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Facilitating Sustainability Collaborations in SMEs: Strategic Challenges in the Scandinavian Outdoor Industry

Master's Thesis in the Master's Programme
Management and Economics of Innovation

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Abstract

This master thesis was written with the purpose to highlight the alignment between industry preservation and preservation of the environment. Sustainability collaborations among industry actors has proven to be valuable to accomplish more effective solutions to common challenges. The industry of subject is the Scandinavian outdoor industry, motivated by the industry characteristics, such as the friendly competitive landscape and an overall willingness to collaborate.

The thesis focuses on finding the barriers that limits sustainability collaborations within the industry and how these barriers are lowered and how industry dimensions are better utilized. To enable for a profound analysis the empirical data collection includes a wide range of companies and additionally, two industry organizations who provides a more holistic perspective of the industry with regards to networking and innovation. Findings are complemented with an iterative data collection of theory to provide a theoretical framework, serving as a support for the analysis. The main findings conclude that sustainability must be integrated as a part of the overall strategy to enable successful sustainability collaborations. To accomplish this integration, the suggestion is to implement a sustainability strategy and overcome the often-occurring resistance of this. The solution is to provide metrics that visualize clear effects and result, preferably that can be translated into monetary measurements such as profitability. Moreover, three dimensions has been identified to help facilitating sustainability collaborations. These dimensions have been concluded as third-party organizations, network and knowledge sharing. By increasing the utilization of those dimensions, the number of sustainability collaborations are believed to increase according to the industry actor's willingness to collaborate and thus, approach the full industry potential.

Keywords: barriers, dimensions, sustainability strategy, sustainability collaborations, Scandinavian outdoor industry

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This is the resulting report of the master's thesis course during the spring semester of 2019 at the department of Technology Management and Economics at Chalmers University of Technology. The thesis finalizes the Master's Programme of Management and Economics of Innovations and corresponds to 30 ECTS. The subject of the thesis is suitability collaborations and what barriers inhibits those, but also what dimensions facilitates them. The industry of subject is the Scandinavian outdoor industry, motivated by the industry characteristics and our personal interest in the industry and nature, hence no direct company stakeholder was involved in the process.

We would like to express our gratitude to a number of people who were a part of making this thesis possible. Firstly, we would like to thank our supervisor Hans Löfsten who has provided interesting insights, feedback and academic knowledge throughout the process. Secondly, we would like to express our gratitude to Johnn Andersson, who volunteered to assist with industry expertise when needed. Thirdly, we would like to thank all companies who answered our survey at ISPO Munich 2019, but especially the two organizations and seven companies who contributed largely to this study by committing to interviews. Without their participation and knowledge this report would not have been possible. It is our great desire that this report will provide interesting insights to them.

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1 Introduction

This chapter will serve the purpose of introducing the conducted study and the research context will be outlined and elucidated. Initially a description of the Scandinavian outdoor industry will be presented and thereafter connected to global warming and its effect on industry interests. The industry is believed to be an environmentally conscious niche industry, hence motivated as positive towards improvements. The background will be followed by a problem analysis and the purpose that lay the foundation upon where the research questions are formulated.

1.1 Background

The Scandinavian outdoor industry is a small and fragmented industry consisting mostly of small- and medium-sized enterprises (SMEs), which are companies with less than 250 employees (OECD, 2005). The Scandinavian outdoor industry has 13 % of the market share of outdoor apparel and clothing in Europe (Statista, 2019). The companies are to a large extent focused on B2C, selling sports and outdoor clothing and equipment to end-users (Scandinavian Outdoor Group, 2019). The industry also includes a number of ingredient brands, which are providing a technical solution for the other brands, and hence, are defined as B2B. In this study 33 companies have been included in the survey. Two industry organizations together with six companies and one ingredient brand has been interviewed more profound. The leading trade fair ISPO in Munich, is the main gathering where brands, sellers, suppliers and dealers meet yearly (ISPO, 2019). In February 2019 the trade fair had a total number of 1099 exhibitors within the segments of outdoor and snow sports from all over the world. 91 of those exhibitors were Scandinavian (ISPO, 2019), this provides a reasonable benchmark for the total number of companies within the Scandinavian outdoor industry. When referring to the Scandinavian outdoor industry, both the segment of outdoor and snow sports are included.

Characteristics for the industry is, due to its small size, the personal connections that extend across corporate boundaries. The Scandinavian spirit has a great impact on the industry and is by Scandinavian Outdoor Group (2019) described as “*friendly, informal, open and democratic*”. Such adjectives are expected to be important as they affect industry *dimensions*, the term dimension will be used throughout the study to describe the competitive landscape where companies and organizations thrive. The study will explore industry dimensions and identify the most important ones and how they reinforce each other. The outdoor industry is closely connected to the nature and companies have a history of hiring truly enthusiasts within outdoor sports (Harrison and Corley, 2011). This result in employees and founders sharing the interest for outdoor leisure and nature, hence the environmentally conscious attitude is assumed to be larger than in other industries. Outdoor enthusiasts who spend a lot of time in nature have self-interest in preserving the environment, but it further includes the business perspective since outdoor products is what generates the monetary profitability.

The outdoor industry bases its business on nature experiences and are therefore dependent on the preservation of the nature. Today, global warming is a fact and one of the causes is industrial production (United Nations, 1987), which causes for the need of action now. However, opinions

differ with regards to the urgency of the problem, but there is a presumption that companies will need to change their way of doing business, to adjust to future laws, requirements and demands. The challenge is to find out how to work proactive with sustainability and how to turn it into a business opportunity. The term *sustainability* refers to the overall objective of creating a present that does not jeopardize the quality of the future (Senge, Smith, Kruschwitz, Laur and Schley, 2008). Today, there are indications that the global warming may lead to changes in the seasons and climate where one effect is a decreased snow cover and ice extent (Folland et al., 2001). Rising temperatures results in precipitation in form of rain instead of snow (Folland et al., 2001). Due to climate changes in terms of warmer winters and less snow, this industry, and especially the segment focusing on snow sports, will inevitable be affected (Gilaberte-Búrdalo, López-Martín, Pino-Otín and López-Moreno, 2014).

Senge et al. (2008) describes how coalitions and collaborations over corporate boundaries are the only way to achieve a critical mass to create an impact in the sustainability challenge. No single company is large enough to change the way an industry is operating. In alignment with this, the United Nations (2019) have defined an initiative called Sustainable Development Goals, consisting of 17 goals that addresses the sustainability challenges that humanity is facing with the purpose is to create a sustainable planet. The Sustainable Development Goals are interlinked with each other and goal number 17 “Partnership for the Goals” describes how collaborations and partnership will be required to achieve all other goals (UN, 2019). This refers to all levels, both governments, companies and the civil society and UN (2019) states that a shared vision and goals focusing on the preservation of the planet and its inhabitants are necessary. In this study, *sustainability collaborations* refer to any collaborations or projects including two or more companies or industry associations within the Scandinavian outdoor industry. For it to be defined as a sustainability collaboration, the purpose of the collaboration needs to be achieving better work methods, materials, products or innovations with the aim to decrease the environmental footprint.

Industry collaborations are common within in larger industries, such as the automotive and ICT especially within *open innovation* (Vrande, de Jong, Vanhaverbeke and de Rochemont, 2009). Huizingh (2011) states that open innovation is a concept within innovation management that has drawn a lot of attention during the last two decades but is still under research. The core of the concept is further described as opening up the innovation process and can take several forms, but the chosen definition for this study was formulated by Henry Chesbrough and reads “*Open innovation is the use of purposive inflows and outflows of knowledge to accelerate internal innovation, and expand the markets for external use of innovation, respectively. [This paradigm] assumes that firms can and should use external ideas as well as internal ideas, and internal and external paths to market, as they look to advance their technology.*” (Chesbrough, Vanhaverbeke and West, 2006).

Industries such as the previously mentioned automotive and ICT consist of many large corporations with specialized departments for design, product development and research and development (R&D). Giants of this size basically do not exist within the Scandinavian outdoor industry. As an SME, all activities are integrated in the companies’ daily operations causing for

a fear of engaging in larger collaborations that are associated with major risks. There are several industry associations who operate to facilitate industry collaborations and push sustainability work, both on Scandinavian and European level (Scandinavian Outdoor Group, 2019). In this study these types of organizations will be referred to as *third-party organizations*. Arenas, Sanchez and Murphy (2013) states how third-party organizations can enable collaborations over corporate boundaries by help eliminating conflicts and providing structure. Different types of third-party organizations are suitable for different types of collaborations. This study will focus on the type called *convener* which is preferred when the third-party organization are intended to firstly, coordinate and secondly, onboard new companies and stakeholders to projects and thirdly, it is important that the process is unbiased (Arenas et al., 2013). When a convener holds formal authority, they are reliant on obtaining the stakeholders trust (Wood and Gray, 1991). Trust is crucial since the stakeholders need to be ensured that the third-party organization is not operating in favor to any participators but rather adds objectivity to the collaboration. Further, Wood and Gray (1991) describes how conveners need to be powerful to allocate resources. However, informal authority is also utilized, for example conveners use credibility, knowledge and influence to create common understanding and solve problems within the collaborations (Wood and Gray, 1991). Arenas et al. (2013) further describes how third-party, by providing structure and “bridges” between companies, can help solving the collective action problem.

1.2 Problem Analysis

Actions such as sustainable innovation and sustainability collaborations requires money, time and knowledge which creates barriers for the relatively small actors within the Scandinavian outdoor industry. Willard (2012) describes that associated problems are that industry actors may be unable to see the financial incentives of performing sustainable innovation and sustainability collaborations, thus this is not prioritized. A problem for many companies is the perception that meeting sustainability requirements are costly which cause for the assumption that improving sustainability work will continue to increase costs moving forward and to prove the opposite is challenging (Willard, 2012). Epstein and Buhovac (2010) further states that stakeholder pressure often forces managers to prioritize short-term goals that supports profitability, which often cause for low prioritization of long-term sustainability goals. The challenge is to prove that sustainability collaborations can be turned into a business opportunity and will not limit, but rather increase profitability.

The fact that the Scandinavian outdoor industry consists of a small number of SMEs, implies that actors have limited ability and power to influence suppliers, customers and other stakeholders individually. Additionally, SMEs may find it difficult to bear the costs for sustainable innovations on their own (Chesbrough, 2007). As mentioned in 1.1 Background, Senge et al. (2008) describes how coalitions and collaborations over corporate boundaries are the only way to achieve a critical mass to create an impact in the sustainability challenge. This cause for a belief that industry collaborations will help overcome these barriers if industry dimensions are better utilized, which gave rise to the interest of this study.

1.3 Research Questions

Based on the described purpose following research questions have been formulated:

1. How are barriers limiting sustainability collaborations within the Scandinavian outdoor industry?
2. How are dimensions utilized to lower barriers and encourage sustainability collaborations within the Scandinavian outdoor industry?

1.4 Purpose

The purpose of this study is to clarify that preservation of the Scandinavian outdoor industry is aligned with the preservation of the environment. By illustrating the main barriers and dimensions in the industry, the objective is to provide a guidance of what barriers other SME industries can face, but also what dimensions that can be better utilized.

1.5 Demarcations

The geographical scope has been limited from the worldwide industry to only include actors within the Scandinavian outdoor industry because of the perception of this as a homogenous group with similarities in behavior. The geographical proximity has also enabled for a feasible width of the study. Moreover, the actor's willingness to participate in the initial survey but also the qualitative in-depth interviews conducted later on in the study is considered a demarcation for the result of the study. Customer demand will not be subject to deeper exploration and the aspects regarding supply chain and logistics will be excluded.

2 Theoretical Framework

This chapter presents the theoretical framework that has emerged throughout the study. The literature that has been selected and anchored within the presented research questions to enable for the researches to answer them with theoretical support. The data has been collected from books, journals and websites and afterwards clustered into themes to provide a logic presentation for reader. The theoretical material has been iteratively updated as new findings has been revealed, thus demanding more or other theory to fulfill the purpose of the study and answer the research questions. The three main topics that will be covered is *innovation*, *collaboration* and *strategy*. The reason for this is that these topics are identified as crucial to achieve a change towards sustainability. Firstly, innovation is the foundation of new production methods, materials, products and business models. Secondly, collaboration is believed to be necessary for SMEs, that have limited resources, to access external knowledge and enable sharing costs in order to perform successful sustainability work. Lastly, strategy lays the foundation for how companies operate and allocate their resources.

2.1 Innovation

Innovation is a key component which is crucial in the shift towards a more sustainable world (Senge et al., 2008). The main concept *innovation* can refer to different types of innovations, from product development to changing processes or even the way an organization operates. These will be further described in this chapter, under the headlines sustainable innovation, business model innovation and open innovation and how these relate to each other.

2.1.1 The General Concept of Innovation

According to Baregheh, Rowley and Sambrook, (2009), innovation and its management is a key strategic issue for practitioners as well as academia and several different definitions exists. In order to find a definition of the concept of innovation Baregheh et al., (2009) has through research and content analysis of previous definitions come up with six attributes that can be used a basis to a definition of innovation. The six attributes are nature of (1) innovation, (2) type of innovation, (3) stages of innovation, (4) social context, (5) means of innovation and (6) aim of innovation. As previously mentioned, the authors further describe that different practitioners tend to look at innovation from their perspective only, but these six attributes are presented to be independent on the context and social entities and thus, rather present the essence of what innovation actually is. The definition by Baregheh et al., (2009) thus reads *“Innovation is the multi-stage process whereby organizations transform ideas into new/improved products, service or processes, in order to advance, compete and differentiate themselves successfully in their marketplace.”*

2.1.2 Sustainable Innovation

Senge et al., (2008) describes how our society, collectively, have created the environmental problems that we today are facing. The industrial age was not planned, nor lead by a single company or political leader, it was shaped by countless of innovations derived from everywhere with the purpose was to simplify humans' lives. Senge et al., (2008) believes this will be characteristic for the next shift in age, which by the authors is called the necessary revolution,

pointing out the need of involving sustainable thinking and opportunities. Characteristic for the industrial revolution was that innovators were inspired by machines, and hence, were thinking in terms of efficiency and increased comfort in people's lives. Senge et al., (2008) means that it is necessary that sustainability and nature become the widespread new inspiration and way of thinking for innovators, for a revolution and not just random events to occur. *“In short, to shape a sustainable future, we all need to work together differently than we have in the past”* (Senge et al., 2008). Sustainable innovation is a widely used concept, but with no established definition of its exact meaning. According to Clark and Charter (2007) this is reflecting the difficulties of defining concepts such as sustainability and sustainable development. However, the chosen definition for sustainable innovation is the one presented by Clark and Charter (2007) and reads *“Sustainable innovation is a process where sustainability considerations (environmental, social, financial) are integrated into company systems from idea generation through to research and development (R&D) and commercialization. This applies to products, services and technologies, as well as new business and organization models.”* It is further described that sustainable innovation covers the entire spectrum of innovation, from incremental to radical innovations.

2.1.3 Business Model Innovation

According to Teece (2010), all companies do have a business model, but the existence of it is either implicit or explicit. The author further states that business model innovation can be a pathway to competitive advantage. As climate changes keeps growing and industries changing, the average company needs to adjust in order to manage new challenges and requirements. Considering the fact that customers are assumed to become more concerned regarding climate threats and sustainability, which will likely cause for a need of business model innovation.

Teece (2010) further describes that a well-developed business model is the key to ensure that innovators are able to both deliver and capture the value from the innovations. This is further supported by Johnson, Christensen and Kagermann (2008) as the authors describe the business model to consist of four linked elements; customer value proposition, profit formula, key resources and key processes. Firstly, customer value proposition is how the company manages to create value for their customers, meaning that a customer problem is solved by the solution presented by the company. Secondly, profit formula concerns how the company are profiting on their solution and includes revenue model, cost structure, margin model and resource velocity. Thirdly, the key resources are the assets the company possess within their organization and includes people, technology, products, facilities equipment, channels and brand (Johnson et al. 2008). These assets are all considered to be required in order to enable delivery of the solution i.e. the value proposition to the targeted customer. Fourthly, key processes consist of operational and managerial processes that allow for value delivery that can be both repeated and scaled. Despite the fact that this framework might seem too simplistic at first glance, according to Johnson et al. (2008), the power is to be found in the interdependencies of its elements. Together these four elements create and deliver value and thus, form the building blocks of the company. Teece (2010) builds on these elements, explaining that in order to create a successful business model it needs to be differentiated and hard to imitate for new entrants and competitors.

Amit and Zott (2012) describes that business model innovation can occur differently; through *content*, which means that novel activities can be added, through *structure*, meaning that existing activities can be linked in new ways or through *governance*, which means that one or more parties that perform the activities are changed. The authors explain that if one of these three design elements are sufficiently changed, then the business model is changed and thus innovated. According Teece (2010) the importance of connecting the business model to the strategy cannot be underestimated in terms of protecting the competitive advantage created by the business model innovation.

Amit and Zott (2012) describes that the business model is generally not what managers change when they search to innovate. The simplistic, yet demanding, change of innovating an individual product or process is usually preferred since it is easier to look at the trees than the forest. However, the authors recommend focusing on the holistic and systemic perspective to get the overall design of the activity system right, before focusing on details. To do so, the suggestion is to ask six questions, stated below, before launching a new model. By addressing those questions, the identity of the company within the environment of networks and ecosystems that the company operate in will appear more clearly to management.

1. *What customer needs will the new business model address?*
2. *What novel activities could help satisfy those needs?*
3. *How could the activities be linked in novel ways?*
4. *Who should perform the activities? What novel governance arrangements can be found?*
5. *How will value be created for each stakeholder?*
6. *What revenue models can be adopted to complement the business model?*

Amit and Zott (2012) presents an example, comparing Apple and HTC in order to illustrate business model innovation and its possibilities. In the beginning Apple were only selling hardware and software products such as the iPod, but when realizing that they would be able to encompass a relationship with their customers through iTunes, revenues, profit and stock price increased rapidly. The authors compare this model to “razor and blade” model by Gillette and call it a successful business model innovation. HTC on the other hand, have continued to focus on the hardware design and product innovation which limits the company to capitalize only on their smartphones and tablets, but not from their usage. Translated into the terms of Gillette, HTC sells great razors but no razor blades (Amit and Zott, 2012).

2.1.4 Open Innovation

As described, the Scandinavian outdoor industry consists mainly of SMEs. Vrande et al. (2009) are addressing the phenomenon of open innovation in SMEs and explains both to which extent it is applied but also the motives behind. Open innovation has mostly been studied in relation to larger high-tech companies within industries such as automotive and ICT, but this study is addressing SMEs. Conclusions can be drawn that medium-sized companies are more likely to engage in and adopt open innovation collaborations compared small-sized companies. However, the trend of practicing open innovation is increasing in both size segments.

Vrande et al. (2009) describes knowledge acquisition and the effectiveness of innovation processes as motives for SMEs to engage in open innovation activities. But the most appealing reason is market related i.e. to serve customer more effectively, enable new market entrance and thus ensure maintained growth and increasing revenues. By joining forces with more incumbent industry actors SMEs are more likely to overcome their largest challenge which according to Gans and Stern (2003) is commercialization rather than the invention itself. The non-profit, non-political organization Scandinavian Outdoor Group is an industry initiative founded based on the common problem of commercialization in export markets (Scandinavian Outdoor Group, 2019).

