprehend that environmental friendly products will contribute to added value for the consumers while 14% point out that they apprehend that there is no added value to be able to provide environmental friendly products. 43% believe that in some situations it might add value (figure 11).

![Figure 11: The customer's perceptions of added value from green products](image.png)

On the one hand, Rytterstig (14-04-2010) stresses that even though the customers are very price sensitive Domstein Enghav believe in providing an added value through environmental friendly products. While Olsson (14-04-2010) at Göteborgskex, on the other hand, do not believe in added value from environmental products.

“If you put two biscuits on a plate and one of them is certificated as environmental friendly I do not believe that it offers the consumer an added value since it is too much focus on the environment these days, I think the consumers are tired of this discussion”

(Olsson, 14-04-2010)
4.2.3 Customers’ Values Influencing a Purchasing Situation

From the empirical study we find that various values of Cascades Djupafors’ customers influence a purchasing situation. The following features are what customers ranked as most important in a purchasing situation which thus reflects their values. 46% of Cascades Djupafors’ customers foremost value *quality* when purchasing carton board with a barrier while for 23% of the customers *price* is considered as most valued (figure 12).

![Figure 12: Customer’s most important values influencing a purchasing situation](image)

Further, the following features are what the customers ranked as second most important in a purchasing situation. 34% value *price* as second most important while 22% value *quality* and 22% value an already *established relationship* (figure 13).

![Figure 13: Customer’s second most important purchasing criteria](image)
4.2.4 Customers Apprehension of Cascades Djupafors

According to Nasr (14-04-2010) Cascades Djupafors is one of very few firms that actively have contacted Göteborgskex and made a visit in order to present their company profile, products and what they can offer. In that sense Cascades Djupafors are apprehended as down to earth and available.

“My impression is that I can call Cascades Djupafors and I know exactly who the person is that I talk to and what position this person has in the firm, this I could not be able to do with Stora Enso for example”

(Nasr, 14-04-2010)

Cramér (12-04-2010) expresses that he is familiar with Cascades Djupafors and he is aware of that they are advanced within the environmental and sustainable field. Göteborgskex have been in contact with the firm to discuss Cascades Djupafors new product development and Cramér forwarded Cascades Djupafors to their converters to discuss an environmental friendly alternative to their current packages. Miver (12-04-2010) perceives Cascades Djupafors as very active when it comes to the environment and Tingstad have been informed about the seminars that they arrange.

Furthermore, the empirical study reveals that 86% of Cascades Djupafors’ customers apprehend the firm as responsible within the field of environment. Merely, 14% has no apprehension, partly since they have not been in contact with Cascades Djupafors (figure 14).

![Figure 14: Customers’ apprehension of Cascades Djupafors as a responsible firm in the field of environment](image-url)
4.3 Cascades Djupafors’ Process from Sustainability to Competitiveness

Below Cascades Djupafors’ resources and capabilities, their source of competitive advantage as well as the firm’s new product and process developments will be presented.

4.3.1 Cascades Djupafors’ Resources and Capabilities

Hägerstrand (26-11-2009) describes that the firm holds a large number of certificates such as the quality system ISO 9001, PFE for energy savings and the environmental certificates PEFC, FSC, EPD and ISO 14001 which has been earlier explained in detail. The certificates of PEFC and FSC enable the customers to request environmental certified carton board. According to Hägerstrand (18-12-2009) the main physical asset Cascades Djupafors possess is their small and flexible machine that produces their carton board. This allows the firm to tune in the machine to produce tailor-made products in accordance to customers’ needs. The size of the machine also implies short production cycles that provides the ability to make fast deliveries, even on tailor-made orders.

“*We are a small board mill and we need to be flexible to support our customers in the best and most efficient way. With short production cycles and being quick to supply and find tailor-made solutions, we can actually customize the carton board weight if needed for some special projects or purposes in the end-use*”

(Hägerstrand, 26-11-2009)

Hägerstrand (26-11-2009) illustrates Cascades Djupafors as a flat organization where decision making and authority are shared among the work force and frequent job rotation has enabled the small work force to share skills among each other. A flat organization has also facilitated the establishment of a family-like corporate culture that the firm embrace. Hägerstrand (18-12-2009) explains that since the firm is small and only has a limited number of employees, the employees need to be, and are, a tight team that have the ability and the desire to be flexible. Hägerstrand (12-01-2010) holds the perception that their customers apprehend that Cascades Djupafors’ brand represent a quality that is comparable to the competitors’. The brand is also apprehended by the customers to symbolize availableness, since the firm’s location is geographically close to the customers and since it is a small organization the firm is perceived as accessible. Cascades Djupafors is well known for their environmental profile which also is reflected in the customers’ apprehension of the firm’s brand. With the aim of increasing the
brand awareness and communicate the quality of the firm’s products the sales representatives of Cascades Djupafors have personal meetings with potential and existing customers. To build long and fruitful relationships with the customers is expressed to be of special importance for the firm and through European market evaluations Cascades Djupafors can confirm that they are especially good at building relationships. Nasr (14-04-2010) expresses that Cascades Djupafors is one of the few board mills that actively has visited Göteborgskex in order to present their products and the firm, in that way she apprehend that Cascades Djupafors is more available than the other mills. This has also resulted in a relationship with the firm that facilitates sporadic business contacts.

4.3.2 Cascades Djupafors Differentiation Advantage

According to Hägerstrand (12-01-2010) the price of Cascades Djupafors’ products are set in accordance to the market standards depending on each country’s market prices. Additionally, the industry itself is characterized by low margins and high price sensitiveness. Hägerstrand (18-12-2009) clarifies that the firm hardly invest any money on marketing to communicate the quality of the products since they consider that it does not yield as much attention as personal business visits. When doing personal visits, Hägerstrand (12-01-2010) describes that Cascades Djupafors focus on educating and training their customers in environmental issues and work routines.

“Of course we always talk about and inform our customers about our sustainability approach and try to communicate that we can provide the FSC certificate and so on”

(Hägerstrand, 26-11-2009)

Hägerstrand (26-11-2009) explains that the quality of their products is comparable to the standards on the market but Cascades Djupafors’ main strength compared to their competitors is their concern about the environment. Carton board as a packaging material has sustainable advantages towards other materials and is more environmental friendly since it is made from renewable sources and can easily be recycled. Some initiatives to improve the environmental profile regarding the products arise from the firm’s employees and some from a noticed demand from their customers. It is uncommon for players in this industry to carry out environmental efforts by own initiatives but for Cascades Djupafors it is expressed as a natural choice that also is deeply rooted in their core values. Additionally, the geographic
location of Cascades Djupafors in the south eastern part of Sweden provides the firm with invaluable natural resources. An example is that the firm only use electricity from hydro-power which is perceived as a natural choice since it is available in Sweden.

“Other companies also work with environmental issues but from their country’s perspective. In France, it is not a big issue yet. Germans have some more thoughts about this since they are a bit more affected by it. […] But it depends on what kind of natural resources the companies have access to, so they can never be as good as we can be, naturally”

(Hägerstrand, 26-11-2009)

According to Hägerstrand (26-11-2009) Cascades Djupafors provide customized products and tailor made pre and after sales services. The firm can tailor make features that are directly linked to the quality of the product such as stiffness, weight and coating but also indirect product features as the environmental certificates of FSC and PEFC.

“Our product fulfils the customer’s specified and unspecified criteria and we provide a long environmental certified product. Unspecified criteria are the norms within the industry, an example is that the product must be convertible. Specified criteria are requirements on store-keeping, local representation and environmental certification that depends on the converter’s customer”

(Hägerstrand, 26-11-2009)

In addition, it is described by Hägerstrand (26-11-2009) the environmental profile of Cascades Djupafors has not only led to increased awareness among the customers it has also decreased the firms internal costs to a large extent due to e.g. lowered energy consumption and a more cost efficient process.

4.3.3 Cascades Djupafors New Product and Process Developments

Sandberg (30-03-2010) explains that Cascades Djupafors continuously investigates the possibility to enhance and develop products and processes that are in line with their environmental profile. Examples of this is that the firm developed the EPD certificate which was the first certificate for sustainability in the carton board industry, implemented water constrictions which facilitated efficient use of energy and developed a board that lowers the
transportation impacts on carbon dioxide. Additionally, they are currently developing an innovative green barrier. Further, it is described that a storm that occurred in Sweden a few years ago motivated Cascades Djupafors to use energy in a more efficient way and to develop their own EPD certificate which also influences his enthusiasm indirectly to develop the green barrier. Hägerstrand (26-11-2009) illustrates, as mentioned, that they started to investigate the water consumption since tons of water is needed in order to produce the boards. The result was that Cascades Djupafors closed some parts of the water systems and created the possibility to clean and reuse the water needed for the production process in order to protect the aquatic biology and save energy.

