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Engaging customers in product development through virtual processes

A case study of an outdoor clothing company

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Abstract

The competitive environment in most markets has been and is still experiencing radical changes in the way firms competing with the introduction of Internet. Recently, more emphasis has been put on revolving and developing the business around the customer, where Internet acts as a flexible way of doing so. One-way has been to involve customers in the development process, enabling them to give input and co-develop products together with the company. This method, which has been very popular especially within software companies, has given rise to concepts such as open innovation and open source. However, companies outside the software industry are also trying to reap the benefits of incorporating customers into New Product Development. One of these companies is a Swedish outdoor clothing company that for long has been a small niche player within its industry with a very conservative approach to New Product Development, but now have had a shift in mind-set with the newly appointed management. The company is now focusing all their effort on becoming the most innovative company within its industry by trying to find new sources for innovation and new ways of offering value.

This research is based on a case study of a Swedish outdoor clothing company with the purpose of investigating how they can motivate and work together with their customers in New Product Development. The research has been conducted during a four-month period, with one week of on-site data collection, and has been evaluating earlier attempts to involve customers into the New Product Development processes, this in order to construct recommendations for the focal company that can be both applicable and useful.

Conclusions that can be drawn from the research is that it is not as easy as just implementing a framework for how to codify what customers are saying. First and foremost company vision, values and culture needs to be in line with the goal of involving the customers. Next organisational and managerial guidelines must be developed in order to know how the knowledge should be utilized, and lastly a strategy for how to motivate customers to share experiences and knowledge should be formed.

Since the focal company is currently in a turbulent situation with an extensive reorganisation, the company should therefore be focusing on developing joint values and a vision for the future. Due to lack of coordination and information loss, the company should appoint a project manager that has an overall responsibility for New Product Development. Also due to financial and time restrictions, the company should focus on finding solution that creates synergies within the company in the near future. Such could be encouraging customers to interact with each other or implementing an IT tool for raising the level of communication within the company.

Keywords: Customer Engagement, Virtual Customer Community, Communication, Co-creation, Knowledge transfer, New Product Development

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Definition of key concepts

Below, key concepts will briefly be explained in order to provide the reader with an overall picture of the thesis. It will also work as an easy tool to turn to if questions arise while reading the remainder of the report.

Community: A community is a group of people with common interests, who interacts with each other and engages in activities that revolve around those interests. Communities can be both formal and informal whereas people can join together to create associations or companies, or merely just gather around a specific event or location.

Customer co-production: The process when customers collaborate with a company and jointly produce knowledge and insights for new business opportunities that the company later can exploit.

Customer Engagement (CE): Is seen through the perspective of the company and seeks to provide an expression for to what extent customers interacts with the company. In CE, either the company or the customer can initiate the interaction, and the level of engagement will represent the intensity of a customer's participation in a company's value offerings and activities.

Customer Involvement: On the other hand, can only be initiated by the company. The level of involvement is represented by the deeds and tools provided by the company in order to learn about the market and the way that customers' feedback is affecting the company's decisions.

Lead Users: Are people who use a product in an extreme way and often have new needs to satisfy. They also tend to stay ahead of the majority in the way they use the product. Lead users possess abilities to think in a solution-oriented way when new needs occur, and are often happy to contribute with their ideas, since they see a mutual benefit in getting their issues solved.

New Product Development (NPD): Is the internal process of developing an idea, realizing it and bringing it to production. A generic NPD process generally contains five stages; ideation, concept development, product design, product testing, and product introduction.

The Outdoor Industry: Is generally considered the collection of businesses involved with outdoor recreation. The industry has been seeing a slow but steady growth the recent years and today includes 60% of the people in the age of 18-65 years and. The largest customer segments are the urban athlete and the athleisure.

Virtual Community (VC): A VC is not bound by geographical limitations. Most features are similar to a normal community, but the interaction occurs online. Thus can virtual communities exist of members from completely different segments of society and/or from different parts of the world, without having to ever meet.

Table of contents

1. Introduction	1
1.1 Background.....	1
1.1.1 Company description.....	2
1.2 Purpose.....	2
1.3 Scope.....	3
1.3.1 Scope of challenges	3
1.3.2 Confidentiality.....	4
1.4 Report outline.....	4
2. Methodology	5
2.1 Emergence of research problem	5
2.2 Research strategy and design	5
2.3 Literature study	6
2.4 Data collection.....	6
2.5 Data analysis.....	8
2.6 Research limitations	8
3. Literature review	9
3.1 Customer Involvement and Customer Engagement.....	9
3.2 Virtual Customer Communities (VCC).....	10
3.2.1 Designing a VCC.....	10
3.3 Lead users	13
3.4 Managerial implications when opening up the NPD	14
3.4.1 Internal challenges when incorporating customers into NPD.....	15
3.4.2 Coping with the challenges	15
3.5 How companies interact with customers	16
3.6 Project management in NPD	19
3.7 Organizational implications with customer-focused structure.....	20
3.7.1 Knowledge transfer and decentralisation	20
3.7.2 Communication.....	21
4. Empirical context.....	24
4.1 The Outdoor Industry	24
4.2 Company vision and strategy	26
4.3 Current organisation.....	27
5. Empirical findings.....	30
5.1 Challenges and opportunities with CE	30

5.1.1 Strategic decisions for the company's virtual presence.....	31
5.2 Challenges and opportunities with NPD.....	32
5.2.1 Employee and customer dedication	32
5.2.2 Company ambassadors.....	33
5.3 Challenges and opportunities for the organization.....	34
5.3.1 Effects of the reorganisation.....	34
6. Analysis	36
6.1 Business environment and industry trends.....	36
6.2 Vision and strategy	36
6.3 Challenges and opportunities for CE	37
6.3.1 Lead users better equipped for the early stages of NPD	37
6.3.2 CE demands resource allocation.....	38
6.4 VCC to create synergies.....	38
6.4.1 Lessons from other case studies.....	40
6.5 Organisational implications on knowledge transfer and decentralisation	41
6.6 Types of communication.....	41
6.7 Project management	42
7. Discussion	44
7.1 Business environment and industry trends.....	44
7.2 Vision and strategy	45
7.3 Challenges and opportunities with CE	46
7.3.1 Lead user method is not the same as CE	46
7.4 Virtual Customer Community.....	47
7.4.1 Socially oriented community to create synergies	47
7.4.2 Communities more for branding purposes than for NPD	48
7.5 Organisational implications	48
7.5.1 Set procedures for knowledge transfer.....	49
7.5.2 IT tools for better communication.....	50
7.5.3 Project based NPD process.....	50
7.6 Final reflections.....	51
8. Conclusion and recommendations.....	52
8.1 Design parameters for CE through a VCC.....	52
8.2 Evaluation and utilization of new information	53
8.3 Strategic and operational guidelines.....	53
8.4 Suggestions for the future	55
9. Bibliography	57

Appendix A.....	62
Interview guides	62
Appendix B	69
Design Brief.....	69

List of Figures

Figure 1: <i>VCC and NPD Design Considerations, Nambisan (2002)</i>	12
Figure 2: <i>Four processes for communication by Spraggon & Bodolica (2012)</i>	22
Figure 3: <i>Customer segments and spending per segment (Egg Strategy, 2015, p.6)</i>	24
Figure 4: <i>VCC Interaction pattern and parameters when utilizing customers as users (Nambisan, 2002)</i>	39

List of Tables

Table 1: <i>The six questions for a co-creation strategy, developed by Thorsten & Alain (2009)</i> ...	11
Table 2: <i>Customer involvement and customer engagement by other companies</i>	26
Table 3: <i>Competitors' customer interaction patterns</i>	26
Table 4: <i>Company structure</i>	28
Table 5: <i>Answer to Thorsten & Alain's (2009) six questions</i>	39
Table 6: <i>Summary of recommendations</i>	55

1. Introduction

This first chapter starts by introducing the reader to the current situation in the background and company description. It will continue by presenting the purpose and scope of the thesis in order to give the reader insight in what result the thesis aims to achieve. Lastly it will present an outline of the rest of the report to make it easier to get an overall view of the report.

1.1 Background

Markets today are facing radically different expectations from their customers (Prahalad and Ramaswamy, 2000). With the increased accessibility of information via the Internet, customers are today able to make more informed choices and have higher demands on the companies they are buying from (Hoyer et al., 2010; Woodruff, 1997; Prahalad and Ramaswamy, 2000). Adding to this, globalization increases the number of competitors and many industries are facing slow growth (Woodruff, 1997), which has created a much more competitive environment where companies need to seek new ways to compete (Prahalad and Ramaswamy, 2000).

Whilst it has been known for long time that firms need to create customer value in order to acquire and retain customers (Butz and Goodstein, 1996), past attempts have been focused on internal processes such as quality management, downsizing and restructuring to achieve a strategic advantage (Woodruff, 1997). However, these methods do not have the same impact as before, as more firms implement them. According to Woodruff (1997), managers have even expressed concern for innovation and quality to not provide a basis for competitive advantage anymore. These concerns contradicts much of the literature, claiming that innovativeness, on the contrary, is essential for firms' growth and competitiveness (Teece et al., 1997 and Zott, 2002). Weerawardena and Mavondo (2011) explain that the difference is instead how firms think about innovation and customer value and how it is created. Companies today are moving away from a 'rigid' or 'static' view to a 'dynamic' view of their innovation capability, in order to capture more of the market dynamism. Hence old tools for achieving innovation and quality are not as central as they have been before.

More and more companies are today looking outside the own organization in order to exploit customers and other stakeholders for new innovation (Prahalad and Ramaswamy, 2000). A trend that is consistent with Woodruff's (1997) and Weerawardena and Mavondo's (2011) predictions. However, it has been shown by several researchers (Hoyer et al., 2010; Prahalad and Ramaswamy, 2000; Nambisan and Nambisan, 2008; Mahr et al., 2013; Kumar et al., 2010 and Fuchs and Schreier, 2010) that customer involvement has led to not only increased innovative capabilities, but also, in successful cases, to increased customer loyalty and positive word of mouth. With the internet, it has become much easier for companies to reach out to and create deeper relationship with their customers by developing better customer support services and by involving them in the product development process (Prahalad and Ramaswamy, 2000; Sawhney, Verona and Prandelli, 2005).

1.1.1 Company description

The company, who is object for this thesis, is a Swedish company selling outdoor clothing and equipment. It is a company, with 16 employees and a turnover of 46 million SEK in 2014 [1]. The company brand has been regarded as a brand with highly innovative products and considerable knowledge of the industry and the upper management want to profile the company as a high-end brand with high quality and high service level. The company does not have any stores of its own (except from a concept store), instead they are using retailers to manage most of the retailing and distribution. Now the company wants to increase its overall sales and especially their sales that occur online, which currently only constitutes for 2% of total sales.

At the moment, the company is undertaking an extensive re-organisation in order to be better equipped when facing new challenges as they aim to expand their business. As a part in the re-organisation, the company wants to be first within the outdoor equipment industry to move into a higher service level than just selling and repairing products. They also want to deepen their relationship with their customers, by redefining them as users. By doing this, the company aims to get closer to their customers and involve them in the product development by encourage feedback on the products they are using. The brand manager explained that the company wishes to use the feedback to enhance the products, somewhat like software companies are working with their customers today.

The first step towards reaching their goal has been made by developing a new website that will be launched in the near future. The next challenge will be to learn how to utilize it in the best possible way in order to increase sales and engage customers.

1.2 Purpose

The purpose of this thesis is to evaluate the company's organisation and product development process in order to advice best practices for creation and utilization of customer co-produced knowledge springing from their new website. The work is based on innovation, management, marketing and organisational literature and seeks to identify opportunities and threats associated with Customer Engagement (CE) in New Product Development (NPD). The result of this thesis should provide (1) suggestions on how the company can utilize their new website in order to increase CE and (2) advice in how the internal organisation needs to adapt in order to facilitate organisational learning.

Based on the stated purpose, the following research questions have been generated:

1. How should the company design their virtual presence in order to facilitate CE and knowledge co-production?
2. How should co-produced knowledge be evaluated and utilized in the NPD?
3. How should the organisation operate in order to ensure organisational learning?

The purpose of RQ1 is to provide suggestions of how co-production can be facilitated through a virtual presence. It is important to note that in order for the organisation to learn and co-create

value with its customers, methods for CE and co-creation needs to be in place, which the company does not have any strategy for at the moment. Therefore were RQ2 and RQ3 generated in order to provide suggestions for organisational changes needed for the evaluation and utilization of the customer co-produced knowledge.

1.3 Scope

Since the purpose of the report is to: “advise best practices for creation and utilization of customer co-produced knowledge springing from their new website” and since the company does not currently have any strategy to incorporate customers into their product development process, the focus has been to interpret past research in order for the authors to advise in best practices and offer concrete proposals for changes. Furthermore, the company has been examined through a qualitative case study in order for the proposals to be in line with the overall company vision of this project. In chapter 8, the authors present the suggested changes to the company’s organisation, which are based on the analysis in chapter 6.

It is generally very hard for companies within the outdoor clothing industry to diversify themselves from their competitors, and there are few opportunities to offer products that have a significant difference in perceived tangible value. Many customers are instead governed by design, lifestyle and ethical preferences. Hence, these are also the values that brands compete on. As described in the background, companies are now increasing their presence at the Internet and are using it in other ways than just as a retail channel. In the outdoor industry, most companies are using social media and their own website to mediate their values and their brand. Many have their own web shop where they can receive orders and track customer behaviour and some companies also use blogs to inspire and inform their customers of new products and stories from their sponsored athletes. However, according to the focal company’s brand manager there is not yet any company that are exploiting the full potential of their customers in their NPD. Therefore, the focal company sees this as a key factor that might help them to become the most innovative brand within their industry.

1.3.1 Scope of challenges

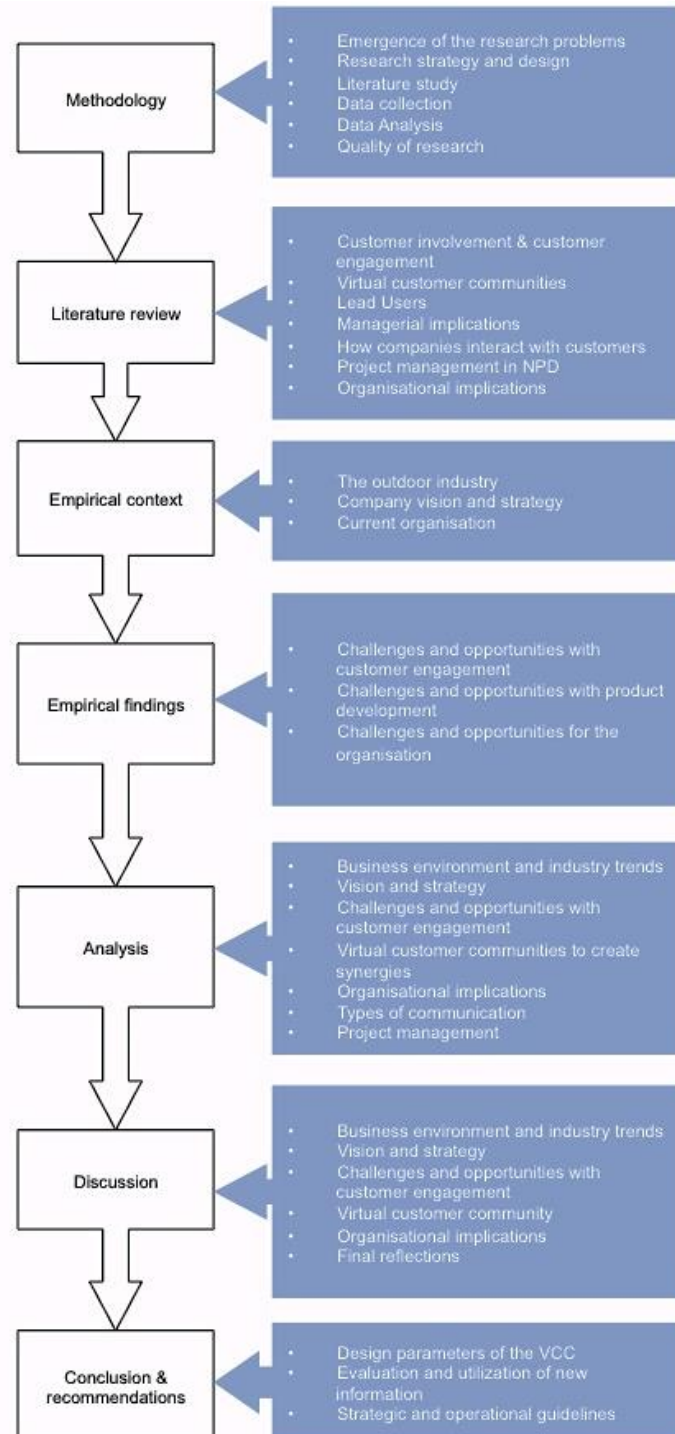
According to the company’s brand manager, there are no processes in place for how NPD should be conducted and how customer knowledge should be incorporated. Most development projects have been performed on an ad hoc basis, and the ideas has mostly sprung from the founder himself, who is a great outdoors enthusiast. However, now when the founder has left and the company is undertaking a large re-organisation in order to make it more modern, the company is seeking to develop such processes in order to become more innovative and more efficient in its operations. The scope of this report will be limited to identify challenges related to CE in a virtual environment (i.e. internet), in order to present suggestions for how the organisation should be designed to best facilitate organisational learning and NPD. It will only focus on end customers, thus neglecting interaction with retailing customers and other B2B relationships.