There are barriers associated with open innovation and Vrande et al. (2009) has identified the main barrier in SMEs to be the challenges associated with different organizational cultures that occur when external partners start collaborating over corporate boundaries. Fredberg, Elmquist, Olila and Yström (2011) describes the confusion and tensions experienced by intermediaries as they participate in open innovation initiatives. The authors have identified four different types of tensions, which are related to career, trust, loyalty and knowledge sharing. It is not necessarily suggested to remove the tensions to achieve better results since the elimination might create stable roles among participants, which is assumed to lower the dynamics within the open innovation activity and thus impair the result. Fredberg et al. (2011) rather advocate acknowledgment of the tensions in order to lower confusion and thus enable for better results among participants.

2.2 Collaborations

Collaborations and united efforts are believed to be crucial to overcome the sustainability challenges that both industries and the planet are facing (UN, 2019; Senge et al., 2008). This section describes theories relevant for industry collaborations, where both competition and networks are present.

2.2.1 Collective Action Problem

Olson (2009) explains how previous theories describes how groups or organizations exist to enhance the interests of its participants. Humans have throughout the history formed groups to become more efficient, stronger, better hunters or to protect each other. Olson (2009) draws upon how individuals act on their self-interest are expected to correlate to how group members

act for the group's best interest. The author further questions whether this phenomenon always is the case, which results in formulating the *collective action problem*.

The collective action problem, described by Olson (2009), is the state where all group members would be better off by commonly working towards a goal, which is too difficult to achieve individually. Conflicting interests and the risk that some actors will not contribute, but only benefit from the commonly created value results in a situation where no player acts. Hence, value creation does not occur (Olson, 2009). When a company enters a collaboration with other competing companies there is always a risk to fail and such failures can hurt the brand or the own organization by economical means (Kramer, Brewer and Hanna, 1996). Another aspect, according to Kramer et al., (1996) is that some participating organizations might put in more effort or resources than others, and hence, there is a risk that less contributing organizations takes advantage of the created collective value, the so called free-rider problem. Kramer et al., (1996) further states that this might make a barrier for companies to justify initiating of collaborations.

There are a lot of parameters that could cause failure when collaborating, even if the willingness to collaborate is present. For over a century the Swiss watch industry accounted for a large share of the world watch market (Glasmeier, 1991). By collaborating and creating a strong network over the last century the Swiss watch manufacturers created great advantages in their mechanical watch production and was superior compared to other regions and countries. Eventually, new technologies emerged in other parts of the world. In Hong Kong, the companies started developing new production systems and the quartz crystal technology, which proved to be cheaper, possess more accurate time keeping qualities and the speed of the technological development turned out to be way more rapid than the previous production techniques (Glasmeier, 1991). By the 1970s the Swiss companies could not be agile enough and adjust its production to stay competitive to other watch companies and hence lost market shares and were perplexed by the external threats. Glasmeier (1991) describes how the companies in the region tried to deal with the problem by initiating collective research in new technologies and innovations, but due to the lack of formal specification on how the valuable results should be shared or dealt with among the participating companies, the Swiss industry's development became stagnate. Since no individual company could be the first to use and benefit from the collectively developed technology, its commercialization failed.

However, Olson (2009) describes that the most crucial factor to ensure all participants act for the better good of the group, is to make sure the members of the group or organization share the same purpose and objectives. Olson (2009) states that the larger and more complex the group is, the more difficult this gets and Kramer et al., (1996) further describes that large and complex networks who fail to get continuity in their collaborations encounter even more difficulties in building trust. The fact that companies compete with each other adds another layer of risk to the collaboration and trust problem. It is easier for smaller or homogenous organizations to rely on each other (Kramer et al., 1996).

2.2.2 Network Management

The field of Network Management and Business and Innovation networks has been thoroughly explored over the past few decades. There are different types of networks and Möller, Rajala and Svahn (2005) defines the difference between “network of organizations” and “organization network” where the former could be any market where organizations who direct or indirect form relationships. The latter is formed with a purpose where organizations have predefined roles or responsibilities. Due to the intentional creation and their strategic aims Möller et al. (2005) names these as “strategic nets”. *“Strategic nets are formed by a few actors pursuing mutual goal(s) and having jointly agreed and contractually defined roles and responsibilities. Actors relinquish part of their autonomy to the net to achieve goals beyond their individual resources.”* (Möller and Halinen, 2017). The activities within strategic nets can vary depending on its nature. Möller et al. (2005) describes three types of nets, where the first one is Vertical Value Nets which are based on vertical integration, and thus, includes suppliers, retailers and other actors along the vertical value chain. The aim is to create more efficient value systems. The second type, which is relevant for this study, is Horizontal Value Nets, consists of alliances and coalitions of competitors who seek to share resources of development, marketing and other important capabilities. Government or industry associations, research institutes and universities can also be a part of this type of value net. The third type is Multidimensional Value Nets (MDVNs) which are more complex nets that consists of different organizations with the purpose to develop new technologies or businesses.

When participating in strategic nets, companies need to consider their own position with regards to other actors. By planning and operating strategically, companies can ensure they have the ability to manage and influence the value activities of other actors (Möller et al., 2005). To create a value net that together share resources and develops new technology, companies must succeed in building trust in each other. It is also crucial that managers possess the ability of identifying roles, capabilities and goals of other actors to be able to strategically adjust their own companies’ activities to the changing environment in the net (Möller et al., 2005).

2.3 Strategy

This section will present the importance of strategy and how the traditional views of this concept differs from sustainability strategy. Further, emerging drivers of sustainability strategy will be presented as well as the complexity of implementation. This is considered highly relevant as the lack of sustainability strategies have turned out to be inhibitory in the industry in accordance to empirical findings.

2.3.1 The Concept of Strategy

According to Grant (2016), a strategy clarifies how certain objectives are achieved, but due to the broadness of the concept, several definitions exist. The strategy is used to increase the effectiveness enabling higher quality of the decisions made, help coordinating and ensure long term objectives are achieved.

Strategy as decision support - Strategy is used to unite the decisions made within an organization and according to Grant (2016) a strategy has several positive effects on decision making. By reducing the number of relevant alternatives, it eases the process of decision making. The strategy is further helpful as it collects and integrates knowledge from different people at the same time as it eases the use of analytic tools.

Strategy as a coordinating device - Grant (2016) states that the main challenge in many companies is how to coordinate different actions within the organization. Strategy helps handling this challenge by working as a communication device between the CEO and the individuals within the organization. Elements such as identity, goals and positioning of the company are communicated through the strategy. In order to ensure the company is moving in the same direction, there is a strive to achieve consensus and along with this, the strategy of the company is developed. After the strategy has been composed it is usually translated into goals, commitments and performance targets in order to provide guidance for the individuals within the company and ensure all employees move forward in the same direction.

Strategy as target - Strategy concerns both the present and the future. When working with future strategy it is, according to Grant (2016), important to motivate and inspire the employees within the organization by setting aspirations.

The strategy of a company originates from the top management but are handled differently depending on the size of the company (Grant, 2016). Smaller companies usually do not find the need to explicitly state the strategy in documentation but is rather keep in the head of the managers. Larger companies on the other hand, usually have the company strategy in writing in confidential strategic planning documents. Despite all of this, Grant (2016) means that most companies value to communicate the strategy to their employees, customer, business partners and investors. Collis and Rukstad (2008) describe that the strategy can be communicated either through a mission statement, a statement of principles or values, a vision statement or a strategy statement. The authors continue stating that words do lead to action and that if a company invests time in in developing a well formulated strategy, this will have great effect on the employees within the organization and both energize and empower them to help achieve long-term goals.

2.3.2 Sustainability Strategy

A successful implementation of a sustainability strategy requires both formal and informal systems (Epstein and Buhovac, 2010). The formal ones are according to the authors; processes, performance measurements and rewards and the informal ones are for example management, culture and staff. Epstein and Buhovac (2010) describe how leadership is a core component in the implementation of sustainability strategies and that the importance of devoted leadership cannot be stressed enough. If owners acknowledge that sustainability can create new revenue opportunities from a strengthened brand and increased sales, in combination with lowered costs, this will encourage the incorporation of sustainability in the strategy (Epstein and Buhovac, 2010). However, the benefits of sustainability efforts might be difficult to visualize, especially

if the company currently have a low level of sustainability work. This is explained by Willard (2012) in the Five-Stage Sustainability Journey to a Sustainable Enterprise.

2.3.2.1 The Five-Stage Sustainability Journey to a Sustainable Enterprise

Willard (2012) presents five stages for organizations in their journey to become sustainable. The first stage, *pre-compliance* is the lowest level of environmental and sustainable engagement, where companies tries to trick the system and only do what they absolutely have to. The second stage, *compliance*, describes companies who work with sustainability to meet current and minimal requirements and regulations to ensure they can continue operating their business (Willard, 2012). The incentives are derived from external factors. Harmful media coverage and pressure from environmental organizations, e.g. Greenpeace, forces this kind of companies to act to protect their reputation. Organizations that take their sustainability work to the third stage, *beyond compliance*, do according to Willard (2012) experience positive effects, such as payoffs and increased cost-savings from eco-efficiencies, derived from previous investments. Efforts at this stage often include decreasing waste and pollution. At this proactive stage companies may also find their brand becoming strengthened, due to the CSR initiatives. These effects therefore often lead to further motivation to continue on the sustainable path. The fourth stage, *integrated strategy*, describes companies who work with sustainability proactively as an integral part of the company's strategy, budget and R&D. Sustainability is considered a business opportunity. At the fifth stage, *purpose/passion* the sustainability awareness originates from the company's management and leaders. Sustainability is highly incorporated in the mission and vision of the company and it is common that these types of companies are founded with sustainability incorporated in the mission.

Willard (2012) describes that it is possible for companies at a lower stage to develop their sustainability work and move all the way up to an integrated strategy, or even to implement sustainability as a core reason for their existence, but this may require extensive work. Many companies find it overwhelming to prioritize sustainability work with diffuse and insurmountable goals as saving the world, when their everyday operations require their full attention. This is according to Willard (2012) one reason why this transition takes long time for most companies. Epstein and Buhovac (2010) describes how managers often, due to external pressure from owners or shareholders have to prioritize short-term objectives, which negatively affects the implementation of sustainability strategies.

2.3.2.2 Measurable goals

In order to clarify and simplify the implementation process, the formulation of goals and performance measures are crucial (Epstein and Buhovac, 2010). Willard (2012) adds to this by stating that the return on investment on sustainability must be identified, quantified and translated into business value for sustainability initiatives to pass top management's tough prioritizations. The authors' statement "*Money and numbers are the language of business*" further underlines this. Epstein and Buhovac (2010) describes how a sustainability strategy differ from other strategies within a company. The traditional organizational goals, e.g. increased efficiency and number of innovations resulting in a higher profitability are easily measured. In contradistinction, sustainability goals, which according to Epstein and Buhovac

(2010) can be defined as obtaining “*excellence in social, environmental and financial performance simultaneously*” are focused on a long-term perspective and are usually difficult to translate into financial metrics. Because of this, projects regarding elimination in waste or energy consumptions which results in better financial performance are hence prioritized over larger projects that will not risk affecting profitability negatively or require initial monetary investments (Epstein and Buhovac, 2010). This is in line with Willard’s (2012) theory, describing the logic of a company at the level of *compliance*, and hence, more comprehensive initiatives will be denied.

Epstein and Buhovac (2010) provides a straightforward way of breaking down organizational activities and assign them with appropriate goals and key performance metrics as presented in figure 1. In contradiction to what Willard (2012) states, the metrics are not required to relate directly to financial numbers or profitability but are rather measured to track the company’s total effort with regards to sustainability over time. The metrics or goals can vary from the nature of just articulating a vision to track how much positive versus negative media coverage the company is subject to. Epstein and Buhovac (2010) means that results of individual actions or initiatives might be difficult to see in financial numbers immediately, while tracking and acknowledging all efforts will enable the visualization of long-term financial progress.

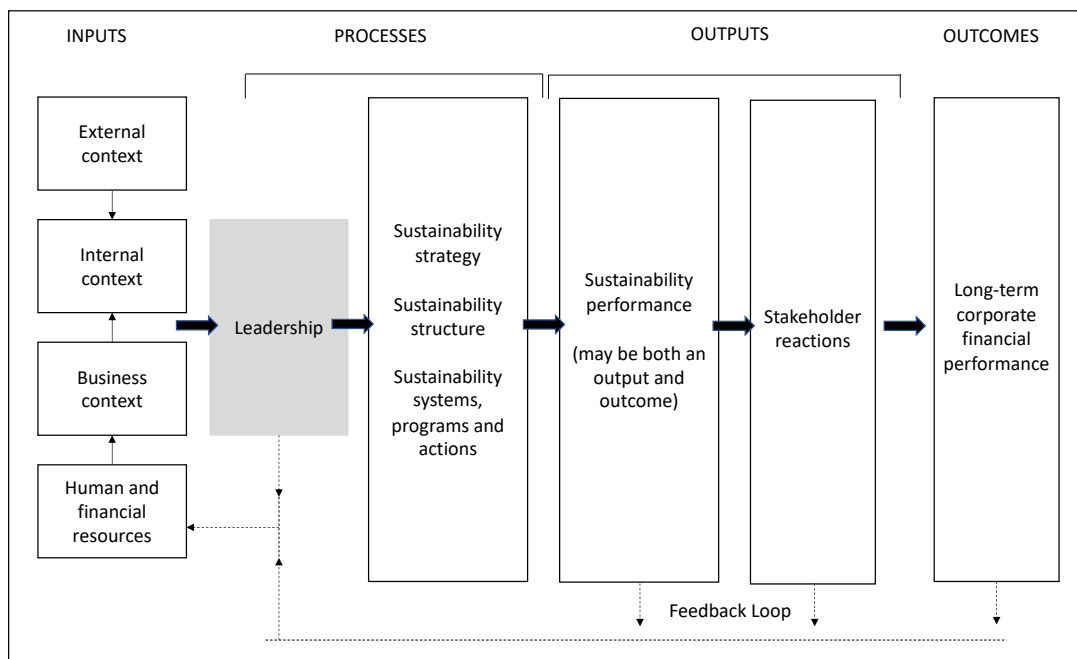


Figure 1. The Epstein Corporate Sustainability Model (Epstein and Buhovac, 2010)

2.2.3.3 Stakeholder management

Implementing new sustainability strategies or actions leads to uncertainties in the organizational performance, which in turns to a various extent will affect stakeholders and may cause different reactions from these (Epstein and Buhovac, 2010). The first results that a company and its stakeholders experience after completed sustainability activities are described as outputs, while the long-term financial performance is defined as outcome. One way to reduce the

dissatisfaction among stakeholders is to have a continuous conversation with them and include them in the sustainability work process, and ensure that the company understands the stakeholders' needs, but also to increase the level of trust from their side. This in turns, result in stakeholders who can make well-grounded decisions on what products to buy or what company to work for (Epstein and Buhovac, 2010). Further, it is recommended to implement a feedback loop, from the stages of both outputs and outcomes back to leadership, which enables the leaders of an organization to test assumptions and adjust the creation of a sustainability strategy further (Epstein and Buhovac, 2010).

3 Method

In this chapter the methodology for the study will be outlined and elucidated. The chapter describes the chosen research methodology and design as well as data collection methods. The choice of methods and design was tailored to gather necessary data to enable answers for the research questions.

3.1 Research Design

Saunders, Lewis and Thornhill (2009) describes how research philosophy is the starting point in selecting research design and methods in social science. The research philosophy investigates the researchers' worldview in terms of positivist and social constructionist viewpoints. This can vary depending on the formulation of research questions and the researchers' assumptions or predicted outcome of those. Easterby-Smith, Thorpe and Jackson (2015) adds to this by describing how a positivist viewpoint builds upon the paradigm that the social entities in the world exist externally, meaning, its attributes can be measured with objective methods. Thus, when the research question is a proposition and the researchers are striving to falsify a hypothesis, a quantitative method, which is enables measurable data providing for identification of patterns, is the best option. In a social constructionist viewpoint, the researchers believe the world is constructed socially, which implies it consists of nuances, feelings and motivations that cannot be translated into numbers (Easterby-Smith et al., 2015). Hence, to enable a subjective analysis including as reflection or intuition, the research method is recommended to be of a qualitative nature. A qualitative method is suitable when the research questions are more of an open question type, rather than a proposition. The data will consist mostly of words and the purpose is to explore new dimensions and underlying factors that the researchers could not predict. Due to the explorative nature of this study, where the purpose is to identify unknown barriers and drivers a qualitative approach was motivated. This is further strengthened since Easterby-Smith et al., (2015) recommends a qualitative method for research where the design is cases and surveys, and the research questions starts with "How...", which is the case in this study.

3.2 Data Collection

Due to the qualitative nature of this thesis, the methods of data collection have been chosen accordingly. Primary data from qualitative surveys and non-standardized interviews such as the chosen semi-structured interviews, are according to Saunders, Lewis and Thornhill (2009) used to gather data for a qualitative analysis. This will help researchers answer not only "what" and "how" questions, but also the "why's". The data collection was initialized with a survey in the early phase of the study to provide a brief understanding of the Scandinavian outdoor industry and what motivates and hinders industry actors to work with sustainable innovation. The survey was later followed by interviews conducted with selected actors within the same industry and the result of the surveys was used to guide the subsequent interviews to enable for effectiveness in question formulation. The purpose of the interviews was to gain a deeper understanding of the interviewee and the organization and how it is operating in terms of sustainable innovation

and sustainability collaborations to enable for answering formulated research questions. To complete the robustness of the study, secondary data will be gathered from relevant literature.

3.2.1 Survey

Survey is a method to collect information in order to gain understanding of people's opinions, feelings or behaviors. The respondents are instructed to answer a form with predesigned questions and the survey can be conducted on either paper, online or in person. Assistance from the surveyor can be given, but some surveys are also held in privacy, for example over the Internet (Fink, 2009).

The survey was conducted in an early stage of the process to verify the problems this thesis is built upon and give indications of what level of importance it has for industry actors. It served the purpose of validating that the subject was worth pursuing and building this study around. Another reason why a closed survey was conducted at this early stage and at this specific fair, was to include a large number of companies within the industry. For the scope of this study it was not possible to interview a larger number of companies, which motivated a closed survey that could be distributed to a large proportion of the companies in the Scandinavian outdoor industry. The survey contained questions regarding what barriers the companies experience in working with sustainability and collaborations with other actors and to what extent they wish to improve.

The fair where the survey was conducted is a large industry fair, called ISPO, in Munich, Germany. The fair took place on February 3rd till 6th 2019 and the survey was conducted during the 5th till 6th. After getting a short introduction including the purpose of the study, the respondents were asked to fill out the survey on an iPad which was handed out by the surveyors, who also assisted with answers to any potential questions. Fink (2009) describes five crucial parts of a survey; questions and responses (1), sampling and design (2), data processing and analysis (3), pilot testing (4) and response rate (5). Firstly, this survey had forced-choice questions, meaning no open-ended answers were possible. According to Fink (2009) this enables to deal with complex behaviors, allows for multiple answers and are most user-friendly. The questions were designed thoughtfully to be familiar for all actors within the industry, to avoid ambiguity and based on relevant theories, such as "Emergent Drivers to Sustainability", described in the theoretical framework. The survey was conducted during a large industry fair and it was considered that the stressful environment might affect the time the respondents can spare. Hence, the number of questions was limited to seven and only closed answers were allowed. This was motivated by the fact that it takes less time to answer which makes it easier for the surveyors to convince respondents to participate. Secondly, the Scandinavian outdoor industry consists of a limited number of actors, where a large proportion will attend as exhibitors on the industry fair ISPO in Munich. The sampling, referring to the number and the characteristics of the participants (Fink, 2009) of this survey was chosen to focus on the participants at the fair. These are considered a good representation of the Scandinavian outdoor industry with regards to size, business area and attitude and awareness of the research questions. The role of the participants varied from marketing managers to CEOs to salesmen, but all possessed a good overall understanding of their own companies. In this study, only one survey

was conducted. For the third part, the alternatives were designed to be easily analyzed, for example, form a basis of how large percentage of the actors have a certain opinion or behavior. Other questions aimed to highlight how the respondents rate the importance of certain alternatives in comparison to other. Fourthly, self-administered surveys need to be designed with a clear and unambiguous language to ensure that least possible misunderstandings occur (Fink, 2009). To ensure the survey-template achieved this, it was tested on several people before rolling out. Feedback was handled by adjusting accordingly. Finally, the survey got 100 % response rate due to the personal handout and collection of the survey. 33 respondents out of 91 targeted companies at ISPO answered the survey.