“When we let the water out in the river, the water temperature is 20 degree. This affects the water balance, especially during winter time when the natural average temperature is 10 degrees, which causes great impacts. This [implementation of water constrictions] also saves energy for us since we don’t have to constantly take fresh water but instead are able to re-use the water. The water we use has to be heated up to 45 degrees to match the process temperature, now when we use the water that is already heated we save a lot of energy”

(Hägerstrand, 26-11-2009)

Hägerstrand (26-11-2009) describes that Cascades Djupafors has developed a thinner board that has the same properties as other boards but with the difference that the weight is lower. Board is delivered in sheets and sold per ton but the end customers’ interest is mainly how many packages they can extract from each sheet. Since the customers can produce the same quantity of packages from the same amount of sheets when using the thinner board the result is that the customers can lower their purchasing costs even though Cascades Djupafors charge a higher price per ton of this board. The customers will also lower their transportation costs since the packages weight less.

“They can actually gain 82 Euros per ton of this new quality when it comes to the required amount of packages. This is of special importance for our environmental profile since this will lower the transportation costs without neglecting the physical parameters needed for the package”

(Hägerstrand, 26-11-2009)
According to Sandberg (30-03-2010), Cascades Djupafors is currently developing a new environmental friendly barrier with comparable features as other barriers made with polyethylene plastic that other firms are offering. A barrier is commonly used for packages containing food and it functions as a separator between the board and the product. The barrier protects the product from moisture and fat that derives from within the product as well as coldness and heat that the package is exposed to during transportation and storage. The uniqueness of the new barrier is that it is made of a chemical composition from renewable resources suitable for packages within the food processing industry. The new barrier will transform the entire board into a mono-material meaning that the barrier does not need to be separated from the board in the recycling process which results in that the total product is completely environmental friendly. This green barrier is expected to be ready for the market within one to two years. Sandberg (10-05-2010) explains that it was natural for Cascades Djupafors to develop a green barrier since they earlier focused on how to minimize the carbon dioxide emissions from packages and to further minimize the emissions the next step was logically to remove the polyethylene from the barrier. Sandberg (30-03-2010) describes that his motivation to initiate and develop a green barrier is triggered by the ongoing public discussions concerning global warming and carbon dioxide emissions in media together with an observed rising request from the customers. Additionally, Hägerstrand (10-05-2010) clarifies that through product developments Cascades Djupafors’ are trying to be the trendsetter and to be the first supplier of environmental friendly products within the industry. The firm attempts to create a demand for their specific environmental friendly products in order to increase sales to existing customers as well as to generate new customers.

“What triggers our development of a green barrier board is maybe not to earn more money than on other products, rather to find a market that is better suitable for us and where we actually can take a profitable price”

(Hägerstrand, 10-05-2010)

**4.4 Elaboration of Cascades Djupafors’ Innovation Developments**

In this section the following parts will be included: customers’ price sensitivity and willingness to purchase green products and Cascades Djupafors ability to develop and learn.
4.4.1 Customers Price Sensitivity and Willingness to Purchase Green Products

The result from our empirical study reveals that 67% of Cascades Djupafors’ customers are willing to pay a higher price for carton board with a green barrier than for a polyethylene barrier while 33% are unwilling to pay a higher price. In detail, 17% are willing to pay 1-5% higher price, 33% are willing to pay 6-10% higher price and 17% are willing to pay 11-20% higher price in comparison to the price of a polyethylene barrier (figure 15).

![Figure 15: Cascades Djupafors’ customers’ price sensitivity for green barrier](image)

Furthermore, the empirical study also illustrates that all of Cascades Djupafors’ customers are willing to change their polyethylene barrier to a green barrier if the green barrier has the same price as the polyethylene barrier, i.e. cost neutral. More precise, with the prerequisite that the green barrier is cost neutral 50% are willing to change their total consumption of polyethylene barrier to a green barrier while 16% are willing to switch 1-10% of their total board consumption, 17% are willing to change 11-20% of their total board consumption and 17% are willing to change 21-30% of their total board consumption (figure 16).

![Figure 16: The customers’ willingness to change to a cost neutral green barrier](image)
In addition, Sandberg (10-05-2010) describes that Cascades Djupafors experience an increased amount of tender requests from their customers since they launched their environmental profile which he believe is a result of their increased communication with customers. He believes that Cascades Djupafors has created a situation where their customers demand the intermediaries, i.e. converters, to consider Cascades Djupafors as a potential supplier of carton board. The environmental work carried out by Cascades Djupafors is described to most likely assist the firm to reach their goals to reduplicate their sales volume in the Scandinavian market.

4.4.1.1 Cascades Djupafors Potential Revenue from a Green Barrier

By using input from the empirical study, information provided by Hägerstrand together with some necessary assumptions we can calculate the potential profit from a green barrier. According to Hägerstrand (21-05-2010) the total development costs concerning the green barrier is approximately 100 000 SEK, including working hours, purchasing, trial runs and transportation of test barriers to Cascades Djupafors’ customer. Furthermore, the cost concerning the production of the green barrier is estimated to 2 300 SEK per ton which includes costs for the constituents of the green barrier as well as costs for applying the barrier on carton board. Cascades Djupafors’ estimate that the sales price per ton of carton board with a green barrier will be about 12 000 SEK, the same price as for carton board with a polyethylene barrier. In addition, Hägerstrand (26-11-2009) stresses that Cascades Djupafors produces on a yearly basis about 60 000 ton of carton board. The empirical study enables the estimation that Cascades Djupafors’ customers are willing to change approximately 10% of their current carton board with a polyethylene barrier to a carton board with a green barrier if it implies an increased price. In order to be able to carry out an approximate calculation for Cascades Djupafors’ profit potential for a green barrier we make the assumption that the customers’ willingness to change 10% can be used as an indicator for the willingness among Cascades Djupafors’ all customer. However, we are aware of that this assumption do not correctly reflects the willingness to change among all of the customers but we find that it enables us to speculate the approximate profit potential from a green barrier for the first production year. By using the estimated sales price, estimated production as well as developing costs it is possible to calculate the estimated profit Cascades Djupafors can gain during the first production year. The calculation below is based on that the sales price of a green barrier has the same price as for a polyethylene barrier.
**Calculation 1:** Potential profit from a green cost neutral barrier

As visual in the calculation, the estimated profit potential for the first year from a green barrier with the same sales price as a polyethylene barrier is 58 100 000 SEK.

Furthermore, the empirical study reveals that Cascades Djupafors’ customers in average are willing to pay a 5.7% higher price for a green barrier in comparison to a polyethylene barrier. In order to be able to carry out an approximate calculation for Cascades Djupafors’ profit potential for a green barrier we make the assumption that the customers’ willingness to pay a 5.7% higher price can be used as an indicator for the willingness among Cascades Djupafors’ all customer. However, we are aware of that this assumption do not correctly reflects the willingness to pay a higher price among all of the customers but we find that it enables us to speculate the approximate profit potential from a green barrier. The calculation below indicates the profit potential for the first production year and is based on that the green barrier is sold to a 5.7% higher sales price than for a polyethylene barrier approximated (numbers already calculated in the first calculation will also be used here, i.e. total production of carton board, production costs and development costs).

<table>
<thead>
<tr>
<th>Description</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Estimated sales price for green barrier (SEK/ton)</td>
<td>12 000</td>
</tr>
<tr>
<td>Estimated production costs for green barrier (SEK/ton)</td>
<td>2 300</td>
</tr>
<tr>
<td>*Estimated marginal income from green barrier (SEK/ton)</td>
<td>9 700</td>
</tr>
<tr>
<td>Estimated willingness to change to a green barrier (%)</td>
<td>10</td>
</tr>
<tr>
<td>Total production capacity (ton/year)</td>
<td>60 000</td>
</tr>
<tr>
<td>*Potential sales of green barrier (ton/year)</td>
<td>6 000</td>
</tr>
<tr>
<td>Estimated marginal income from green barrier (SEK/ton)</td>
<td>9 700</td>
</tr>
<tr>
<td>Estimated revenue from green barrier (ton/year)</td>
<td>58 200 000</td>
</tr>
<tr>
<td>Estimated revenue from green barrier (SEK/ton)</td>
<td>58 200 000</td>
</tr>
<tr>
<td>Estimated developing cost for green barrier</td>
<td>100 000</td>
</tr>
<tr>
<td><strong>Estimated profit from green barrier (year 1)</strong></td>
<td><strong>58 100 000</strong></td>
</tr>
</tbody>
</table>
**Estimated sales price for green barrier (SEK/ton)** 12 000

**Customers' willingness to pay a higher price (%)** * 5,7

**Estimated production costs for green barrier (SEK/ton)** - 2 300

*Potential marginal income from green barrier (SEK/ton)* 10 384

**Estimated willingness to change to a green barrier (%)** * 10

**Total production of carton board (ton/year)** * 60 000

*Potential sales of green barrier (ton/year)* 6 000

**Potential marginal income from green barrier (SEK/ton)** 10 384

**Potential sales of green barrier (ton/year)** * 6 000

*Potential revenue of green barrier (year)* 62 304 000

**Potential revenue of green barrier (year)** 62 304 000

**Estimated developing cost for green barrier** - 100 000

**Potential profit from green barrier (year 1)** 62 204 000

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**Calculation 2:** Potential profit from a green barrier with a higher price

As visual in the calculation, the estimated profit potential for the first year from a green barrier with a 5.7% higher sales price as a polyethylene barrier is 62 204 000 SEK.