1.3.2 Confidentiality

Since this thesis may contain sensitive information risking that the company brand is damaged, the report will not disclose the company name or any other material that could be linked to the company. Nor will names of the interviewees be mentioned.

1.4 Report outline

The reader has up until now been introduced to the subject and background of the report. The remainder of this report will be outlined as follows:



2. Methodology

This section introduces the research approach chosen for this thesis and what tools and methods used when collecting and analysing the data. Further, the validity and trustworthiness of the paper is also discussed.

2.1 Emergence of research problem

When the researchers first approached the company, the initial problem stated was that they wanted to redefine their customers to users. The second problem was that they were missing a systematic process for how to transfer customer data to the innovation and NPD process. After a first meeting with the company's brand manager, the researchers found that there were an extensive reorganisation taking place within the company, aimed at increasing the focus on the company's core business and making it more efficient. In this reorganisation, one part had been to outsource IT development and to develop a new e-commerce platform. The focus for the researchers was therefore limited to investigate how the initially stated problems could be solved from a web-based perspective. It was also discovered that there had never been any process in place for how product development should be conducted, but it was said that a person within the company had been assigned to develop such process during the researchers work.

2.2 Research strategy and design

The research conducted was qualitative in its nature, which provided a more detailed, and in depth understanding of the focal company's current situation. Since the objective of this thesis was loosely defined in the beginning of the researchers work, this was a necessary approach. This is confirmed by Savin-Baden and Major (2012) who states that qualitative research is exploratory and can be used to define a problem or to develop an approach to the problem. The work process also clearly followed the main steps of qualitative research as defined by Bryman and Bell (2003) with a general research question that later were revised to a tighter specification for the research and finally resulted in the findings presented later in this report.

As Bryman and Bell (2011) point out, a qualitative approach leads to limited generalizability and external validity of the results because of limited insights into other cases. To circumvent some of these limitations, an interview with another company was also conducted to achieve a more general view of the challenges with CE. More interviews of such nature were intended, but due to time restrictions and limited availability of relevant managers, this could not be performed.

The research was performed using a combination of inductive and deductive reasoning. Deductive reasoning implies that hypotheses are formulated, based on existing theories or frameworks, and then tested whilst inductive reasoning follows the opposite order with observations of real life situation to a more generalized view within a theoretical framework Eriksson and Wiedersheim-Paul (2014). This meant that the research could be conducted freely, without having to be locked into one approach. Furthermore, it enabled the researchers

to analyse already existing theories which, together with observations and interviews, helped to answer the above mentioned research questions.

Observations can, according to Eriksson and Wiedersheim-Paul (2014), provide information of how people interact, plan and make decisions in a group. When the researcher does not have any fixed frame of reference, observations is very common in order to create an understanding of the current situation and to identify leads that need further investigation. Eriksson and Wiedersheim-Paul (2014) further explains that observations conducted through participation (action research) may help to create a better understanding of the context, but can increase the risk of biased interpretations.

2.3 Literature study

Redefining customers as users were interpreted, based on a discussion with the company's brand manager, as a wish to create a deeper and more communicative relationship with the customers. Therefore the researchers initially focused on the latest literature within such areas as CE (Vivek et al., 2012) and customer co-creation (Hoyer et al., 2010). However, the second problem stated that the data should be transferred to the innovation and NPD process, and therefore literature regarding lead user development (von Hippel, 1986) was also investigated. It was found that with this type of customer interaction, firms need to not only invest in new resources to make the implementation successful, they would also need to adapt the organisation in order to facilitate learning. Therefore the researchers choose to focus their effort on how this new customer interaction should take place and, depending on that, how the internal organisation should be designed. Furthermore, literature regarding innovation management, change management and organisational theory were also studied and evaluated. Key words used to find relevant literature included: customer involvement, CE, customer co-creation, customer coproduction, customer value, customer relationship, customer relationship management, open innovation, customer focus, communities, communication, knowledge transfer, organizational change.

2.4 Data collection

To collect data, several methods were used. First, Skype interviews were held as introductory interviews. This was a good alternative to real-life interviews due to the distance between the interviewee and the researchers. However, to get a better understanding of the problem and to create a better relationship with the company, the researchers travelled to Stockholm and met with the brand manager. Later on, it was also decided to travel to the head office, where the company is located, in order to get a better understanding and a holistic perspective of the organization.

Once the researchers were on site, semi structured interviews were held. Semi structured interviews were chosen due to its flexibility which seemed appropriate in order to be able to get a broader perspective of the situation. Asking additional questions and elaborating on important topics were seen as a major advantage (Bryman and Bell, 2011). Since the researchers only

were on site for one week, the interview guidelines were created beforehand in order to follow a good structure and to make the most out of the stay. Thus, since the purpose of the different interviews varied, unique guidelines were created for each of them, which can be seen in Appendix A. Being able to create the guidelines and being well prepared also ensured that the interviews were not losing track and keeping the research purpose in mind. To prepare the interviewees and to increase the quality of the content, the purpose of the interviews was communicated and the interview guidelines were sent to the company beforehand. Moreover, additional questions and interviews were also held after the initial stay, this in order to clarify any uncertainties that might have occurred.

To acquire a good understanding of the organisation in general, and to get insights in how the company works with and handle its customers, several interviews were conducted. People that were of interest were the CEO, an employee responsible for the NPD process, a sponsored athlete and the designer. The CEO was chosen to be interviewed due to his position within the company. He should have a good overview of the organisation, where it is right now and where it wants to be. The person responsible for the NPD process was selected as interviewee since the authors were told that he was appointed to develop processes for NPD, which is of high relevance for this thesis. The sponsored athlete was chosen due to his interest in being involved in the NPD process when working with the company. Further he also has an interesting profile and could be a helpful source when trying to understand and help the company in its reorganization. Lastly, the designer was selected since she is responsible for the design of the clothes and it seemed relevant to see how/if she considers customer input in her process.

Moreover, other employees were also chosen for interviews in order to get a more holistic view of how the company is actually functioning, and to create a better understanding of the organization. In this way, it can be argued that the credibility and trustworthiness were increased since persons from different departments were interviewed and gave different perspectives. No interaction or discussion regarding the topic of the interviews took place between the interviewees, so when the interviewees confirmed or rejected different statements that had been said by others, it was considered as strengthening the credibility and objectivity of the empirical findings.

One interview was also held with Åre skidfabrik because of their "Project Opinion". Project Opinion was the first project to utilize a community to create a completely new ski model. It seemed relevant to interview them in order to broaden the authors' view within the area of communities and open innovation and how it can be used. Furthermore, an interview was held with the company who has developed the new website. This was done in order to see which opportunities that were available, and to gain insights in how the authors' recommendations should be tailored.

In addition, the authors also got the opportunity to participate in a one-day workshop on site. The aim of the workshop was to discuss issues relevant to sustainability and how the company should work in order to continue to stay ahead of its customers regarding sustainability. During the workshop a lot of different matters and different perspectives on the company's organisation

were brought up, issues that was not only covering sustainability. This allowed the authors to get a deeper understanding of how the whole organisation worked, which have been used in the report. The workshop was also seen as a good compliment to interviews due to the fact that interviews can sometimes be perceived as too formal. Thus, the workshop let the authors take part of what the employees really “thought and felt” about the company’s situation.

The process of triangulation, which according to Bryman and Bell (2011) is the use of several different data collection tools to ensure one's result, were ensured by using different methods that the authors felt was appropriate. Patel and Davidsson (2011) also discuss triangulation as a tool to give a clearer picture of an analysis by making use of several methods. Methods such as interviews (both internal and external), taking part of previous reports and customer complaints/letters, participating in a one day workshop, and a general feeling received by being on site, were used which leads the authors to argue that the process of triangulation has been covered.

2.5 Data analysis

The interviews lasted for approximately 40-60 minutes and to ensure that no information would be lost, the interviews were documented both in writing and through recordings. Furthermore, directly after each interview, the researchers sat down and discussed and wrote down the main “take-aways” that were of interest. Thereafter, the most important parts of the interviews were transcribed in order to facilitate the analysis. Later, the findings from the interviews together with the acquired understanding from the literature were analysed in order to answer the research questions.

2.6 Research limitations

The research of relevant literature has been quantitative in its nature, in order to distinguish the features applicable for the case in this thesis. However the empirical investigation has mostly originated from a qualitative case study of one company, and can thus not be argued to be representative for the industry or as a general solution for other companies.

Due to distance problems and limited budget, the authors have only been able to conduct face-to-face interviews and participate in the company’s daily work during one week. Apart from this, most of the authors work has been conducted from the author's city of residence and interviews conducted via Skype. Even closer collaboration with the focal company could have assisted the authors to get even deeper knowledge of the underlying problems, but it would also mean an increased risk of authors becoming biased. Another aspect that would have been interesting to consider is a more quantitative customer survey, in order to get a representative image of how the current, and potentially new, customers would want to interact with the company through its website. However, due to time restrictions, this has not been done.

3. Literature review

This section aims to provide a framework of relevant literature regarding CE in NPD. It starts by giving the reader an explanation of the differences between customer involvement and CE. Second, the concept of Virtual Customer Communities (VCC) is introduced. Third, the concept of Lead users is explained and how to use it. Thereafter, it continues with describing managerial implications, how other companies have worked with similar solutions and the concept of project management in NPD. Lastly, aspects of organizational implications with customer-focused structure are presented.

3.1 Customer Involvement and Customer Engagement

Business and product development, innovation management and marketing literature have all been addressing the topic of centring the business around the customers and tailoring the offerings around them. Research has shown that innovations do not only come from the design or manufacturing department, but many originates from the users themselves (Piller and Walcher, 2006). Companies began almost 30 years ago to look at the innovation process and, for example, discovered that about 80% of the most important scientific instrument innovations and major innovations in semiconductor processing came from the customers (von Hippel, 2005). Since then, the academics has been acknowledging this using allied concepts interchangeably, such as: the lead user method (von Hippel, 1986; von Hippel, 2005), CE (Vivek et al., 2012), customer involvement (Kaulio, 1998; Matthing et al., 2004), customer coproduction (Blazevic and Lievens, 2007) or co-opting customer competence (Prahalad and Ramaswamy, 2000).

In this report, the authors distinguish between a mostly one-way conversation between a company and its customers and a two-way interaction where the contact can be initiated by either the company or the customer. This is in line with what Lengnick-Hall (1996) refers to as involving the customer as a resource or as a co-producer. Thus, the authors will distinguish between Matthing et al's (2004, pp 487) definition of customer involvement;

"The processes, deeds and interactions where a service provider collaborates with current (or potential) customers to learn about the market and alter organizational behaviour"

when describing a one-way conversation between customer and company. When referring to a two-way conversation between company and customer, Vivek et al's (2012, pp 127) definition of CE will instead be used:

"The intensity of an individual's participation in and connection with an organization's offerings and/or organizational activities, which either the customer or the organization initiate."

3.2 Virtual Customer Communities (VCC)

Relationship marketing has been emphasizing the importance of maintaining healthy customer relationships in order to ensure customer loyalty and repurchase (Hennig-Thurau and Hansen, 2000) and the internet has made it possible for companies to interact with customers and compete in new ways (Prahalad and Ramaswamy, 2000). Companies today are interacting with their customers via internet and some are even engaging customers in the innovation and product development process through specific technology-based forums (Nambisan and Nambisan, 2008). However, there are more to gain than just new insights for the innovation process and NPD (Nambisan, 2002; Nambisan and Nambisan, 2008; Prahalad and Ramaswamy, 2000; Sawhney, Verona and Prandelli, 2005). By improving the dynamic capabilities of the company, Weerawardena and Mavondo (2011) argue that the performance of the company can be improved since it allows for a broader possibility of value capturing. Teece (2009) explains that companies with strong dynamic capabilities are entrepreneurial and have a great ability to adapt and shape business ecosystems through innovation and collaboration with other companies, entities and institutions. Dynamic capabilities are especially important in fast-moving business environments open to global competition since it may help the company to maintain a unique asset base that may give a competitive advantage (Teece, 2009).

In traditional NPD firms usually use tools like focus groups, customer surveys and brainstorming to solicit new product ideas, and QFD, prototyping and product testing to refine new concepts (Sawhney et al., 2005). However, these methods are often internal processes and customer interaction with higher richness of information has traditionally meant physical interaction. But with virtual customer environments, firms are able to engage a larger number of customers without having to compromise too much on richness of the interaction. They will also be able to increase speed, frequency and persistence of the CE according to Sawhney et al. (2005).

Farquhar and Rowley (2006) explain that a VCC is a computer-mediated space where a group of people, who share a common bond, come together to share and generate content. It is becoming increasingly important to not only encourage organisation-to-consumer, but also consumer-to-consumer interactions in order for the community to sustain customer participation (Farquhar and Rowley, 2006). This way of engaging customers in conversation may also help firms to tap into the social context of its customers (Sawhney et al., 2005). Nambisan and Nambisan (2008) argues that these VCCs can be used by companies in order to improve both their innovative capabilities as well as their customer relationships. Nambisan (2002) explains that implementation of such VCC may involve deployment of a variety of technologies, such as the internet, multimedia, intelligent agents and virtual reality tools. The way that a firm chooses to deploy different technologies should be governed by the specific aim that the firm has with its involvement in the VCC.

3.2.1 Designing a VCC

The NPD process can usually be divided into five stages; ideation, concept development, product design, product testing, and product introduction (Sawhney et al., 2005). The front-end stages (ideation and concept development) requires high richness of information and deep

knowledge of the situation of use, whilst the later stages require effective internal process (such as QFD) and a broader set of customers (reach) to validate and test new product concepts. How the VCC should be designed and how successful a company will be in leveraging the knowledge being created there, is then dependent on the systems and the processes that helps the firm to integrate with the VCC (Nambisan, 2002; Sawhney et al., 2005). It is also determined by what goal the focal firm has with the VCC. According to Thorsten and Alain (2009) a company needs to consider six key questions when developing, what they refer to as, a co-creation strategy. These questions are explained in Table 1 below:

Who will be involved?	Customers vary in which type of information they provide and what their bonds are to the company. This question should be answered with which type of customers that the company would like to involve.
What is the purpose?	The purpose of co-creation could be to develop a radically new innovation, or simply to just make continuous improvements on existing products. This question aims to identify how the company expects to use their customer input.
Where does it occur?	Customer input can be utilized at different levels of the NPD. That is why the company needs to be clear about where in the NPD process this happens.
How much involvement?	The tools for co-creation should be implemented in a way that creates as low entry barriers as possible for the customers. However it should also create as much value for both customer and company as possible. Therefore the company needs to consider how deeply the customer should be involved in the company processes.
For how long?	Customers can be involved on time-limited basis with a specified purpose, or on a more continuous basis. However, only keeping an open channel will not be motivation enough for customers. The company needs to solve how to keep the customers motivated so that they come back.
How to incentivise?	Lastly, it is important for the company to answer how they are going encourage customers to get involved and how to keep them motivated. Intrinsically motivated customers are generally best suited for sustained interest and creativity.

Table 1: The six questions for a co-creation strategy, developed by Thorsten and Alain (2009)

Further, Nambisan (2002) distinguishes three key roles that a customer can take in the stages of the NPD process, namely; customer as a resource, customer as a co-creator and customer as user. Nambisan (2002) explains that in the role as a resource, the customer is used to gain new insights and ideas for NPD. It is further explained that using customers as a resource tend to be successful in industries where continuous innovation is common. Often times so called “lead users” (von Hippel, 1986) are used for these purposes. This expression is further elaborated upon later in chapter 3.3. In the role of co-creators, customers are instead involved in the design to product development activities. Nambisan (2002) explains that there are potential benefits to be gained from such collaboration, both from the customer as well as from the firm’s point of view. But he further explains that there is a significant managerial challenge to coordinate such activities.

Lastly, Nambisan (2002) proposes that customers can take on the role as users. By this he explains that their contribution mostly will be in product testing and product support. In product testing, customers might detect product flaws that can be translated back to the company so that it can minimize costly redesign and rework. As users, Nambisan (2002) also explains that customers develop knowledge that can be used to help other peer users that might have a similar problem. As challenges to these roles, Nambisan (2002) highlights that customer contributions is dependent on the facilities or mechanisms to structure customer inputs and that the sample of customers might not be representable (which is especially important in product testing). In Figure 1 an example of a framework is presented, developed by Nambisan (2002), which can be used to ask the right questions when designing a VCC.