3.2.2 Interviews

According to Saunders et al. (2009), using interviews as a method for data collection can be advantageous when gathering relevant data with regards to the research questions. Interviews can further serve the purpose of helping to more correctly articulate the research questions to ensure for a better study.

Three different interview approaches are presented by Saunders et al. (2009) as applicable for data collection, these are highly structured, semi-structured and unstructured interviews. The different approaches describe the levels of structure and formality which applies to the preparation and conduction of the interview. According to Easterby-Smith et al. (2015) the structured interviews are applicable when the researcher is conducting a quantitative study and wants to gather quantifiable data. As a result of this, the structured interviews were not considered applicable to this study due to its qualitative nature. The semi-structured and unstructured interviews on the other hand, are used for qualitative research and were thus considered more suited options for the data collection in this study. They are further considered suitable when wanting to understand an opinion or a certain matter from the interviewee's perspective (Easterby-Smith et al., 2015). The chosen approach for this study was semi-structured interviews that were performed with two different interview templates that was used as the script for all interviews conducted. The two different templates are motivated by the differences in characteristics of the respondents since they were either employed at a company in the Scandinavian outdoor industry or a third-party organization i.e. industry associations within the same industry.

As Saunders et al. (2009) describes, the semi-structured interviews are together with the unstructured interviews defined as non-standardized in contradiction to the structured interviews. By using semi-structured interviews, the interviewer has a predefined list of questions and topics that can be both excluded and added during the interview, depending on the conversation and the situations that might occur. The motivation of choosing semi-structured interviews was the upside of having a structured template at the same time as allowance of flexibility adjustments were present. The interviewees were allowed to speak more freely, and the interviewer adjusted the order of the questions dependent on how the conversations developed. By doing so, there is a chance it leads to more interesting conversations and that the interviewee will reveal information that might not have been brought up in an interview limited by structure and formality. Saunders et al. (2009) further explains

that by conducting semi-structured interviews the interviewer has the possibility of excluding questions that of various reasons are not applicable for the specific respondent because of organizational contexts etc. The nine interviews conducted during the time period of March 12th till April 5th.

3.2.2.1 Interview Sampling

The interviews were conducted with two organizations and seven companies with the purpose to cover a broad perspective of the industry. The organizations and companies have been selected with a non-probability sampling, which means that the respondent has not been randomly selected but rather selected by using purposive sampling (Bryman and Bell, 2011). Purposive sampling means that the respondents has been strategically selected. In this study the selection was made to include variations and combinations regarding products, company size, geographical location, sustainable profile and membership or collaborations with third-party organizations to illustrate differences. Regarding products, companies selling both clothes and textile, but also hardware products and gear are represented in the study. Company size is considered self-explanatory, the selection of geographical location is Scandinavia even though most companies are of the same nationality, attempts were however made to include more companies from other Scandinavian countries but was limited of factors such as response and relevance. To include a broad sustainability perspective, companies that on beforehand was assumed to have relatively different sustainable profiles was selected and also companies that both are and are not members the selected third-party organizations. Lastly, companies who both are and are not participating in well-known collaborations has been selected.

The organizations included in the study were also selected through purposive sampling because of their respective purpose and functionality within the industry. Organization A was included based on the organization's innovative and sustainable role within the industry. Organization B was included motivated by the organization's coordinating and network building community. This environment and the collaborations between the two were assumed interesting.

3.2.2.2 Interview Form

Regardless of the chosen approach, the interaction of the interview can take several forms. It can be conducted face-to-face, over telephone or buy using the internet and video calls. The interviews can further be constructed to include only the researcher and the respondent which is a one-to-one interview, or it can include more respondents and take the form of a group interview or a focus group which is a one-to-many interview (Saunders et al., 2009). In this study all interviews have been conducted over internet using video calls via Skype or by phone to eliminate any geographical barriers that will otherwise affect the sampling of the respondents and obstruct the purposive sampling of participants. Furthermore, only one-to-one interviews was conducted, and all interviews aimed to last for approximately 45 minutes. The interviewer did vary between the two researchers conducting the study. However, both were always present to ensure that relevant follow-up questions were asked and that no questions or subjects was unintentionally excluded. To further support the previous, but also to ensure that all information is captured and eliminate information loss all interviews were recorded with permission from

the respondents (Bryman and Bell, 2011). After completion, all interviews were summarized instead of transcribed and the summaries were distributed to the respondents for approval of material and citations. This resulted in exclusion of minor details containing sensitive information. However, these changes did not affect the content of the interviews and thus not the data analysis. In table 1, all interviewee roles are presented together with the date and duration of the interview.

Organization / Company	Interviewee Role	Date	Duration
Organization A	Sustainability Project Manager	2019-03-12	69 min 32 s
Organization B	Coordinator	2019-04-02	40 min 4 s
Company A	Sustainability Manager	2019-04-02	47 min 10 s
Company B	Sustainability Developer	2019-04-05	46 min 18 s
Company C	Head of Innovation	2019-04-11	61 min 11 s
Company D	Product Developer	2019-03-21	39 min 52 s
Company E	Co-Founder & Product/Design	2019-03-20	42 min 44 s
Company F	Head of Product Development	2019-04-04	30 min 46 s
Company G	Marketing Manager	2019-03-20	48 min 8 s

Table 1. List of Interviews

3.2.3 Data Analysis

The section will present how data was collected, summarized and analyzed with the purpose to be presented in a structured and perspicuous way to enable for easier reading. Further, the research quality is evaluated, and ethical considerations are discussed.

3.2.3.1 Qualitative Data Analysis

During this study the data analysis has been performed as an iterative process. The survey was performed during an early stage of the research and conducted within short and intense period of time. Thus, the relevance of organization A was not yet discovered and included in the survey, which would have been preferred to investigate their importance within the industry. From this point forward, data from interviews and literature were iteratively collected. After finishing the data collection, the interview recordings were summarized, closely compared to a transcription, with the purpose of eliminating information loss.

From the interview summaries, significant findings were extracted and labeled into 1st order categories, with inspiration from a qualitative analysis method presented by Gioia, Corley and Hamilton (2013). This was an overwhelming part with lots of data and different topics and categories. To gain an overview and enable clustering of this data, all categories were written down on sticky notes and put on a wall. From here, similar categories were paired, and duplicates removed. Eventually, the findings were sorted into six 2nd order themes (Gioia et al., 2013). From this stage, it became clear that some of the 2nd order themes were inhibitory to sustainability collaborations, hence, identified as barriers. Other themes were considered having a facilitating effect on sustainability collaborations, hence, identified as industry dimensions. The clustering of categories also resulted in a theme that gave a clear perception

of industry characteristics. These themes are sub-categories to the aggregate dimensions (Gioia et al., 2013) of industry characteristics, barriers and industry dimensions. Further, Gioia et al. (2013) describes how a pre-mature literature review can cause for biased analysis of the data, leading to researchers searching for pre-decided topics and patterns. To mitigate the risk for this, the literature review has been conducted iteratively and a more thorough review of the theme's topics was conducted in parallel to the analysis process.

3.2.3.2 Research Quality

As any research conducted, this qualitative research study needs to undergo a quality assessment and thus an evaluation according to certain criteria. Usually the terms of reliability and validity are used to assess quantitative research, but those have been questioned with regards to qualitative research (Bryman and Bell, 2011). According to the authors, qualitative studies should rather be evaluated from the perspectives of trustworthiness and authenticity, thus these criterions will be used in the evaluation of the study. Trustworthiness includes credibility, transferability, dependability and confirmability and has corresponding ones within quantitative research; credibility corresponds to internal validity, transferability to external validity, dependability to reliability and confirmability to objectivity (Bryman and Bell, 2011). Credibility of the study is considered achieved as the study is carried out with good practice. The findings have been discussed with a third-party and non-member of the social world where they were found. Transferability refers to the fact that a qualitative study usually represents a small group with the same common characteristics, this describes the nature of this study, but the researchers made an effort to include a broad variation of companies in the study to open up for transferability of findings. Dependability are handled according to the requirements of Bryman and Bell (2011) stating that records should be kept of all steps of the research. Since complete objectivity is considered impossible to ensure, but this study has been conducted in good faith and thus achieves confirmability.

3.2.4 Ethics

Bryman and Bell (2011) describes that ethical principles in terms of business research concerns the four areas of harm to participants, lack of informed consent, invasion of privacy and deception. The information shared by survey respondents and interviewees are according to themselves not considered harmful to any of the businesses. However, the participating companies has been promised anonymity to the extent that no organization names, company names or project names will be revealed in the empirical findings. All interviewees have been offered the opportunity to read the interview summaries with the possibility to exclude or adjust the information shared, thus the problem with lack of informed consent are considered to be overcome. As invasion of privacy is closely tied to the lack of consent, it is considered to be handled and eliminated. The absence of deception corresponds to the literature of Bryman and Bell (2011) as the researchers of this study have done their utmost to represent the research as what it is.

4 Empirical Findings

The following chapter will present the findings from the primary data collections carried out in this study. The empirical findings consist of answers from one survey and nine interviews which were held with company and organization representatives. Firstly, the findings from the survey, which was conducted at an initial stage of the study will be presented and thereafter the interviews.

4.1 Survey Findings

In this section the empirical findings from the survey will be presented. It is structured to present the result from each survey question, one at a time. The empirical findings are presented in a corresponding order to the interview survey template.

A survey was conducted in February at the trade fair ISPO in Munich 2019, which is the largest trade fair for sports business including the segments of snow sports, outdoor, health and fitness, urban and team sports (ISPO, 2019). However, all targeted companies were Scandinavian. When all industry actors were gathered the opportunity of conducting a survey was seized. The purpose of the survey was to gain broad and overall understanding of the companies' perception regarding relevant topics for upcoming interviews and to validate that the subject of the study was worth pursuing. A further expectation was to make contact and introductions for the interviews in order to hopefully enable easier access to relevant interviewees.

As a response to the first question in the survey, which is visualized in diagram 1 in Appendix A2, all companies state that their attitude towards sustainability work exceeds the level described as "we do what we have to". In fact, the majority of the companies place themselves at the highest level of engagement, where they aim to create value for society and environment.

The second and third questions were asked in a way that the respondent had to weigh six drivers for sustainability actions against each other. The responses are shown in diagram 2 respectively 3 in Appendix A2. Several respondents found this difficult, since all six alternatives appeared to be important, which was the intention. The question regarding the most important drivers to work with sustainability shows a clear result, where 20 respectively 17 out of 33 respondents have stated that "preservation of the industry" and "build a strong brand" are considered the top two most important drivers. The remaining four drivers have been given a fairly even distribution and "achieve competitive advantage" has been chosen the least number of times. The third question had the same six drivers, but the respondent was instead asked to choose the two least important drivers. Correlated to the second question, 18 respondents state that "achieve competitive advantage" is the least important driver to work with sustainability, followed by 14 respondents choosing "meet regulations" as least important. It can be assumed that since all the companies, according to the first question, have an ambitious attitude towards sustainability work, meeting regulations are something they already do and thus, do not pay much attention to. Worth mentioning is that in both the second and third question in the survey respondent were asked to choose two options out of six which means that there should be 66 answers since there was 33 respondents. However, there is only 65 and 58 answers in question

two respectively question three. This can be interpreted in two ways, either the respondents found the question confusing or they simply thought only one answer was applicable for their company.

Question number four focuses on the main barriers with regards to sustainability work. Cost and time are considered the main barriers among the respondents. A large portion of the companies also states that the lack of knowledge is a barrier. Only four respectively six companies respond that uncertainties in customer demand and supplier relationships are considered main barriers. The answers are to be found in diagram 4 in Appendix A2.

The last three questions are together with respectively answers presented as diagram 5-7 in Appendix A2. These questions focus on collaborations, which is seemingly common in the Scandinavian outdoor industry. As many as 30 companies state that they at some point collaborate over corporate boundaries, and nine of 33 are doing it continuously. Only three companies do not participate in any collaborative activities. Furthermore, the respondents were asked if they are a part of the organization B or Protect Our Winters, but also about the importance of organization B with regards to sustainable innovation. 21 of the respondents are a part of organization B and three of these companies state that organization B has a very important role for their companies' sustainable innovation work. Further, nine companies specify that the organization is of important nature, while eight companies consider organization B to be of little importance. One member of organization B states that the organization is unimportant, with regards to sustainable innovation. Additionally, three respondents collaborate with Protect Our Winters.

4.2 Interview Findings

In this section the empirical findings from interviews that were held with two organizations and seven companies will be presented. It is structured to present the result from each interview one at a time to enable a more clarity and easier reading. Further, the findings are summarized in order to present relevant information for the reader. Initially, the two interviews conducted with organizations will be presented. The interview template differs from the ones conducted with companies, therefore the structure of the findings between organizations and companies will vary. The findings are, for each interview, presented in a structured way ordered after topic. However, the topics might vary to some extent due to its relevance correlated to individual companies. In the end of this chapter table 2 and table 3 presents a summary of the empirical findings from company and organization interviews respectively.

4.2.1 Organization A

Organization A is a part of a company which owns an incubator and a science park. This company is further co-owned by a university, an economic association, by the local region and by three nearby counties. The organization is a national initiative in sports and outdoor and works project oriented. The financials and coordination have during the last ten years come from a government agency for innovation systems with the purpose to create an innovation hub with focus on sport and outdoor.

Organization A work closely with Mid Sweden University which is crucial for its survival and the interviewee states that *“One part of what we do is trying to find research questions to the university but also trying to make them to create value for the industry. The other part is working within the industry with sustainability.”*. One example of what the interviewee has done is the development of a strategy program to raise the level of knowledge within the companies in the industry to enable for them to manage questions within innovation.

Sustainable Innovation

The interviewee explains that there are two approaches to working with sustainable innovation. Either working with innovation and ensure that this leads to something sustainable or originate from the sustainability challenge in the innovation which cause for a sharper project in terms of sustainability. Most of the projects within organization A has a sustainability focus, or a focus on something that is challenging for the society. The interviewee clearly states that organization A are not consultants running customer’s errands. The basis of what the organization is doing is creating benefit for the society, which is necessary since it uses public funds.

Drivers of Sustainable Innovation

The interviewee expresses legal aspects and regulations to be of great importance in terms of driving sustainable innovation work. Regulations such as the European Reach Regulation drives development forward. Furthermore, there are associated groups and organizations who helps to draw attention around those questions. Another driving force the interviewee mentions is the people working in the industry and states *“The connection of being an outdoor person who appreciates the nature and wants to preserve it really matters”*. People are explained to be humble and understand that most of the time they do not work with necessities of life, but rather with products that are supposed to make people feel good and enjoy living in consonance with the nature. The interviewee states that *“Most people have a personal wish of not doing anything bad for the nature, rather something really good! But at least nothing bad.”* An increasing customer interest in sustainable innovation is mentioned. However, the interviewee states *“It is not considered a driving force since most companies are still far ahead of the average consumer regarding these questions”*. But what is considered a driving force is associations such as Greenpeace, Naturskyddsföreningen and WWF. According to the interviewee, they do a great job in terms of pushing these questions and create cooperation. Other types of organizations such as Protect Our Winters, are considered having an influence too, but in more of an inspirational way rather than handling big questions and create medial pressure.

The interviewee explains that companies with a clear vision and an outlined strategic direction are working more with innovation and sustainability despite less effort. The interviewee states *“If you have a holistic perspective and a clear vision of where you are going, then the innovative and sustainability work comes naturally”*. As a proof of this, it is further explained that companies participating in the sustainability program developed by organization are returning, talking about their own ideas and asking if it is possible to start a new initiative. Earlier these

same companies had their hands full with the internal structure, working mostly with short time innovation projects.

Collaborations

Collaboration projects can be suggested either from a company or from an industry association such as organization B or ISPO which are all associations that organization A works with continuously. Ideas and initiatives can also come from RISE or Vinnova. The interviewee has noticed an increased interest in collaborations and think it is possible to unite companies around different core areas and mentions the example of a project regarding sustainable shoe innovations. This project was initialized by one company wanting to produce the most sustainable trail running shoe possible. They wanted to do it through an open innovation project in collaboration with other companies. The initial thought was for them to run the project but later concluded that this would be difficult. Now three companies are participating in the project and others are likely to join. It is thus better to have organization A coordinating the project together with ISPO since they are both neutral partners. Otherwise problems may arise since most companies are likely not willing to participate in a product development project lead by one of their main competitors. The interviewee explains that if organization A is running the project this makes it easier for the companies to find a common platform for collaboration.

To make sure that all companies have the same objective with a collaboration, the interviewee states that it is important to make sure everything is clear from the beginning. All companies are usually included in the development phase of the project and talk about objectives for the industry and in what direction to move forward. Then the project is designed, and the objectives are clearly communicated to all parties. Organization A contributes to projects and collaborations by offering industry expertise, sustainability knowledge, network opportunities and are working as the link between the parties in the role of a project leader, coordinator and the legal neutral partner.

Barriers of collaborations

The interviewee continues by describing some of the challenges and difficulties that can occur in collaborations, for example intellectual property, which is a major one requiring contractual agreements. The more concrete and practical the innovative work is, the more difficult the rights of those intellectual properties are to manage. Two recent projects are mentioned as an example of this, which required between three and five months of the project time before organization A had completed the contracts. No valuable information from companies can be shared before contract completion.

Many projects are created to involve external expertise and competencies and this project group consisting of people and companies share a common base of knowledge for everyone to benefit from. Projects concern background and foreground in terms of knowledge, information and results. Background is the input from the companies and foreground is the desired result of the project. The background material is owned by the different parties and thus, each party choose what to share. Legal contracts, stating whether the other parties are allowed to use the shared

information and if so, how they are allowed to use it in terms of agreements such as licenses. When it comes to the foreground there is a need to find a fair way of distribution.

The interviewee has never experienced any large disagreements in any project where one company experience that they are doing the majority of the work and while others only collect information. However, organization A has not yet managed any major innovation projects with the purpose of coming up with a common solution and makes a comparison with innovation projects in the automotive industry. These types of projects are according to the interviewee much more sensitive in terms of contribution, time and money invested but also the ownership of rights and capitalization on the solution becomes crucial. The interviewee's opinion regarding why organization A have not conducted any such projects are described as *"It probably depends on the maturity of the sustainability work in the industry, which is required to be able to do this and to work together with practical questions. But it is likely also depending on the fact that it is an industry with smaller companies, compared to the automotive industry where the companies are huge and have specific organizational departments for design, product development and R&D. This basically do not exist in our industry, not in Scandinavia."*

Examples of collaborations

One example of a project that organization A is currently working with is a project with ski wax. The purpose is to find a system change and move towards fluoride free ski wax. The interviewee explains that sport shops already sell fluoride free wax which provides a good glide for the average skier. However, the fluoride free wax provides an insufficient performance for professional athletes chasing seconds or hundredths of seconds, especially in warmer temperatures. This fluoride wax is currently unbeatable in this area. In this project organization A works together with two competing companies and one large competition for cross country skiing in Sweden, who is participating as a communication partner in the project. Researchers are working with performance tests in laboratories, with environment and health questions in different ski wax types and with performance in real conditions. The interviewee further explains that the competition management took a standpoint in December 2018 when they announced the removal of all fluoride wax from their wax stops during the race. They further recommended everyone to race without fluorides during the competition. This has created a snowball effect, both in terms of scrutiny, internally and in collaborations with the Swedish ski association. Since this is only a recommendation, the interviewee is speculating in what the next step will be and if it might cause for a regulation. If so, the sport is facing challenges such as figuring out how controls are supposed to be conducted. A project like the ski wax project includes many perspectives and industry collaborations. It is important to educate people and spread the knowledge to enable for the average skier to make better choices already in the sports shop when buying the wax. Organization A does not work directly with commercialization but do help to search for funding for commercialization.