**4.4.2 Cascades Djupafors’ Ability to Develop and Learn**

Below Cascades Djupafors’ ability to develop and learn will be outlined through an account for Cascades Djupafors’ innovation development as well as the customers’ usage and preferences of packages.

**4.4.2.1 Innovation Development by Incremental Learning at Cascades Djupafors**

It is described by both Sandberg (30-03-2010) and Hägerstrand (30-03-2010) that the environmental profile of Cascades Djupafors has developed sequentially the last five years and the firm has carried out a number of processes and product developments in order to become more environmental friendly. For instance, the first step was to decrease carbon dioxide emissions in different ways which then sequentially developed and resulted in an establishment of a new certificate within Cascades Djupafors’ industry. According to Sandberg (30-03-2010) the development of the firm’s environmental profile has taken time. Hägerstrand (26-11-2009) emphasizes that the firm develop green abilities and skills in order to stay competitive and this is perceived as the advantage of Cascades Djupafors in
comparison to other carton board mills. Further, Hägerstrand (10-05-2010) points out that Sandberg is not only the manager of Cascades Djupafors, he is also the project manager and the entrepreneur behind the innovative development of a green barrier board. Sandberg is described to be the individual who initiates most ideas of how Cascades Djupafors can become a more environmental friendly firm, e.g. he was also the project manager who accomplished the development of Cascades Djupafors’ thinner board that reduces carbon dioxide emissions during transportation.

Hägerstrand (10-05-2010) explains that the green barrier project has been initiated because there is a potential to reach new markets and to offer additional value to their existing customers. Sandberg (10-05-2010) fills in that Cascades Djupafors has noticed that their customers demand a barrier that is not made from polyethylene. A polyethylene barrier can be apprehended as the market standard and the customers does not know what precise features a barrier composed from other materials need to have since it has never been evaluated before. The new product development has involved various practical activities. Cascades Djupafors have been collaborating with a chemical firm in order to come up with the right chemical combination, this has been a process where the firm has altered and revised the components several times before reaching an adequate barrier which have sequentially enhanced the quality of the barrier. Except from these laboratory tests several trials runs have been carried out at Cascades Djupafors’ factory and they are also providing their customers with samples from the green barrier so that the customers can test the capacity and the firm can make further adjustments to determine the implicit requirements. Furthermore, internal meetings and discussions at Cascades Djupafors have taken place and just recently the firm applied for an acceptance from Normpack, the organization that carry out controls and make acceptances for material that is in contact with food. As mentioned, Sandberg is described as the entrepreneur behind most environmental initiatives at Cascades Djupafors. Both Hägerstrand (10-05-2010) and Sandberg (10-05-2010) illustrate that the environmental initiatives from Sandberg have been well received by the organization, both by the local employees at Cascades Djupafors and the top management at Cascades Inc. in Canada.

4.4.2.2 Cascades Djupafors’ Customers Usage and Preferences of Packages
The empirical study indicates that the usage and preferences of packages differ among Cascades Djupafors’ customers. 40% declare that the primary function of a package is to
protect their products, 20% regard that the primary function is to inform the consumers about the packed product and 20% announce that the function is to sell the product (figure 17).

![Figure 17: The primary function of a package for Cascades Djupafors’ customers](image)

The majority of Cascades Djupafors’ customers, accurately 41%, announce that they use a carton board with a barrier for products containing fat. 35% declare that a barrier is used for frozen products. 18% use a barrier for dry products while 6% of the customers use a carton board with barrier for fresh products (figure 18).

![Figure 18: Sector of application for carton board with a barrier](image)

Furthermore, the preferences that Cascades Djupafors’ customers have on a carton board with a barrier are that the barrier has to be resistant against moisture (41%), fat (29%), heat/cold (24%) and steam (6%) as outlined in figure 19.
4.5 Empirical Summary

Below a summary of the empirical findings will follow where empirical input to the answers of the main research question as well as four sub research questions will be provided.

The first sub question deals with how a firm can create social and natural values for their customers. The empirical input that will enable an answer to this question is the following:

- Cascades Djupafors engage in a variety of activities with the aim of improving internal products and processes which has resulted in that the firm has obtained a large number of certificates, reduced its usage of natural resources and decreased its impact on the natural environment. Cascades Djupafors also engage in social activities that are not solitary connected to their business since these activities partly favours the industry or society as a whole.
- The majority of Cascades Djupafors’ customers appear to have a medium to high interest for sustainability, environmental and climate issues. All customers have, in one way or another, included responsibility in their basic norms and values even though the interest varies among the various customers.
- 86% of Cascades Djupafors’ customers apprehend Cascades Djupafors as a responsible firm within the field of environment.

The second sub question deals with the factors influencing how customers value social and natural values created by a firm. Following empirical input will contribute to the answer to this question:
Cascades Djupafors strives to both target customers that have an explicit environmental profile and target customer that they can influence in environmental issues e.g. by educating and informing them in different work routines and values.

Cascades Djupafors’ customers see a potential to benefit from green products provided by the firm since it can contribute with added value in their offers towards the final consumers.

The third sub question concerns how a firm can achieve sustainable competitive advantage. The empirical input that will enable an answer to this question is the following:

- Cascades Djupafors continuously rethink and develop products and processes that are in line with their environmental profile in order to be competitive.
- Cascades Djupafors strives to be a trendsetter by being the first to supply innovative environmental friendly solutions within their industry
- Cascades Djupafors holds a large number of certificates, is apprehended as available and environmental friendly by their customers and they have a small work force that share skills among each other. Further, the main physical asset Cascades Djupafors possess is their small and flexible machine

The fourth sub question deals with how a firm can adapt its activities in accordance to customers’ preferences for social and natural values in order stay competitive. The following empirical input will contribute to the answer of this question:

- The environmental profile of Cascades Djupafors can sequentially developed simultaneously as their experience and knowledge within the field of environmental have increased.
- The development of an environmental barrier is preceded by Cascades Djupafors’ notices that their customers demand a barrier that is not made from polyethylene and they apprehend that there is a potential to reach new customers and markets with a green barrier.

The main research question deals with how a firm can transform social and natural values to competitive advantage. The empirical findings that will contribute to the answer of the main research question are the following:
By engaging in various activities, both internal improvements as well as external activities, Cascades Djupafors has decreased its impact on the natural environment and highlighted the sustainability issue within their industry.

The customers of Cascades Djupafors see a potential to benefit from green products provided by the firm since it can contribute with added value in their offers towards the final consumers.

86% of Cascades Djupafors’ customers apprehend Cascades Djupafors as a responsible firm within the field of environment. The brand of Cascades Djupafors symbolizes availableness and since the firm is perceived as advanced within the environmental field in their industry the brand also represents environmental friendliness.

Cascades Djupafors continuously rethink and develop products and processes that are in line with their environmental profile in order to be competitive. The environmental profile of the firm has sequentially developed simultaneously as their experience and knowledge within the field of environmental have increased.

67% of Cascades Djupafors’ customers are willing to pay a higher price for carton board with a green barrier than for a barrier made of polyethylene and 100% of Cascades Djupafors’ customers are willing to change their polyethylene barrier to a green barrier if it is cost neutral.

An estimated profit potential for Cascades Djupafors indicates that the firm can gain 58 100 000 SEK for a cost neutral green barrier while the firm can gain 62 204 000 SEK with a 5.7% higher sales price.
5 ANALYSIS

In the analysis chapter the theoretical framework is related to the results of the empirical study. We discuss and analyse how Cascades Djupafors manage to create social and natural values as well as economic values and thereafter the three different types of values are summarized in a discussion regarding Cascades Djupafors’ creation of a sustainable business. In addition, the organizational learning process within Cascades Djupafors is elaborated with focus on their capability development.