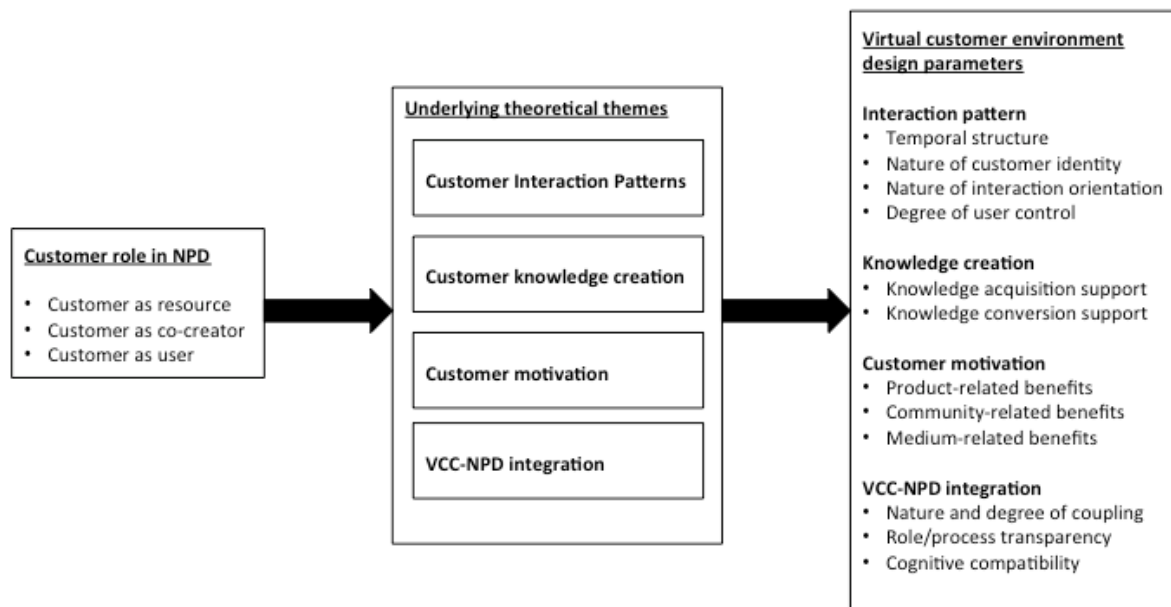


Figure 1: VCC and NPD Design Considerations, Nambisan (2002)

By answering the questions developed by Thorsten and Alain (2009), a first step may be taken towards defining which role a customer should have and where in the NPD process they will contribute. Once this is established, the design of the VCC needs to be governed by the characteristics of that customer role and take on a holistic perspective of the firm's management and organisation, product development, marketing and innovation processes (Nambisan, 2002).

3.3 Lead users

In today's market there are several types of users and customers that have ideas and input suitable for product development (Piller and Walcher, 2006). However, not all ideas and customer input can be considered and used in product development. Bower and Christensen (1995) argued that if manufacturing companies listens to their present customers, all they will get is a repeating tendency of old procedures, rather than disruptive innovations. Thus, to prevent this, companies can make use of so called "lead users", which can be separated from the majority of customers due to their special characteristics (von Hippel et al, 2005).

Piller and Walcher (2006, pp 309) define lead users as "organizations of individuals who (1) face needs that will become general in a marketplace much earlier before the bulk of that marketplace encounters them; and (2) are positioned to benefit significantly by obtaining a solution to those needs". Moreover, what most companies are looking for when collaborating with lead users is their sense of coming up with new innovations (Luthje and Herstatt, 2004; von Hippel et al, 2005). Von Hippel et al. (2005) argue that concepts generated from lead users have a higher degree of innovation and are more strategically significant. As lead users adopt new products earlier than the majority of customers and actively communicate their experiences, they may find product characteristics that they are dissatisfied with. As they are experienced users within the area, they are also more likely to come up with solutions to the underlying dissatisfaction. Luthje and Herstatt (2004) further argue that a lead user do not just face a new need, but they also see this new need as something that most customers in the market will face in the future. In addition, studies have shown that product concepts generated by lead users can contribute to potential sales increases up to over eight times higher than traditionally developed concepts (von Hippel et al, 2005).

However, this collaboration is not just something that the companies will benefit from, but it is a collaboration that will create value for both parts (Piller and Walcher, 2006). The lead users will benefit from this collaboration because their solutions will hopefully be integrated into the product, which will facilitate the use of it. But, it is also a question of recognition from the company, such as actively letting other practitioners within the area know who actually came up with the solution/improvement, which in many cases can be seen as a sufficient enough reward (Luthje and Herstatt, 2004). However, Gassmann et al (2010) argue that working with lead users might also lead to side effects, such as dependence on customers views/interest. Meaning that the company relies too much on their lead users, which in some cases can take the company in the wrong direction in the product development. Another such side effect can be loss of know-how, whereas the lead users takes part in the innovations phase and unavoidably acquires company know-how. The problem may then occur if the lead user takes the know-how

elsewhere, and in worst case, develop a similar product with a competitor (Gassmann et al, 2010).

Collaborating with lead users is one thing, but another difficult task lies in identifying the lead users that are appropriate for the company in question, and to make sure that they have the right characteristics (mentioned above). If non appropriate lead users are selected the company might not get the benefits that they are expecting. Preferably, two methods can be used when selecting lead users; screening and pyramiding. (von Hippel et al, 2005)

Screening, which can be seen as the traditional method, is when people are chosen from a group of people due to their characteristics. The process can simply be as follows; A group, that is active in the topic, is chosen to be interviewed. Thereafter, the selection process is started in which the interviewers are asked questions that can point out a possible lead user. Several interviews at different stages will be held and the number of participants will decrease continuously, until the preferred number of lead users are left (von Hippel et al, 2005).

Pyramiding, on the other hand, uses a different process where lead users will be chosen through recommendation. However, this method requires more groundwork on who to be interviewed in the initial phase (von Hippel et al, 2005). The persons that are going to be interviewed should have good knowledge within the area and also have influence and know other people within the area that possibly could be lead users. If people are recommended to be lead users, they are also contacted and interviewed to see if they fit into the characteristics of a lead user. This process continues until you have found the lead users that you were looking for (von Hippel et al, 2005). This method does not require as much resources since the number of interviews are less than for screening, which further leads to lower costs. Von Hippel et al (2005) points out that costs of pyramiding can be less than 15% of the costs of screening.

3.4 Managerial implications when opening up the NPD

Managers sees CE as an increasingly important strategy to both retain current and attract new customers, since it creates extra customer value in addition to the product itself (Vivek et al., 2012). Yadav et al. (2007) concludes that firms whose upper management focuses and encourages external engagement are more effective in detecting and adopting new innovations. They also state that firms whose upper management focus on internal processes will achieve a more efficient product development of initial products with new technologies. But solely focusing on internal processes will leave the company less equipped to detect the new technologies and deploy new innovation. Further, Yadav et al. (2007) concludes that neither external engagement nor internal focus is predictive of how effective a firm will be in deploying new innovations. Instead Yadav et al. (2007) argues that it is important for the upper management to have a clear vision of the future when deploying new innovations. Foss et al. (2011), on the other hand, states that there is no direct link between customer involvement and innovation, but instead argue that the crucial thing is the organisational practices surrounding it. According to Nambisan (2002), managers need to know what commitment such engagement might lead to and be clear about what role the customers should play within the company. Opportunities for value co-

creation must be weighed against the cost of the organisational changes that needs to be made in order to facilitate this process (Nambisan, 2002).

3.4.1 Internal challenges when incorporating customers into NPD

With a shift from an NPD process based solely on internal development, to a more externally oriented process that involves customers, come a lot of challenges. As new discoveries for the NPD may be found outside the company, external engagement needs to be encouraged by the management and new types of incentives needs to be developed (Salter et al., 2014). At an individual-level, Salter et al. (2014) identifies four main challenges that R&D professionals face when increasing their external engagement: first, getting the right mind-set is a challenge since external inputs is often seen as second best due to the demanding nature of these procedures. Interviewees in Salter et al.'s (2014) research states that it is time consuming, hard to translate information into internal procedures and lacks reward systems. Second, building partnerships may be challenging since it is time consuming and individuals tend to stick to comfortable partners that they have worked with in the past. Third, starting a conversation may be seen as difficult since there are no clear objectives of what information that can be disclosed to external parties. Fourth, taking advantage of the information that is being created is seen as challenging, since it may be hard to align this information with internal knowledge, procedures and objectives. These challenges correspond very well to the entrepreneurial mind-set that Teece (2009) emphasizes in order to increase the dynamic capabilities of the company.

3.4.2 Coping with the challenges

Acknowledging these challenges may serve as guidance for what management should consider when opening up the NPD process to customer influences. If this process is totally new to the focal firm, it will imply significant changes to the work processes for each involved individual, thus making it important to efficiently mediate problems with current state, solutions to these problems and a vision for the future (Nadler and Tushman, 1997). Supporting the vision of the future and incorporating individuals in the change process are crucial steps in order to succeed with the desired changes (Nadler and Tushman, 1997) and can be directly correlated with the firm's increased innovation and competitive capabilities (Yadav et. al, 2007).

In order to encourage creative thinking Amabile, (1998) explains that expertise and motivation are two key factors. Thus reward systems that incentives employees, and can be followed up, needs to be developed to motivate knowledge acquisition from CE (Nadler and Tushman, 1997; Salter et al., 2014) which, combined with the expertise within the firm, can be developed into new innovations. Such reward systems could include reward for transferring an external idea into the internal organisation or including it in a new product. It could also be in form of a prize for those who excel in external engagement (Salter et al., 2014). Empowering employees to have more responsibility and influence and encourage creative thinking are also motivational factors that may create incentives for CE (Amabile, 1998; Eriksson Lundström, 2013).

In a business situation, creative thinking must also be appropriate, useful and actionable (Amabile, 1998). But with CE, much of the externally produced knowledge might have a poor

overlap with internal procedures and objectives, thus making it hard to achieve this (Salter et al., 2014). Therefore it is very important to train employees to identify and align external with internal knowledge and to have formal procedures for how knowledge should be codified and translated within the firm (Salter et al., 2014).

3.5 How companies interact with customers

With the Internet's success, companies have begun to adapt and develop methods to bring in customer knowledge through Internet platforms (Piller and Walcher, 2006). A study of several articles has been made by the authors and is compiled in Table 2 below. What can be seen is that companies make use of several methods and that there is no best practice solution. Two examples of how to bring in customer knowledge through Internet platforms are more fully explained below:

Adidas used an internet-based toolkit for idea competition (TIC). This was a one-time project where customers were encouraged to participate on the nature of competition, to inspire creativity and to increase the quality of product ideas. This created a situation where the perceived value for the customer increased and the information from the customers improved the products for the company (Piller and Walcher, 2006).

Another example is when an enthusiast named Saul Griffith wanted to improve kite surfing. Griffith created a virtual community and started making posts about different designs and improvements that anyone could take part of. People thereafter contributed by making their own posts regarding improvements and designs. Companies producing kite surfs also took part of the community and produced the kite boards accordingly to what the people were recommending (von Hippel, 2005).

However, the remaining examples can be seen in Table 2 below.

Source	Method	Type of communication	Company	Industry	Solution	Strategy for the NPD	Duration	Customer segment	Nr of participants	Result
Sawhney, Verona and Prandelli (2005)	Community and Lead user development	User-user, company-user, product-user	Ducati	Motorcycles	Ducati developed an own community with dedicated community managers. It is used to gain both qualitative and quantitative info about products and its services. The qualitative insights for the NPD were realized by identifying lead users in the community and including them in virtual teams for the NPD.	Ad-hoc processes with virtual teams dedicated to specified problems.	Continuous in the community and time limited in different NPD processes	Dedicated duali users	160000	New insights for PD and creating stronger relationships to the brand
von Hippel (2005)	Community	User-user	zeroprestige.com	Kite surfing	The founder began by posting models for kites he had designed on the site and added helpful hints and tools for kite construction and use. He then invited others to his community.	Other innovators posted their own kite designs, improved constructions, advice for novices, using sophisticated design tools such as aerodynamics modeling software and rapid prototyping software.	Continuous	Interested kite surfing users		1. Close relationship between information and physical products. 2. Uvecklandet av nya tillvägagångssat gallande tillverkningen av kites.
Jeppesen and Frederiksen (2006)	User Community	user-user, company-user, product-user	Propellerhead	Computer-controlled music instruments	Propellerhead created an "official" online user community where users could interact with each other and also address the company directly.	Customers posts problems and questions and other users share their solutions. Some innovative solutions were acknowledged and implemented by the company.	Continuous	Open for everyone	3850	Many incremental-innovations
Digital Innovation Lab - Event Highlights (2014)	Private Community	Company-user	Danone (Activia)	Mejeriprodukter	Customer were invited with private invites to participate in the Activia Advisory Board for 18 months.	The company turned to the advisory board in order to gain customer insights.	Time limited	Invited customers only		Improved brand insight by 84%. Two new products brought to market. Helped develop the common platform resulting in 9% uplift i base sales.
Vision Critical (2015)	Insight Community	company-customer, product-customer	Nascar	Racing	NASCAR partnered with Vision Critical to launch The Official NASCAR Fan Council, an insight community of 12,000 passionate NASCAR fans.	The Official NASCAR Fan Council engaged members at least twice a month on specific topics. Interactions that influenced everything from the on-track competition to business and marketing decisions.	Time limited	Genuintly interested fans	12000	Quantity meaningful feedback tripled. Costs decreased by 80 percent. TV ratings and viewership increased. The company picked up the Fan Council's comments, validated them and initiated the new "double-filer" restart rule
Gloor and Cooper (2007)	One time survey	company-user	BMW	Automotive	BMW invited customers to participate	Customers were invited to create solutions to specified problems. They also made a toolset available to help consumers design features of future cars, which recieved thousands of responses.	Time limited	Open for everyone		The contributions were then evaluated and some were implemented.
Sawhney, Verona and Prandelli (2005)	Ad-hoc forums	User-user, product-user	Eli Lilly - e.lilly	Pharmaceuticals	Created to be responsible for two Web-based activities—generation of new drugs and creation of new patient solutions. Each stream of activities is pursued through a specific Web site and ad-hoc mechanisms of customer engagement, selectively applied at the early stages and later stages of the innovation process	Ad-hoc mechanisms for specific problems	Time limited	Invited patients, doctors and employees	-	Insights to creatively drive the idea generation
Parsons and Rose (2009)	Lead Users	Company-user, product-user	OMM	Outdoor clothing and equipment	An online google group consisting of 14 lead users	The company discusses new product ideas together with the group.	Continuous interactions	Early adopters	14	Reduced product development time from 18 to 9 months

Ulwick (2002)	Lead Users	Company-user	Cordis corporation	Healthcare	Customers are interviewed with a predetermined interview guide.	Product characteristics are ranked. The attributes with the highest rank are those characteristics that are most likely to satisfy the customers.	Time limited	Doctors who were using Cordis' products in products in	Market share from 1% to 10% in USA
Fuller et al. (2006)	One time survey	Product-user	Audi	Automotive	Participants were recruited via Audi's website and newsletter and categorized as early adopter, routine users and laggards.	The participants were given graphical tools to design their own infotainment system and were asked to rank proposed solutions.	Time limited	All customers who were willing to participate	1662 Consumer insight that were valuable for further development. Customers expressed strong appreciation
Piller and Walcher (2006)	Lead users	Company-user, Product-user	Adidas	Sporting goods	Customers were randomly selected at the point of sales (in selected stores) and asked to participate in the project. Customers willing to participate received a personal access code to the project's website.	The customers competed to come up with the most innovative and desirable solutions. Framing it as a competition was supposed give customers higher incentives.	Time limited	Customers of the high-end shoe segment	10% of the ideas were evaluated as radical new ideas, bearing the potential to expand, respectively, change Adidas' business spectrum.
Vision Critical (2015)	Insight Community	company-customer, product-customer	Banana Republic	Fashion Retailing	Banana Republic engaged a community of customers to guide the design of its clothing and stores. The company turned to Vision Critical to help it build an insight community of 50,000 trend-conscious customers.	Community members have the opportunity to provide monthly feedback to the company. In return, they receive sweepstake incentives and newsletters to keep them informed about how their insight influenced the company's latest fashions.	Continuous	Trend-conscious customers	50000 Stronger brand and more customer focused
Schweitzer et al. (2013)	Virtual Community	Company-user	Cisco	IT network solutions	Online idea competition to realize new IT network solutions. Participants were also asked to submit a business plan to ensure that the contributions were feasible	Participants who worked together as international virtual teams could use Cisco technology to facilitate their work.	Time limited	Open for everyone	25000 1 winning contribution resulting in a venture that Cisco invested 10 million dollars into
Hildreth and Kimble (2004)	Community of Practice	Internal communication	Siemens		Internal community within the company where employees can engage in both work related and no-work related topics. Suppliers are also invited to join.	Encourage discussion that might lead to new products and other improvements of the organisation.	Continuous	Employees and suppliers	
Nambisan and Nambisan (2008)	Product knowledge center	Product-user	Samsung		Offer a virtual product simulation tools that allow customers to acquire deeper product knowledge.	Let customers to virtually test-drive its products. Which the NPD can analyse and later use to improve the products.	Continuous	Open for anyone	Started to pursue strategies in an effort to find synergies between VCE activities and its overall approach to brand management.
Inncore (2015)	Community/ Crowdsourcing	Product-user, Company-user	Threadless.com	T-shirts	Community of customers and designers that submit and vote on T-shirt designs	Designers submit their T-shirt designs and the community of customers and designers vote on which they like the best. The ones that gets the highest votes are then continuous	Every design has a time limit. But the business model is continuous	People who like T-shirts with unique and creative prints	700000 New T-shirt designs
Quirky.com (2015)	Community/ Crowdsourcing	Product-user, Company-user	quirky.com		Users create a profile and can submit new product ideas and help develop new concept ideas	The ideas are ranked and evaluated by the users and the quirky team and the most promising goes on to the concept phase. After that, users can contribute with own product concepts and the one that gets most votes are then produced and	Every product development is time limited. But the business model is continuous	Anyone can join	1E+06 416 new products developed
Freeride (2013)	Community	User-user, product-user	Extreme	Ski equipment	Freeride.com is a forum that together with the company Extrem created a dedicated site where users could contribute with ideas to a new ski design.	All users were invited to participate and the forum moderator then compiled all insights for the ski manufacturer	Time limited	Open for everyone in the forum	A new ski design developed totally based on the user insights

Table 2: Customer involvement and customer engagement by other companies

3.6 Project management in NPD

The ability to develop and to launch new products that survive in the marketplace is crucial to a firm's competitive advantage (Jeffrey Thieme et al, 2003). Developing and launching new products that will succeed in the marketplace is clearly every company's desire. However, this is not always the case, some products do not live up to the expectations set and new products do fail in the marketplace. This may be due to several factors, and one of them might be the lack of project management during the NPD (Jeffrey Thieme et al, 2003). Project management is according to Maylor (2010) the process of planning, organising and controlling activities in order to achieve a specific goal. Maylor (2010) divide a project into four major phases: define, design, do and develop. Included in these phases are; initial planning, time planning, structures and teams, improving project performance etc. Moreover, a project can be seen to be of *unique character* when, e.g. the project has a degree of novelty. It can also be considered to *be temporary* when, e.g. it does have a beginning and an end, and *focused* when the purpose of the project is to deliver a specific result.