Another example of a collaboration is a project with the purpose of increase retailer knowledge. Organization A has identified that many companies have great solutions and many customers are searching for those but cannot seem to find them. The reason why this is happening is

because of the missing link, which according to the interviewee is the lack of competence among the retailers. Thus, organization A has initialized a knowledge program with the purpose of raising the level of knowledge since it will increase the market for sustainable innovations within the segment. The interviewee states *“If we can make this work, it will create ripples on the water and increase the speed of innovations. This is extremely important in all steps of chain.”*

The interviewee cannot recognize any collaboration failures and states *“There have definitely been contributions in projects which did not reach the expected outcome. There have also been collaborations that failed because the parties involved was not mature enough for this type of collaboration.”* The interviewee mentions the sustainability program developed by organization A as an example of such a program. There has been great variation of what the companies embraced and how they have transformed the knowledge into a practical benefit internally. The interviewee continues by stating *“There has been extremely successful examples where the companies have embraced the knowledge and are building new strategies and base future work upon it, resulting in a strong innovative force”*. This is explained as largely dependent upon the approach of the leaders within the company. This determines the amount of resources spent on sustainability and how it is prioritized within the company. The interviewee further describes that there are companies who did not make as much out of it and states *“Some did not develop any sustainability strategy, rather a basic policy which the project leader said turned out to be a good thing, but management did not see the point and the value that came from it”*. Management of those companies has the opinion that time was wasted instead of spent on accomplishing practical activities tangible results. When working with innovation, one should be prepared of failures, and the interviewee states that people are often afraid of failing. There is a belief that the reason behind this can be the large number of small companies with limited resources in terms of time and money. This adds the pressure of creating something valuable. Many companies rather do something small with a certainty of creating value, than take on a large project and risk a major failure.

4.2.2 Organization B

Organization B is an industry association with over 60 SME members. The main focus of the organization is networking between companies in combination with marketing Scandinavia as a strong brand. The basis in the organization is to work towards retailers and press outside of Scandinavia and in this work, it is considered beneficial to be a larger number of companies grouped together. The interviewee states *“We want to create an awareness of what Scandinavia is, who we are and why we do good things.”* The interviewee further describes that there is no self-interest in marketing the organization itself, or in growing the organization in terms of member companies.

Sustainable Innovation

Innovation work does occur within organization B even though it is not the reason for its existence. Two times a year there is a product innovation competition hosted by the organization. Member countries nominate a recently launched product they want to compete with. There is a number of prize categories and a jury consisting of retailers and press from

Europe, performing tough tests on the products and announce one winner within each category. Innovation is a main focus in all prize categories.

Collaborations

The interviewee describes that member companies generally view collaborations as something positive and continues *“Competitors enjoy each other's company, which is encouraging. Before I started working for Organization B I did not expect it to be like this. Everyone wants more networking, more workshops and more time to hang out with each other. It truly is a positive attitude among the members.”*. The interviewee further describes collaborations as especially important with regards to sustainability work by stating *“At every company there is more or less one person responsible for the sustainability work, they are pushing it but are rather alone in this role at the own company. It is important for them to be able to discuss and exchange information with others.”*. Thus, the information exchange with people in the same position at other companies are proven valuable. The interviewee continues by stating that *“As a single Scandinavian SME, you are nothing in terms of affecting the industry. But if we are over 60 SMEs, then we have a way better chance to actually affect and influence the sustainability work.”*.

Within organization B, a sustainability group exists. All member companies are a part of the group and they meet two times a year in conjunction to the annual meetings. The interviewee mentions a Sustainability Charter as an example of the work this group is conducting. The project is currently under development, but all member companies has signed the agreement to participate. The purpose is to create educational steps within the chart to enable for companies to climb between the levels depending on the dedication in their sustainability work.

Different companies are described to experience variations in value created by organization B. The size of the member companies is described as one reason and the value created is a factor that affects the decision if members actually prolong their membership or not. It is further described how smaller and larger companies work in symbiosis at the fairs. Smaller, newer companies attract visitors curious about what is up and coming in Scandinavia and are considered a proof of the fact that Scandinavia is developing and still to count on in the outdoor industry. Larger companies on the other hand, are attracting visitors simply because of who they are. They can achieve success on their own, but still see an upside with the membership and the common showcase village at the fairs.

The interviewee cannot think of any failed attempts of collaborations that organization B has facilitated. Rather the opposite, that other countries around Europe are wondering why the organization and collaborations works so well in Scandinavian. They are experience much more opposition between companies. When asked specific about this, the interviewee cannot answer why. But the perception is that the reason is the overall positive attitude towards collaborations and competition that exists. The interviewee further describes that within the organization there is a belief that to ensure long lasting collaborations that facilitates innovations straightforward communication and transparency is a key. This is described as important since the organization works on behalf of their members.

4.2.3 Company A

Sustainability work permeates the entire company and all its operations, and company A is ready to sacrifice their profitability to become more sustainable. The interviewee states that they do everything they can, while at the same time trying to keep the business up and running and says, *“If we go bankrupt and have to shut down the company, we can no longer make a change”*. Over the past three years, company A has made a huge transformation and reached far in their sustainability work. By formulating strategies and creating structures the company has gone from a low level of sustainability to recently becoming a climate positive company. The owners were committed to the transformation and have since then provided resources to conduct sustainability work. Currently, company A is both able and willing to help other companies with sustainability related issues.

When communicating with suppliers regarding recycled materials, the company have experienced a change over the past years, with increased knowledge and a different mindset. Previously, it was difficult for a small company to demand certain standards, but the company have had a dialog with the manufacturers to make them realize that even though company A is small, there will be a greater demand for sustainable specifications in the future from all companies. By providing sustainable alternatives the manufacturers and suppliers will gain a competitive advantage when other, larger companies require the same things.

Collaborations

Company A are positive to collaborations and have participated in such to various extent and scope. A smaller collaboration was when company A bought a fabric made of leftover material from another manufacturing outdoor brand in Sweden. Through personal connections one of company A's employees learned about this product and introduced it to the development team at company A. The team tried to figure out how to utilize it and finally it was used in soles and shafts for the shoes.

Another project was initiated as company A are humble to the fact that they cannot solve all problems themselves. The project idea was to create the best possible trail running shoe in a sustainable way and this derived as an open innovation project. Initially, company A figured they should start inviting companies to join the project, but then realized there are already an existing open innovation platform in conjunction with ISPO. Shortly after contacting the platform, company A got the response that the platform had been waiting for a project like this. The project started, and organization A was designated to take the lead. Company A invited a lot of other trail running brands to join. Initially, almost 2000 companies responded and through ISPO and ISPO Open Innovation the project reached the 35 000 members in the system. Many companies chose not to participate in the first phase, but to join in the second phase. The reason for this was for example that companies had limitations in time or that they already were working on a similar project. The launch was set to ISPO in the beginning of February 2019, and many companies were not able to join because of the short deadline. According to the interviewee, smaller brands are the most agile and most daring to jump on projects with uncertainties regarding time frames. Three companies in total decided to spend a lot of time on

the project, because they were convinced it was worth a try to create the most sustainable trail running shoe with the greatest gathered knowledge. The other two companies are competitors to company A, but company A does not see any risks associated with this. The main purpose behind the project was to find best possible materials, methods and logistics to produce products and it was only considered a possibility to bring competitors along. The interviewee describes that the project could end up with the companies producing three very similar products, but the individual companies have different design and ideas behind their products. The interviewee states *“We are not afraid of sharing our knowledge, it’s for the best purpose. We want everyone to have access to the best-practices for manufacturing their products. We are convinced everyone will create their own unique products anyway.”*. There are no patents or intellectual property rights involved in the trail running shoe project. The interviewee however describes that there are occasions where individual companies have agreements with suppliers giving these companies exclusive rights to some materials for a period of time. Company A states that within all of their projects, no intellectual property problems have occurred so far.

Third-party Organizations

Organization A was the one leading the trail running shoe project and together with ISPO Open Innovation they provided the structure of the project. Company A participated as brand partner and states that *“it was valuable to include a third-party organization with academic credibility.”*. The brands who did not participate in the first phase has been offered to buy the survey results from the first phase. Since the project had an academic partner the credibility of the project was strengthened and this in turns attracted new companies to buy the results or join the project.

The interviewee states that outdoor companies are fast-paced, agile and able to act quickly on new projects or businesses and even though it is valuable with the structure that organization A brings, it can also be a barrier when time frames are extended due to bureaucracy. Further, the interviewee describes that if deliveries are within the time frame, the company can handle it. But on longer projects, with a duration of six months to three years, the formals may take too long from a company perspective, who wish to see visual or concrete results at an earlier stage, and thus, hinder participation.

Company A have a close connection to organization B, and the support from the organization have been significant when company A started working with sustainability. The company has also participated in the sustainability group and attended meetings one till two times per year. Company A started researching what other companies within the industry was doing and initially concluded that other companies were light-years ahead of them, but it did not take long until company A were just as good as them. Then the questions about who possesses more information and knowledge and how to get access to it, arose. The fact was, no more information was to be found. At this point company A realized they needed to work with research centers and universities to gain and create more information.

Regarding future opportunities company A is optimistic, the interviewee explains that they want to show what is possible to achieve. By being transparent and show every phase, what has been

done and how it has been done, while being a small company, company A want to prove to larger corporations that it is possible to be sustainable and yet profitable.

4.2.4 Company B

Company B have a passion for outdoor activities and want people to be able to experience nature today and in the future. The goal is to work more with sustainability and become a leading actor within the industry. The interviewee describes how the environmental awareness is widespread within the Scandinavian outdoor industry and almost all companies have sustainability on their agenda. The interviewee believes that since the companies are selling outdoor products the industry attracts employees with this interest in common. Company B works with sustainable innovations mostly through business model innovation, product development and by including sustainable materials in the production. Quality is a key factor at this company and the products are created to have a long lifetime but also to be easily repaired.

Company B has been focusing on circular services, such as recycling and rentals. The company has a pilot project with rental clothes, which was launched around two years ago. Currently this service is only provided in the flagship store, which is the store where company B tries out all their circular services. The customers pick up the rental item in store and return it in the same store afterwards. This is not considered consumer friendly, but the gain insights how the clothes are treated and what products are most popular. Insights collected so far reveals that people are quite skeptical about renting clothes, but gear such as tents are currently more popular. Another positive aspect with this project is that a lot of people end up buying the clothes they are renting, which implies they make a better purchase decision knowing they will like the clothes. The company have two other rental projects, one together with the Norwegian tourist organization, where they provide gear and clothes for rent to people hiking. It is common that people forget to bring clothes or that the weather shifts, and they suddenly need gear they did not bring. The other project is a pilot project with a subscription for kids' outdoor clothes, called "kindergarten clothing". The idea is that the customer pays per month and they get an outdoor outfit which they then can switch out when seasons are changing. The company is trying this out to see how durable the clothes are, if they last more than one season/rental period or if they have to develop new outdoor clothing that are more durable to last several rental seasons. This service includes development regarding other things such as cleaning services, transportation and technology solutions.

The company has also launched a "recycle bag", where the customer receives a bag delivered to their home, fills it up with clothes from all kinds of brands and then delivers it to the stores, and in return they get 20 % off their next purchase. The company cleans and repairs the products from their own brand and sell them in the flagship store. The country currently has a law, which forces certain controls when selling second hand gear in order to stop sales of theft items. This law is outdated and makes it difficult and time consuming for company B to sell used gear. The law is basically hindering the company of doing exactly the same thing as the authority tries to achieve, which is for companies to help society become more of a circular economy. The enterprise minister is currently exploring a possible removal or change of this law.

Company B works a lot with repairs and have 5-6 employees working only with this. The interviewee states that even if repair staff are busy, many customers does not know about this service. To enhance the knowledge about this service, the interviewee explains that the company started a sewing workshop in the flagship store where one employee performs easier repairs or transfer larger repairs to the head quarter. Company B also has a “sewing car” which visits events and resellers and offer free repairs. A lot of people have torn outdoor clothes at home, that they are not using and do not know how to fix.

Collaborations

Company B collaborate with RISE regarding microplastics and fluorocarbons which both are challenges within the industry. Fluorocarbons are used as a water repellent in outdoor clothes and the company is expecting harder regulations regarding this in the near future. The interviewee acknowledges the need of a replacement for this and works together with other outdoor brands on projects regarding this.

From a supplier perspective, company B is considered a small customer. This cause for a need of collaborating with other companies. By mapping out manufacturers together with competitors they discover similarities which enables for the possibilities to split costs and exert collective pressure to achieve certain standards. The company is also a part of collaborations regarding their own climate impact, in for example logistics but also in the value chain. The idea is that company B and the other participating companies measure their own impact in order to find best practices. The company have found that dyeing fabric makes a huge negative impact and that is why they chose to collaborate with another company who provides a more sustainable solution to this. The collaborating company is still small and company B express a wish for other brands to join and use this method, in order to enable lower costs.

The company believes that one barrier when collaborating with regards to sustainable innovations is that many companies wish to be the first one to launch a new material or new solutions. It might be difficult to get a new innovation commercialized if not more than one company using it. The interviewee states that it is their job to create new solutions and make the customers choose them and their sustainable alternatives and continues *“Customers do not choose certain clothes because they are sustainable, they choose them because they like the style or functionality, but they consider it good if it is sustainable in addition.”*. Company B states that larger companies may have worked with environmental- and sustainability problems for a longer time and hold more resources for research. When joining projects or sustainability initiatives the company hope to gain knowledge and contribute with their own experiences. Since company B do not have the same resources as a large corporation it is valuable to get access to tool or measurement methods that the larger corporations use to simplify the sustainability work.

Third-party Organizations

The interviewee states that according to goal number 17; to use partnership to achieve the other goals, in United Nations sustainability goals, collaborations are necessary. The company

believes that it is always good to have a third-party organization involved in collaborations, since competition is a factor. Further, the interviewee describes that third-party organizations are good for providing access to researchers or professionals, who have competences that does not exist in individual companies. Together with other companies, company B can benchmark and find best practices and formulate common goals.

Company B's future challenge lies within reducing emissions in the production by using less water and chemicals for example. This is a challenge since the company is considered a small customer according to their suppliers. The also aim to change customer's consumption habits, so that they use clothes and gear for a longer time. This can also be achieved by buying used gear or rent or use a subscription method instead of owning your own gear.

4.2.5 Company C

Company C is a small company that is a part of a larger corporate group consisting of several outdoor companies with global distribution. All companies have separate product development and do not share for example designers and buyers. Company C do however seize the opportunity to share material development and coordinate larger projects together within the corporate group. The companies also share other services, such as administration, legal services and customer service within the group. This puts company C in a unique position, compared to if it would have been an independent company.

The entire corporate group is forefront within sustainability and are starting to employ sustainability managers at a group level. Apart from that, company C does not have any employees working solely with sustainability. Instead, the company have integrated sustainability in every part of the business, from the buying department to the production. The interviewee states that almost all employees at the company are environmentally conscious, probably because they all have an interest in outdoor activities. Ten years ago, there was an internal movement from bottom to top where product developers tried to create more sustainable products, but management considered the products too costly with too low margins. Years later, the owner expressed a willingness to become the most sustainable company in the outdoor industry. According to the interviewee *"This change in strategy made a huge difference. It still not easy, but it is way easier to drive the sustainability work forward."*

Company C have completed a project where the aim was to create a 100 % bio-based product, which turned out to be highly valuable and important for the company. When it comes to publicity it was a success, but in terms of sales it was almost a catastrophe. The interviewee concludes that *"To be cynical, this product is not going to save the world, but we completed the project and learned tremendously"*. Through the project the company learned a lot about bio-based materials and the fabric made of castor oil instead of fossil-based materials. In the research for the product company C found a polyester that are 30 % bio-based, which was not good enough for the concept product, but great for using as liner in all other products. Liner is, apart from the concept product, a high-volume product and this discovery will make a huge impact in larger quantities.

Collaborations

Company C describes that *“We are willing to share our processes, but we do not give away any information before our own launch”*. However, after launch it is no problem. The company experiences that they sometimes need help from others, for example when a new idea requires a larger quantity. The advantage of being a company within a corporate group appear again as the close connection to the other companies within the group enables for dialogues and collaborations. One example of this is when company C wanted to start buying wool locally. Sweden is lacking an infrastructure to utilize the wool from sheep in the country, and Company C would never have reached the large quantities to achieve economies of scale individually. In this case they teamed up with another, larger company within the group to increase the quantities. As a result of this, the wool suppliers could invest in their own facilities and scale up their business.

When it comes to chemicals, company C continuously collaborate with RISE, where they receive a lot of support and also take part in research projects. Company C does not consider themselves to be enough knowledgeable about the technical parts, but they contribute with information about requirements for new materials, to make it useful. Instead of developing material first and then try to find a customer, they involve company C at an early phase of the process. The interviewee states that they need more collaborations where they lack knowledge *“All smart people do not work at our office, we need to find people at other companies who possesses knowledge that we do not have and try and match this with knowledge we have that they are lacking.”* The company believes this is crucial to create symbiosis and collaborations and separate this from just buying a service or a technique. Company C encourages collaborations where they can share technologies or knowledge with other companies.

Third-party Organizations

Company C participates in educational meetings in conjunction with ISPO that is arranged by organization B. Even though the interviewee has a large personal network these meetups continuously helps adding to that network. Company C mentions two non-governmental organizations that has been more beneficial to be a part of, when it comes to sustainability; Textile Exchange and Sustainable Apparel Coalition. The first provides something called “preferred material”, which means the company are advised on best material in every category. The organization describes pros and cons with all materials and company C appreciates the hands on and straight forward information. This provides the knowledge to ask suppliers the right questions.

Company C believes in huge opportunities within the company by working with sustainable innovations. Product development used to be focused only on improving functionality of products but has shifted towards involving sustainability too. Today, there are awards for sustainability and not only innovative technology, which is appreciated by company C.

4.2.6 Company D

Company D has since it started had sustainability as a cornerstone in the business and strongly believe in doing what they can for the environment, and that this is the only way to go. This attitude is well rooted from owner and management all the way to the production, which is placed locally. According to the interviewee this enables sustainability work *“I know from previous experiences how difficult it is to push those questions bottom-up if the management are not onboard. The resistance would be the double since sustainability work is already difficult, we need the approval of putting time and resources into the sustainability work”*. Furthermore, company D does not believe that a company not working with these questions will exist for much longer. The company states that the customers, both businesses and end-users are much more aware of sustainability today which puts pressure on all companies.