5.1 Creation of Social and Natural Values

It is described by Jansson (2007) that a firm needs to claim responsibility towards their stakeholders by adopting a wider socially responsible behaviour that the stakeholders can benefit from in order to gain legitimacy to create social and natural values that subsequently result in a societal advantage.

![Diagram of Claims/Justifications, Stakeholder Value, Legitimacy, and Societal Advantage]

**Figure 20:** Cascades Djupafors’ creation of social and natural values (developed from Jansson, 2007)

5.1.1 Claiming Responsibility

According to Jansson (2007) a firm can claim responsibility, trustworthiness, creditability, respectability, or reliability towards its stakeholders by engaging in CSR activities in order to create a societal advantage. The empirical study reveals that Cascades Djupafors engage in various activities to improve internal products and processes, such as investigating carbon
dioxide flows, evaluate use of energy and participate in energy saving programs, implementing water constrictions and managing sustainable use of forests. Engaging in these activities has resulted in that Cascades Djupafors has obtained a large number of certificates, reduced its usage of natural resources and decreased its impact on the natural environment. Further, the empirical findings indicate that Cascades Djupafors also has engaged in social activities that are not solitary connected to their business since these activities partly favours the industry or society as a whole. For instance, Cascades Djupafors established the industry-wide EPD certificate and are yearly arranging seminars with focus on sustainability issues. Continently, Cascades Djupafors claim responsibility, trustworthiness, creditability, respectability, and reliability towards its customers by engaging in above mentioned internal and external activities, which can therefore be viewed as CSR activities.

5.1.2 Customers Value
It is described by Jansson (2007) that it is crucial for a firm to adapt the activities carried out to stakeholders’ norms and values in order to assure that they can benefit from the activities. A firm can either relate actions carried out to stakeholders’ norms and values by integrating stakeholders’ current norms and values or influencing them by trying to change the view held by the stakeholders. Hägerstrand (12-01-2010) expresses that Cascades Djupafors, on the one hand, strives to target customers that have an explicit environmental profile by evaluating the information provided on the customer’s websites. On the other hand, the firm aims to influence customers’ view of environmental issues by educating and informing them in different work routines and values. Thus, Cascades Djupafors manages to relate to some customers existing norms and values as well as influencing the norms and values held by some customers in order to assure that they benefit from the activities carried out.

Furthermore, the empirical findings indicate that the majority of Cascades Djupafors’ customers, more precisely 77%, appear to have a medium to high interest for issues concerning sustainability, climate and environment. All customers account that responsibility is, in one way or another, included in their fundamental norms and values, it also appears to be given that they collaborate with responsible partners. However, there is a variation among the customers’ interest. For instance, Domstein Enghav has an explicit interest for sustainability issues which is described to be natural since they handle living raw materials and the consumers demand a sustainable handling. While e.g. Göteborgskex and Annas Pepparkakor are less directed towards sustainability since they experience that their final
consumers, within the confectionary segment, do not demand environmental friendliness to a large extent. As a result, the norms and values as well as environmental interest of Cascades Djupafors’ customers vary depending on what type of product category they belong to. Since the norms and values as well as environmental interest varies among Cascades Djupafors’ customers it is suitable that Cascades Djupafors adapt, as mentioned above, both by relating and influencing to the various customers’ norms and values.

Nevertheless, the empirical study indicates that 86% of Cascades Djupafors’ customers perceive a potential to benefit from green products provided by Cascades Djupafors, in the sense that in most situations it can contribute with added value in their offers towards the final consumers. Hence, Cascades Djupafors’ customers benefit from social responsible activities carried out by the firm since their norms and values are taken into account. The benefit appears to derive from a contribution of added value in their offers towards the final consumers. Cascades Djupafors’ customers can thus be apprehended as legitimate actors through collaborating with Cascades Djupafors, thereby there is a potential for the customers to gain legitimacy from the consumers.

5.1.3 Legitimacy
It is emphasized by Jansson (2007) that if stakeholders can benefit from and consider activities carried out by a firm to be valid legitimacy is given to the firm. As discussed above, the majority of Cascades Djupafors’ customers benefit from the activities carried out by the firm. Additionally, the empirical evidence demonstrates that 86% of the customers apprehend Cascades Djupafors as a responsible firm within the field of environment. Thus, the customers give legitimacy to Cascades Djupafors since the activities the firm carries out provide benefits for the customers.

5.1.4 Societal Advantage through Capability Development
It is emphasized by Jansson (2007) that a firm can, by creating social and natural values for their stakeholders, achieve a societal advantage. Moreover, the resource-based view of a firm, described by Grant (2010), implies that a firm’s unique resources and capabilities is the foundation for the activities carried out by a firm. As discussed above, Cascades Djupafors has gained legitimacy from its customers through carrying out CSR activities that the customers benefit from (see figure 20 at page 70). Consequently, Cascades Djupafors has managed to create social and natural values and achieved a societal advantage. The activities
creating social and natural values are a result of Cascades Djupafors’ development of following identified capabilities:

- Cascades Djupafors knows how to develop green product and process innovations with low degree of carbon dioxide emissions which their customer’s value since it offers them increased legitimacy towards the consumers

- Cascades Djupafors knows how to engage different local actors in environmental issues that their customer’s value since it increases their trustworthiness towards the consumers

5.2 Creation of Economic Values
It is emphasized by Jansson (2007) that in order to financially gain from its societal advantage a firm needs to transform it into competitive advantage. The transformation is achieved through enhanced intangible resources, gained from achieved legitimacy with customers, which can be transformed to competitive advantage through the source of competitive advantage, i.e. differentiation or cost advantage.

![Diagram](image.png)

**Figure 21:** Cascades Djupafors transformation of societal advantage to competitive advantage (developed from Jansson, 2007)
5.2.1 Resources and Capabilities

The resource-based view of a firm, described by Grant (2010), is founded on the perspective that a firm’s competitiveness is a result of its resources and capabilities. Furthermore, it is identified that a firm’s resources can be tangible, intangible or human but few resources are valuable on their own. A firm’s capacity to combine resources to perform a certain activity or reach a desired outcome can be defined as a capability.

The empirical findings illustrate that the main physical asset of Cascades Djupafors is their small and flexible machine that produces their carton board. The features of this machine offer the firm a possibility to produce tailor-made products in accordance to customers’ needs. Further, Cascades Djupafors holds a large number of environmental certificates, such as PEFC, FSC, EPD and ISO 14001 which enables customers to request environmental certified carton board. It is emphasized by Hägerstrand (12-01-2010) that the brand of Cascades Djupafors symbolizes availableness and accessibility due to its size and geographic location. Since the firm is perceived as advanced within the environmental field within their industry the brand also represents environmental awareness. In addition, Hägerstrand (26-11-2009) describes that Cascades Djupafors is a flat organization with a tight, flexible and multifaceted skilled work force. As a result, the primary tangible resource of Cascades Djupafors is their small and flexible machine and the intangible resources are their extended number of certificates as well as their reputation and brand symbolizing availableness and environmental awareness. Cascades Djupafors’ tight, flexible and multifaceted skilled work force is their primary human resource.

It is described by Sandberg (30-03-2010) that the green barrier Cascades Djupafors currently develops is resistant for fatty acids, moisture, heat and cold. The empirical study reveals that the customers’ demands on a green barrier are mainly resistance for fat, moisture, heat and cold. Moreover, the empirical study also illustrates that the majority of the customers rank quality of the carton board as the most important purchasing criteria while the price is ranked by the majority as the second most important purchasing criteria. Thus, it is identified that Cascades Djupafors’ following interrelated capabilities constitute the foundation for creating economic value for their customers:

- Cascades Djupafors knows how to use natural resources in a more efficient and sustainable way that their customers’ value since it decreases their costs
- Cascades Djupafors knows how to develop green product and process innovations with low degree of carbon dioxide emissions which their customers value since it reduces their costs

- Cascades Djupafors knows how to protect their customers’ fatty products from fatty acids, moisture, heat and cold in a sustainable and environmental friendly way that their customers’ value since it enhances the quality of their products towards the consumers

Hence, Cascades Djupafors’ green barrier meets the preferences of the customers since the firm’s capabilities match the demands of the customers. Further, Cascades Djupafors’ capabilities meet the purchasing criteria of their customers, i.e. customers regard quality and price as important factors when purchasing carton board and Cascades Djupafors has the capabilities to perform activities that enhance quality and decrease costs for their customers.