Jeffrey Thieme et al (2003) propose several characteristics that foster the development of new products that are more likely to survive in the marketplace. One such character is that each department has its own focus and goals that they are striving for. The different departments are also specialized in specific activities, meaning that other departments do not have as much insight in this area. Maylor (2010) points out that integrating departments with each other will become more efficient as members with different backgrounds share information and understand different viewpoints. Jeffrey Thieme et al (2003) argue that the greater the cross-functional integration between departments, the more likely is the product going to be viewed as a success.

Another aspect is planning, which according to Maylor (2010) is of vital importance. Planning provides the team with procedures and rules that should be followed. Jeffrey Thieme et al (2003) stresses the importance of planning activities such as well-defined target market, detailed product specifications, clear product concept statements etc. This leads to reducing the ambiguity concerning the project. Further, allowing team members to participate in the planning phase can also be beneficial as they seem to take ownership of the plan and are more willing to follow it through. Jeffrey Thieme et al (2003) argues that the greater the planning proficiency in the NPD process, the greater the likelihood the product will be seen as a success.

Another characteristic concerns leadership and senior support. As organizational structures changes it has become even more important with leadership (Jeffrey Thieme et al, 2003). Project managers has gone from a more assigning tasks kind of role to a more motivating team members kind of role as the teams themselves has become more responsible for details in planning and decision-making (Jeffrey Thieme et al, 2003). Project management leadership must contain appropriate skills and style suitable for the project team. For instance, the project manager should have a deeper knowledge within the area and understand technical aspects of the project to avoid pitfalls that could delay or derail the project. Maylor (2010) argues that being a project manager does not imply technical specialism, even though this is often required. Moreover, project managers must also have support from senior management and continuously

Table 2: Customer involvement and customer engagement by other companies

communicate with stakeholders (Maylor, 2010). Project managers often take general strategic directions from senior managers, but have the freedom to operate on their own authority. However, even though the senior managers are not as involved, their support is still very important. Jeffrey Thieme et al. (2003) therefore argues that the more participative the project manager is and the greater the senior management support is, the more likely is the project going to succeed.

3.7 Organizational implications with customer-focused structure

In recent years there has been a growing interest for involving the customer in product development and to co-create products (Homburg et al, 2000). Working towards a more customer focused structure means that the company has to change the way they work and Homburg et al, (2000) points out that that different organizational implications may arise. It can be implications such as decisions about structure, coordination, culture and power. This thesis will mainly address the two first topics regarding structure and coordination. Below, literature regarding knowledge transfer and communication is presented.

3.7.1 Knowledge transfer and decentralisation

Knowledge transfer can be viewed from two perspectives; first, as previously mentioned, there is external knowledge transfer that takes place between the company and the customer. Secondly, there is knowledge that is transferred internally within the company (Johansson and Näsholm, 2013). Spraggon and Bodolica (2012) argue that knowledge that is created and transferred internally may have significant importance for the competitiveness, since it tends to be unique, tacitly held, and more complicated for competitors to imitate. Argote and Ingram (2000, pp 151) defines knowledge transfer in organizations as “the process through which one unit (e.g., group, department, or division) is affected by the experience of another.” Homburg et al. (2000) states that the internal knowledge transfer will become even more important when working towards a customer focused structure. Foss et al. (2011) argue that companies trying to work closer with its customers must design an organization appropriate to support it. They further argue that this can be facilitated by using organizational practices such as intensive vertical and lateral communication, rewarding employees for sharing and acquiring knowledge, and high levels of delegation of decision rights (this is referred to as a decentralised organisation by Johansson and Näsholm (2013)). A greater delegation of the decision making and letting the employees be more involved is viewed as a beneficial way to increase the knowledge transfer within the organisation (Foss et. al, 2011).

Foss et al. (2011) argues that it is a difficult task to encourage internal knowledge transfer. They therefore suggest that knowledge acquisition, knowledge sharing, and dissemination should be motivated simultaneously in order to successfully work with knowledge transfer. Even though Foss et al. (2011) encourage knowledge transfer, Johansson and Näsholm (2013) argue that decentralization can lead to negative consequences regarding knowledge transfer within the organization. This due to the fact that the scattered units this organizational structure causes, can result in a short-term mind-set that inhibit the knowledge transfer. The fact that the different

units are more result-driven may contribute to less knowledge transfer since they want to keep the knowledge within the unit (Johansson and Näsholm, 2013). However, they do argue that if a decentralized structure is used correctly it can contribute to enhanced knowledge transfer and communication.

3.7.2 Communication

When looking at how knowledge transfer can be used there are different ways on how information can be communicated. Spraggon and Bodolica (2012) argue that there are mainly four processes for communication; *Static virtual processes*, *Dynamic virtual processes*, *Canonical face-to-face processes* and *Non-canonical face-to-face processes*, which will be described below.

3.7.2.1 Static and Dynamic virtual processes

Static virtual processes and dynamic virtual processes are mainly based on technological tools. Static virtual processes can be described by databases, reviews and reports and does not deal as much with customized data but more often with secondary data. This information may be time consuming to construct, but when constructed its transfer can occur immediately to the firm's members via different IT tools. This process is best suited for knowledge transfer of information that is easily interpreted for the recipient, e.g. financial results or ratios. Dynamic virtual processes can be exemplified by e-mails, forums, virtual communities of practice, phone calls etc. These processes need interactions in a higher extent between the transmitter and the receiver than for the static processes. Thus, dynamic processes allow more flexibility than static processes because the audience that is reached may vary in size and the knowledge is distributed to either the whole organization or selected individuals or groups (Spraggon and Bodolica, 2012). Eskerod and Jepsen (2013) also discuss a similar way of communicating and refers to it as impersonal communication. They argue that it is best used for reaching a larger amount of people due to its simplicity, a simplicity that is also seen as cost efficient.

3.7.2.2 Canonical and non-canonical face-to-face processes

Concerning canonical face-to-face processes and non-canonical face-to-face processes is the knowledge transferred at meetings through interaction between the transmitter and the receiver (Spraggon and Bodolica, 2012). This way of communicating is referred to as Interpersonal communication by Eskerod and Jepsen (2013). Hence, these processes are appropriate for more complex knowledge transfer. Spraggon and Bodolica (2012) points out that canonical face-to-face processes are more structured and consist out of organised meetings, cross-functional teams, teaching etc. They are usually planned in advance and follows a pre-established agenda that follows a timeframe. As these meetings are more planned and meetings are pre-planned and inscribed within a given framework, they are usually imposed by upper levels of management. Canonical processes tend to reach a smaller number of members than the virtual processes, but the reason for a narrower scope of coverage is based on the idea of getting more out of canonical processes and the level of complexity is increased because it is a limited number of participants (Spraggon and Bodolica, 2012). Non-canonical face-to-face

process is more spontaneous when meetings for instance take place unplanned and they are carried out voluntarily. It can for example take place through social networks, in the cafeteria, mentoring etc. Both face-to-face process is effective in its own way but non-canonical face-to-face processes have a higher degree of the speed of knowledge flow, the motivation to exchange knowledge, and the generation rate since actors participate on their own free will. Since non-canonical face-to-face processes are spontaneous, they rarely occur on directives from higher-level management.

Eskerod and Jepsen (2013) further discuss if the communication is characterised by push or pull, which is slightly different from Spraggon and Bodolica (2012) canonical and non-canonical face-to-face processes. Push communication is information that is imposed upon employees, in contrast to pull communication where all information is available and the employees can decide by themselves whether they want to access the information or not.

Eskerod and Jepsen (2013) argue that there is no specific approach that is best suited for all communications and can be viewed as a best-practice solution. However, as mentioned above, there are occasions where one specific approach is more suitable than the other. For instance, conical processes are favourable if the information contains high complexity and virtual processes for information that is easily interpret and where the aim is to reach larger amount of employees (Spraggon and Bodolica, 2012). Eskerod and Jepsen (2013) states that what possesses a problem is to chose the most appropriate approach given a specific condition. For example, virtual processes can be used as a more time and cost efficient process even though the information contains high complexity and preferably should have been communicated through conical processes (Eskerod and Jepsen, 2013).

A summary of the four processes for communication can be seen in figure 2 below:

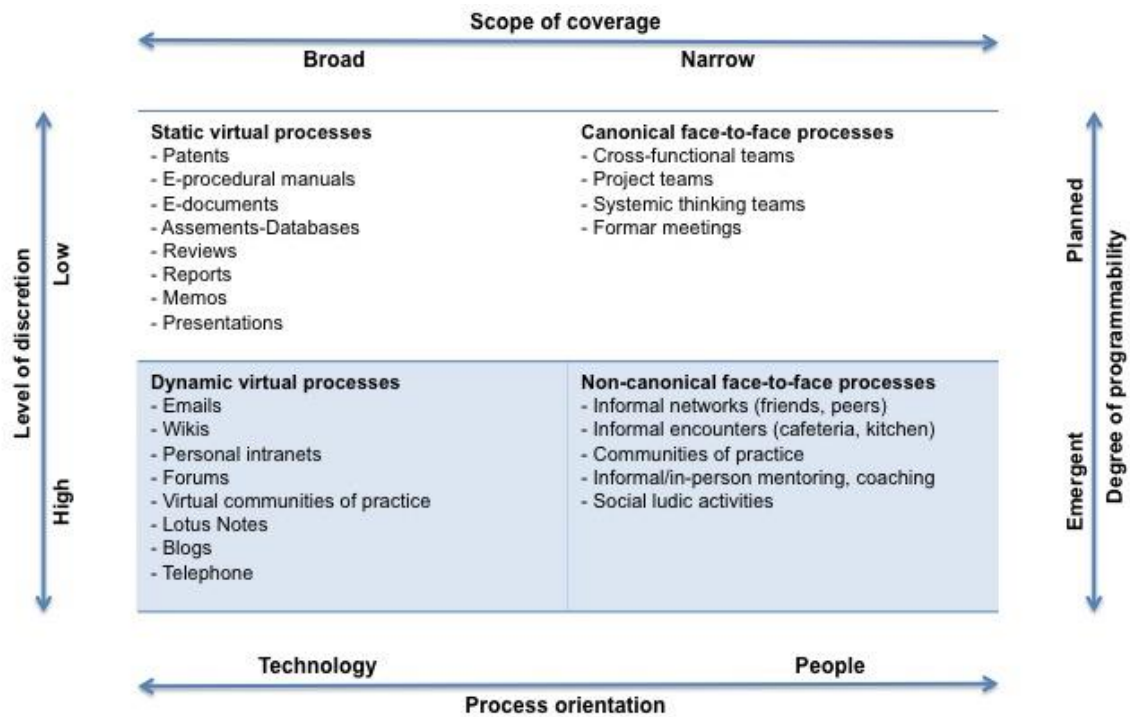


Figure 2: Four processes for communication by Spraggon and Bodolica (2012)

4. Empirical context

In this section, the context in which the company is operating is presented in order to provide the reader with a better understanding of the current situation of the company and its environment. This also gives the reader a better insight into the challenges and opportunities the company faces, which are further described in chapter 5.

4.1 The Outdoor Industry

As previously stated, the company is a small niche brand within the outdoor industry with a turnover of SEK 46 million 2014 [1]. In the State of Trade report for 2012 it is estimated that the European outdoor industry's annual turnover at retail exceed €10 billion [3], and in 2014 the industry saw a growth of 1%-3% of the overall market (the focal company did not take part in this report) [5]. However the industry comprises tough competition at both the brand and retail side, with several large players such as Adidas, Haglöfs, The North Face and Fjällräven, and the results for smaller businesses may not have followed this growth [4].

Companies that reported positive figures during 2014 explain their success with an optimum offer of innovative products combined with investments in new and effective online and offline sales and Point of Sale (POS) strategies [4]. Further there is a strong consensus among companies that the three largest issues facing the industry is; the rapid changes in how companies manage their marketing, sales and distribution, the traditional sales patterns with the sector's dependence on snow and cold conditions before Christmas, and the need for more hard market data [4].

The Outdoor Industry Association (OIA) has compiled a consumer segmentation report with key insights from the American outdoor industry. This report states that 60% of adults between the ages of 18-65 in the US consider themselves as outdoor consumers and of these almost half is in the age between 25-44. However the customer segments and the activities they undertake vary greatly (Egg Strategy, 2015). According to OIA, the outdoor industry in the US constitutes for \$646 billion in consumer spending [7]. Figure 3 illustrates how big each customer segment is and how much each segment spends on its outdoor activities (Egg Strategy, 2015).

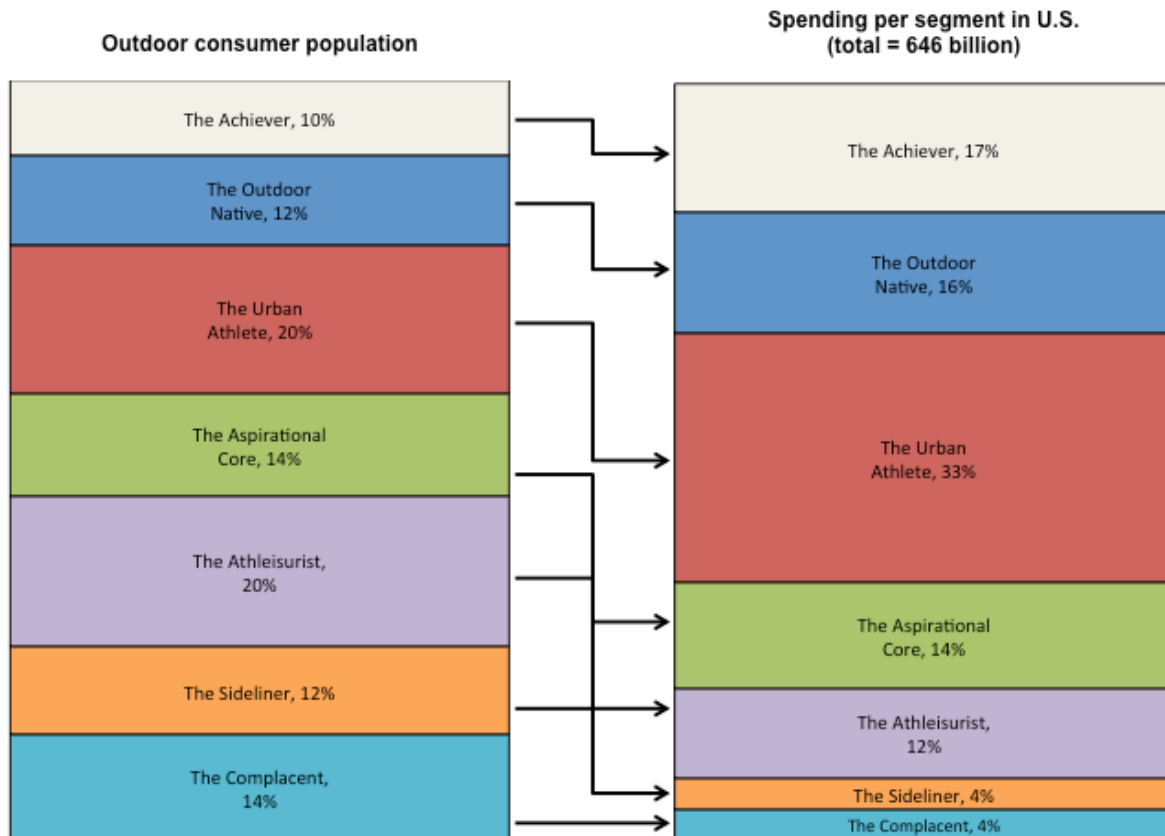


Figure 3: Customer segments and spending per segment in the US (Egg Strategy, 2015, p.6)

Based on researching outdoor brands' websites, the authors can conclude that most brands in the outdoor industry today sell their products both through their own websites and through retailers who are present both offline and online. Many are using tools such as blogs and newsletters to keep their customers informed and most websites are very informative of the company's policies, processes and values. Most companies sponsor athletes and publish pictures and stories from their undertakings, and many also use social media as a tool to show how the company's products are used in real life, something that one employee at the focal company confirmed as a critical factor when communicating with customers:

"Customers want to know what people are doing in real life and what is happening around the world" - Marketing employee, 2015-03-19

Several brands are now also using so called pro purchasers, which are given discount prices and education in the brand's different processes, in exchange for feedback on the products they receive. In Table 3, a compilation of how different brands interact with their customers is presented.