Collaboration

The whole product range, which is rather static and with little variation, is created from a certain functional material. Hence, sustainable innovations are not focused on product development but rather on other activities, such as eliminating waste or increase efficiency in the production. One project derived with this purpose, where the company wanted to create a field of use for leftover material. It is currently ongoing and has so far resulted in a felt material from which new products such as shoe soles and sit pads are created, but the material is also sold per meter for others to create creative solutions with. Another Scandinavian outdoor brand has bought this material and included it in their production. This collaboration was managed and pushed forward by the other company, which from company D's part was appreciated. The companies share the desire to favor local production and the collaborating company ended up winning an award for the final product, resulting in great branding with regards to sustainability for both brands. Company D wish to see their leftover material being used by others, rather than waste it. The fact that company D is a small company is sometimes limiting, they need to prioritize among projects and they cannot do everything they wish to do. This is limiting in terms of product development since the time needs to be distributed mostly to operational events. The company sets a clear project plan of what should be done throughout the year, and it cannot involve everything they want to do.

Third-party Organizations

The company is a member of organization B visits ISPO yearly. The company does not attend as an exhibitor, but still meet with suppliers, customers and distributors. Additionally, they participate in meetings hosted by organization B two times a year. The company is also a member of Sports Tech Innovation Initiative, which is an initiative from Mid Sweden University with the aim of strengthening the renewal capacity and competitiveness, primarily at companies that work with innovative products in the outdoor industry. The latter one includes workshops together with other companies which enables networking opportunities, but also access to the textile lab at the university, which is considered valuable for product development. In these specific collaborations there are no direct competitors participating, but the company encourages collaborations even with competitors and consider knowledge sharing and helping each other a good thing.

Company D is a part of another collaboration for textile recycling which is an initiative together with RISE and the Textile University in Borås. In this project they are test pilots and the idea is to find ways to recycle textile. Company D consider it important to manage and choose how to spend their time in this type of collaborations. The best scenario is if someone else can run the project and company D can take a supporting and participating role, without responsibilities regarding project management. The company value these projects highly since they need to allocate time and resources towards other activities within the own organization. Depending on the size of the project the company believes it is valuable to have a third-party organization involved. Smaller projects might not be as time consuming and then a third-party organization is not necessary, but in larger ones it is valuable to have a third-party running it.

Barriers

Company D believes in the good of solving common problems together with other brands. The interviewee states that in most cases, it is positive to collaborate and learn from each other even if competitive advantages and expert knowledge is shared. What the company choose to share with others are depending on the nature of the collaboration. It is preferred to keep as much activities as they can within the company and run their own projects since the benefits of learnings along a project is valuable. A risk with letting another organization run the projects is that knowledge and experience is lost. Generally, they do not participate in many collaborations. Another large risk associated with collaborations is that it will demand a lot of time from the company. Time is considered the main challenge to the company's overall sustainability work. The company have ideas on how to improve their environmental footprint, such as produce yarn out of their leftover material and reduce the number of polyamides in the products while keeping the durability.

4.2.7 Company E

Company E sells hardware products and are currently going through a change where the aim is for all products to be sustainable. The interviewee explains that the company's founders identified that no competitors worked with bio-based plastics, and this is how it all started. Through a collaboration with Sportstech Research Center at Mid Sweden University they established a contact with a professor and together with him company E found the material they were searching for, a bio-based plastic good enough to produce the product with. However, the material thermoplastic elastomer (TPE) can only be made 50 % in bio-based plastic, otherwise performance will be reduced. The interviewee explains that the problem with reusable material in their product is the difficulty to ensure the solidity since it varies from one batch to another. This is why the company needs to work with virgin materials, but bio-based virgin materials. The interviewee explains that the company tries their best to use as much recycled material as possible, but for some parts it is simply not possible yet. Because of this limitation, they choose to work with distributors who trace their waste in order to make sure it is properly recycled.

When talking about sustainability and its importance the interviewee states *“Sustainability focus is the only reasonable thing to do. We work in an environment that is dependent upon the climate. We want the winters to remain.”*. But at the same time the interviewee expresses a

wish to keep selling more products and increase consumption. Thus, company E aims to be the green alternative and tries to eliminate competitors that do not sell clean products. Company E think of sustainability not only in terms of products, but also by making conscious choices such as travelling by train instead of flying. This is further supported by the interviewee stating, *“I believe it is important to practice what you preach.”* The interviewee describes a new dyeing process where the color is injected in the material by melting rather than painted/sprayed onto, which is beneficial for the environment. There is an existing technique that enable to do this on the polyester material as well, but currently their demands on minimum quantities are too large for company E and delivery times are too long. The interviewee is however convinced that time will solve this problem.

Collaborations

Company E has a positive attitude towards collaborations with competitors regarding sustainability and the interviewee express the opinion that for small companies, it is difficult not to collaborate. *“We do not have the muscles and I believe it is always a good idea to share things that will benefit the entire industry. If the industry gets better the all companies in it will be better.”* Another type of collaboration described, is the ones with suppliers since they have a lot of knowledge.

Company E has been participating in a three-year project which is a collaboration subsidized by Tillväxtverket. The idea was to find synergies, which was difficult for company E since the other companies in the project work with textiles and company E work with hardware products. Despite that, company E developed three new designs together with Sportstech Research Center and started to implement a new material, which caused for a high level of satisfaction from the project anyway.

Third-party Organizations

The company is not a member of organization B, but despite this the interviewee express a positive attitude to these types of organizations. The reason why the company is not a member is because they do not have the time to utilize it. *“We are a small growing company and need to focus on managing our own business before getting involved in organizations such as organization B.”* Everyone at company E has a large personal network on their own, but the interviewee points out that it can never be too large. Company E some companies competitors and some friends, but this is also a personal question. All companies are competitors, but there are different ways to tackle the competition. Once again, the interviewee mentions the importance of helping each other within the industry for the better good of the industry.

Challenges and Opportunities

The largest challenges for company E are expressed to be freight and deliveries. The interviewee describes the difficulties in making them both sustainable and cost effective. Another challenge is currencies and the fluctuations in the dollar, but this problem will be reduced when the company internationalize. The opportunities, on the other hand, are endless according to the interviewee, since there are many brands selling the same products. This means

that the market is mature and that the focus is gaining market shares which the interviewee is optimistic about since company E wants to be the sustainable option compared to others.

4.2.8 Company F

Company F is present on two different markets as they sell sports apparel and protection products within both textile and hardware plastic. The company has a clear vision stating that they should do what they can to limit accidents and save lives and that the company's entire existence is based on doing good for people. The interviewee describes how this vision affects everything the company does.

Sustainable innovation

The interviewee highlights the broadness of the concept of sustainable innovation and describes the differences in the markets of textile and hardware plastics. When working with textile, the company is forced to meet the criticism of unnecessary consumption. To improve, both in terms of positive publicity and for the better good of the environment, the company is using organic cotton and excluding harmful materials. The interviewee further explains that by comparing textiles to the traditional industrial design with hardware products, the situation is different. *“The awareness is more or less the same regarding hardware plastics, but how we talk about these products in terms of sustainability is not at all on the same level.”* As a company present in both industries, the interviewee describes different requirements and challenges within each, but currently the ones in the industry of hardware plastic products are larger. This is further described as a consequence of the fact that the textile industry has been forced to defend themselves for longer compared to the hardware plastics industry. To produce products which are transported long distances is according to the interviewee not a good thing *“This is a crime both in terms of circular economy and environmentally perspectives. But at the same time, it can be worth it, if we know that we save a number of lives every year.”*

Company F states that *“Today, mostly virgin materials are used in hardware products, but the product development department has a goal in 2019 to research what materials can be replaced”*. The interviewee further describes that environmentally friendly materials previously has been evaluated but with the conclusion that the same level of protection could not be reached. Thus, the search will continue since no materials will be changed if it will cause a compromise in safety. The interviewee states *“When talking about the product, it is worth remembering that we are working to save lives, which is CSR in a way.”*

Collaborations

Company F does not collaborate with any other companies regarding sustainable innovation, but they do have an overall positive attitude towards collaborations. The interviewee explains that it is rather because they do not have the time for it or that they cannot see the upside of participating. Despite this, a number of previous collaborations are described, such as the strategic collaboration with a large car manufacturer. Since visions aligned and a common ground in the work with safety was identified the two companies decided to work together, which led to a number of great things within traffic safety. The interviewee states *“we do the best we can to possibly save lives and reduce the consequences of accidents”*. Additionally,

this collaboration was associated with great marketing and public relations since it is a collaboration that company F is proud of. Other collaborations mentioned are the one with a high-end Italian fashion brand, the one with Protect Our Winters and the ones conducted with suppliers in order to find better materials. The interviewee explains that the company are selective and chooses their collaborations carefully.

The interviewee describes that company F wants to have an edge compared to their competitors and that they want to do something different. They see no upside in doing things the same way as someone else. The interviewee states *“That is not at all a competitive advantage for us. We want to find what no one else did think of.”*. The interviewee further expresses a conviction that if company F were to team up with a competitor to try and develop a better material for the product the competitor would also lack competence. Company F rather collaborate with a supplier who possess chemical competences that both themselves and their competitors do not have. One thing the interviewee believe they could do together with competitors, is to put pressure on the suppliers to actually produce better materials, this would increase the bargaining power towards the supplier. This would be useful since company F describes that they have seen a shift from the focus of developing better plastics to instead developing better packaging. Suppliers obviously put their efforts on the products they sell the most of and currently the volumes of company F are too small to be prioritized.

Third-party Organizations

As mentioned, the company collaborate with Protect Our Winters, but the interviewee does not think the company are a member of organization B. It is further clarified that the company like the idea and have good contact with the organization. But the reason for not being a member is stated as *“We aim to be global, rather than brand ourselves as Scandinavian”*. Organization A is another third-party organization that company F have had a lot of touch points and projects in common with over the years. The interviewee describes an improvement for third-party organizations to be a concretizing of their offer and points out that such large organizations possess a lot of knowledge and power. The interviewee expresses a belief that it would be valuable to be able to consult with them regarding sustainability work and if more companies become organized, then it is easier to put pressure on the suppliers.

Attitude Towards Sustainability Work

At company F sustainability is a hygiene factor. Everyone at the company is interested in how they affect the environment they are living in. But the company does not brand themselves as sustainable, it is expressed as an underlying requirement. What the company stand for is technology and innovation within safety and the rest is considered essential. But the largest challenges for company F are within the hardware industry. According to the interviewee the largest challenge is the obvious, which is the fact that they sell hardware in plastics that is manufactured far away. Currently there is neither the production technique nor the competencies to manufacture closer to the market. The interviewee describes another challenge to be the recycling of the main product since it is difficult to make the product able to disassemble and at the same time ensure this does not happen by accident. The interviewee expresses the ideal to be if the entire product was manufactured in the same material and could

be recycled as one piece. Challenges within the textile industry are also mentioned, but they are not considered as large since this is a more mature industry.

4.2.9 Company G

Company G's business idea is to dye polyester fibers in a more sustainable way. The method is not novel, it has been on the market for 20-25 years but has previously not been suitable for clothing. Company G have worked to lower the barriers for this industry to use the method and provide the technique for textile companies as well. The car industry has been using this technology for years, but they own their own production facilities and have different preferences than the fashion industry. The minimum order quantity is lowered and most importantly for the clothing industry, the selection of colors has been increased to 2000 different colors. A unique feature for this method is that the color is exactly the same every time.

Collaborations

The company consider themselves being of a collaborative nature. Firstly, company G collaborate with their customers (outdoor brands) with the aim to get them interested and willing to start using this method as soon as possible, but also to use the method as much as possible to reach maximum saving of environmental resources. The company is also cooperating with experts and research institutes. RISE is one of those, and the purpose of the collaboration is to gain credibility in the company's work. RISE examines the company and issues a certificate stating exact water and energy savings on specific batches of fabric, which enables transparency for customers, end-user and journalists. Company G states that these types of collaborations are extremely important to the company and they aim to be as transparent as possible.

Barriers

Company G consider it an opportunity if other companies start using their method, even if it is a competitor providing it. The company does not aim to serve 100 % of the polyester industry, but the dream scenario is to have 1 % of the total world market. The business model is based on licensing and company G have their own certificate which results in every manufacturer working with them must be transparent with their production chain and bookkeeping. This means a rather large commitment from the producers' side as well. It is a requirement for collaborating companies to let RISE go through their bookkeeping to ensure that everything is in order. Company G is not limited to their own factory but can work with the best producers within each segment to deliver the best quality for the customers.

Company G describes that barriers to collaboration often derive from fear of change. Managers assume that changes may cause for higher costs. To overcome this, the interviewee describes the importance of leadership and well-defined purpose and objectives. Company G have experienced that it is more difficult to drive collaborations where management is not committed *"If a company have a devoted CSR manager, it does not matter if the CEO does not understand the change, and it will be impossible to bring the project forward."* The interviewees further states that in one collaboration the other company had new directive from the board to become the world's most sustainable company within the outdoor industry, which simplified the

initiation. One of company G's strategies is to collaborate with larger companies to put pressure on the rest of the industry. The company is a premium ingredient brand and they intend to add value to the product, and when premium brands puts company G's logotype on their product that is considered a driver in the industry, as the top of the pyramid inspires the base of the pyramid.

Third-party Organizations

Company G is a part of organization B and support some other initiatives. The company wants to be a part of this organization to increase the awareness of how large impact the dyeing of fabric affects the environment. The company experience that the awareness regarding this is currently fairly low, even within this industry. The interviewee also mentions other third-party organizations, such as Textile Exchange and Sustainable Apparel Coalition. Company G participate as much as they can to get easy access to updates and information about the news and research. The development is happening quickly, and these organizations help to stay updated, but it is also important for company G to spread information about what they are doing. By staying in the middle of these networks, company G ensures publicity, public relations and to get invited to events to talk about their solution.

Collaborations are usually initiated through the company's own network and personal connections within the sports industry. Since the solution makes significant reduction in water usage company G experience that when other brands evaluate their offer, it raises so much interest that the majority of companies start considering how collaborations could be initiated. The interviewee states *"The personal network is important, when you are 4-5 people working at a company, you reach pretty far. But when you reach the limit of your personal network, then organization B is important and through them you reach the Scandinavian market."* The benefits with being a member of this organization is that it facilitates meetings with "the right" stakeholders, such as CEO, marketing director and sales managers.

Company G states that collaborations with organizations is a question about trust and credibility. If there is a third-party organization with a trustworthy history, it helps building trust between company G and customers. Third-party organizations are working continuously on certain subjects and company G can use their expertise on these things, RISE helped the company develop their certificate for example. The highest level of credibility company G can achieve is when a third-party is promoting them. It can be brands that are using their technology or organizations going on stage and talk about their solution.

Challenges and Opportunities

The largest short-time challenge right now is to highlight the fact that the dyeing process have the negative impact it actually does. Company G says that there is so much noise surrounding the term "sustainability", and they want to present their solution because it could make a huge impact. The idea is based on life cycle analysis over the whole production, where the company has performed measurements together with RISE and through this it is clear that dyeing is the largest problem. The company wants the consumers to be able to take a decision based upon the whole process, to be completely transparent and acquire all knowledge possible for this.

4.3 Empirical Summary

This section will provide a table with brief summary of the empirical findings from respectively organization and company. Table 2 and 3 displays the findings with the purpose of clarifying for the reader what information to bring to the analysis.

Organization	Purpose	Sustainable Innovation Work	Sustainability Collaborations	Barriers to Sustainability Collaboration	Drivers to Sustainability Collaborations
Organization A	Create an innovation hub with focus on the sport and outdoor industry.	The majority of the projects have sustainability focus and/or crating benefit for society since is uses public funds. Have managed both innovation projects and other collaborations.	Initiated from companies, industry associations or research organizations. Organization A experiences an increased interest in collaborations.	Unclear or incompatible objectives. Intellectual Property rights and bureaucracy leads to extensive work and extended time frames.	Legal aspects and regulations. Personal interest by enthusiasts in the industry. Companies with clear vision and outlined strategic direction.
Organization B	Provide networking opportunities combined with marketing Scandinavia as a strong brand globally.	Innovation work occur but to a low extent. Encourages companies by providing sustainability innovation competitions and awards.	Provides a sustainability group and a Sustainability Charter with the purpose to educate and provide educational steps.	N/A	Competitors enjoy working together. Networking is appreciated. CSR employees are "lonely" at their own company, wants to network over corporate boundaries. Exercise common supplier pressure by collaborating.

Table 2. Empirical Summary Organizations

Company	Sustainability Strategy	Sustainability Collaborations with Other Brands	Relation to Third-Party Organizations	Barriers towards Sustainability Collaborations	Industry Dimensions
Company A	Willing to sacrifice profit to become more sustainable.	Positive attitude. Have participated and initiated several collaborations. Willing to share information.	Have participated in collaborations with organization A. Close connection to organization B.	Bureaucracy causes long time-frames.	Third party organizations adds credibility, structure and enables project management with competitors.
Company B	Vision to become a leader in the industry when it comes to sustainability.	Collaborations to achieve pressure towards suppliers. Collaborates with sustainable ingredient brand.	Collaborates with RISE. Member of organization B.	Competition: many brands wish to be first with new sustainable solutions. Lack of resources.	Knowledge sharing in terms of getting access to measurements tools to measure their own climate impact.
Company C	Sustainability integrated in every part of the business.	Collaborations within the company's corporate group to achieve larger quantities to enable for wool to be produced locally.	Collaborates with RISE regarding chemicals. Collaborates with two NGO when it comes to sustainability. Member of organization B.	Competition: wants to be first. Previously: lack of management's prioritization.	Knowledge sharing: willing to share information after launch.
Company D	Sustainability as a cornerstone in the business, well rooted from management.	Willing to collaborate, but have not participated in any major collaborations yet.	Member of Organization B and attends yearly meetings. Collaborates with RISE in sustainability initiatives.	Lack of time and resources. Risk that knowledge and experiences are lost if someone else manages the projects.	Network have enabled smaller collaborations. Knowledge gained from other organizations.
Company E	Sustainability focus is the only reasonable thing to do.	Positive attitude towards industry collaborations. Collaborations with research institutes to find new materials.	Collaborations with Tillväxtverket to find synergies. Not a member of organization B.	Difficult to find synergies with other companies.	Gain knowledge.
Company F	Sustainability as a hygiene factor.	Positive attitude towards sustainability collaborations but does not participate in any.	Collaborates with Protect Our Winter in a sustainability project. Not a member of organization B.	Need to maintain focus on the overall strategy which is safety.	Collaborate to put pressure on suppliers to produce better materials.
Company G	Sustainability as a business idea.	As an ingredient brand collaborations are crucial for the company.	Collaborates with RISE. Member of organization B and values the network where they get the opportunity to spread information about their solution.	People are generally afraid of change, since it often implies costs. Companies strategies and leadership is crucial for collaborations.	Network to meet decision-makers. Collaborations to get access to expertise from organizations. Collaborations with third-party organizations provides trust and credibility.

Table 3. Empirical Summary Companies

5 Analysis

This section presents a thorough analysis of the empirical findings and draw upon literature from the theoretical framework with the purpose of providing a basis upon where the two research questions will be answered. To simplify the reading and provide guidance throughout the chapter the Sustainability Collaboration Model has been developed and is displayed in figure 2. The model illustrates the main findings and highlights within which block each research question is answered. Initially, the characteristics of the Scandinavian outdoor industry will be presented and analyzed, followed by company characteristics as they tend to vary on a rather broad spectrum. The company characteristics is followed by one of the main findings that is unique for the individual company, namely the company strategy, and more specific, the importance of an implemented sustainability strategy as a part of the overall company strategy. The analysis will illuminate how the presence but also the absence of a sustainability strategy will affect the level of engagement in sustainability collaborations and thus, the results of the same. This analysis leads the reader into the next block that clarifies the importance of metrics for sustainability collaborations. It is further described that the current absence of those metrics is problematic, and the absence is highlighted with lack of color and deviant lines. The next block presents what has been crystallized from empirical findings as crucial industry dimensions. These are further analyzed with regards to their effect and their possible increased impact on sustainability collaborations. Their importance is highlighted with blue in the model. Lastly, the combined effects of the main findings are used to describe examples of successful sustainability collaborations. Additionally, the two research questions are marked out, related to the blocks that describes the subject, thus approaching the answers.