Jansson (2007) describes that the transformation from societal advantage to competitive advantage is partly built upon enhanced intangible resources. A firm that has achieved a societal advantage has gained legitimacy with stakeholders that create a positive reputation, which is described as the most critical intangible resource for a firm. As mentioned previously, one of the intangible resources that Cascades Djupafors holds is their reputation and brand symbolizing availableness and environmental awareness. Further, 86% of the customers apprehend Cascades Djupafors as a responsible firm within the field of environment. Thus, Cascades Djupafors’ societal advantage has resulted in a good reputation mainly built upon their extensive environmental work, which has been gained through achieved legitimacy with customers.

5.2.2 Green Innovation as a Source of Competitive Advantage

According to Jansson (2007) an improved reputation can be transformed to competitive advantage through the source of competitive advantage, i.e. cost or differentiation advantage. On the one hand, a good reputation can be a source of cost advantage mainly through better use of natural resources that leads to cost efficiency. On the other hand, a good reputation can be a source of differentiation advantage if it makes pricing concessions achievable so that a firm can set a premium price or increase its amount of sales. The empirical study illustrates
that Cascades Djupafors has during the latest five years learned to use natural resources in a more efficient way, e.g. through implementing water constrictions as well as sustainable and efficient use of forests. These activities have lowered the firm’s energy consumption and led to a more cost efficient process. Moreover, Cascades Djupafors offers tailor-made services and customized products, in the sense that Cascades Djupafors can adjust the product specific features after customer requirements, regarding for instance weight, stiffness, coatings and optional certificates. As a result, a more efficient use of natural resources has led to a cost efficient process which indicates that Cascades Djupafors posses a cost advantage. However, for Cascades Djupafors these actions have rather been a source of differentiation advantage since it is uncommon within their industry to be this explicitly environmental friendly. Thereby Cascades Djupafors offers their customers an added value by more efficient use of natural resources. Additionally, Cascades Djupafors further differentiate themselves by offering tailor-made services and customized products with a number of optional environmental certificates.

It is outlined by Grant (2010) that the characteristics of a firm’s resources and capabilities will determine which source of competitive advantage it can pursue. Consequently, Cascades Djupafors’ resources have directed their source of competitive advantage, i.e. by having a small and flexible machine, environmental certificates, good reputation and brand together with a flexible and multifaceted skilled work force Cascades Djupafors is able to differentiate itself as an environmental friendly and customized producer of carton board. Furthermore, Cascades Djupafors’ capabilities have also directed their source of competitive advantage, i.e. by knowing how to use natural resources efficiently, developing product and process innovations and protecting customers’ products in a sustainable way Cascades Djupafors can further different themselves from their competitors.

Furthermore, according to Grant (2010) innovation and new product development is one of the key strategic elements of differentiation advantage since it offers superior customer value. Chen et al. (2006) emphasize that green innovations are hard or software innovations with focus on green product and process developments, such as development of energy saving, waste recycling and green product designs. It is described that green innovations particularly facilitate the achievement of competitive advantage for a firm. Sandberg (30-03-2010) describes that Cascades Djupafors continuously rethink and develop products and processes that are in line with their environmental profile in order to be competitive. For instance,
Cascades Djupafors has developed a thinner carton board, a green barrier as a complement to polyethylene as well as enhanced processes for more efficient use of energy and decreased carbon dioxide emissions. Thus, Cascades Djupafors product and process developments are green innovations since they are directed in an environmental and sustainable way. For example, Cascades Djupafors’ newest product development, the green barrier, is made from renewable resources instead of polyethylene. This will transform the carton board into an environmental friendly mono-material that can be easier recycled than a polyethylene barrier. Moreover, it is explained by Chen et al. (2006) that a firm that pioneers with green innovations can enjoy first mover advantage which offers possibilities to set a premium price, reach new markets and develop corporate image. Hägerstrand (10-05-2010) describes that Cascades Djupafors strives to act as a trendsetter by being the first to supply innovative environmental friendly solutions within their industry. Thus, Cascades Djupafors is a pioneer within green innovations and has thereby a potential to set a premium price, research new markets and further develop their corporate image.

All in all, Cascades Djupafors’ good reputation is their source of differentiation advantage, which is built upon the development of green innovations and thus a firm’s reputation can function as a source of competitive advantage (see figure 21 at page 73). However, this consequentially raises the question of how a firm can move from the source of competitive advantage to an actual competitive advantage where it earns higher profits in comparison to its competitors which will be further analyzed below.

5.2.3 Competitive Advantage

According to Jansson (2007) a firm needs to transform its societal advantage to competitive advantage in order to financially gain from it. However, as first outlined in the introduction chapter, there is a contradiction in previous research whether the relationship between CSR and financial outcome of a firm is positive, negative or absent. The data from the empirical study reveals that 67% of Cascades Djupafors’ customers are willing to pay a higher price for carton board with a green barrier than for a barrier made of polyethylene (the level of willingness to pay a higher price varies from 1-20%, see figure 15 for detailed data). Furthermore, all of Cascades Djupafors’ customers are willing to change their polyethylene barrier to a green barrier if it is cost neutral. Thus, there is a positive link between Cascades Djupafors’ CSR activities, such as the development of a green barrier, and financial outcome of the firm. The positive link is a result of that the majority of the customers are willing to pay
a premium price for a green barrier. Also, the customers are willing to increase their amount of purchases from Cascades Djupafors if the barrier is cost neutral. In the empirical chapter a calculation concerning potential profit from Cascades Djupafors’ green barrier was carried out. From the calculation regarding Cascades Djupafors’ estimated profit potential for the first production year of a green barrier that is cost neutral, i.e. with the same sales price as for a polyethylene barrier is 58 100 000 SEK and the profit potential from a green barrier with a 5.7% higher sales price as for a polyethylene barrier is 62 204 000 SEK. As a result, the numbers indicate that there is a clear profit potential for Cascades Djupafors, no matter if the sales price is higher or not. The potential profit from the green barrier with a higher price is obviously the highest. Nevertheless, even though the estimated profit potential from the green barrier with the higher sales price is the highest it needs to be taken into account that our empirical study reveals that the customers are willing to increase their amount of purchases, as much as 58%, if the barrier is cost neutral. We find that Cascades Djupafors needs to evaluate whether the potential to set a premium price or increase their amount of sales will be the most suitable for them. In this calculation, when taking into account that 58% of the customers are willing to increase their amounts of purchases if the green barrier is cost neutral, it is visual that it is most profitable to sell the green barrier to the same price as a polyethylene barrier since the customers are willing to increase their purchases to a large extent. However, this number is also estimated from the interviews conducted in the empirical study and therefore cannot be seen as valid for all of Cascades Djupafors’ customers but we use them in order to speculate about the profit potential. Thus, the green barrier offers Cascades Djupafors’ both the potential to set a premium price and increase its amounts of sales.

All in all, Cascades Djupafors has achieved a competitive advantage by developing capabilities that their customers value, for instance by protecting customers’ products in an environmental and sustainable way that their customers’ value since it enhances the quality of their products towards the consumers. Thus, Cascades Djupafors has a potential to create economic value from their societal advantage. Furthermore, it is emphasized by Grant (2010) that in order for a firm to stay competitive it is essential that the competitive advantage of a firm is long lasting, i.e. *sustainable*. Whether a firm can gain profits from its resources and capabilities not only depend on if they provide the firm with competitive advantage but also on for how long the competitive advantage can be sustained. Sustainable competitive advantage depends on the durability and imitability of the resources and capabilities.
Resources and capabilities that are more *durable* than others provide a more secure basis for competitive advantage, e.g. brands are more durable than equipment. *Inimitable* resources and capabilities are non-transferable and nonreplicable, such as those resources and capabilities that are entirely firm specific or have a value that depreciates on transfer, e.g. natural resources or organizational capabilities. However, even if a resource or capability is replicable a firm can benefit if the resource or capability has been accumulated over a long period of time which implies disproportionate costs for competitors to replicate.

As earlier discussed in the analysis regarding Cascades Djupafrors’ resources and capabilities, the primary *resources* of Cascades Djupafrors is their small and flexible machine, their extended number of certificates, reputation and brand symbolizing availableness and environmental awareness together with Cascades Djupafrors’ tight, flexible and multifaceted skilled work force. Hägerstrand (26-11-2009) discusses that since Cascades Djupafrors use energy from renewable local resources their competitors can naturally never be as environmental friendly as the firm since the competitors lack access to the same sources of renewable energy. As also discussed previously, Cascades Djupafrors has the *capabilities* of knowing how to use natural resources in a more efficient and sustainable way, develop green product and process innovations with low degree of carbon dioxide emissions as well as protect their customers’ fatty products from fat acids, moisture, heat and cold in a sustainable and environmental friendly way.