Brand	Blog / Magazine / Athlete stories	Product Guides	Travel Guides	Newsletter	Webshop	Social Media	Pro Purchaser Program	Values/ Vision	Company Processes
Fjällräven		x	x	x	x	x		x	x
Arcteryx	x	x		x	x	x	x	x	x
Patagonia	x	x		x	x	x	x	x	x
Norröna	x	x		x	x	x	x	x	
RAB	x	x		x	x	x	x	x	x
Mountain Equipment	x	x		x	x	x			
Tierra		x		x	x	x	x	x	
Haglöfs	x			x	x	x		x	
The North Face	x	x		x	x	x		x	x
Peak Performance	x	x		x	x	x		x	

Table 3: Competitors' customer interaction patterns

All brands are focusing on being informative and many are focusing on telling stories. All have social media integrated in their websites in some way, and most brands have web based magazines or blogs that are used to give customers an insight in professional athletes lives.

4.2 Company vision and strategy

The common picture among most employees is that there is no vision and strategy that is fully developed and rooted within the company. Some employees argue that the overall strategy, such as the company wants to grow and sell more products, exists, but the strategy on how to get there is more diffuse. They do not make use of any milestones and the employees express a feeling of not knowing what to do in order to reach the goals/visions of the company.

The CEO discusses the matter that they are more or less not working with any strategies at the moment. He does however push on the importance of working with visions and goals and emphasizes a more self going organization where the employees are encouraged to make own decisions and work more independent. He says that the company is currently in a turbulent and uncertain period, which should be turned into something positive that can be used to create a better vision and strategy. He wants to take this opportunity to do something radically different from the rest of the industry and create a "Love brand", where employees and customers

interact and together create value. The management has recently developed a “Brand platform” that should illustrate their beliefs, vision and what they stand for. In their brand platform the vision is clear and slogans that represent the vision are presented. However, strategies for how to obtain this vision is not yet developed, since employees express that they are missing guidelines regarding how they should work towards this vision.

Moreover, the brand manager also emphasizes the work with what they call “The naked truth”. The naked truth is a vision that stresses the importance of being transparent in its process. This should contain the whole process, from what suppliers and material they make use of and which customers they are working with. However, they cannot lose track of who they really are and they do not want to aim for the more general mainstream clothes that similar companies do. They want to provide their customers with something special and be unique. Thus, the strategy must contain more formal structures that still allow the brand to keep its uniqueness.

The company is currently launching its new website and the idea is to increase the overall sales. With the new website new visions and strategies will be needed since it has to be aligned with the new way of working with Internet. There is a vision of letting customers buy clothes on the website before it actually reaches the retailers, this in order to attract customers and create a unique value for the use of the website. In addition, there is also ambitions to increase sales from the current 2% to 50% in 2020 via their website.

During the workshop it became clear that the company wants to create a clear image of sustainable thinking. The company does not currently have any stated vision regarding sustainability but this will be discussed in the coming workshops. However, the general understanding of the vision is pointed out, which is to create a vision where the company wants to be in five years regarding sustainability. Thus, this vision and goals will be formulated with the participation from all employees in order to make sure that it is anchored throughout the organization.

Lastly, many employees discuss the “company religion” where they want to be a company that do much more than just selling products. They want people to live a life that the brand represent and become a part of the whole society.

4.3 Current organisation

The company has been undertaking a massive internal reorganisation the last year. This is mainly due to an investment by a venture capital firm and the stepping down of the founder, who has been acting as CEO of the company earlier. With the shift in ownership and a new CEO, the company now aims to move from an entrepreneurial driven company into becoming a more mature company that can help it to expand the business.

As previously mentioned the company has 16 employees and four in-house consultants (see table 4). Today there is one designer who is responsible for all new designs, while the design manager and the product manager are responsible for determining which products to include in

the next collection and what focus it should have. The brand manager is working on a strategic level together with the CEO to develop an overall strategy for how to work with marketing and the company brand, while another employee is responsible for the operational tasks surrounding marketing materials and social media. Two people are responsible for customer service - one works with the end customers, and the other with the retailers.

Department	# Employees
Financial	2
Design	1
Seamstress	1
Production	1
Concept store	2
Customer service	2
Marketing	2
Sales	3
Purchase	1
Logistics	1
	# Consultants
Design	2
Financial	1
Sustainability	1

Table 4: Company structure

Before, most of the IT and business solutions were developed internally, however recently, strategic decisions have been made to outsource the development and maintenance of a new ecommerce platform and to replace the current business system with a more well established one. According to the CEO, these decisions were made in order to build a functional organisation, and now the work is focused on establishing a shared vision for the future and building structural capital, both internally and externally.

Today four of the employees/consultants are stationed in Stockholm, and one in Germany. Most of the company's sales occur in Europe but there is also has a growing percentage of sales in Asia, especially Japan and South Korea. Even though the company's turnover increased significantly during the time 2008 - 2010 (16,6 Million SEK to 37,7 Million SEK) and has been relatively stable since then, the company have showed negative results since 2009 [1] and

almost went bankrupt in 2014. According to the CEO, the company is still in a very strained economic situation and much of his time is taken to find ways to free up capital.

5. Empirical findings

In this chapter findings of challenges and opportunities regarding the earlier mentioned research questions will be presented. These are then linked to the reorganization, vision from management and to the business environment. This helps presenting suggestions for future changes and their implementation.

5.1 Challenges and opportunities with CE

The possibility to engage customers into conversation and co-production requires a motivated customer that sees a benefit to engage in the company (Nambisan, 2002). According to several interviewees, this is one of the company's strengths, and it is common that they receive feedback from customers via mail, telling what they have been doing with their products and what they think about them. The company brand is also often regarded as a truly "good" and genuine brand with high quality, explains the CEO, regarding their relationship towards customers, suppliers and competitors. One comment that brand manager, received from a colleague in the industry during the ISPO fair was that the company should keep up what they are doing and "stay strange".

It was discovered during the workshop that there is a very homogeneous view of the strengths and weaknesses of the company among the personnel. Being genuine and having a sustainable mind-set is highly valued, and many confirm that the brand needs to retain their genuineness. The authors were also told that many of the company's subcontractors and suppliers saw their collaboration as a privilege, even though their order quantities sometimes were too small. This is, according to the CEO, due to the quality and reputation that company's products have within the industry. However, as of today the company is still paying for being too product centred historically, even though the products per se have very low environmental impact, many innovative features and have won many awards, the information has not been mediated to potential customers. This is shown through the current customer base, which is very committed, but few in numbers. According to the CEO, this has much to do with things around the product, such as marketing materials, recycling offers and packaging not being fully thought through and in line with the brand's desired image. To quote him:

"A lot of ideas are really great, but they are only finished by 80%" – the CEO, 2015-03-18

As an example he mentioned that the company wants to establish itself as a high-end brand, but their packaging design is still just a grey plastic bag that their warehousing staff choose. Another example is their recycling bonus that customers can receive if they return their used up clothes, a service that the company were offering many years before any of the competition. The service has only been utilized two or three times according to one of the employees. One explanation for this is the high second hand value that the company's clothes has and that many clothes are instead sold through second hand marketplaces, another reason is that it has not been marketed clearly enough.

5.1.1 Strategic decisions for the company's virtual presence

As of today the customers who buy the products, are real “hard-core fans” who only want the best products on the market, regardless of packaging, design or brand. Many are extreme outdoor enthusiasts who possess significant knowledge of their situation of use and are actively seeking to find the best possible solution for their problems. However, the company lacks a vision and guidelines for how the products should be marketed in order to increase the range of customers acknowledging the brand. One employee explained that there was no guidelines set for how to work with social media, but through experience she had learned that “funny” posts generated more response than more informative ones. She also explained that two posts a week on Facebook were enough otherwise people got fed up. However there was little to no follow up on what such posts and newsletters generated, the only thing they could point out was that the internet traffic to their “fyndlåda” (“bargain box”) increase for a short while after a new post has been posted.

As stated before, part of the new strategy will be to increase the sales occurring online, according to the brand manager; the goal is to have 50 percent of total sales occurring online by year 2020. The first step towards making this a reality has been to outsource all IT development, and the company now has an external supplier who will develop a new e-commerce platform from the ground up. According to both the brand manager and other interviewees, this gives the company possibilities to be more creative and more attractive online, since the supplier possesses great knowledge of the latest trends and technologies within their field. The company who will design the new website also participated in a short interview where it was found that they have been working with similar projects before. They therefore possess knowledge that can be interesting for the development process and insights of how online retailing is changing. The authors were told that there are opportunities for making configurations on the website and that the platform it is built upon allows for modifications if new sales strategies and marketing channels would be needed. The brand manager sees the new website as one of the most important steps toward an innovative, and new way to compete in the market and interact with their customers. Although the company has been outsourcing the IT development, the brand manager states that content creation and generation of insights should not be outsourced.

With more possibilities and creativity, the new website could have the potential to facilitate and increase CE, but with increased CE comes also an increased need for customer support, content creation and processes for handling and translating feedback to the NPD process, something that has been identified as a big challenge for the company. The pure entrepreneurial mind-set and high degree of centralised decision making that has been present at the company earlier, has resulted in a work culture where many employees are unsure when it comes to making their own decisions, according to the CEO. Other employees confirm this statement by saying that the company lacks any real guidelines and goals for where they want to be and how procedures should be undertaken.

5.2 Challenges and opportunities with NPD

As of today there are no set procedures for how NPD should work with input from the customers. This matter is expressed by several of the employees, as there is no structured way of collecting customer input and using it in NPD. The procedure for the design department for instance, is performed by asking the sell department for customer input and what to take into consideration in the design. The sell department then give a brief of what their interpretations of the customers wants and needs are, and communicates this verbally to the design department. The customer input from the sell team is an overall interpretation of the customers that is communicated from “their minds”, and is not based on anything formally written down. As expressed by the employees this might not be the best procedure, but at the moment it is “good enough” since there is a lack of time.

Some employees expressed that involvement from people nearby can be beneficial, due to the fact that they can facilitate development because of their availability and their physical presence. However, locating these individuals can be a difficult task, since not just anybody can be used. The person in question must have the right physical characteristics, something that can be hard to find. Nevertheless, when people with the right characteristics are found nearby, they are seen as very helpful as they communicate useful information. As expressed by employees, this face-to-face contact with customers is seen as invaluable.

Employees also stress the fact that not all departments are involved in the NPD. Thus, valuable input might not have been considered, even though it could have been useful. However, if other departments are involved it does not happen in an overlapping approach, but instead the departments hand it over when it is done with its part. Thus, it can be compared to a “throw it over the wall” thinking. Meaning that when one department is done with its task, it passes it on and is no longer involved.

Recently, a new approach has been introduced to the NPD process, namely the design brief (see Appendix B). The design brief is a document where aspects such as product description, target activity and consumer, and key product design features are presented. The design department together with the brand manager creates the document. This is done to acquire knowledge and to be able to trace why certain features were chosen for the product, and to facilitate for future decisions.

5.2.1 Employee and customer dedication

Some employees express the feeling that there is no one that has the overarching responsibility for the product development, or in other words, no one “owns” the product development. Another employee express the feeling that working with project form in product development would be beneficial. They argue that working with a better project form would probably lead to a better structure and it would increase productivity. For instance, in today's form the employees does not know when product development for spring summer 18 is going to take place, which leads to that the employees doesn't know when specific information about spring summer 18 is needed. This matter is also highlighted as a problem for the design department. For instance, at

the time when they are working on e.g. product A, they are very focused on that specific product and do not want input on other products. However, it happens that they get input about other products which makes it harder to focus, but maybe even more important, to absorb the input for other products. Nevertheless, this leads to that most product development is based on own preferences from the design department, rather from the actual customer input.

As previously mentioned, the employees states that some of the company's customers are very loyal and dedicated, and they are very eager to help the company perform well. Today, some customers are already coming back to the company with input and stories about the products. This is mostly done by mail and it can be "whole stories" on several of pages according to an employee working with customer service. However, this information in combination with the information from e.g. complaints, adds up to too much information for the company to handle. This leads to that, instead of conserving the information, nothing is done since it simply becomes an overload of information and there is no systematic way to process and utilize it in a proper way. The employees express this as being annoying, since they have usable information but have no structured way of communicating and using it in the product development. Furthermore, the employees show interest to work with customer input and think that it can be a beneficial way of working with product development. But the overall challenge for the employees is the lack of time, which affects their effort. The employees describe the procedure of working with customer input as a time consuming task and argue that the lack of time is partly because there is an overload on their specific work tasks, and partly because of the unforeseen tasks that must be carried out. One employee for example states that 50 percent of her time goes to unforeseen tasks everyday, which forces her to deliver results that she is not 100 percent satisfied with.

5.2.2 Company ambassadors

The company is today working with so called ambassadors, who are extreme users and often compete in a specific sport such as climbing and/or adventures. This collaboration can be viewed mostly as sponsoring as the ambassadors gets products in return for pictures for marketing purpose. The pictures are used to convey a feeling of what the brand stands for. In this sense, their ambassadors does not contribute to the product development, and even if they would like to include their ambassadors in the product development it can be a challenging task since they do not communicate on a regular basis, only once or twice every 6th months according to the interviewees.

In order to provide a more objective view of the company's work with its ambassadors, one newly appointed ambassador was interviewed. Even though, the collaboration between the company and the ambassador was recently started (last fall), there had not yet been any set procedure for how the collaboration should be structured. This was explained to be because of lack of time, from both sides. However, the ambassador emphasised his interest in the company and his eagerness to contribute and help developing the products.

The ambassador, has his own business as a mountain guide and therefore get an extreme amount of time on the mountain, 140 days total, compared to other extreme users as he argued

only get 20 days on the mountain. The ambassador explained his interest and argued that after the winter season, he would go through all the clothes and see how they have been performing. He takes notes on what he thinks about various features and also make suggestions for improvement and then he hopes to pass it on to the company. However, this is not something that he has decided in cooperation with the company, but an initiative taken entirely on his own. He further argues that in the best of worlds, it would be beneficial to have a good relation with the design team in order to spontaneously discuss important features. He also adds that it would be preferable to know when the company wants information about a specific product, in order not to miss a product cycle. If a product cycle is missed the proposed improvements might have to wait until next years cycle.

5.3 Challenges and opportunities for the organization

Previously, the former owner and founder have controlled the organization. He designed and produced the products based on what he thought and considered was important. The employees could come with thoughts and insights but in the end it was always he who made the decisions and everything had to go through him. In other words, it was very top managed and people lacked the ability to make own decisions and to take initiatives. However, since the founder now has left the company, they are currently trying to take another approach in order to allow the organisation to change. It has been expressed during interviews that even though the company is a different company today, there is still a part that is affected from when the founder were in charge, which has lead to people still hesitate when it comes to decision making. However, some interviewees consider themselves able to make own decisions and cannot relate to this issue.

The general feeling otherwise, is that the employees are willing to contribute to the company. They have a personal interest in the brand and thinks that it has great potential. They further stands for what company is doing and is very active in such activities that the company's products are made fore. However, during the interviews it was found that there is a lack of incentives / motivations / unified vision and a common picture of what the company is. This in such a way as employees does not always know the meaning of their work task or why they should strive with a specific task.

5.3.1 Effects of the reorganisation

The majority of the employees have a positive attitude towards the current reorganisation. They believe that the company will benefit from it, and are hoping that it will facilitate their work. The new reorganization with its new systems will be more structured and tasks that have before been performed manually will now be automated. Thus, allowing time to be spent on other more relevant tasks. However, even though the employees are positive, the authors were told that the recent turnover of staff has implied a lot of challenges. No set working procedures and lack of documentation has meant that a lot of information gets lost when an employee leaves the company, and steep learning curves for new recruits. Ad-hoc solutions are explained to be the result of the high turnover, which also were identified as a reason for the lack of time.

Another implication of the reorganisation and recent recruitments is that the company today have some of its employees and consultants in Stockholm, which have led to internal geographical challenges. The employees explain that the distance between the head office and Stockholm has created barriers for communication and the feeling of just being able to have a spontaneous chat with colleagues sometimes gets lost. Talking with colleagues in a different location becomes much more complicated since the meeting many times has to be decided in advance, which inevitably has resulted in fewer meetings and less communication. Moreover, some employees also discuss the matter with the current office layout. They explain that also the layout sometimes hinders communication, or that it makes it less spontaneous as they would like it to be. As a result of this, the employees explain that knowledge sometimes get stuck in the different departments. This has to do with the fact that there is no common platform where the departments can discuss and bring up matters with the rest of the company, leading to that the knowledge is kept within a specific department.

6. Analysis

In this chapter, the empirical findings are related to the theory from the literature review. It starts with an analysis of the company's potential for CE. It continues by providing an analysis of how CE can be encouraged by the company, and finishes by analysing the internal operations that are used for NPD today.

6.1 Business environment and industry trends

The outdoor industry has been growing for the last couple of years and the trend is expected to maintain. The definition of an outdoor consumer has broadened and the largest customer segment today are the urban athlete, who seldom encounters extreme conditions. Companies within the industry are heavily focused on branding and storytelling to create an image that is mediating quality, sustainability and performance and there are very little possibilities for disruptive product innovations. Instead the next big innovation will most likely be within how the companies manage their marketing, sales and distribution through Internet.