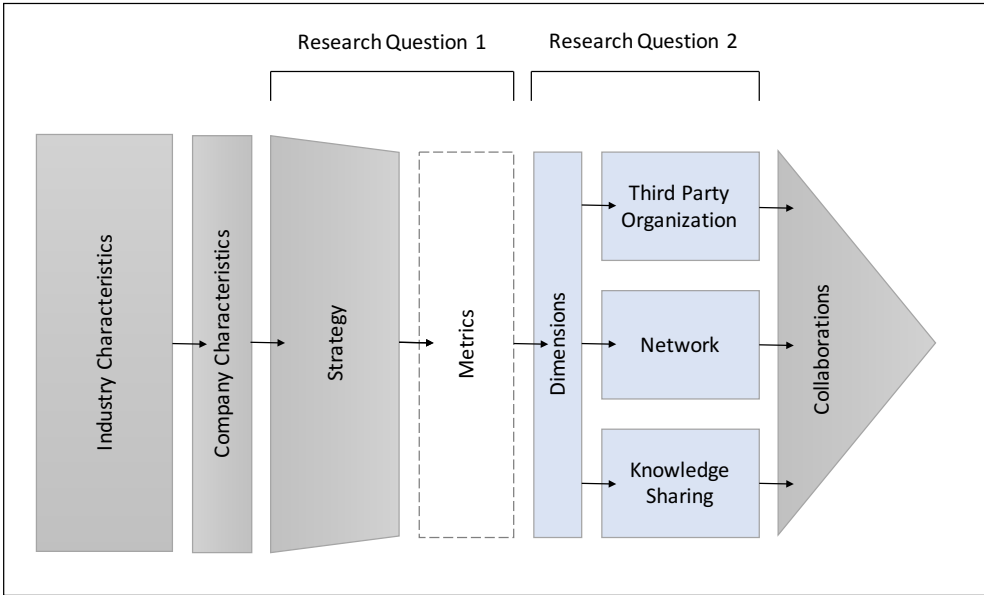


Figure 2. The Sustainability Collaboration Model

5.1 Industry characteristics

The industry characteristics revealed in empirical findings describes the unique environment with regards to competition, sustainability and relationships that is referred to as “The Scandinavian Spirit”. The wish to preserve the nature and by doing so, preserve the industry and business itself, is the most important driver to sustainability work according to the survey. This corresponds to the theory of different stages in the sustainability journey as presented by Willard (2012). This reflects why the companies within the industry, to such a large extent, take their sustainability work beyond what regulations require and strive to create value for society and environment. The environmentally conscious attitude is, assumed to be larger in the Scandinavian outdoor industry than in other industries and through interviews it is expressed that the companies to a large extent are years ahead of the customers’ demands.

The challenges related to sustainability are to the greatest extent considered to be a what Olson (2009) describes as a collective action problem. The warmer climate and requirements for reducing the usage of fossil-based materials are challenges that all actors within the outdoor industry are facing and this is not a problem to be solved by a single company. Collaborations are thus encouraged as the entire Scandinavian outdoor industry would benefit from defeating these threats. The answers from the survey proves this, since the majority of the companies consider “preservation of the industry” a driving force for sustainability work. In addition to this driving force, the companies also state that they perform sustainability work to “build a strong brand”. It can thus be interpreted that there is a great value in being considered a sustainable company from a stakeholder perspective. This leads to contradictions; the gathered industry would achieve greater success in sustainability work by performing it together. But since competitive advantages are gained by individual companies being the first or best company in this area which may cause for a barrier to collaborations, which is described as the collective action problem by Olson (2009). From interviews it is further extracted that several of the participating companies aim to become the most sustainable company within the industry, which indicates that there is some value in this, worth striving for. Epstein and Buhovac (2010) describes how stakeholders quickly will show their reactions to sustainability activities, and one of them might be attracting and retain a valuable workforce by take advantage of the personal interest of the staff within the industry. The interviews reveal that most people within the industry have a great passion for the nature and that sustainability initiatives often comes from employees, i.e. bottom-up within the companies. If a company brand and prove themselves as sustainable, it will likely be an opportunity to be a sought-after employer.

To overcome climate related challenges the actors within the Scandinavian outdoor industry have expressed a great desire to collaborate with regards to sustainability, which is evident in most interviews. Organization A describes how initiatives to collaborations comes from both companies but also from academia and researchers. This is also substantiated from the survey and presented in diagram 5 in appendix A2 where 91 % of the companies stated that they at some point participate in collaborations. The way of collaborating has, however, been fairly limited. Organization A describes how no major innovation project have yet been conducted.

Hence, the industry is considered to be rather immature in terms of open innovation as described by Chesbrough et al. (2006). One reason for this is assumed to be the low-tech characteristics of the products and the lack of technology platforms. Another reason is the size of the industry and the companies within it. Most open innovation project has been conducted in the areas of ICT or within larger industries such as automotive (Vrande et al., 2009). The interviewee from organization A supports this by stating *“It probably depends on the maturity of the sustainability work in the industry, which is required to be able to do this and to work together with practical questions. But it is likely also depending on the fact that it is an industry with smaller companies, compared to the automotive industry where the companies are huge and have specific organizational departments for design, product development and R&D. This basically do not exist in our industry, not in Scandinavia.”*

5.2 Strategy

This section will present the importance of strategy and how the existence of a sustainability strategy will allow for successful sustainable innovation and collaborations to evolve. The absence of the same strategy is identified as the main barrier that inhibits sustainable innovation collaborations. Since the strategy of a company exists with the purpose of clarifying how certain objectives are achieved (Grant, 2016), the lack of a sustainability strategy implies problems for the sustainability work and thus obviously inhibits sustainability collaborations. The concept of strategy will be further analyzed to enable for a suggestion of how to be managed and implemented.

5.2.1 The Limitations of a Non-Existing Sustainability Strategy

The observed non-existence of sustainability strategy does not mean that the companies do not have a strategy. According to Willard (2012), it rather means that some companies are in a less mature stage on their journey towards sustainability and that sustainability is only prioritized to a certain extent. This leads to sustainability activities currently not being integrated as a part of the overall-strategy. In turns, causing for a number of problems, such as lack of prioritization and therefore lack of resources for sustainability collaborations. The overall-effect is that the industry’s collective potential is currently not fully utilized.

Companies who, according to Willard (2012) do not surpass the third stage on the five-stage journey to sustainability may not find the motivation to provide resources for collaborations. It is a risk that these companies only see the costs and downsides, instead of the benefits with such collaborations. This is seemingly the case with Company D, who have a desire to be sustainable but describe their sustainability activities at the level of waste-eliminating, which according to Willard (2012) corresponds to the third stage. The company points out that collaborations risk to be too time consuming and that they do not want to take any leading role in those, but rather join smaller-scope initiatives that other companies coordinate. This is considered to be linked to the lack of visualized value for the company.

Company F describes how they view sustainability work as a hygiene factor, but also how the level of challenge differs within the two segments they operate in. In textile and apparel, the

company describes that it is easier to choose sustainable alternative due to the maturity of sustainability work in this segment. While, in hardware products it is more difficult since there is a lack of sustainable high-quality materials meeting the company's requirements. The company explains that their vision is to save lives. When having such a clear vision and strategy focused on people's' safety in their hardware segment, they are not willing to take risks implementing sustainable materials at the expense of safety. This implies that the two different segments of textile and hardware products have reached different stages within the Journey towards Sustainability as presented by Willard (2012), despite being within the same company.

Company F's strategy differs from the other companies since they strive to be unique, global and prioritize the safety aspects above all. It is clear that the company's passion is within safety and not within sustainability, as many other companies' strategies are. Hence, management at company F do prioritize safety above sustainability, as safety is the cornerstone in the company strategy. No company will take risks that interfere with their core strategy as this will jeopardize stakeholders' trust. In this case it means that sustainability collaborations are more difficult to motivate towards stakeholders, thus limiting the number of sustainability collaborations. Company F has however, a willingness to collaborate, as with the car company, and it is clear that the overall vision to save lives is shared between the parties.

Furthermore, company G describes how collaborations have been cancelled due to the low commitment towards sustainability from potential collaborating companies. The interviewee states that implementations often require a change, and these are related to costs in different ways. If the CEO does not understand the change and the benefits of the same, there is no willingness to take the risk, which results in cancelled implementation. This is reinforced by the theories of Epstein and Buhovac (2010) stating that stakeholder pressure often forces managers to prioritize short-term goals. These cases are associated with several uncertainties both in terms of short-term goals, such as the direct financial profits, which are difficult to predict and calculate, but also the long-term outcome. Benefits from sustainability collaborations are impossible to calculate with regular metrics, which implies that many initiatives will be cancelled before reaching implementation.

5.2.2 Strategy as a Key Element to Sustainability

Answers from the survey revealed that the majority of the companies aim to create value for society and environment, which is an indication that the companies are positioning themselves at a high stage, five-stage sustainability journey, described by Willard (2012). They consider themselves to be at the fourth or the fifth stage which is *integrated strategy* and *purpose/passion*. This indicates that most companies in this study values sustainability work highly, or at least, aim to do so. Some companies have performed sustainability work that undoubtedly puts them at the highest stages. Interviews proved that companies who operate at different stage have different approaches to how sustainability work and collaborations should be carried out and valued.

The overall interpretation from the interviews is that companies with a thorough sustainability strategy has achieved considerably greater progress. Grant (2016) describes how the strategy is

a way to internally communicate the company's identity and positioning among competitors. If the strategy includes a high level of sustainability, this is expected to reflect on sustainability innovations and collaborations. The assumption is reinforced by the interviewee from organization A, who states *"If you have a holistic perspective and a clear vision of where you are going, then the innovative and sustainability work comes naturally"*. Senge et al., (2008) also describes how inspiration is crucial for sustainability innovations to occur. It is believed that the communicated strategy has a large impact on this. One interviewee further supports the literature by describing how companies has, after participating in the sustainability collaboration of developing a strategy program, returned. They returned with their own new ideas, asking for the possibility to start a collaborating initiative through the organization. This proves that working with sustainability it creates ripples on the water.

5.2.3 Implementation of a Sustainability Strategy

It is possible for companies that currently do not have a sustainability strategy to implement one, and examples from interviews shows that this has been done multiple times and to various extent. The interviewee from organization A confirms this when talking about the sustainability program they developed *"There has been extremely successful examples where the companies have embraced the knowledge and are building new strategies and base future work upon it, resulting in a strong innovative force."* This supports the fact that when done right, it becomes successful and powerful. Company A describes how they, over only three years of time managed to go from low engagement to implementing a sustainability strategy, which currently place them at stage five, *purpose/passion*, according to Willard (2012). When the owners committed to the goal of becoming a climate positive company other goals, such as standard financial objectives, are assumed to be put aside to some extent. The interviewee states that the sustainability work was always supported from top management with the resources that needed. It is believed that this transition would never have been possible if the management would not have chosen to clarify these goals of becoming climate positive, which is a process that is measurable. It is also considered costly unless major changes are conducted in the internal processes. Becoming climate positive are not directly related to profit. The company has however, after the completion, received lots of publicity and recognition for its efforts.

The phenomena where the leaders have shifted attitude towards sustainability and implemented it in their strategy with great progress, are described by other interviewees as well. Company C stated that sustainability had always been present among the product developers but that environmentally friendly products often were turned down by management due to their high costs and low profits. When the owner shifted focus in the strategy to become the most sustainable company in the industry it made a huge difference according to the interviewee from the company. Company D adds to this by stating that *"I know from previous experiences how difficult it is to push those questions bottom-up if the management are not onboard. The resistance would be the double since sustainability work is already difficult, we need the approval of putting time and resources into the sustainability work"*.

5.2.4 Business Model Innovation as a part of Implementing Sustainability Strategy

In order to enable a change and implement a sustainability strategy companies need to innovate their business model and at the same time ensure the new model both deliver and capture value as Teece (2010) describes as key. There is a strong belief that this will be achieved since most companies need to innovate what Amit and Zott (2012) describes as *content*, in this case meaning that sustainability activities are added, such activities can be added both internally and externally. A suitable example to illustrate this is company B describing their business model innovation where the company has been focusing on circular activities such as rentals and repairs. The interviewee from company B described a pilot project with rental clothes in the flagship store. To be able to try these ideas, support from management is crucial as resources are needed. The suggestion is not for any company to innovate their entire business model, but rather to add circular activities and move towards a more sustainable business model. Epstein and Buhovac (2010) describes how new strategies and activities leads to uncertainties in stakeholder reactions, and company B have used business model innovation as an excellent way to handle this. By doing this small-scale and observing their customers reactions, they utilize this as the feedback loop that Epstein and Buhovac (2010) recommend. By ensuring they fulfill their customers need this iterative method, the company will be able to track the short-term reactions and create a long-term sustainable business model and strategy. If it is possible for company B, it is likely to be possible for other companies. A further suggestion is to innovate the business model towards more openness thus enabling for collaborations with competitors in terms of developing solutions to help commonly work against climate threats and for industry preservation. The latter of the two was considered the most important driver to work with sustainability among the companies in the survey as displayed in diagram 2, appendix A2. Expressing such wishes, at the same time as the non-existence of sustainability strategy is present cause for an in-house conflict that needs to be solved, rather sooner than later.

5.2.5 The Need for Metrics

Company B is another company that has improved its outspoken sustainability strategies, with the aim to become a leader within the industry and the company can show several initiatives and actions in line with the statement. All initiatives, such as the repair car, cannot be motivated by positive financial metrics, this is seemingly only a cost, that make people repair their clothes instead of spending their money on purchases of the company's new gear.

Company C's project where the aim was to create a 100 % bio-based product is a great example when the traditional financial metrics do not reflect the reality. The company states that the product was a commercial catastrophe, i.e. the project probably costed lot more than the revenues from the sold products. This is a case where the management traditionally would have called it a failure. It is important to look into other aspects and effects from the project, that is difficult to measure and connect to exact numbers in revenue. Recognizing and tracking them is crucial to get an overview of the actual return on investment.

Epstein and Buhovac (2010) and Willard (2012) describes the value tracking and identifying of performances and goals. Willard (2012) states that these goals should be quantified and

translated into business value. This is the underlying problem within sustainability strategies; the performance and progress are difficult to translate into business value, especially short-term. Since the short-term goals are of such a large importance, both according to the interviewees and Willard (2012), this entails a major problem and barrier for further sustainability work. Top management is understandably afraid of pushing through a major investment with no assurance in metrics that it will increase profitability, they have stakeholder interests to please. There are however some parts that can be quantified and tracked easier than others. Epstein and Buhovac (2010) describes that breaking down all organizational activities and track the individual activities, to see if one event affects others and the long-term outcome, can be a way to overcome the problem. In the case with company C, described as a catastrophe in terms of sales, the revenue from the product does not reveal the whole truth. By tracking how all implemented sustainability projects affect different aspects in a company, finding patterns and relations between these, will enable a better picture of the overall outcome generated from these projects. To get closer to the real effects of the bio-based project, the company should acknowledge how much publicity the project generated, thereafter increased the number of visitors at the webpage followed by increased sales on all products. However, companies will always face the challenge of proving a direct correlation between the sustainability project and increased sales and profitability. Additionally, tracking the percentage of bio-based material in all products will make it clear that the project also had an impact on the regular clothing line. The project resulted in finding the 30 % bio-based material, that was not good enough for the product in the sustainability project, but by using the material in other apparel it enabled a huge decrease in the company's usage of fossil-based material. All these findings together lead to long term progress that would be impossible to present in financial numbers before implementation of a new project. When it comes to collaborations, the uncertainties are even more difficult to quantify. The companies will be collaborating with competitors and risk to reveal sensitive information or be exposed to the free-rider problem (Kramer et al., 1996).

5.3 Dimensions

By studying the outdoor industry, three dimensions has been identified as crucial to drive a sustainability collaboration forward. The dimensions are interlinked, which means that they reinforce the effect of one another. The characteristics of the outdoor industry provides an environment and a community which enable for *third-party organizations, networks and knowledge sharing* to grow strong and by utilizing the combination of these dimensions, companies have the power to commonly influence the industry.

5.3.1 Third-party Organizations

The third-party organizations included in this study were identified during industry research and are presumed to have a considerable effect on the companies within the Scandinavian outdoor industry. Both organizations do exist to enhance the interests of its participants, which is in line with overcoming the collective action problem (Arenas et al., 2013; Olson, 2009), with the purpose to become more efficient and stronger. This was further supported during the interviews with the two organizations, but also through company interviewees as they praised the organizations as well as provided suggestions for improvements. The third-party

organizations are believed to have a considerable influence on the companies in the industry and this should be utilized with regards to sustainability work. As Senge et al. (2008) describes, sustainable influence and environmentally thinking are crucial to create products with a focus on decreasing the environmental footprint. Organization A and B both have sustainability initiatives and organization B collaborate on a European level with these problems. Their power should not be underestimated, and it is recommended that the third-party organizations keep influencing the industry to sustainability for a change to occur.

The previously mentioned sustainability program developed by organization A, is an example of how the organization affects the companies within the industry. It further illustrates that many companies appreciate the organization's expertise since they trust them with something as important as developing their new internal strategy. This will likely lead to business model innovation to some extent by performing changes in either content, structure or governance as presented by Amit and Zott (2012). In many collaborations it is valuable to have a neutral third-party involved, since it provides objectivity (Wood and Gray, 1991) and thus ensure no single company are benefitting more than others from the collaboration. This is efficient to avoid the free-rider problem presented by Kramer et al. (1996). For a third-party organization to manage to do this efficiently, they need to have the participating companies' trust that the collaboration will be handled with objectivity (Wood and Gray, 1991). The example above, where organization A is trusted with helping companies develop strategies shows that the organization A have overcome this hurdle. By involving third-party organizations such as research institutions and universities, a collaboration is considered more credible and trustworthy as described by company A. Furthermore, interviewees state how organization A helps managing questions and problems associated with intellectual properties that can occur. This type of structural arrangements and problem-solving capabilities provided from a third-party organization are according to Arenas et al. (2013) needed to overcome the bridge between corporate boundaries. It is especially important in the initializing phase of collaborations between competitors, since no one wants to share sensitive information before it is contractually regulated how others are allowed to use it.

As the study progressed, other possible third-party collaboration partners have been identified. Examples are industry associations that are pushing for changes in laws and regulations as well as associations that work proactively with sustainability matters. It can be beneficial to team up with those organizations, both for the purpose of achieving results but also for positive publicity. Organization A mentions Naturskyddsforeningen, Greenpeace and Protect Our Winters as examples of such organizations. The interviewee further describes these organizations to be a driving force in lobbying for changes in law and regulations. However, some operate more in an inspirational way, trying to affect the average individual to make more conscious choices. These organizations also have, as mentioned above, a great opportunity to influence the industry and interviewees state that new regulations are an important driver to change how companies currently work. This will eventually force all companies to develop their sustainability work, even if it cannot be tracked to short term financial benefits, and by this collective change it might be possible to achieve what Senge et al., (2008) describes as the

necessary revolution. Being proactive rather than reactive in this movement, can enable for strengthened brand and thereby gain competitive advantage.