Consequently, Cascades Djupafrors’ machine as well as their environmental certificates is resources that can be replicated by competitors, however, it implies that the competitors have to commit large financial and time investments in order to acquire these resources. Cascades Djupafrors’ reputation and brand as well as their flexible work force are durable resources since they are entirely firm specific. The majority of Cascades Djupafrors’ capabilities are firm specific and build on complex organizational abilities, e.g. their flexible work force, which have been accumulated over a long period of time and thereby are nonreplicable. As a result, Cascades Djupafrors has resources and capabilities that, to some extent, are non-transferable and nonreplicable. Thus, Cascades Djupafrors has a potential to achieve a sustainable competitive advantage since their resources and capabilities are durable and built on complex organizational routines.
5.3 Sustainable Business

Jansson (2007) establishes that in order to achieve a sustainable business a firm needs to create social and natural as well as economic values for their customers. These types of values are interrelated since creation of social and natural values also can contribute to economic value. As mentioned in 5.1.4, Cascades Djupafors has managed to create social and natural values and achieved a societal advantage. Further, Cascades Djupafors has the potential to create economic value since their societal advantage has transformed into a competitive advantage with a possibility to set a premium price and increase sales, which is described in 5.2.2. As a result, since Cascades Djupafors has created social and natural values and has the potential to create economic value, the firm has a potential to achieve a sustainable business. For Cascades Djupafors, the enabling factor for creation of a social and natural values as well as economic values appears to be the development of capabilities, which will be further discussed below.

5.4 Organizational Learning Process at Cascades Djupafors

The 4I framework of organizational learning, developed by Crossan et al. (1999), describes that in order to sustain its competitiveness an organization needs to explore new learning possibilities as well as exploit previous acquired learning. The concept of 4I framework implies converting tacit knowledge to explicit knowledge which occurs through the four subprocesses of intuiting, interpreting, integrating and institutionalizing.

5.4.1 Cascades Djupafors’ Organizational Learning Process

Intuition is, according to Crossan et al. (1999), the sub-conscious process at the individual level of an organization where individuals recognize patterns and possibilities that results in novel ideas in the form of tacit knowledge. It is argued by Kleysen and Dyck (2001) that intuition is not only a sub-conscious process since external circumstances such as attention to customer needs, market opportunities and end-user’s ideas additionally can impact the individual’s process of generating new ideas. The empirical evidence reveals that after a storm in Sweden about five years ago, the employees at Cascades Djupafors started to consider that the firm had to make some changes in order to minimize their impact on the environment and climate. For instance, the firm implemented water constrictions, participated in energy savings programs, achieved several environmental certificates and investigated their carbon dioxide flows which resulted in the establishment of the EPD certificate. Additionally,
Hägerstrand (10-05-2010) expresses that Sandberg, the manager of Cascades Djupafors, is the individual who has the ideas, initiates and manages most of the product and process developments that can enhance the firm’s environmental friendly profile. As a result, already before the initial stage of Cascades Djupafors’ adoption of an environmental profile the firm had become aware of the need to make internal changes in order to adapt and sustain the environment. This demonstrates that the intuiting stage of organizational learning occurred before Cascades Djupafors made their internal changes. Furthermore, the individuals at Cascades Djupafors, especially Sandberg, have the ability to recognize patterns and possibilities that results in novel ideas which is the starting point for the organizational learning process.

Crossan et al. (1999) discuss that when an individual’s intuition has converted to conscious elements that other individuals can make explicit connections to, the process of interpreting begins. In order for others to develop shared meaning and understanding for an individual’s intuition a common language is crucial. In this sense, language is a tool to preserve what has been learned but the language must also evolve in order for organizations to learn and renew. In order for individual learning to convert to group learning and thus become integrated in the group, Bontis et al. (2002) argue that the process of sharing individual interpretations to develop a common understanding needs to be developed. Crossan et al. (1999) illustrate that coherent and collective actions as well as an evolved shared understanding are the focus of integrating which occurs and develops through shared practices, continuous interactions and conversations with the advance mutual language in the group. Hägerstrand (26-11-2009) stresses that the EPD certificate was a tool to affirm the results regarding Cascades Djupafors’ impacts on the climate and to be able to externally communicate the sustainable improvements the firm have managed to accomplish. According to Sandberg (30-03-2010) the development of Cascades Djupafors’ environmental profile has taken time and technological processes has been enhanced and green products has been developed stepwise in accordance to their enhanced knowledge within the environmental field. Consequently, shared understanding of environmental knowledge has been developed at Cascades Djupafors which enhances the employees ability to develop product and processes in a sustainable way, in other words, the stages of interpreting and integrating have occurred. Further, Cascades Djupafors’ various certificates, e.g. the EPD certificate, has enabled the employees to explicitly express their ideas among each other with a familiar language that has been collectively developed since the employees engage in activities of collectively interpreting
information with other employees that are involved in the same activities. The process of institutionalizing is described by Crossan et al. (1999) as informal rules that have become embedded in an organization’s structures, strategies and routines. Bontis et al. (2002) argue that the individual and group learning need to be transferred into the non-human aspects of the organization in order for the embedded learning to endure even if the individuals leave the organization. Crossan et al. (1999) argue that it is vital for an organization to manage the process of transforming individual innovative ideas to institutionalized organizational routines through a learning process in order to gain sustainable competitive advantage. The empirical evidence reveals that the employees at Cascades Djupafors automatically and unconsciously take environmental aspects into account when developing new products and processes as well as when formulating sales arguments. For instance, when sales representatives from Cascades Djupafors visits potential and existing customers a discussion of environmental aspects appears to be given. Furthermore, the empirical findings indicate that the environmental aspects and issues are a natural part of Cascades Djupafors’ overall strategy and visual within the production routines. Thus, Cascades Djupafors has to some extent embedded informal rules in their strategies and routines. Environmental aspects not only appear to be given when developing new products and processes and formulating sales arguments, they are also reflected within the strategies and routines of Cascades Djupafors. Thereby the organizational learning process is visual at Cascades Djupafors and some parts of their environmental work have become institutionalized which results in that the knowledge to some extent will remain embedded in the firm even if the individuals would leave.

5.4.2 Managing Institutionalized Learning
As mentioned, an organization needs to manage the exploration of new learning possibilities as well as exploiting previous acquired learning in order to sustain its competitiveness. It is described by Crossan et al. (1999) that what the organization has learned to do and what it needs to do can mismatch since the external environment is constantly changing. It is emphasized by the authors that what the organization has learned to do will affect how the employees act and think since that knowledge is fed back from the organizational level to the individual level via the group level. Simultaneously, what the organization needs to do is observed by the individuals who identify novel ideas and possibilities to meet the external changes. Then the flows of new ideas are fed forward from the individual level to the organizational level via the group level. Furthermore, Jansson (2007) describes that there is a
particular capability that relates to change, development or creation of new capabilities, namely the dynamic capability in the form of an organizational learning process. As a result from the empirical evidence presented earlier, Cascades Djupafors has the ability to both exploit previous acquired learning and to some extent explore new learning since the firm partly adapt their routines, products and processes to customers changing requirements and at the same time use their knowledge and abilities within the environmental field in order to meet the customers changing demands. Thus, the processes of feed back as well as feed forward are to some extent established at Cascades Djupafors which implies that the firm has possibilities to sustain its competitiveness. Cascades Djupafors has managed to develop “green” capabilities through an organizational learning process which constitutes the foundation for the firm’s competitiveness. Cascades Djupafors’ capabilities appears to be dynamic to some extent since they are not constant rather they are changeable and adaptable to changing market requirements.
6 CONCLUSIONS

In the following chapter the conclusions of this thesis will be presented. First the four sub questions will be discussed and concluded which is followed by an overall conclusion and answer of the main research question.

6.1 Answering the Research Questions

The premise of this thesis is the need to research the link between social and natural values and the competitive advantage of a firm. There is a contradiction in previous research whether the relationship between CSR and financial outcome of a firm is positive, negative or absent. Thus, the overall purpose of this thesis is to identify, describe and analyze how a firm can achieve competitive advantage from a transformation of social and natural values. Following, the main research question of how a firm can transform social and natural values to competitive advantage will be answered through a discussion of the sub questions concerning creation of social and natural values, influencers on customers’ values, achievement of sustainable competitive advantage and activity adaptations in accordance to customers’ preferences.