6.2 Vision and strategy

At the moment, the company is lacking a clear vision of where they want to be and strategy for how to get there. The managers have begun developing such tools, and seem to have a relatively clear image of what they want to do. However this vision is not yet anchored among the rest of the employees and many feels as if they do not know which overall goals they are working towards. Clear visions and goals are crucial factors in order to motivate and empower employees to make own decisions and think creatively (Ambile, 1998; Nadler and Tushman, 1997; Salter et al., 2014). The absence of a real company culture is also affecting the motivation among the employees and, according to the CEO, some of the employees feel insecure of the future of the company and where it is heading. This is hampering the company and makes it increasingly difficult to motivate and implement new changes to the work processes and the organisation. A first step has been taken towards building unified values and visions within the company by having workshops that involves all employees. These first workshops have been discussing sustainability and have shown to better unify the visions and values among the employees as well as building company culture. This is in line with Nadler and Tushman (1997) who states that incorporating employees in the change process is necessary in order to motivate desired changes.

The company is in a situation where the first priority is to reverse the latest trend of negative results. According to the brand manager and the CEO two factors that are necessary to achieve this is, increased sales and shorter time to market for new products. The first step towards this is the development of a new website that has been developed with an external IT-development provider. With the IT-development provider's extensive knowledge and experience from e-commerce the tools for a better and more communicative web presence is possible to develop. This in its turn can help the company to increase their sales occurring online. It also puts the company in a better strategic position as they will be able to act faster when market conditions online change at the same time as they can focus on their core business. As customers are

demanding better communication and are more informed than before, it is also necessary for the company to follow that trend and improve their online presence. Today there are more ways to create value than to just sell products via the company's website (Prahalad and Ramaswamy, 2000) and the company therefore needs to develop values and a vision that can be applied to more than just their products, something that has been identified as problem earlier, with unclear offerings and lost sales as a result.

6.3 Challenges and opportunities for CE

The majority of the company's current customer base has been identified as loyal customers who have a genuine interest in the company and chose the brand because of its genuineness and unwavering standpoint to sustainability and quality. Building on their customers' personality, the possibilities and opportunities should be well suited for a high level of CE with the company. Since customers are expected to be motivated to engage in conversation. However, as the nature of customer interaction has changed, it will be crucial for the company to develop their new website to be easier to navigate, more intuitive, more informative and enabling higher levels of CE. This is confirmed by issues identified during the interviews where it was stated that the products and marketing have failed to mediate benefits of new solution, differences between certain products and that it was complicated to understand how to navigate and get support from the website. It will therefore be important to design the virtual presence so that it facilitates customer interaction and induces incentives for participation by providing relevant content and enabling both customer-to-company and customer-to-customer interaction. These changes would help the company to move their web-based offerings towards what Farquhar and Rowley (2006) describes as a VCC and tap into the social context of their users as Sawhney et al. (2005) explains.

6.3.1 Lead users better equipped for the early stages of NPD

The company is currently working with what they call ambassadors that helps them to take real life pictures for marketing purpose, in exchange for sponsoring. These ambassadors are extreme users within their area and also use the products under extreme conditions. However, as most of the ambassadors only take pictures, they do not really contribute anything to the product development and can therefore not be placed under the category "lead user", as explained by von Hippel et al (2005). Further, the contact between the company and its ambassadors occurs sporadically (only once or twice every 6 months) making it difficult for them to take in the information needed even if they would like to. Therefore the company is not currently reaping the benefits that are explained by von Hippel (2005). From both the literature and the interview with Åre skidfabrik, the authors can conclude that incorporating customer input from a VCC in the early stages of NPD is not something that is desirable for the focal company. This would instead increase the administrative burdens for the company and require large investments. Instead, the authors confirm what Nambisan (2002) recommends for these early stages of the NPD process. Namely: to use lead users as resource and co-creators. However, this requires the management to coordinate such activities (Nambisan, 2002).

In the interview with one of the ambassadors, it was found that he is in a position where he is exposed to the extreme conditions, that the company's products are made for, up to six times

more often than a regular user. He is also eager to contribute with new ideas and solutions to the products he is using and sees it as a perfect opportunity to gain recognition for his own business through this collaboration. Thus he fits perfectly into the characteristics of a lead user defined by Piller and Walcher (2006) and Luthje and Herstatt (2004) as an individual who faces needs before the majority of the marketplace and would benefit from a solution and recognition of his contributions. The ambassador also claimed that he knew other extreme users similar to him, who also could be interested in a future collaboration. These users were people that he himself used as mountain guides, if there is an overload in his business. He stated that these users are reliable and can be compared to him and probably could be of interest for the company to work with. Thus, this could be an opportunity to make use of the pyramiding method as proposed by (von Hippel et al, 2005). By using the pyramiding method the company can ensure to find reliable lead users in a cost efficient way. This would also reduce the costs of looking for lead users as the ambassador already has people in mind, which means that the number of interviews can be kept down (von Hippel et al, 2005).

6.3.2 CE demands resource allocation

One major challenge that was identified was the constant lack of time for most employees, mostly due to lack of standard procedures, manual tasks and unforeseen problems. This lack of time is hindering the company in several ways as employees have little to no time for customer supporting activities and utilizing external knowledge in the NPD process. These challenges are also in line with the challenges identified by Salter et al. (2014) and will really be a key issue to solve in order to increase CE and translate customer-generated knowledge into NPD. This was further confirmed in the interview with the CEO of Åre Skidfabrik, who explained that the administrative work tasks increased substantially when involving the customers in the NPD process. Some initiatives have already been taken to lower the administrative burdens by introducing a new business solution system and outsourcing IT development, however the authors argue that there is more that is needed to be done and there has to be a shift of mind-set when thinking of NPD and value offering. The new mind-set needs to be more externally oriented in order to capture more of the customer input and incentives must also be created for customers to engage in the company. This is in line with what Yadav et al. (2007) states regarding the importance of encouraging external engagement in order to adopt new innovations. It is also one thing that Prahalad and Ramaswamy (2000) aims at when stating that companies can create value in other ways through their websites today.

6.4 VCC to create synergies

The company is currently working with virtual IT tools such as websites, Facebook and Instagram. Through these channels new offerings are mediated, as well as stories from athletes, other users and from within the company. However, from the interviews it was found that the company has no strategy for how these channels should be used and what result the content is supposed to generate. Nor is there anyone measuring the results or translating feedback from these channels into the organisation. According to Thorsten and Alain (2009) there has to be a clear objective on what the goal is with the CE in order to achieve effective customer translation of customer feedback. Also according to Nambisan (2002) and Sawhney et

al. (2005) the design and strategy of the virtual presence should be governed by the systems and processes in place that helps the company to integrate with the VCC, something that has been identified as non existing in this case. With the development and introduction of the new website these systems and processes needs to be developed, along with an overall strategy for how the CE should benefit the company. From the interview with the company involved in developing the website it was confirmed that the virtual tools needed are possible to develop, as well as the knowledge for how to measure and translate data. This is therefore not regarded as a limitation for the company, but rather as an opportunity. Further, Sawhney et al. (2005) argues that working with a VCC can lead to increased speed, frequency and persistence of the CE. Therefore, working with a VCC might facilitate the problem with lack of time, as mentioned above, as the information will be processed faster. It also has the potential to increase sales since customer might stay on the site longer.

The brand manager explained that the goal with the CE is to gain feedback in the later stages of the NPD process, namely product testing, product introduction and product support. By answering the six questions, developed by Thorsten and Alain (2009) (see table 5 below), a first step can be taken towards understanding how a VCC for the company should be designed.

Who will be involved?	All current and potential customers
What is the purpose?	To continuously improve products
Where does it occur?	Later stages of NPD: Product testing and product support
How much involvement?	Moderate involvement
For how long?	Continuously
How to incentivise?	Intrinsic motivation and recognition

Table 5: Answer to Thorsten and Alain's (2009) six questions

Following the framework developed by Nambisan (2002), we can conclude that this type of information is gained through a VCC with customers as users (this also match the initial goal stated by the brand manager). Further following Nambisan's (2002) propositions, it shows that customer interactions and communications for product testing should be more formally governed with less customer to customer interaction. Whilst information for product support is a more social process where customer-to-customer interaction should be encouraged and content should be less controlled. Product support mechanisms can therefore be achieved by facilitating customer-to-customer interaction, something that Farquhar and Rowley (2006) highlighted as increasingly important. Whilst feedback from product testing does not call for the same level of CE, as long as the incentives are in place for customers to contribute. By elaborating and visualising the framework (see figure 4 below), developed by Nambisan (2002), a better overall picture can be provided of how CE should be structured in the VCC.

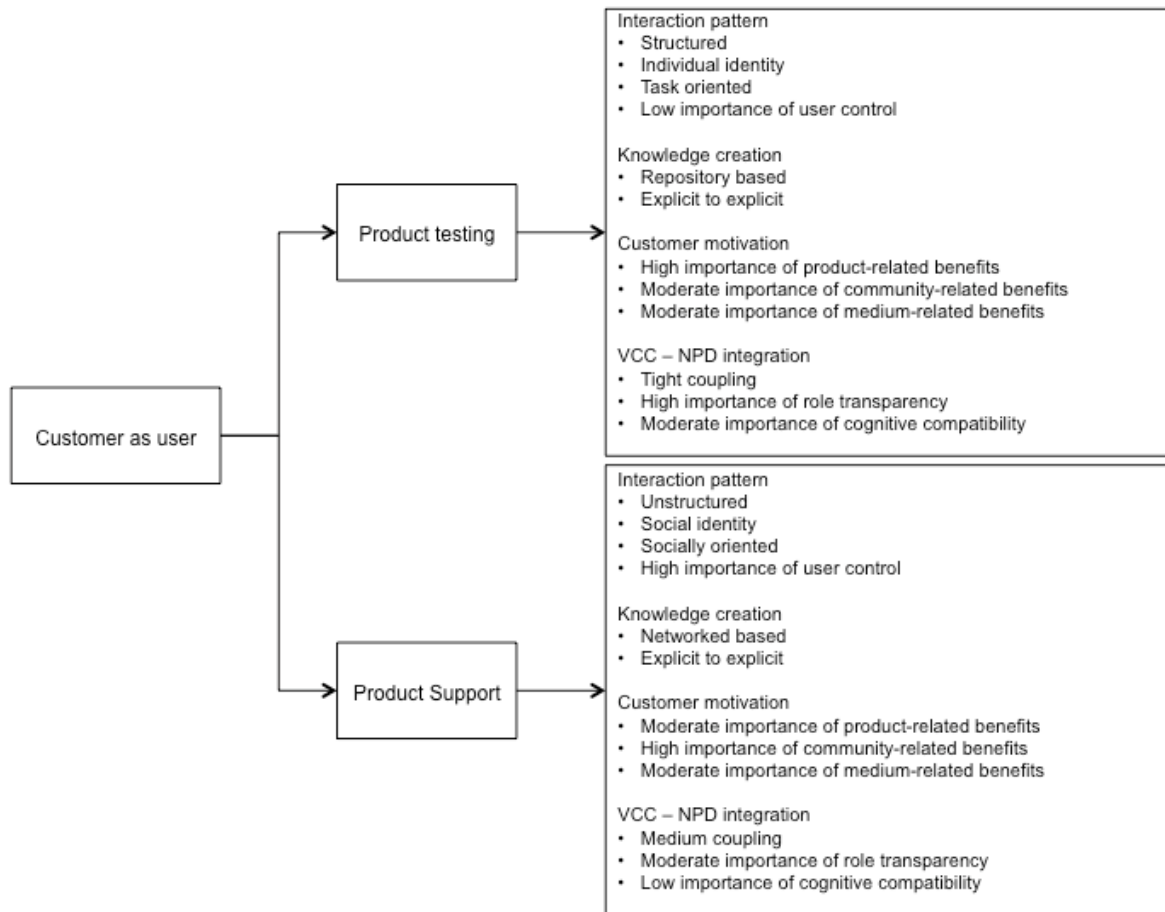


Figure 4: VCC Interaction pattern and parameters when utilizing customers as users (Nambisan, 2002)

6.4.1 Lessons from other case studies

Some lessons can also be learned from the examples presented in Table 2. The argument that a VCC might be applicable for the company can be supported by Sawhney et al.'s (2005) example of Ducati. The motorcycle company, which can be regarded as a real lifestyle brand and is a relatively small niche player in the motorcycle industry, has been very successful in creating a community where customers contribute to NPD process. Like Ducati, the focal company is a small niche player within its industry, with highly dedicated customers who are already showing their dedication through long emails. Further, to relieve from more administrative burdens and create what was requested as "solutions with synergy effects", one could look at how Propellerhead let customers interact with each other to come up with solutions to their problems or how Cordis ranked suggestions and only used those with highest ranking. By connecting customers with each other, there will be less time needed for the focal company to dedicate to customer service, and by screening suggestions early on the administrative burdens would become less demanding. Another example of how the company could make use of their lead users would be to facilitate their integration in the NPD process through online discussion tools just as Original Mountain Marathon (OMM) did with Google groups.

However developing advanced virtual tools to integrate customers in idea generation, such as in the case of Audi, Adidas and BMW, or engage a large set of customers through the whole NPD process such as Åre Skidfabrik, is not applicable since it would be too costly and time consuming to manage. New business models such as threadless.com and quirky.com are not applicable either, but the possibilities that internet provides, where customers can come together and solve problems, opens up for interesting possibilities to keep in mind. It will be important for the company to think strategically when developing their virtual presence, especially as customers' buying behaviour is most likely to change even more, according to the CEO of IT development agency.

6.5 Organisational implications on knowledge transfer and decentralisation

Today, the organisations seem to have high spread of decision making among the employees. Some say that they can make decisions on their own, and some say that they could take even more decisions if they wanted. This is align with some points that Foss et al (2011) argues an decentralized organisation needs, as they point out that greater delegation of decision rights and involving employees more advocates decentralisation. The CEO also try to encourage people and want them to take more decisions, which also is align with Foss et al (2011). However, there are no set procedures on how to communicate and no one has the overall responsibility for how communication should occur, which can be interpreted as communication is not encouraged. Foss et al (2011) points out that communication must be encouraged as a main driver for working with a decentralised structure. However, what Johansson and Näsholm (2013) argue is that a decentralized structure can contribute to that knowledge get stuck in different units. This trend has been identified to be an issue at the focal company, and one employee has confirmed this. However, this is not due to the scattered units as Johansson and Näsholm (2013) propose, but in fact has to do with the lack of a common communication tool, and that some employees and consultants are located in Stockholm, which hinders the knowledge transfer. However, the company might not get affected in the same way as a result driven organisation would with less knowledge transfer (Johansson and Näsholm, 2013), since the company is a very flat and open organisation.

6.6 Types of communication

The CEO states that he wants the employees to take more responsibility and to make more own decisions, which can be linked to a decentralised organisation discussed by Johansson and Näsholm (2013). However, this is contradicting since the employees feel that they do have sufficient rights concerning responsibility and decision making. It can therefore be seen as there are some kind of miscommunication, which will be elaborated on below.

According to Spraggon and Bodolica (2012) communication can be divided into four different types of communication. Applied to the focal company's situation it becomes clear that they make use of all of them, but some more than others. First, in product development when designing new products the design team ask the sell department for customer input. This is done spontaneously and there are no set procedures. This is a crucial step for the NPD and

handles valuable and complex information. When communicating complex information, it is communicated correctly according to Spraggon and Bodolica (2012). Similar information that comes from customers in general is mostly received by e-mail. With the increased importance to work with customer input this information should be communicated to the design team, but this does not happen on a regular basis. It was found, that if it is communicated at all, it is communicated by email internally. Relating this to Spraggon and Bodolica (2012) approaches this can be viewed as dynamic virtual processes. However, even though it has been communicated it does not mean that the knowledge has been transferred and received. If the design department choose not to take part of it, because of reasons such as limited time or being too busy, they do not need to actually access the information. This brings us to Eskerod and Jepsen (2013) term, pull communication, which is information that has been communicated but the receiver can choose to access the information or not.

However, canonical face-to-face communication has recently been introduced when looking over design specifics and performing the design brief. The design brief is a crucial step in product development; hence, complex information needs to be communicated. This aligns with Spraggon and Bodolica (2012), who recommends canonical communication for complex communication. Eskerod and Jepsen (2013) recommends interpersonal push communication when ensuring a common understanding, which is the purpose of the design brief.

The company is supposed to have monthly meetings where reconciliations and decision-making should be done. But as understood during the interviews, these meetings do not always take place and are sometimes cancelled. Instead, the information is sent out by email. This leads to that instead of the canonical processes that were meant to be held, the information is communicated through dynamic virtual processes. Thus, moving away from the approach that is best suited for complex information into a process more suitable for less complex information. Furthermore, the dynamic virtual process is a pull process, meaning that not all employees necessarily need to read the information that was provided, leading to that complex information is left out. The general communication that is used in the office is non-canonical processes whereas employees communicate chat freely in the office. But off course, they do also make use of canonical processes when communicating more important matters, such as questions about different collections and matters regarding the reorganization etc. Eskerod and Jepsen (2013) argues that choosing the appropriate communication approach given a specific condition can possess a problem. However, the company does not face this problem since they have not chosen any specific communication approach for a certain task yet. Thus, the employees themselves decide what communication approach to use, which means that similar information can be communicated in various ways from time to time.

6.7 Project management

As discussed by Jeffrey Thieme et al. (2003), cross functional integration should be encouraged in order for the employees to share knowledge from different departments. Applied to the company's situation it was found out that it, to some extent, exists cross-functional teams as the departments do integrate with each other. However, the employees has expressed that this is

done by own initiative and there are no set standards for this. It is also relatively easy to integrate with other departments due to the limited number of employees, which also can be a contributing factor to as why cross functional integration exists. But, the employees argue that they sometimes work after the “throw it over the wall” principle, meaning that departments finish their part and then pass it on to the next department, without further involvement. This indicates that there is a low cross-functional integration, which can affect the survival rate of the product according to Jeffrey Thieme et al. (2003).