One major collaboration that is facilitated and coordinated by a third-party is the development of a Sustainability Charter provided by organization B. The purpose is to create educational steps within the chart to enable for companies to climb between the steps depending on the dedication in their sustainability work. This is supported by Wood and Gray (1991) who describes how a third-party organization possessing influence and knowledge can help aligning participating companies' view on external problems and how to solve these. The Sustainability Charter can be argued to have similarities with the Journey towards Sustainability, as presented by Willard (2012). However, the different stages differ. Organization B is currently working together with the member companies on developing the charter, it is not yet fully developed and decided what it will end up in. Despite this, all member companies have signed the agreement to participate. This demonstrates a great willingness to work with sustainability related questions but also a desire to collaborate both with organization B and with other member companies and competitors. Arenas et al. (2013) describes how collective action problem can be overcome with help from third-party organizations, and this empirical example with organization B validates this. It also reveals that the companies' perception of sustainability work is highly positive as they are all willing to sign off on something they do not yet know the outcome of. This can further be connected to an established level trust both among member companies but also between the organization and its members.

As mentioned in the beginning of the section there are areas of improvements even within well-functioning organizations such as A and B. The survey revealed variations in the opinions regarding the importance of organization B. The role of organization A however, was at the time for the survey not well-known by the researchers, thus the organization was unfortunately not included in the collaboration questions in the survey.

21 of the 33 respondents in the survey are a member of organization B as presented in diagram 6, appendix A2. When asked about the importance of the role of organization B with regards to their work with sustainable innovation the member companies' answers are summarized like this; very important (14 %), important (43 %), of little importance (38 %) and unimportant (5 %), as presented in diagram 7, appendix A2. This indicates that even though being an organization with focus on coordination and networking building, their work matters for sustainable innovation according to its members. This result was further built upon during the interviews and all seven companies confirmed that organization B is a valuable community. Even the ones that are currently not a member confirmed this with statement such as "*We are a small growing company and need to focus on managing our own business before getting involved in organizations such as organization B.*". or "*We aim to be global, rather than brand ourselves as Scandinavian.*". Despite statements like this all companies express a gratitude for third-party organizations as they do good within the industry and for other companies. But suggestions of how to improve are also presented. One wish is for both organization A and B to concretize their offer as this is expected to clarify for potential collaboration partners what to expect. This will likely make it easier for other parties to estimate the value that will be

created associated with a collaboration. Another barrier for collaboration is the bureaucracy associated with many third-party organizations. This likely originates from the fact that they are non-profit, and some are in addition, public funded. Organization A are aware of the bureaucracy within their organization and state that sometimes it is necessary and other times inhibitory. The ideal is of course to eliminate the bureaucracy in the matters where it is inhibitory.

5.3.2 Network

Throughout this study the value of networks has been a continuously reminder and is associated with the unique industry characteristics such as the small industry size and the valuable personal connections. According to Svahn (2005) it can be argued that both “organization network” and “network of organizations” and exists within the industry, where organization A and B are considered to be the former. The latter are the indirect relationships that occur within the respective organization. The organization networks correspond to what Möller et al. (2005) describes as strategic nets which are jointly agreed upon as contractually defined roles and responsibilities exists. Both organization A and B operate as coordinators and project leaders in collaborations with their members and partners. The activities within organization A and B varies, in accordance with Möller et al. (2005). Organization A concentrate on innovation and sustainability whereas organization B concentrate on network building activities. Both purposes have proved to be highly valuable as the partners and members are offered opportunities to meet, discuss and exchange ideas and knowledge. Interviews has revealed that informal meetings have been highly appreciated as competitors actually enjoy each other’s company and to have informal chats regarding industry topics. This is highly valuable out of a network perspective as the opportunity to establish new contacts. It further builds trust within the industry and among competitors as the environment becomes friendlier at the same time competitiveness exists. This can be assumed as a contributing reason to the many personal connections that are described to exist in the interviews. It is further interesting that organization B, according to themselves, does not work directly with innovation, but despite this, 43 % of the organizational members that participated in the survey stated that the organization is important for their sustainable innovation work. The perception of this contradiction is considered to depend upon the networking opportunities that occur in adjacent to the organization’s meetings.

Characteristic for this industry is its small size, the personal connections that extend across corporate boundaries which has been described by most interviewees. This leads to a large personal network and organization B describes that people in the Scandinavian outdoor industry appreciate the close connection and enjoys the company of competitors. This type of networking corresponds to what Möller et al. (2005) describes as a horizontal value net, where competitors i.e. industry peers join coalitions and alliances with the purpose of sharing resources and capabilities, thus exchange knowledge and find common solutions. One example is the sustainability group that exists within organization B, where organization A also is involved.

By joining forces through networking, the SMEs of the Scandinavian outdoor industry are strengthening their position towards both suppliers and retailers. In many cases it is dependent upon the numbers, where the power to affect is much stronger coming from a group rather than a single company. This is further supported by the interviewee from organization B when stating that *“As a single Scandinavian SME, you are nothing in terms of affecting the industry. But if we are over 60 SMEs, then we have a way better chance to actually affect and influence the sustainability work.”*. This has turned out to be valuable in several occasions. It is easier to put pressure on suppliers to invest in new and more sustainable materials and processes, if the pressure comes from more than one company. Another situation where it is considered powerful is when lobbying for changes in laws and regulations. Company B has received acknowledgment for lobbying for a law change in one of the Scandinavian countries where sales of second-hand clothes and gear has been inhibited by the law. The company did receive permission of selling used items, and the enterprise minister are currently examining a removal or change of this law. This provides an eminent example of the fact that these changes are within reach, but it requires the corporate industry to acknowledge them to enable a change. Such changes or lobbying obviously have more effect, the more companies involved as this will create larger pressure on politicians.

5.3.3 Knowledge Sharing

As revealed both through the survey and the interviews conducted, cost, time and knowledge are large obstacles associated with sustainability work. According to Vrande et al. (2009) knowledge acquisition is a motive to engage in open innovation activities. By participating in third-party organizations and by being an active member of varied networks, the gain of knowledge will grow exponentially. Most companies do not have the chemical knowledge in-house for developing new sustainable materials, compounds and products. By collaborating with either third-party organizations, competitors or suppliers the lack of knowledge is easier to overcome. This has been proved by statements from the interviews as organization B described the difficulties associated with sustainability work and that networking is especially valuable regarding these questions. *“At every company there is more or less one person responsible for the sustainability work, they are pushing it but are rather alone in this role at the own company. It is important for them to be able to discuss and exchange information with others.”*. Discussions based on this statement and similar, reveal that much of the knowledge sharing revolves around the problems that people are experiencing. They share ideas and thoughts that do not necessary concern innovation but leads to ideas and solutions to benefit from within the internal company. Organization A and B further facilitate this knowledge sharing by initiatives such as the sustainability group within organization B. The organizations further support knowledge sharing as they usually have better contacts and connections to research institutes and universities that possess expertise in detailed areas. This is a reciprocal exchange as it helps these institutions to better understand the difficulties that the industry is facing and organization A states *“One part of what we do is trying to find research questions to the university but also trying to make them to create value for the industry.”*

Company A has made a huge transformation and reached far in their sustainability work and the interviewee explains that the company are both able and willing to help other companies

with sustainability related issues, i.e. the company are willing to share their internal knowledge for the better good of the industry and the environment. An example to illustrate the collaborative and supportive work that company A has initialized is the best possible, yet sustainable, trail running shoe. The interviewee stated “*We are not afraid of sharing our knowledge, it’s for the best purpose. We want everyone to have access to the best-practices for manufacturing their products. We are convinced everyone will create their own unique products anyway.*”. A mindset like this will facilitate innovative collaborations yet distinguish the final products from each other. These types of collaborations may appear as associated with several risks for the companies considering participating. This can be explained by the confusion and tensions that Fredberg et al. (2011) describes to originate from career, trust, loyalty and knowledge sharing, in open innovation initiatives. The dynamics created by such tensions are likely to improve the results of the collaboration as long as the tensions are accepted and thus lowering the level of confusion.

5.4 Collaborative Success Stories

The overall aim is to lower barriers and increase incentives for competing companies to collaborate over corporate boundaries. This is the only way to achieve a widespread sustainability innovative force, according to Senge et al. (2008). Success stories are told, and the nine interviews conducted has revealed several projects where the participating companies has ended up in a better place than before.

Examples of such projects are:

- *The sustainable trail running shoe*
The project ended up in a new product and best practices with regards to methods and materials.
- *The ski wax project*
The project was supposed to end up in a new chemical compound, which have not yet happened, but so far new test methods has been developed.
- *Joining forces to buy local wool*
The project enabled for a supplier to invest in production facilities with the result that the collaborating companies are able to buy wool from a local production facility.

Additional suggestions of collaborations are to map suppliers to be able to unite with competitors to put pressure on the suppliers with regards to sustainability. Another suggestion is to collaborate for lobbying and influencing politicians to reinforce laws and regulations supporting sustainable innovation.

5.5 Summary of Analysis

In this chapter, answers to the two research questions has been crystallized by analyzing empirical data in combination with theories presented in the theoretical framework. This section provides a summary of the analysis and answers of the two research questions.

1. How are barriers limiting sustainability collaborations within the Scandinavian outdoor industry?

To answer the first research question, key drivers and barriers within the Scandinavian outdoor industry has been identified to understand what both pushes and inhibits collaborations. Empirical data collections revealed collaborations do occur mainly in relation to sustainability, which sometimes includes innovation, but not necessarily. Two main barriers for sustainability collaborations has been identified. The first is *strategy*, which includes the resources allocation of time, money and knowledge. The second is *metrics* to measure the outcome of collaborations and especially sustainability collaborations. Those main findings imply that sustainability as a part of the overall strategy is a key to enable successful sustainability collaborations since management's commitment is required to make it a prioritization. The lack of that same sustainability strategy is a barrier that inhibits sustainability collaborations. The most prominent reason why companies lack a sustainability strategy and are skeptical towards sustainability collaborations is because there are no metrics providing management with clear effects and results. Additionally, sustainability collaborations usually proceed over an extensive period of time. Thus, other actions are prioritized as they are considered more reliable in terms of short time results and profitability.

2. How are industry dimensions utilized to lower barriers and encourage sustainability collaborations?

To answer the second research question three dimensions has been identified as a help in lowering barriers, thus encourage sustainability collaborations. These three dimensions has been identified as *third-party organizations*, *network* and *knowledge sharing*. Third-party organizations are mainly referring to industry organizations such as organization A and B and has proved valuable to most companies in terms of influencing, taking initiatives and educating the industry with regards to sustainability and through this facilitates collaborations within the area. The organizations further coordinate and leads several projects as well as provides objectivity and credibility at the same time as helping to contractually structure collaborations. In the surroundings of those organizations, networking is encouraged and the conditions for its occurrence is created. The network is of great importance within the Scandinavian outdoor industry and personal connections are well developed and highly valued as they allow for both formal and informal meetings, discussions and opportunities of knowledge sharing, thus lowering barriers to sustainability collaborations. Knowledge sharing has been identified as the last dimension as this is of great importance to enable for sustainability collaborations among competitors as companies are humble to the fact that all expertise does not exist in-hose. Moreover, there is a willingness to discuss industry problems and together tackle common

problems instead of doing it individually. Additionally, there is a consistent belief that the more knowledge, the better resulting effects of sustainability collaborations.

5.6 Discussion

In this section the main findings of the study will be discussed in relation to the context where they exist. The resulting model, presenting the main findings of the study, will be compared to an existing theoretical model in terms of measuring the effect of sustainability collaborations. This will be done based on the indication of an existing research gap as strategy models generally lack suggestive metrics of collaborations, hence also sustainability collaborations. The generally positive attitude towards collaborations with competitors will be discussed, since there have been statements pointing out the Scandinavian outdoor industry as an eminent example. A further discussion will be included regarding to what extent the findings within the Scandinavian outdoor industry can be considered unique or not, thus their applicability to other industries. Lastly, the management and practical implications of the suggestions will be discussed in parallel with limitations.

As one of the main findings for this study is presented to be that sustainability as a part of the overall strategy is key to enable successful sustainability collaboration. The lack of that same sustainability strategy is one of the strongest forces inhibiting sustainability collaborations. The most prominent reason why companies lack a sustainability strategy is the absence of metrics to illustrate effects and results of sustainability. The Epstein Corporate Sustainability Model described by and Epstein and Buhovac (2010), originated from the Epstein's book (2008) presents a rigorous model illustrating how sustainability can be implemented and measured within a company. Despite this well-developed model, collaborations have been identified as a missing piece and an obvious result of this is the lack of metrics and effects of sustainability collaborations. This indicates a potential research gap within sustainability collaborations and its effects but should be further explored outside the scope of this study before drawing any conclusions.

The competitive landscape within the Scandinavian outdoor industry has by most interviewees been described as positive and friendly with a willingness to collaborate and thus encourage collaborations. Moreover, the geographical scope is small, the majority of the companies are SMEs and the market is smaller compared to other parts of Europe, for example central Europe. According to Statista (2019) Scandinavia did consist of just above 21 million inhabitants in 2018 whereas Germany, as a single country in central Europe, consists of 82,3 million inhabitants. This differences in population size imply for a smaller group of outdoor enthusiasts in Scandinavia causing for fewer and smaller business-related meeting points and fewer offices. Additionally, Scandinavia has a concentrated nature and mountain area that is rather accessible from anywhere within the area whereas e.g. Germans need to travel to reach the same quality of outdoor activities. All of this can be assumed to have an effect on the networking opportunities offered within the Scandinavian outdoor industry, resulting in less anonymity and closer connections, hence a more camaraderie way of doing business and approaching

competitors, which can naturally be assumed to lead to an increased number of collaborations within the industry.

The geographical scope and context of the study is fairly narrow as it includes only Scandinavia. Based on the information presented earlier, this region includes a low number of inhabitants in a sparsely populated area of Europe. Even though this selection of geography and industry was preferred, it can pose difficulties for applications to other industries and to other geographical areas, even within the outdoor segment.

The management and practical implications of the findings might cause for a dramatic change in the internal company strategy as business model innovation according to Amit and Zott (2012) is suggested to various extent. First, sustainability, and second, sustainable collaborations need to be prioritized and thus metrics to motivate them need to be found. As this is no small task it might cause for short time sacrifices to achieve long term goals, which might seem risky for a profit seeking companies. Furthermore, the new sustainability strategy needs to be clearly communicated top-down and anchored with management support.

With all facts on hand, a number of improvements within the study has been identified as it progressed. Even though the number of participating companies represents a wide range, a larger selection is considered eligible. Additionally, a more even distribution with regards to company nationality within Scandinavia is another improvement. Based on these two mentioned limitations, one should be careful with generalizations, since a larger number of respondents might reveal disagreements. Worth mentioning, as it increases the credibility and transferability within the study is the interviewed non-profit industry organizations, who view the industry from another perspective and communicate with various companies on a daily basis. Thus, it can be assumed that any major agreements would have been revealed in those interviews. However, it is considered eligible to include one more third-party organization in the study, for example a research institution, as it is an industry actor that has been discussed during several interviews. Another, topic that was discussed in all interviews is the company strategy with regards to sustainability. As strategy management and metrics of collaborations has turned out to be main findings it would have been preferred if more direct questions were asked about those topics, as especially metrics for sustainable collaborations has been difficult to find in theory.

6 Conclusions

A preconceived and frequent opinion is that integrating sustainability in the business and company strategy is important and contemporary, yet costly and complicated as many often associate it with laws, prohibitions and guilt. Senge et al. (2008) describes the term *sustainability* by referring to the overall objective of creating a present that does not jeopardize the quality of the future. Hence, the purpose of this study is to clarify the alignment of preservation of an SME industry, namely the Scandinavian outdoor industry, with the preservation of the environment. The purpose was achieved by illustrating main barriers and dimensions in the industry, with the objective of providing a guidance of what barriers other SME industries can face, but also what dimensions that can be better utilized to align industry and environmental preservation.

The two research questions enabled for the study to reach its purpose by providing the two main findings in terms of barriers and dimensions. The two main barriers are *strategy* and *metrics*. Sustainability as a part of the overall strategy is a key to enable successful sustainability collaborations in the industry. The absence of managerial support will cause for low prioritization, thus inhibit sustainability collaborations. To turn this around, the solution has been identified as a need of metrics that provides the clear effects and result, which would be further improved if it could be translated into monetary measurements such as profitability, despite the extensive period of time.

Moreover, three dimensions has been identified to better utilize industry potential, thus encourage sustainability collaborations. These dimensions are *third party organizations*, *network* and *knowledge sharing* and were crystallized by analyzing participating companies' perception with regards to third party organizations and what they consider valuable. The existence of the dimensions has proved to be highly valuable, but not maximized, hence the industry potential is not fully utilized, meaning that the existence of sustainability collaborations does not correspond to the expressed willingness among industry actors. By finding metrics to increase top management support, the implementation of a sustainability strategy will be easier. This in combination with the support from third-party organizations, who will facilitate networks and increase knowledge sharing, the full potential of sustainability collaborations within the Scandinavian outdoor industry will be utilized.

6.1 Suggestions for Further Research

As the study progressed, interesting findings has been highlighted and additional research is considered valuable but outside the scope of this study. The suggestion for future research is to deeper investigate what metrics are suitable for measuring sustainability collaborations with the purpose of motivating those, hence increasing the probability of better results.

A Appendix

A.1 Survey

This survey will be conducted with the purpose of investigating actors' work with sustainability and sustainable innovation in the outdoor industry. The result will be included in a master thesis at Chalmers University of Technology in Sweden, with the purpose of evaluating sustainable innovation and business model innovation. The survey is limited to exhibitors at ISPO Munich within the winter sport industry. Individual answers will be handled anonymous and with confidentiality.

Thank you for participating!