The first sub question deals with how a firm can create social and natural values for their customers. From our analysis we can identify that creating social and natural values is a result of the adoption of a wider socially responsible behavior from which a firm can demonstrate responsibility, trustworthiness, reliability, respectability and credibility towards its customers. When developing its business a firm can implement a wider socially responsible behaviour through adoption of CSR practises. This study illustrates that a firm can demonstrate responsibility and create values for their customers through adoption of both internal and external CSR practises, i.e. by internally improve products and processes in a sustainable way as well as by externally engage in activities that are not solitary business connected. For instance, internal processes can be improved by implementing water constrictions and managing sustainable use of forests while external engagement can entail establishment of industry-wide certificates. Furthermore, from our analysis we can distinguish that a firm’s potential to create social and natural values for their customers, from the adoption of CSR practises, is a result of the firm’s ability to develop capabilities which occurs through an organizational learning process. A constant development of capabilities, including both exploiting previous learned knowledge as well as exploring new knowledge, is vital in order
to establish a learning process that offers the firm possibilities to create social and natural values. For instance, a firm can have the capability of knowing how to develop green product and process innovations with low degree of carbon dioxide emissions which their customer’s value since it offers them increased legitimacy towards the consumers. In addition, the analysis reveals that if customers can benefit from and consider the CSR activities carried out by a firm to be valid legitimacy is given to the firm, as a result, the firm has created social and natural values for its customers. Thus, we can conclude that a firm can create social and natural values for their customers, which are facilitated by the adoption of CSR practises that the customers can benefit from, by constantly developing capabilities.

The second sub question deals with the factors influencing how customers value social and natural values created by a firm. Our analysis illustrates that there are two main factors influencing how customers value social and natural values. First, the degree of customer value is influenced by how well a firm manages to adapt the activities carried out to the norms and values of the customers. A firm can manage this either through integrating the current norms and values of the customers in their activities, or the firm can influence the customers’ current norms and values and thus change the view held by the customers. Second, the degree of customer value is also influenced by how well the customers can benefit from the activities carried out by a firm. Consequently, we can conclude that the factors influencing how customers value social and natural values are how well a firm manages to adapt activities to customers’ norms and values as well as how well customers can benefit from the activities carried out.

The third sub question concerns how a firm can achieve sustainable competitive advantage. From our analysis we find that by developing a differentiation advantage that derives from green innovations, i.e. rethinking business models, products, technologies and processes in a sustainable way, a firm can achieve a competitive advantage. For instance, the competitive advantage offers the firm a potential to set a premium price and enhance their amount of sales. In addition, the achievement of competitive advantage appears to be facilitated by the benefits arising from pioneering with green innovations. Furthermore, from the analysis it is clear that the durability and inimitability of a firm’s resources and capabilities are vital for the achievement of a sustainable competitive advantage. By having resources and capabilities that are durable, e.g. brand and reputation, and inimitable, e.g. natural resources and organizational capabilities, as a foundation for green innovation the competitive advantage of
a firm is more sustainable. As a result, we can conclude that a firm can achieve sustainable competitive advantage through pioneering with green innovations founded on durable and inimitable resources and capabilities.

The fourth sub question deals with how a firm can adapt its activities in accordance to customers’ preferences for social and natural values in order stay competitive. Through the analysis we find that it is crucial for a firm to constantly develop its capabilities, which entails both exploiting previous acquired knowledge and exploring new knowledge. This occurs through an organizational learning process where the firm sequentially learns how to adapt its activities to customers’ changing and diverse preferences. From our analysis we can distinguish that through an organizational learning process a firm can manage to develop dynamic capabilities which are constantly changing and thereby capture customers’ changing preferences and requirements. Thus, a firm can adapt its activities in accordance to customers’ preferences for social and natural values by developing dynamic green capabilities through an organizational learning process and thereby the firm can capture changes in the external environment and adapt in order to stay competitive.

Lastly, the main research question concerns how a firm can transform social and natural values to competitive advantage. Through the analysis we identify that a firm can manage a transformation of social and natural values to competitive advantage, in line with the theory developed by Jansson (2007). We find that a firm can achieve a competitive advantage through adopting CSR practices. A firm can gain legitimacy from its customers by offering them social and natural values that can lead to a positive reputation which is linked to competitive advantage through a differentiation as the source of competitive advantage. As a result, a firm that has achieved competitive advantage can set a premium price or increase its amount of sales. However, in distinction to authors focusing on the link between CSR and competitive advantage we focus on green product and process innovations as a source of competitive advantage; an issue that has not been extensively elaborated in previous research. The concept of green innovations as a source of competitive advantage has only been previously discussed by few authors, e.g. Nidumolu et al. (2009), Chen et al. (2006) and Porter and van der Linde (1995). But in distinction to these authors, our study adds the perspective that a firm’s development of capabilities as an enabler for creating green innovations. Thus, this study addresses the need for further research regarding how social responsible practices of a firm can be linked to competitive advantage through a firm’s
creation of resources and capabilities, as pointed out by Husted and Allen (2007). From the analysis it is visual that green innovations, i.e. rethinking business models, products, technologies and processes in a sustainable way, offers a differentiation advantage for a firm which enables an achievement of a sustainable competitive advantage. As a result, a firm can set a premium price or increase its amount of sales. Further, this study shows that a constant development of capabilities, which facilitate the adoption of CSR practices that the customers can benefit from, is vital in order for a firm to create social and natural values. Thus, a firm can transform social and natural values to competitive advantage by developing green capabilities to perform CSR activities that their customers value and thereby gain legitimacy. This can lead to a positive reputation which is linked to competitive advantage through the source of competitive advantage, i.e. green innovations. The competitive advantage allows a firm to set a premium price or increase its amount of sales which offers a possibility for increased financial outcome.

This thesis provides a real-life case study of how a firm can transform social and natural values to competitive advantage and the study is based on in-depth personal interviews with a firm’s customers. To our knowledge, this is the first study that indicates how green innovations can be linked to competitive advantage through a creation of resources and capabilities that is based on a real-life case study with personal in-depth interviews. Besides, no studies that we are aware of have based their empirical results on interviews where the focus has been on a green product in the initial development phase. Thus, we find that this study bridges the research gap and contributes with novel findings to the concept of green innovations and competitive advantage.
7 RECOMMENDATIONS

In the final chapter we give account for the limitations of this study and provide recommendations for further research within this field. This is followed by a presentation of specific managerial implications for our case company Cascades Djupafors.

7.1 Limitations of the Study

This study contributes with novel findings to the concept of green innovations and competitive advantage, however, there are a number of limitations of this study which should be kept in mind by the reader. Firstly, this study solitary involves the view of one stakeholder, i.e. the customers of a firm, which we perceive as the main limitation of this study. As mentioned in the delimitations we are aware of that several stakeholders are influenced by a firm and that in turn influences the firm. By merely involving the customers in this study it can be difficult to ascertain how all stakeholders value social responsible acts carried out by a firm, since a firm has a potential to gain legitimacy from other stakeholders than the customers which can contribute to the creation of social and natural values. Secondly, this study is based on interviews with a single case company and a selection of their Swedish customers which we perceive as an obvious limitation of this study. Scandinavian firms are well known for having extensively developed economies, educated workforces and fair ethical and sustainable behaviours. The positive link between social and natural values and the competitive advantage of a firm pointed out in this thesis is more likely to be valid for firms operating in markets with similar characteristics as the Scandinavian market than for firms operating in e.g. emerging country markets. Thirdly, we base our findings regarding the relationship between social and natural values and competitive advantage on an empirical study that was conducted under a limited period of time. Thus, the long term consequences are not examined which would be the ideal situation in order to ascertain what impact adoption of CSR practises have on the competitive advantage of a firm. This is also pointed out by Garcia-Castro et al. (2010) who argue that the relationship between short and long run performances must be elaborated in further research.

7.2 Suggestions for Further Research

As the above mentioned limitations suggest this study gives rise to further research within this field and we would like to conclude with calling for increased attention to five main areas for further research. First, in this study we have concluded that a firm can transform social and
natural values to competitive advantage. This is partly built upon the empirical evidence that customers are willing to pay a higher price for green products and increase their amount of purchases if the products are cost neutral, since green products offers an added value for the majority of the customers in the study. We call for further research whether the willingness to pay more and increase purchases also is evident further in the supply chain. Cascades Djupafors’ customers that we have interviewed sell their products to general dealers, such as ICA and COOP in Sweden, which then offer the products to the final consumer. It is questionable whether the general dealers and final consumers also experience an added value from green products. An interesting topic for further research would be whether the adoption of CSR practises also creates legitimacy with general dealers and final consumers. Second, as evident when reading the limitation of this study we find it valuable to include more stakeholders than the customers in further research. We suggest researchers to address this limitation and include several stakeholders and thereby investigate whether CSR can create social and natural values also for other stakeholders.

Third, to establish a clearer picture of the topic researched in this thesis it would be interesting with further research concerning a firm’s potential to create social and natural values that leads to competitive advantage in other countries, as the limitations suggest. An empirical study, similar to the one conducted by us, based on firms in emerging country markets would be especially interesting for further research. Fourth, we call for further attention to research whether long term consequences from a firm’s adoption of CSR activities coincides with the short term results pointed out in this study, in order to ascertain that the findings of this study is valid also in the long run. At last, we also insist that the measurement issues are addressed in further research. As outlined in the introduction chapter the contradictive disagreement in previous research, whether CSR can lead to competitive advantage, partly derives from an extensive measurement problem. Throughout this study we manage to avoid these problems to some extent by applying firm specific research, based on personal interviews concerning a specific product development with the customers of a firm. Thus, we identify a possibility to establish a cause-and-effect connection between the adoption of CSR practises and competitive advantage of a firm to some extent. However, our findings do not indicate any solutions to the measurement problems and thereby further research should address this issue.
7.3 Managerial Implications for Cascades Djupafors

From our findings in this thesis we have identified three specific managerial implications for Cascades Djupafors which will be outlined below. For each recommendation we will first describe the recommendation itself then give account for why it is important for Cascades Djupafors to implement the recommendation. Lastly we give some practical suggestions of how Cascades Djupafors can manage the implementation.

7.3.1 Develop Green Product and Process Innovations

We recommend Cascades Djupafors to keep focusing on and continuously develop green product and process innovations, i.e. rethinking business models, products, technologies and processes in a sustainable way. One of the main findings of this study is, as mentioned, that developing green innovations offers a firm a differentiation advantage which enables the achievement of a competitive advantage. Our empirical study reveals that Cascades Djupafors already pioneer with green innovations through e.g. implementing systems for water constrictions and developing a carton board with a green barrier. However, we find it crucial that Cascades Djupafors continuously keep developing these innovations and not lack behind when other firms start to adopt a similar environmental friendly profile. We suggest that the firm manage this continuous process by constantly developing capabilities, which will be further discussed below.

7.3.2 Manage a Constant Capability Development

Our second advice to Cascades Djupafors is to manage a constant capability development in order to stay competitive. One of the main contributions of this study is, as mentioned, that a firm’s development of capabilities functions as an enabler for creating green innovations. The empirical findings indicates that Cascades Djupafors holds a number of resources that together create capabilities that allows the firm to develop green product and process innovations. For instance, Cascades Djupafors has the capability of knowing how to develop green product and process innovations with low degree of carbon dioxide emissions which their customer’s value since it offers them increased legitimacy towards their customers. We find it crucial that Cascades Djupafors keep managing the development of capabilities so that it results in a process that is continuous. Thus, the capabilities need to be dynamic rather than static. Our empirical study of this thesis point towards that Cascades Djupafors exploits their previous learned knowledge within the environmental field particularly well e.g. by using their previous knowledge, partly acquired from the development of the EPD certificate, the
firm manages to develop products that have a low amount of carbon dioxide emissions. We also find that Cascades Djupafors to some extent are good at exploring new knowledge within the environmental field, e.g. by taking customers preferences and changing market demands into account in new product developments. We advise Cascades Djupafors to continuously manage both exploiting and exploring knowledge to nurture the capabilities that allows the firm to develop green innovations. To practically manage a constant capability development we suggest Cascades Djupafors to integrate their environmental and sustainability work into their internal product and process developments, rather than engaging in charitable donations since it is the internal developments that create resources and capabilities that can lead to competitive advantage.

7.3.3 Assure Institutionalization to Stay Competitive

In order to stay competitive we furthermore recommend Cascades Djupafors to assure that the environmental and sustainable work undertaken by the firm becomes institutionalized, i.e. embedded in the processes of Cascades Djupafors. The empirical findings indicated that Sandberg is the individual who has the ideas, initiates and manages most of the product and process developments that can enhance the firm’s environmental friendly profile. However, the analysis reveals that Cascades Djupafors’ knowledge has to some extent become embedded in the firm. But we find that there are still some knowledge that needs to be further established within the firm. If not, there is a risk that the knowledge and capabilities leave the firm with the individuals. Thus, we recommend Cascades Djupafors to assure that the environmental and sustainable work is institutionalized in order to stay competitive. Practically, we suggest Cascades Djupafors to manage this recommendation through establishing routines for how to act in accordance to the environment. These routines should be explicitly documented and established in the daily practical operations. We further suggest that the firm establish routines for scheduled meetings where environmental developments can be discussed in order to reassure that the initiatives of green product and process developments are established within the firm and not leave with the employees.
BIBLIOGRAPHY

Literature


Articles


Dissertations
Timlon, J. (2005) Realizing New Marketing Strategy through Organizational Learning in Industrial Networks, Gothenburg University, Sweden

Interviews
Cramér, G., Production Director of Almondy AB, 12-04-2010
Hägerstrand, S., Sales Manager of Cascades Djupafors AB, 26-11-2009, 18-12-2009, 12-01-2010, 08-03-2010, 30-03-2010, 10-05-2010, 21-05-2010
Johansson, M., responsible for Sustainable Development at Lantmännen, 07-04-2010
Jonsson, M., Manager of Herrgårdstoppen AB, 20-04-2010
Martinsson, P., Purchasing Manager of AB Annas Pepparkakor, 07-04-2010
Miver, M., Manager Key Account Horeca at Tingstad, 12-04-2010
Nasr, L., Packaging Developer at Göteborgskex AB, 14-04-2010
Olsson, I., Purchasing Manager at Göteborgskex AB, 14-04-2010
Rytterstig, E., responsible for Quality Environment and R&D at Domstein Enghav, 14-04-2010
Sandberg, B., Manager of Cascades Djupafors AB, 30-03-2010 and 10-05-2010
Vidlund, H., Purchasing Manager of Delicato AB, 06-04-2010
Electronic Sources

The webpage of the EPD system, www.environdec.com/pageID.asp?id=160&newsId=411, 05-05-2010 14:15
ATTACHMENT 1: Interview Guide for Cascades Djupafors’ Customers

1. What is your core business and what kind of products do you offer?

2. Who are your customers and which markets do you serve?

3. What is your turnover?

4. What do you apprehend as your main competitive advantages? Who are your main competitors?

5. What does your customers’ value and demand?

6. Does the firm have any certifications? Are your products certified?

7. What kind of and how large amounts of carton board are you currently purchasing?

8. How has the sort and amount of carton board changed during the latest period? What are your apprehensions about the future?

9. What is the primary function of the package?
   - __ Inform  __ Protect  __ Printable  __ Maintain heat
   - __ Sell    __ Wieldy  __ Other

10. To which kind of products do you primary use carton board with a barrier?
    - __ Frozen  __ Dry
    - __ Fatty   __ Fast food
11. Which criteria do you have on your current carton boards with a barrier?
   __ Resistance towards moisture    __ Resistance towards fat
   __ Resistance towards steam       __ Resistance towards cold/heat

12. What kind of fatty acids does the products contain that carton board with a barrier is currently used for?
   __ Animal fats    __ Vegetable fats
   __ Oil based fats __ Others

13. For how long time do you estimate that your products will remain in the package?

14. Can you describe the recycling process for carton board?

15. What are your current costs for recycling?

16. What are the firm’s fundamental values and how do you work with environmental, climate and social issues?

17. Who is your current supplier of carton board?

18. Can you describe the purchasing process of carton board?

19. How do you collaborate with the converters?

20. Who takes the decisions regarding packages for your products?

21. What are your current purchasing criteria for carton board? Please rank the alternatives (1 for most prioritized and 8 for least prioritized)
22. Are you willing to pay a higher price for a carton board that is environmentally friendly in comparison to a carton board with a polyethylene barrier in order to be able to offer your customers environmental friendly products? (If yes, approximately how much?)

- 0-5%
- 6-10%
- 11-15%
- 16-20%
- 21-25%
- 26-30%

23. Would you consider purchasing carton board from a supplier that offers environmental friendly products/ low climate impact/ sustainable production process?

24. If yes, approximately how much of your total purchasing?

- 0-10%
- 11-20%
- 21-30%
- 31-40%
- 41-50%
- 51-60%
- 61-70%
- 71-80%
- 81-90%
- 100%

25. Do you apprehend that you can offer your customers added value through environmental friendly products?

26. Do you know the board mill Cascades Djupafors?

27. How do you perceive Cascades Djupafors?

28. To your knowledge, are you currently buying anything from them?

29. Approximately, how much do you buy from Cascades Djupafors in comparison to other suppliers?
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