Continuing with planning, which according to Maylor (2010) is of vital importance, it can be found that different matters occur when applied to the company’s situation. Employees point out that the overall planning of the NPD is weak. This due to the fact that employees does not know when the design department needs information about the products or how information should be communicated. However, the planning is covered to some extent as they have the design brief. The design brief includes target markets and detailed product specifications, which is something Jeffrey Thieme et al (2003) advocates. Further, the interviewed ambassador expressed that it would be beneficial for him to know when the company needs information about the products, this in order for him to not miss a product cycle. This indicates that there is a lack of planning from the company, as they cannot provide him with this information. However, the lack of planning has its ground in the lack of overall responsibility, or that there is no one that is the designated project manager.

Regarding what Jeffrey Thieme et al (2003) discuss about leadership and project managers, there is currently nothing like this in the NPD. There is no one that has the responsibility concerning NPD and the employees do not know who to discuss problems with if they occur. Instead, they face the person they believe is most appropriate for the problem in question. However, this might not be the best way as Jeffrey Thieme et al (2003) propose that project managers should have deeper knowledge within the area and understand technical aspects.

7. Discussion

This chapter discuss the analysis and bring a more reflective and holistic view to it. It will follow the same structure as the analysis with a discussion of the company's potential for CE, and continue with a discussion concerning approaches for CE and changes to the internal operations.

During the authors' work together with the company, it has been realized that the company lacks much of the basic structural capital that is needed for successful CE in NPD. At first this came as a surprise for the authors, and hence the expectations for what was going to be the result of this thesis needed to be turned down. The recommendations discussed in the remaining part of this report will be on a more strategic level than first expected, and specifications for how each individual recommendation should be tailored is not provided.

It is also important to note that the company is very small and that much of the literature presented in this thesis discusses organisational theory in larger firms. Expressions such as a decentralised organisation or cross functional teams may not be applicable in the same sense as in larger organisations. But the overall idea of an entrepreneurial organisation where decisions are made quickly, initiatives are encouraged and people with different knowledge are included in the decision process are also applicable for small firms such as the focal company.

7.1 Business environment and industry trends

As previously mentioned, the outdoor industry is a relatively stable market that is slowly growing, and judging from the increasing trend of people wanting to promote their healthy lifestyle and awareness of the environment, this trend is most likely to continue. The most major factor affecting customer behaviour and companies' competitiveness is no longer the products themselves, but how companies are marketing, selling and distributing their products in order to create a good experience for their customers. Much of this new value often originates from more intangible offerings such as branding activities that promote a certain "feeling" that customers can identify with. It is also becoming more common for companies to promote themselves with special offers through their Internet channels, more companies are arranging their own events and races and some have their own concept stores.

The growth of online retailing is expected to continue and it will be important to use several platforms in order to reach out to as many customers as possible. The vision and values of the company should govern which platforms to use, as well as which may contribute to highest payback. This means that the best strategy might not be to only use the biggest retailing companies, where the focal company will have to compete with all big brands in the industry, but instead trying to identify niche retailers where potential customers are more likely to be found. Another aspect to consider is what the CEO of the IT development agency explained as a possible scenario in the future, where more of the online retailing occurs through social media. This will affect companies' websites in the way that they need to offer added value, on top of product value itself. Customers should want to buy the product because the brand is clearly

representing the values and causes they stand for in an transparent and honest way, at the same time as it is contributing to increased knowledge and engagement in those causes.

In this homogeneous and consolidated market, the focal company still has managed to maintain a somewhat unique brand, which is confirmed from customers, suppliers and competitors. However, as their uniqueness has long been grounded in their uncompromising attitude to environmental and ethical solutions for the production and use of their products, this competitive advantage is decreasing as more companies are adopting the same solutions into their own products. The strong product focus within the company has resulted in a narrow group of customers who are very enthusiastic about the brand and often are extreme users within their field. But the greater bulk of customers are choosing other brands since they have greater budget and more clear branding and marketing strategies. This however, should not be seen as a weakness but instead as an opportunity for the company to exploit. The uniqueness of the brand should be used to create value that other brands may be too mainstream to do.

7.2 Vision and strategy

In the first discussions together with the brand manager, where the objectives of this thesis were discussed, the vision of turning customers into users was identified. He explained it as they wanted to work together with their customers in a more pivoting way, like software companies are working today and in a systematic way incorporate customer feedback into the NPD process. He further argued that no company in their industry is currently working in this way today.

The redefinition from customers to users where expanded in later interviews to also include deeper relationships and better communication with their customers. After researching the area and also investigating how competitors marketed themselves online, it was found that the company have been lagging behind in this area and that there were signs of companies already starting to integrate customers as users by involving them in both customer service and NPD. Digging deeper into the area of CE and NPD, it was discovered that the company is currently lacking several important enablers that are needed for incorporating customer feedback in a systematic way. This has much to do with the recent shift in management and the reorganisation that has been taking place. Some initial steps has been taken, and are currently under progress, to develop a joint vision for the company and shared values. This has been identified as one of the cornerstones needed to be in place for the company, in order to be successful in further undertakings and CE. The vision and values needs to be developed so that they may be applicable to the whole organisation, both internally and externally, not only product specific as it has been earlier. This will also help to build a culture within the company that helps to foster an entrepreneurial mindset that facilitates quick decisions since employees know which goals and values to focus on. Employees will feel more motivated and the change process can easier be implemented. It will also help the company to govern decisions regarding how to design their virtual presence, how to interact with customers and which content the website should provide.

7.3 Challenges and opportunities with CE

CE through virtual processes will demand virtual tools that facilitate customer interaction and processes for how the knowledge, generated in these interactions, should be translated into the organisation and NPD. At present, the company lacks the internal processes and guidelines for how product development and customer feedback should be handled; hence this will have to be their first priority. Initial steps towards solving this issue will be discussed in chapter 7.5. How the virtual processes should be designed in order to generate desirable outcome (which is a deeper relationship with customers and feedback for NPD), will be discussed in the next chapter.

Although the company claims to have a customer base who is very loyal and highly motivated to give feedback, it is important to examine who these customers really are. There is a risk that, since the brand can be viewed as a rather conservative, many customers possess similar characteristics, something that may affect their attitude towards the brand when it is trying to renew itself. It is also important to note that the customer base is very limited to a crowd that puts a lot of demands and efforts in sustainability and quality of the products, and appreciates a smaller and somewhat more “strange” brand, which is a value that the brand has to maintain at the same time as it has to make itself more attractive for a broader set of customers.

7.3.1 Lead user method is not the same as CE

During the authors' work at the company, it was found that NPD often is performed by the designer alone and that information often demanded canonical face-to-face interaction. According to her, this is the only way to make the development efficient and possible to accomplish. Introducing customer as co-creators in this process would be too time consuming and overwhelming. Therefore, the role of lead users will be of great significance for the company, where the company needs to find a systematic approach to incorporate them into the organisation and build collaborations that are mutually beneficial. Collaboration with the interviewed ambassador should be exploited as a first step in this process, since he has expressed a will for this himself and since he has been identified to possess the characteristics of a lead user. A systematic collaboration with him is most likely to generate a lot of value for the company's NPD, and through his contacts, there might be a possibility to attract more lead users later on. However, it is important to notice that involving lead users in the NPD is not the same as engaging customers in the same process. A lead user must possess certain characteristics, whilst a customer could be anyone. Therefore the information from customers needs to be confirmed by many or by a lead user, in order to be seen as valuable. Therefore, the company could make use of lead users in the screening process of customer feedback as well, if they want to engage customers into NPD in the future.

After reviewing the literature used in this report, and talking to Åre Skidfabrik about their open innovation project - Extreme Opinion, there is two conclusions that can be made. Firstly, engaging customers can serve as a beneficial way for branding purposes of a company, which can help them achieve higher customer loyalty and positive word of mouth. Secondly, engaging customers in the NPD process demands high level of commitment from the company, high level

of coordination and structure as well as a strategy for how to acknowledge the participation. Judging from the capabilities and wishes of the focal company, their CE should in first hand be focused on creating value for and foster communication with their customers. To take this engagement further in the NPD process demands too much effort and time from their daily work as it is today.

7.4 Virtual Customer Community

During interviews with the company, it soon became clear that the solutions presented in this report, could not require more time or high investments. Instead the initial steps needs to generate synergy effects that can save time, increase CE and facilitate organisational learning with simple and easy to implement changes. This partly due to the strained economic situation and partly due to limited time available. Therefore, should input with high richness of information, for idea generation and product design purposes, be collected from lead users during canonical face to face interactions. Involving too many customers in this process through dynamic virtual communication would require too much attention and administrative capabilities to make the process efficient.

However to achieve the objective of redefining the customers as users, the level of CE needs to be increased. At the same time as the administrative burdens and investments must be kept down. This is why creating a virtual customer VCC might be of interest for the company. Partly this is what other brands within the industry already are doing. However most of their efforts still seem to be focused on branding activities, though the authors are recognising efforts among some players to also exploit customers as users by introducing so called “pro purchaser programs” and enable customers to rate and comment on certain products. What results this has lead to, and how companies are then making use of the information, has not been possible to evaluate in this thesis due to risk for conflict of interest.

7.4.1 Socially oriented community to create synergies

As of today, we can confirm what the brand manager said, that no company yet are working like this in the industry. However, there seems to be some players who are beginning to realize the benefits. With that said, it is not easy to implement a VCC fully, since it requires dedication and a certain image of genuineness and transparency to really get commitment and engagement from the customers. Further it also needs to create an added value to the product itself from the customers' point of view. The opportunity for the company lies in that they still possess that uncompromising image for sustainability and quality, which has made their current customers very loyal. By developing a VCC that mediates these values, at the same time as it contributes with new information and value to its customers and encourages discussion and knowledge sharing, the company could create new possibilities for knowledge acquisition from its customers. This knowledge could then serve as guidelines for NPD and as a tool for improving the customer service. Developing this additional value to its virtual presence would also put the company in a better strategic position for increasing its sales occurring online. However, the main obstacle will be to keep such a community alive and prosperous. If CE levels should be increased and then maintained, it will require a lot of time and dedication from the company in

terms of content generation, discussion encouragement and customer supporting activities. This is something that needs to be maintained with consistency, which might be a problem for the company due to the lack of time available. As a possible solution to this, the authors have identified that the company should encourage customer-to-customer communication (which might relieve them from some supporting activities) and encourage content sharing (through both social media and other platforms). Customers as users in product support could contribute by commenting on product and products features, rate products, help other customers to solve problems and share stories from their experiences. It might also be favourable to make use of its lead users and athletes to a larger degree by using them as moderators, to stoke new conversations and to increase value offerings at the website.

These suggestions clearly points to a more socially oriented VCC which best facilitates the role of customers as users in product support. The authors argue that this would be preferable for the focal company at this point, due to the fact previously mentioned of limited time and financial restrictions. Nambisan (2002) claims that utilizing customers as users in product testing would demand a higher degree of control in order to ensure representative samples, that it would have to be time limited, in order to be able to synthesise and use the feedback in NPD. However, the authors argue that some of the benefits of exploiting customers as users in product testing might also be gained in a more social oriented VCC. By providing a platform for customers to share their experiences when using the product, the company would also have the possibility to exploit the information in their NPD. Even if the nature of interaction is more socially oriented. The matter then is instead the methods and processes the company uses in order to identify and absorb that information.

7.4.2 Communities more for branding purposes than for NPD

Whether VCC can contribute to new insights for the NPD or not, could be discussed. In some of the examples from earlier research, and from the interview with Åre Skidfabrik, it has shown to generate new insights for what the customers are really looking for. However, no case has really resulted in a truly disruptive innovation. When successful in creating your own community (e.g. Ducati or Quirky), or when exploiting already existing communities (e.g. Åre Skidfabrik) CE will be increased substantially. But more than new insights for NPD, it creates customer loyalty and positive word of mouth, effects that are more closely associated to marketing activities. Which knowledge that is being absorbed and translated into new products is also dependent on the underlying organisation, which will be further discussed below.

7.5 Organisational implications

Although the aim at the beginning of this report were to provide a clearly defined framework for how to translate and utilize customer input into NPD, the authors today argue that the initial problem needed to be solved lies within internal communication. Therefore, specific suggestions on how to evaluate and utilize certain information are still to be investigated by the company itself.

A matter that was discussed is that the old structure from the founder, still lives in the company, hampering people to make their own decisions. However, the authors has identified this as not being the problem, instead the problem lies within the lack of structure and standard procedures. Since most employees are positive towards the reorganization, the problem will not lay within “change management”, and trying to convince people about the benefits of the reorganisation. Instead, the main driver will be to communicate rights of making more own decisions to the employees and including everyone in the process. This based on the fact that the CEO interprets the situation as the employees does not make sufficient enough own decisions. Moreover, the high staff turnover has greatly affected the internal corporate culture, which makes the whole process more complicated. According to the CEO, the company culture is today non-existing. Hence, the importance of introducing standard procedures and structures in order for the new employees to know how and why certain tasks are carried out is reinforced.

7.5.1 Set procedures for knowledge transfer

As of right now, the way that the company is communicating causes a lot of information to get stuck in the different departments. Today employees take own initiatives when communicating, which must be regarded as positive. But, as similar information is communicated differently from time to time, it will become hard to create an efficient and standardised NPD process, something that has been identified as a necessity in order to successfully engage customers in the process.

The design department argues that information regarding customer feedback is mostly received by the selling department and communicated when asked for. Even though the communication is mostly conducted correctly when comparing it to literature, there is no underlying strategy as to why that specific information is communicated in that way. Nor is there any structured way to ensure that this type of information is absorbed in a consequent manner over time, which creates a risk for information being lost or brought up to late in the development process. Therefore, it would be beneficial for the company to overlook the different types of communication channels and reflect upon how to best communicate certain information at certain points in time. As an example, the design brief is the first real set procedure on how to communicate special features. It enables the design department to get insights into the new product design, from other parts of the organisation, and helps set the requirements. This also enables the company to later on trace why certain decisions were made at a specific point in time. Implementing this kind of set procedures at other levels of the NPD process, such as between sell and design, would be beneficial. It would help other employees with potentially useful information to know when and how to share it, preventing information from getting lost.

Set procedures for how to communicate can further facilitate communication with employees who are working from different locations and avoiding the separated feeling that currently exist between the head office and the employees located in Stockholm. Skype and mail, as expressed by the employees is very formal and hampers spontaneous chats, especially as the office layout is very isolating and the distance between the head office and Stockholm is long.

7.5.2 IT tools for better communication

The cross-functional integration that exists today is insufficient and the fact that the employees themselves express that there is low cross-functional integration, confirms this statement. Communication between departments is today mostly done sporadically and by the employees themselves. There is no set guidelines for how cross functional integration in the NPD process should look like or who to involve, risking that employees with relevant information are left out. In order to create a more stable organisation and better quality of the NPD process, should the work between departments be more overlapping, thus, involving different departments simultaneously in the NPD. This will help employees to become more involved and get a better insight in the NPD. Which will reduce the risk of information being lost, or stuck in the different departments, even further.

Today there is a number of IT tools on the market (e.g. eXo, Basecamp, Slack) that helps companies to structure their internal communication and encourage a collaborative approach. The cross-functional integration could be facilitated through these IT tools since they encourage spontaneous interaction within an organisation in a systematic way. It could further facilitate the problem of information getting stuck in different departments. Hence, the problems with lack of time, facilities and geographical challenges can be solved. It will also help create synergies with very little investments needed, something that were requested from CEO.

However, encouraging cross-functional integration and working with set procedures is not easily done. Therefore, the company must improve their work with project management and appoint a project manager, which in turn will decide and take care of the planning required to work with set procedures, and encourage cross functional integration between departments participating in the NPD.

7.5.3 Project based NPD process

As brought up in the analysis, the company does not currently utilize the guidelines concerning project management that are suggested for NPD. However, working with project management goes in line with, and could facilitate, the problem identified by one of the employees as no one having the overall responsibility of the NPD process. As discussed in the analysis, the authors were told that one person had been appointed to have the overall responsibility, but this was not the case. Thus, the authors argue that working on a project basis and having a designated employee that takes on the role as a project manager would help facilitate the NPD process. In this way the employees will always know who to go to if questions occur. Previously, employees has just discussed matters with the person they thought were most appropriate for the problem in question, which lead to that similar problems may have been brought up with different people. Leading to that information might have been spread out amongst different employees making it difficult to have an overall interpretation of the project. If one employee were appointed this position he would have a good overall interpretation of the project as the information is gathered in one place.

From the analysis, it can also be seen that the NPD needs to develop its planning process. There are no underlying planning to the NPD and when different steps are going to occur. The company needs to improve their planning process and set predetermined deadlines, in order for the employees to be prepared and know when specific information is needed. Thus, the first step should be to determine a project manager, which later on can take care of the planning process.

7.6 Final reflections

One question that has been asked consequently during the writing of this thesis is whether the company have the resources and dedication to work with any proposed improvements made by the authors. Upper management has argued that they are prepared to put the work with customer input as a “core business” and develop the organisation around this. As the authors have been on site and gained insight into the company and how they work, and with the overall ambition from the CEO, the authors agree with and believe that the company both have the resources and dedication to fully work with customer input as a core business. Further, as most employees has expressed that something new needs to happen in order for the company to succeed, the authors also believe that there will be a positive attitude towards adopting new structures, communication tools and a VCC. However, saying one thing is not the same thing as doing it, and the authors identifies this as the biggest risk with this effort. Collaboration with customers and engaging them in NPD has been shown to be a challenge and it is not self-sustaining. Instead, CE must become a central part of the organisation, and as the level of engagement increases so will also the level of resources needed to allocate.