For further questions, please contact us
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1. What describes your company's sustainability work?
 - a. We do what we have to
 - b. Prepare for future requirements
 - c. Consider sustainability a opportunity
 - d. Create value for society and environment
2. What drives your company to work with sustainability? (Rank 1-6, 1 is most important)
 - a. Competitive advantage
 - b. Meet regulations
 - c. Build a strong brand
 - d. Ethics and company values
 - e. Meet customer demand
 - f. Industry threat due to climate threat
3. What are the main barriers for your company when working with sustainable innovation? (Choose three alternatives)
 - a. Costs
 - b. Knowledge
 - c. Time
 - d. Uncertainties in customer demand
 - e. Supplier relationships
4. To what extent is your company collaborating with competitors regarding sustainable innovation?
 - a. Always
 - b. In selected projects/areas
 - c. Never
5. Is your company collaborating with any of the following organizations? (Yes/No)
 - a. Protect Our Winters
 - b. Scandinavian Outdoor Group
6. If a part of Scandinavian Outdoor Group, what role does the organization play for your company's sustainable innovation?
 - a. Unimportant
 - b. Of little importance
 - c. Important
 - d. Very important

A.2 Survey Findings

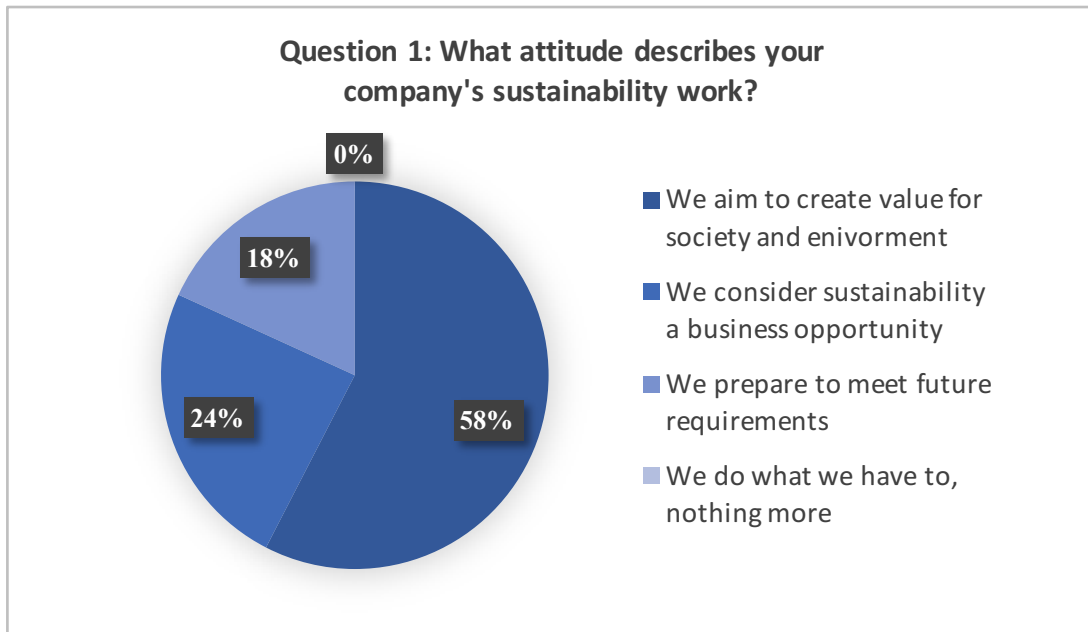


Diagram 1. Result distribution for survey question 1

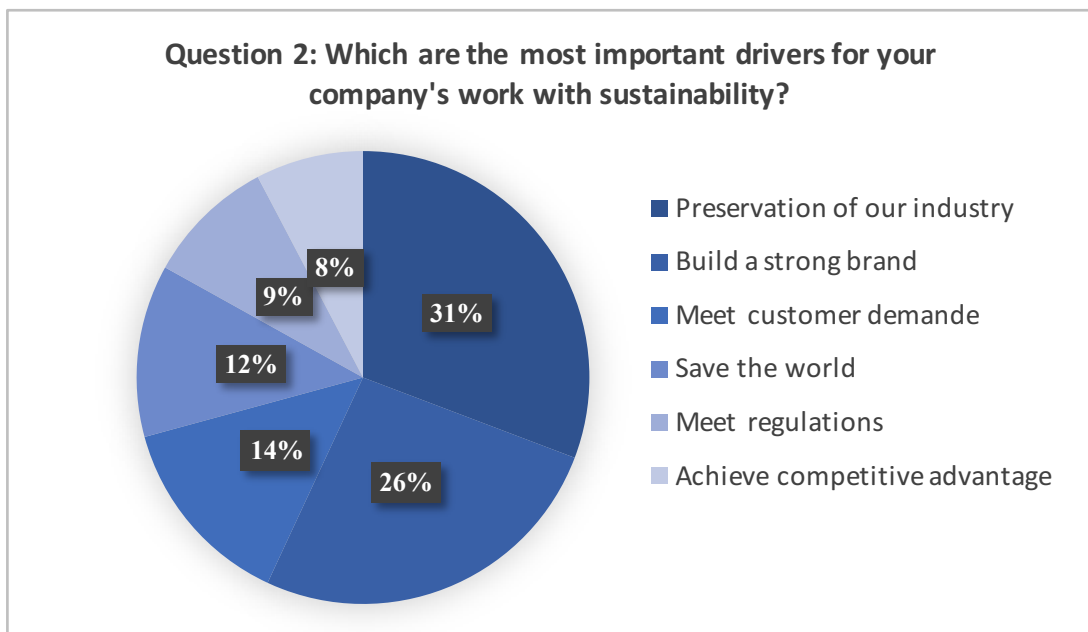


Diagram 2. Result distribution for survey question 2

Question 3: Which are the least important drivers for your company's work with sustainability?

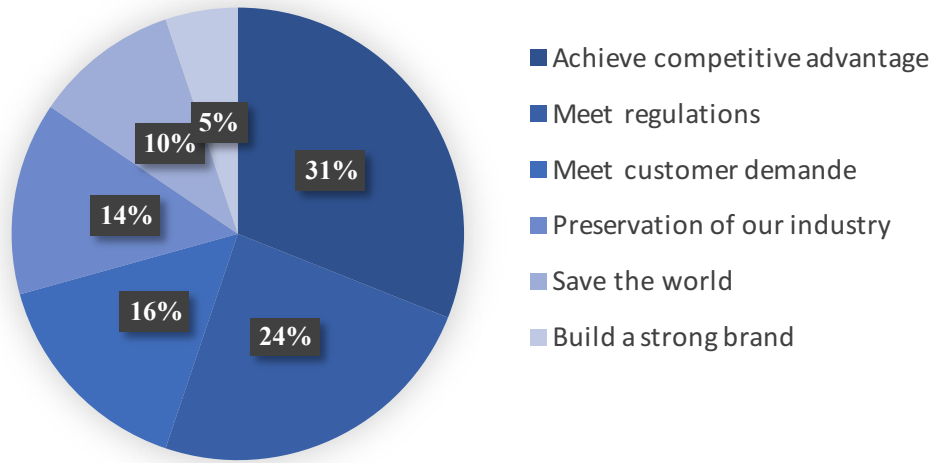


Diagram 3. Result distribution for survey question 3

Question 4: What are the main barriers for your company when working with sustainable innovation?

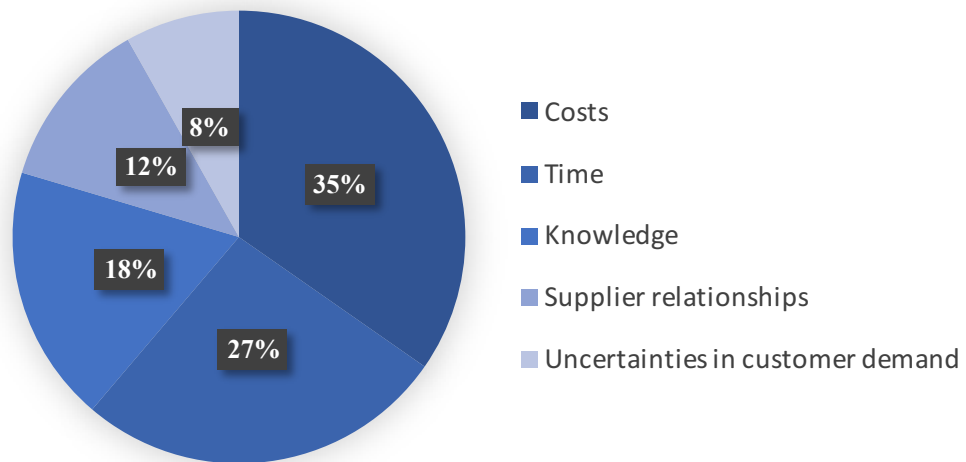


Diagram 4. Result distribution for survey question 4

Question 5: To what extent is your company collaborating with competitors regarding sustainable innovation?

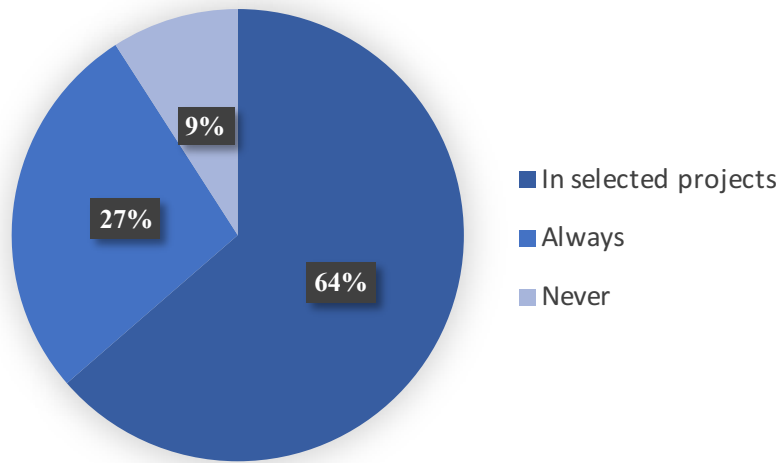


Diagram 5. Result distribution for survey question 5

Question 6: Is your company collaborating with any of the following organizations?

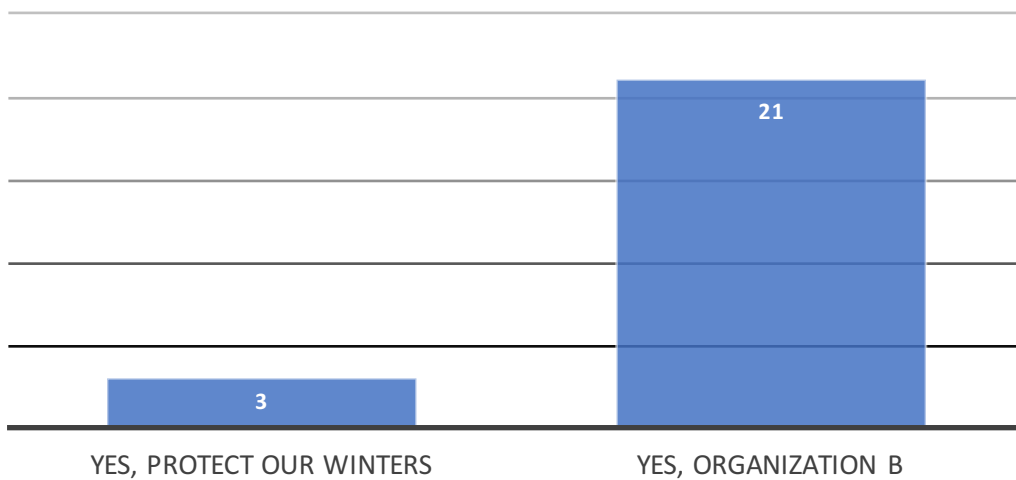


Diagram 6. Result distribution for survey question 6

Question 7: As a member of organization B, what role does the organization play for you company's sustainable innovation?

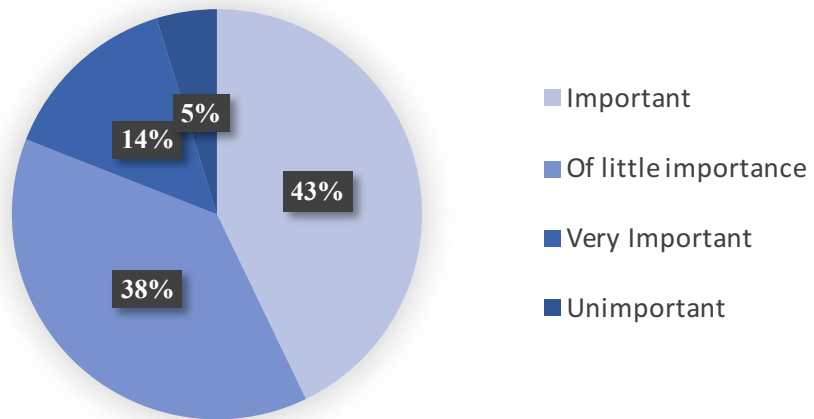


Diagram 7. Result distribution for survey question 7

A.2 Interview Template: Organizations

Section 1: Background

1. How come you started working for this organization?
 - a. Warm up question to set the scene and create atmosphere

Section 2: Innovation

2. How do you overall/generally work with innovation?
 - a. Ideas
 - b. Product development
 - c. Commercialization
 - d. Support function /facilitation among members/partners
 - e. Network and community
3. How does the industry work with sustainable innovation?
 - a. Collaborations
 - b. Incentives
4. Does your work with sustainable innovation differ from general innovation?
 - a. How?
 - b. Why?
 - c. Distribution between the two?

Section 3: Collaboration

5. Describe how sustainable innovation collaborations are initialized
 - a. By whom?
 - b. Why/motives/drivers?
 - c. General attitude towards it?
 - d. Does company size matter?
 - e. Inside/outside members/partners?
6. Do you have any concrete examples of collaborative sustainable innovation projects to share?
 - a. Success stories - why?
 - b. Failures - why?
 - c. Roles
 - i. The companies' role
 - ii. The third-party organization's role
 - d. Innovation collaborations
7. How does your organization ensure that sustainable innovation collaborations are facilitated and protected?
 - a. Challenges
 - i. Establish trust
 - ii. Intellectual property rights
 - iii. Organizational responsibility
 - b. Risk management
 - i. Financial responsibility
 - c. Competition and related difficulties

A.3 Interview Template: Companies

Section 1: Interviewee role and background

1. How come you started working for this company?
 - a. Warm up question to set the scene and create atmosphere

Section 2: Collaborations in Innovation

2. How do you overall/generally work with sustainable innovation?
 - a. Why not?
 - b. Ideas
 - c. Product development
 - d. Commercialization
3. How do you collaborate with other companies regarding sustainable innovation?
 - a. Reason for collaboration/initiatives
 - i. Product development
 - ii. Network and community
 - iii. Co-branding
 - iv. Sustainability
 - b. General attitude towards collaborations
4. What are the drivers and barriers associated with collaborations?
 - a. IP rights
 - b. Funding
 - c. Competitiveness
 - d. Trust
 - e. Company size

Section 2: The Third Party

5. What is your company's attitude towards third party organizations?
 - a. Why/why not a member?
 - b. Trust/self interest
 - c. Pros and cons
 - d. Improvements
6. What are the reasons for collaborating through those organizations vs. arranging collaborations independently?

Section 4: Sustainability

1. What attitude would you say describes your company's sustainability work?
 - a. Challenges
 - b. Opportunities

References

- Amit, R., & Zott, C. (2012). Creating value through business model innovation. *MIT Sloan Management Review*, 53(3), 41-49.
- Arenas, D., Sanchez, P., & Murphy, M. (2013). Different paths to collaboration between businesses and civil society and the role of third parties. *Journal of business ethics*, 115(4), 723-739.
- Baregheh, A., Rowley, J., & Sambrook, S. (2009). Towards a multidisciplinary definition of innovation. *Management decision*, 47(8), 1323-1339.
- Bryman, A., & Bell, E. (2011). Ethics in business research. *Business Research Methods*, 7(5), 23-56.
- Chesbrough, H. W. (2007). Why companies should have open business models. *MIT Sloan management review*, 48(2), 22.
- Chesbrough, H., Vanhaverbeke, W., & West, J. (Eds.). (2006). *Open innovation: Researching a new paradigm*. Oxford University Press on Demand.
- Clark, T., & Charter, M. (2007). Sustainable innovation: Key conclusions from sustainable innovation conferences 2003–2006 Organised by the Centre for Sustainable Design.
- Collis, D. J., & Rukstad, M. G. (2008). Can you say what your strategy is?. *Harvard Business Review*, 86(4), 82-90.
- Easterby-Smith, M., Thorpe, R. and Jackson, P.R., 2015. *Management and business research*. Sage.
- Epstein, M. J., & Buhovac, A. R. (2010). Solving the sustainability implementation challenge. *Organizational dynamics*, 39(4), 306.
- Fink, A. (2009). *How to conduct surveys: A step-by-step guide*. Sage Publications.
- Folland, C.K., Karl, T.R., Christy, J.R., Clarke, R.A., Gruza, G.V., Jouzel, J., Mann, M.E., Oerlemans, J., Salinger, M.J. and Wang, S-W. (2001) Observed climate variability and change. In J.Y. Houghton, Y. Ding, D.J. Griggs, M. Noguer, P.J. van der Linden, X. Dai, K. Maskell and C.A. Johnson (eds) *Climate Change 2001: The Scientific Basis. Contribution of Working Group I to the Third Assessment Report of the Intergovernmental Panel on Climate Change* (pp. 99–181). Cambridge: Cambridge University Press.
- Fredberg, T., Elmquist, M., Ollila, S., & Yström, A. (2011). Role Confusion in Open Innovation Intermediary Arenas. *New Forms of Collaborative Innovation and Production on the Internet*, 177.
- Gans, J. S., & Stern, S. (2003). The product market and the market for “ideas”: commercialization strategies for technology entrepreneurs. *Research policy*, 32(2), 333-350.

- Gilaberte-Búrdalo, M., López-Martín, F., Pino-Otín, M. R., & López-Moreno, J. I. (2014). Impacts of climate change on ski industry. *Environmental Science & Policy*, 44, 51-61.
- Gioia, D. A., Corley, K. G., & Hamilton, A. L. (2013). Seeking qualitative rigor in inductive research: Notes on the Gioia methodology. *Organizational research methods*, 16(1), 15-31.
- Glasmeier, A. (1991). Technological discontinuities and flexible production networks: The case of Switzerland and the world watch industry. *Research policy*, 20(5), 469-485.
- Grant, R. M. (2016). *Contemporary strategy analysis: Text and cases edition*. John Wiley & Sons.
- Harrison, S. H., & Corley, K. G. (2011). Clean climbing, carabiners, and cultural cultivation: Developing an open-systems perspective of culture. *Organization Science*, 22(2), 391-412.
- Huizingh, E. K. (2011). Open innovation: State of the art and future perspectives. *Technovation*, 31(1), 2-9.
- ISPO 2019, *Munich*, viewed 2019-02-20, <https://www.ispo.com/en/munich>
- ISPO 2019, *Online Catalog*, viewed 2019-05-19, <https://www.ispo-mediaservices.com/onlinecatalog/2019/exhibitorlist?#searchFormAnker>
- Johnson, M. W., Christensen, C. M., & Kagermann, H. (2008). Reinventing your business model. *Harvard business review*, 86(12), 57-68.
- Kramer, R. M., Brewer, M. B., & Hanna, B. A. (1996). Collective trust and collective action. *Trust in organizations: Frontiers of theory and research*, 357-389.
- Möller, K., & Halinen, A. (2017). Managing business and innovation networks—From strategic nets to business fields and ecosystems. *Industrial Marketing Management*, 67, 5-22.
- Möller, K., Rajala, A., & Svahn, S. (2005). Strategic business nets—their type and management. *Journal of Business research*, 58(9), 1274-1284.
- OECD 2005, *Small and Medium-sized Enterprises (SMEs)*, viewed 2019-05-28, <https://stats.oecd.org/glossary/detail.asp?ID=3123>
- Olson, M. (2009). *The logic of collective action* (Vol. 124). Harvard University Press.
- Saunders, M.L. and Lewis, P., 2009. P. & Thornhill, A.(2009). *Research methods for business students*, 4.
- Scandinavian Outdoor Group 2019, *About Us*, viewed 2019-02-15, <https://www.scandinavianoutdoorgroup.com/about/>
- Senge, P. M., Smith, B., Kruschwitz, N., Laur, J., & Schley, S. (2008). *The necessary revolution: How individuals and organizations are working together to create a sustainable world*. Crown Business.

Statista 2019, *Market share of outdoor apparel and clothing in Europe in 2014, by region*, viewed 18 May 2019, <https://www.statista.com/statistics/560725/market-share-of-outdoor-apparel-and-clothing-in-europe-by-region/>

Statista 2019, *Population of Selected European Countries*, viewed 17 May 2019, <https://www.statista.com/statistics/685846/population-of-selected-european-countries/>

Teece, D. J. (2010). Business models, business strategy and innovation. *Long range planning*, 43(2-3), 172-194.

United Nations. (1987). Report of the world commission on environment and development: our common future. *UN Documents*.

United Nations 2019, *Sustainable Development Goals*, viewed 15 may 2019, <https://www.un.org/sustainabledevelopment/sustainable-development-goals/>

Van de Vrande, V., De Jong, J. P., Vanhaverbeke, W., & De Rochemont, M. (2009). Open innovation in SMEs: Trends, motives and management challenges. *Technovation*, 29(6-7), 423-437.

Willard, B. (2012). *The new sustainability advantage: seven business case benefits of a triple bottom line*. New Society Publishers.

Wood, D. J., & Gray, B. (1991). Toward a comprehensive theory of collaboration. *The Journal of Applied Behavioral Science*, 27(2), 139-162.