8. Conclusion and recommendations

This last chapter concludes the report and present the recommendations that the authors have reached through their working process.

This thesis has addressed methods and challenges for customer engagement (CE) in NPD within a company in the outdoor clothing industry. Increased CE has been identified to increase the intensity of an individual's participation in and connection to an organisation, which has been shown to generate a lot of new knowledge if efforts are successful. Which knowledge that is produced and transferred into NPD is then dependent on (1) how the engagement is encouraged and (2) how the managerial and organisational practises surrounding it are structured.

Through a qualitative case study of the outdoor clothing company in combination with literature grounded in a knowledge based view of the firm, network theory and systems theory, this thesis combines generic, as well as newly developed concepts, with empirical findings for this particular case. CE through virtual processes is still regarded as a relatively new concept as a source for NPD and in combination with the fact that little has been written about this concept in small, non-tech firms, motivated this study. A theoretical framework was developed in order to understand which design parameters that have been shown to be important for high CE, what this engagement generates and how it should be exploited. Important design parameters were meant to be identified through the first research question, whilst the research questions two and three of how to interpret and exploit this engagement were asked in order to identify key internal processes and any differences from other larger organisations and more technology intensive companies.

The company is currently lacking a vision and strategy that is well rooted in the company. This has affected the company negatively and the employees do not know exactly why certain tasks are performed and where it should lead. Further, milestones do not currently exist that can confirm if the work is going in the right direction. Therefore, the vision and strategy should be formulated together with the employees in order for them to feel involved, which can facilitate the work against set vision and strategies. Therefore the authors recommend that the company should:

- *Develop values that can be applied to all levels of the company*

These values will later govern all further decisions and the recommendations presented below, which are based on the research questions, are also they affected.

8.1 Design parameters for CE through a VCC

CE in the outdoor clothing industry is seen as rather high, since products are often associated with a particular lifestyle and interests. Being a small player might benefit the company since it will be easier to establish trust among customers. However, new product development is knowledge intensive, and within small companies with limited budgets, it will be important to

keep the costs and administrative burdens low. Therefore should CE through virtual processes mostly be focused on exploiting customers as users in product testing and product supporting roles, and encouraged customer-to-customer interaction that relieves the company from too much commitment in content generation. A virtual customer community, that offers added value on top of the products themselves, might help to facilitate this interaction and create a more favourable social context that facilitates customer generated content and knowledge. Therefore, building upon research question 1, the authors recommend that the company should:

- *Leverage the brand's good relationships and genuineness through their virtual presence*
- *Enable customer-to-customer interaction through their virtual presence*

How this knowledge should be interpreted and transferred into the NPD is then dependent on managerial and organisational variables.

Looking at the NPD it was found for this specific case, that the use of lead users is of great advantage, because their knowledge of how the products should be used during extreme conditions is invaluable when looking for new features. Thus, collaboration with these users is seen as invaluable for the design department. However, the company only makes use of these users in branding purposes today, neglecting their importance for the development of new features. Thus the authors also recommend the company to:

- *Make use of its lead users when engaging customers in their virtual presence*

8.2 Evaluation and utilization of new information

When considering the company's organisation, the overall conclusion is that due to lack of guidelines, lack of time, unfavourable facilities and geographical challenges, much of information concerning customer feedback gets lost. Another underlying reason may have to do with the former founder and CEO who worked completely without standard procedures and with a very centralized organisational structure. This structure can still be seen in the company today and is hampering initiatives. With the reorganisation that currently takes place; the company needs get rid of the old way of thinking and working. Today they only have mail to communicate insights, and no systematic way of collecting or transferring customer input to the concerned department. To overcome these challenges, and answering research question 2, the authors therefore suggest that the company should:

- *Implement a new IT communication tool*

8.3 Strategic and operational guidelines

After sorting the communication issue, another matter to look into is working on a project basis that encourages cross-functional integration. To determine a person that set rules and standards for how the project should be carried out. For example, having a determined project leader that has the overall responsibility for the winter collection. The project leader would then

set the standards for the project and decide how things should be communicated and when, and have continuous check up meeting in order to overlook the status of the project. To provide an answer for the third and last research question, the authors therefore suggest that the company should start to:

- *Work on project basis*
- *Work with cross functional integration*

A summary of the proposed suggestions can be seen in table 6 below. Also, a short description on why and how it should be done.

Recommendations	RQ	Why?	How?
Develop values that can be applied to all levels of the company	1/2/3	The company needs to be genuine and breath the values it wants to stand for in every aspect. This will help guide all future strategic decisions	Workshop with everyone involved, just as the sustainability workshop
Leverage the brand's good relationships and genuineness	1	This creates value beyond the product itself for customers and may work to attract customers back to the site after purchase. It will also create goodwill among other companies with similar values	Become a "hub" for companies, customers and other organisations that align with the company's values. Also include ambassadors such and (if they have) their companies, and encourage them to contribute with their knowledge to customers.
Enable customer-to-customer interaction	1	This will help customers to get a more objective perspective of the products and also create added value beyond the product itself. The company also has "unique" customers which they should somehow make use of.	Enable customers to make comments, rank and discuss products. Also arrange for customers to interact and ask questions regarding other areas of outdoor and include ambassadors and employees in the discussion. Also leverage the second hand value of the products.
Make use of lead users when engaging customers in the virtual presence	1/2	Today, the company has ambassadors in their organisation, but they are not utilized to their full potential. Therefore, rephrase them into lead users and make use of	Develop set procedures and documents for collaboration with lead users. They should also be used as moderators on the website and facilitate

		their full potential, which can contribute to knowledge acquisition.	the work with customer engagement.
Implement IT communication tool	2	They have all parts needed for NPD, but they have no set procedures for how and when to communicate. A designated communication tool might facilitate both communication and NPD if used correctly.	Make use of IT tools in order to have a common ground for communication and to get a better structure
Work on project basis	2/3	No one has the overall responsibility. Therefore problems occur with how to plan and communicate. This eventually leads to information loss and a “throw it over the wall” process.	Assign a project manager that can decide and structure the work with, for example, the winter collection. The project manager can further inform employees about when certain information about specific products is needed.
Work with cross functional integration	2/3	This will enable different work tasks to be initiated in parallel to each other, keep everyone updated on when information is needed and prevent information being lost along the way	Include employees from all concerned parties in the development of new products right from the beginning and have regular follow up meetings.

Table 6: Summary of recommendations

8.4 Suggestions for the future

The recommendations presented above are merely first steps towards becoming a more customer-focused organisation and more efficient in NPD. The authors have focused on delivering tangible recommendations that can be implemented without exaggerated expenses, but wants to yet again highlight that this is a continuous process that needs to be further developed in the future. In this last section the authors will therefore take on a more speculative approach in order to provide suggestions for how to further develop the CE and NPD.

As it has been shown throughout this research, it takes a lot of resources to maintain CE through virtual processes, and thus the full potential might not be exploited until it is a central role of the organisation. When internal structures and procedures are in place, the natural next step would be to hire someone dedicated to only work with customer engagement, similar to a community manager. This community manager should then work closely with the NPD team, and act as a gatekeeper for customer input.

Throughout the report, the authors have pointed out that it will be important for the company to maintain its uniqueness. The brand is today a niche brand, which made it very popular amongst

current customer, but management also stress that they want to increase their sales. It will therefore be important to consider whether the next steps should be to either move towards more mainstream product offerings (risking that the brand loses its uniqueness) to address a broader customer segment, or trying to exploit other markets where the current offerings also might be popular. One great example is the growth in sales in the Asian market, where the current offering seems to attract new customers. Further steps to develop even better CE in this market could be to also hire community managers that understand these market dynamics, something that also might help to increase sales.

Another strategy for having a more customer-focused NPD could be to instead outsource the maintenance of a VCC to an external part. This could be worth exploring as it would demand less effort from the focal company and several other companies today are specialized in these types of services. It was discussed with the company that the purpose for keeping the VCC in-house was not to loose control. But, the first step in the new reorganisation was to outsource the IT department, which seems to have worked well, and hence the company could also consider outsourcing the VCC. However, this has not been considered in this report since the authors believe that this is a strategic future core competence for the company, which means that it should be kept in-house. Another strategy could be to explore other already existing communities with similar target groups as the focal company, and integrate with those. Thereby, the company would not have to start from scratch and trying to build up interest for the community. Thus, this option was not explored as the company urged an expression of keeping it in-house in order to not make it to mainstream and loose control, which might be the result if using already existing communities.

In the future it will become increasingly important to provide a great customer experience in order to be successful in online retailing. Companies therefore need to have a strategy for how to manage their marketing, sales and distribution and keep focus on how their customers' behavioral patterns are changing. One factor that is crucial throughout this whole process is the way the companies handle their customer support services. At the same time it is several new services on the market today that help companies to offer customer support service in other ways than by merely using phone support and mail contact. Future support services will also include other customers who are experts within a certain field and smart applications that can predict what customers might want help with, relieving the company from time spent on customer support. As stated previously in the report, enabling customer-to-customer interaction might be an easy first step towards this. However, in the future it might also be worth considering other tools to enhance the customer experience and the support services even further.

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Appendix A

Below the appendix for the method phase is presented.

Interview guides

Interview Template - Interview with CEO

The CEO were chosen to be interviewed due to his position within XXX. He is the CEO of the company and should therefore have a good overview of the organisation, where it is right now and where it wants to be. His thoughts will also be compared with the rest of the employees in order to make sure that they are on the same side.

Who are we?

We are two master students from Chalmers University of Technology who are writing a master thesis with XXX. The aim of the master thesis is to elaborate upon how XXX can utilize customer feedback in the development of its products and at the same time create a deeper relationship with its customer.

Get to know the interviewee

1. What is your background and previous experiences?
2. How come you started working at XXX?
3. What is your role within XXX?
4. What is your view on innovation?
5. What do you expect to get out of our master thesis?

Understanding company background and current situation

3. Could you briefly describe XXX's background?
4. What are your values within XXX?
5. How has the organisation within XXX been structured before?
6. What customer segments is XXX focusing on? And who are XXX's main competitors?
7. What is important in order to be competitive?
8. What is the focus regarding your reorganization?
9. What are your company objectives and how will you reach them (strategy)?
10. How do you work with social media? What is the purpose of this?

Understanding the internal processes

11. How do you work with product development today?
12. How do you work with your customers today?
13. Are you using any tools?
14. How do you communicate new insights/opinions within XXX?
15. How much influence has each employee?
16. Are the employees encouraged to increase their knowledge/insights?
17. How are decisions about products and product development taken?

Identifying strengths and weaknesses

- 18. What are the greatest strengths/competitive advantages of XXX?
- 19. What are the greatest challenges/problems that the company faces?
- 20. What opportunities do you see for XXX?
- 18. Are there any business threats to the company?

View of the future

- 21. Where do you see XXX in 3 and 10 years?
- 22. How is the reorganization affecting you?

Interview Template - Interview with employees

Other employees were chosen for an interview in order to get a more holistic approach to how the company is actually functioning. The questions were formulated in order to confirm or reject answers from other employees, and to create a better understanding of the organization.

Who are we?

We are two master students from Chalmers University of Technology who are writing a master thesis with XXX. The aim of the master thesis is to elaborate upon how XXX can utilize customer feedback in the development of its products and at the same time create a deeper relationship with its customer.

Get to know the interviewee

1. What is your background and previous experiences?
2. How come you started working at XXX?
3. What is your role within XXX and how do you feel about that role?
4. What is your view of XXX?
5. How much influence do you have within in the company considering decision-making?

Current situation

6. Are you actively searching for new knowledge in order to develop your professional skills and insights for your role at XXX?
7. How are you rewarded for this?
8. Do you feel that you clearly know what your role is and how the working process looks like?
9. Do you feel that you have room to affect your working situation? How?
10. How much contact do you have with customers?
11. What do you do with the information you get from the customers?
12. How do you communicate insights and opinions within the company?
13. How do you feel about the current reorganisation?
14. How has this affected you?

Other

15. Is there something else that we have not yet discussed, that you would like to bring up regarding your role?

Interview Template - Interview with ambassador

The ambassador were chosen to be interviewed due to, as we have understood it, his interest in being involved in the NPD process when working with KM. He is not just an “athlete” that is sponsored, but he actually has something more to contribute with and is anxious to help. We believe that his profile is interesting and he can be a helpful source when trying to understand and help XXX in its reorganization.

Who are we?

We are two master students from Chalmers University of Technology who are writing a master thesis with XXX. The aim of the master thesis is to elaborate upon how XXX can utilize customer feedback in the development of its products and at the same time create a deeper relationship with its customers.

Get to know the interviewee

1. What is your background and previous experiences?
2. How come you started working with XXX?
3. What is your role within XXX? What is your view of XXX?
4. What is your view on innovation?
5. How much influence do you have within in the company considering decision making?

Understanding current situation

6. How often do you discuss improvements/adjustments with XXX?
7. How does your collaboration with XXX look like today?
8. Are you satisfied with what you get from the collaboration with XXX? What would bring additional value?
9. Do you know anyone else that would be interested in collaborate with XXX as you are doing?
10. How is the reorganization affecting you?

View of the future

11. How would you like to integrate/communicate with XXX?
12. What would you like to get out of your collaboration?

Interview Template - Interview with designer

The designer was chosen for an interview due to her position in XXX. As designer it is interesting to see if/how she considers customer feedback in the design process.

Who are we?

We are two master students from Chalmers University of Technology who are writing a master thesis with XXX. The aim of the master thesis is to elaborate upon how XXX can utilize customer feedback in the development of its products and at the same time create a deeper relationship with its customer.

Get to know the interviewee

1. What is your background and previous experiences?
2. How come you started working with XXX?
3. What is your role within XXX? What is your view of XXX?
4. What is your view on innovation?
5. How much influence do you have within in the company considering decision making?

Understanding current situation

6. How do you think about design, how should it take place?
7. What is your role within NPD?
8. How do you consider what the customers think and feel? How do you do this, or where do you get this information?
9. How is the reorganization affecting you?

View of the future

10. How would you like to work with your customers? How would you like to take into account what they think?

Interview Template - Interview with NPD responsible

This person were chosen for interview since he is working with processes for developing the NPD. This is something that is related to our master thesis and is therefore of great interest. We will try to understand his role in order to consider this throughout our thesis, hence, he is one of the persons that will benefit the most out of our results.

Who are we?

We are two master students from Chalmers University of Technology who are writing a master thesis with XXX. The aim of the master thesis is to elaborate upon how XXX can utilize customer feedback in the development of its products and at the same time create a deeper relationship with its customer.

Get to know the interviewee

1. What is your background and previous experiences?
2. How come you started working at XXX?
3. What is your role within XXX? What is your view of XXX?
4. What is your view on innovation?
5. How much influence do you have within in the company considering decision making?

Understanding current situation

6. How has the process of NPD looked like before?
7. How do you think about NPD, what is important and what is less important?
8. What are the objectives with your work and how do you reach them?
9. How far have you come with your task?
10. What do you want the process to look like?
11. How would you like to integrate with your customers? Do you think it is important to integrate with your customers?
12. How are the reorganization affecting you?

Nature of challenges

13. If we focus on the challenges that you face, what other challenges do you see in addition to the ones you mentioned in Q7?
14. Let's briefly discuss each challenge, why is it a challenge/problem for you, where does it derive from and what impact is it having on the product development?

Interview Template - Åre skidfabrik

“Åre skidfabrik” were selected for an interview in order to get a deeper look at their project “Extrem Opinion”. The project involved co-development together with potential customers from the forum website freeride.se, and can therefore be of interest for our master thesis in order to get insights from a real life case.

Who are we?

We are two master students from Chalmers University of Technology who are writing a master thesis with XXX. The aim of the master thesis is to elaborate upon how XXX can utilize customer feedback in the development of its products and at the same time create a deeper relationship with its customer.

Get to know the interviewee

1. What is your background and previous experiences?
2. What is your role at Åre Skidfabrik?

General

3. How do you use to work/integrate with the customer?
4. How did your work with “communities” differ from your ordinary work with customers? is there a difference?
5. Do you work with lead users today?

Project Opinion

6. How did you come up with project Opinion?
7. Have you ever done something similar before?
8. What were the main challenges? Why was this challenging?
9. How was the interaction with freeride.se structured?
10. How did you secure that you utilized all the input?
11. How did you exclude input that was non relevant?
12. How did you utilize the customer input? Was there a framework?
13. What were the key components that made this project a success?
14. What has project opinion ment to Extrem and Åre skidfabrik?
15. Has the project affected how you work with product development in general? How and why?
16. What would you have done differently if you were to do it again?

Appendix B

Below the appendix for the Empirical findings is presented.

Design Brief

DESIGNBRIEF	
SEGMENT :	CONCEPT :
SEASON :	PRODUCT EXPECTATION :
CREATED BY :	BRIEF DATE :
STYLE NAME :	ARTICLE NUMBER :
RETAIL PRICE :	PREL FORECAST :
LANDED COST TARGET :	FOB TARGET :
COLOR OPTIONS	
SIZE RANGE :	
PRODUCT DESCRIPTION :	
TARGET ACTIVITY & CONSUMER :	
KEY PRODUCT DESIGN FEATURES :	

KEY MATERIAL & TRIM IDEAS:

SILOUETTE/FIT:

COLOR IDEAS: