



SCHOOL OF
ECONOMICS AND
MANAGEMENT

The Dilemma of Disrupting Under Pressure:
Exploring the sensemaking of entrepreneurial SMEs'
environmental innovations

By

Natali Bremer

Joel Rikardsson

19 May 2022

Master's Programme in Entrepreneurship and Innovation

ENTN19 Degree Project - New Venture Creation

Supervisor: Ester Barinaga

Abstract

Innovations with the goal of creating a more sustainable economy and industry has been a topic of study for many researchers over the recent decades. This comes to no surprise since large organizations flag for the problematic consumption and production patterns that could lead to environmental problems at a global scale. The research on these environmental innovations that has been done up until now has been focusing on applying quantitative methods on a wide sample size of large size enterprises, to figure out the drivers, motivators, and forces that affect the way environmental innovations are done. This thesis aims to explore environmental innovation, by looking into how institutional and stakeholder theories reflect the ongoing sensemaking process of small and medium size entrepreneurial enterprises. In contrast to previous studies, this thesis applies a qualitative method with an inductive approach in order to establish a deeper understanding of the nuances of environmental innovation from the perspective of three entrepreneurial SMEs in Sweden. The semi-structured interviews provide empirical data which then is organized into themes by using first and second order categorization.

The findings show that the entrepreneurial SMEs face three main challenges in the form of dilemmas when engaging in environmental innovation. These dilemmas appear to stem from different stakeholder pressures and isomorphic processes. The first finding displays the tension entrepreneurial SMEs face when their sustainable ambitions go against the traditional business practices of an industry, which in turn is reflected poorly in their environmental innovation. The second finding shows that the disruptive ambition clashes with the industrial norm and results in incremental innovation, which supports the previous findings that uncertainty induces imitation. The third finding indicates that a compromise is necessary between changing the habits of the customer and adapting to the habits of the customer, which is a back-and-forth of teaching and learning.

Keywords: Environmental Innovation; Disruptive Innovation; Entrepreneurial SME; Isomorphic processes; Stakeholder pressures.

Acknowledgements

We would like to thank the very helpful and critical eye of our supervisor Prof. Ester Barinaga, without whom this thesis would not have been possible. Furthermore, we would like to give a special thanks to the participating firms, Edgy Veggie, Percy Roc, and Skosh; and the individual interviewees who gave us their valuable time and invaluable information. Their personal stories about their ventures, and the challenges that they are facing working with environmental innovations truly helped make this thesis unique. Furthermore, we would like to thank our significant others, Filippa Lövgren and John Lundberg, for extending their support and stoic patience throughout the process of writing this thesis.

Table of contents

| | |
|--|------------|
| Abstract | II |
| Acknowledgements | III |
| Table of contents | IV |
| List of tables | VI |
| List of figures | VI |
| 1. Introduction | 1 |
| 1.1 Background..... | 1 |
| 1.2 Aim, Objectives, and Purpose..... | 2 |
| 1.3 Outline of the Thesis..... | 3 |
| 1.4 Delimitation | 4 |
| 2. Theoretical Framework | 5 |
| 2.1 Introduction to the theoretical landscape of environmental innovation | 5 |
| 2.1.1 <i>Defining disruption and innovation</i> | 5 |
| 2.1.2 <i>Research on environmental innovation</i> | 6 |
| 2.2 Theories within environmental innovation..... | 9 |
| 2.2.1 <i>Institutional theory and isomorphic pressures</i> | 9 |
| 2.2.2 <i>Stakeholder theory and stakeholder salience</i> | 10 |
| 2.2.3 <i>Research on isomorphic pressures and stakeholder theory within environmental innovation</i> | 12 |
| 2.3 Concluding remarks | 14 |
| 3. Methodology | 16 |
| 3.1 Research Philosophy and Approach | 16 |
| 3.2 Research Design | 16 |
| 3.3 Data Collection Method and Case selections | 17 |
| 3.4 Data Analysis..... | 19 |
| 3.5 Ethical considerations | 22 |
| 3.6 Limitations | 22 |
| 3.6.1 <i>Research Design</i> | 22 |
| 3.6.2 <i>Data Collection</i> | 23 |
| 4. Case setting..... | 24 |
| 4.1 <i>Case Firm 1: Percy Roc AB</i> | 24 |

| | |
|---|-----------|
| 4.2 Case Firm 2: Skosh AB..... | 24 |
| 4.3 Case Firm 3: Edgy Veggie AB..... | 24 |
| 5. Findings and Analysis | 26 |
| Theme 1: The Business Logic Dilemma..... | 26 |
| Theme 2: The Disruptor’s Dilemma..... | 31 |
| Theme 3: The Educator’s Dilemma..... | 35 |
| 6. Discussion | 42 |
| 7. Conclusion | 46 |
| 7.1 Aim of the thesis and main findings | 46 |
| 7.2 Limitations | 47 |
| 7.3 Practical Implications and Future Research..... | 48 |
| References..... | 49 |
| Appendix I: Interview Guide..... | 55 |

List of tables

Table 1: Interviews 19

Table 2: First and Second order categorization 21

List of figures

Figure 1: Institutional framework (Herold, Farr-Wharton, Lee & Groshopf, 2019, p.3)..... 9

Figure 2: Modified Institutional framework..... 15

1. Introduction

1.1 Background

Human impact on the environment of this planet has never been clearer. The latest iteration of the IPCC Working Group III Report, *Climate Change 2022* (IPCC, 2022) shows that unless humanity takes drastic actions and makes radical changes in its ways of production, consumption and discarding of products the climate will change beyond repair, which might lead to a disastrous outcome for the planet. While Northern Europe, including Sweden, is placed among the lowest of the Developed countries, it is still above the “Sustainable Development Corridor” when it comes to emissions of greenhouse gasses per capita (IPCC, 2022). The matter of the fact is that change needs to come. The report mainly targets actions made by governing bodies of countries and regions (IPCC, 2022) but a part of the actions is pre-emptively made by individuals, creating novel solutions that have the potential to reduce emissions or general pollution from humans. These ‘eco-entrepreneurs’ are engaged in something called “environmental innovation” (also eco-innovation).

Environmental innovations have been researched academically since the end of the 20th century and are defined as processes which intend to lower or remove environmental damage through “new or modified processes, techniques, systems, or products (Kemp, Arundel & Smith, 2001 in Horbach, 2008). Scholars have analyzed how and why large enterprises (Horbach, 2008; Frondel, Horbach & Rennings, 2009; Kammerer, 2009) engage in this specific type of innovation (Rennings, 2000; Cleff & Rennings, 1999), where sustainability was incorporated in both the product and the business model around it. The entrepreneurial perspective has also been studied within this field, however, has gained little attention as a research topic in general (Hörte & Halila, 2008). The reason for this might be that the majority of impactful innovation is done by large corporations (Karlson, Sandström & Wennberg, 2021). Larger corporations typically have a larger pool of resources and can therefore sustain the development of new processes incurred from innovation. On the contrary, this is not typically the case for entrepreneurial enterprises. However logically, parts of the environmental innovations still should come from entrepreneurial enterprises but given the inherent limitations of said firms, this might prove to be difficult. One could be left wondering why there has been so little research conducted on small and medium sized

entrepreneurial enterprises and their environmental innovations since they in fact still cover a part of the market known today, but in order to make a more environmentally friendly future it is important to get a grasp on what could be influencing and affecting environmental innovations. Are they influenced by any external factors? If so, which? Are they *de facto* forced to innovate in an environmentally sustainable way because of governmental or non-governmental actions? Is it that their customers are demanding it? Is the competitive landscape pushing for change?

All these questions reflect the pressures and processes at work in today's modern markets. A way of describing some of the workings of the market today is *isomorphic processes*, a part of institutional theory, which describes processes where companies and organizations within a certain market or industry, become more similar to each other over time (DiMaggio & Powell, 1983). Despite, perhaps, striving for dissimilarities, companies and organizations tend to follow isomorphic processes over time. These isomorphic processes could possibly affect environmental innovation, which has been researched upon through larger corporations, however, entrepreneurial small and medium sized enterprises (SMEs) seem to have been left out (Rehfeld, Rennings & Ziegler 2007; Montalvo, 2008; Guoyou, Saixing, Chiming, Haitao & Hailiang, 2013; Huang, Hu, Liu, Yu & Yu, 2016; Chan, Yee, Dai & Lim. 2015; Chen, Yi, Zhang & Li 2018; Eiadat, Kelly, Roche & Eyadat, 2018). Moreover, these processes could also work in symbiosis with *stakeholder theory*, a field of study initiated by Freeman in 1984. Stakeholder theory claims that the relationship and interrelationship between a business and its stakeholders affect how the business acts (Freeman, 2001). These pressures could have an effect on how the business chooses to innovate within a certain field or in a certain direction, like towards a positive environmental impact; or by decreasing the environmental impact from their consumers.

1.2 Aim, Objectives, and Purpose

The inspiration of this thesis originated from the fact that there is a lack of literature illuminating environmental innovation from entrepreneurial enterprises, and thus created a need for a deeper understanding about what affects such environmental innovations and the experience of individuals working with environmental innovation. Actors in the market need to understand how they can stimulate and bring environmental innovation forward, in order to help create a more

environmentally friendly future. The authors are curious about how Swedish entrepreneurial SMEs perceive, understand, and interact with the workings of the market and industry they act in, with regards to their environmental innovations. Therefore, this thesis applies the question:

How do entrepreneurial SMEs within Sweden make sense of stakeholder pressures and isomorphic processes on their environmental innovations?

Even though there has been research on customer specific and regulatory pressures, competitive specific pressures have been left out. Whilst several studies on environmental innovation have been conducted through quantitative methods (Rehfeld, Rennings & Ziegler 2007; Montalvo, 2008; Guoyou et al. 2013; Chan et al. 2015; Chen et al. 2018; Eiadat et al. 2018; Huang et al. 2016), it appears that studies conducted through a qualitative approach are missing from the field of study. Moreover, many of these studies have been carried out in China and future research has been suggested to expand the studies, covering other parts of the world. Given the lack of research conducted in Sweden, regarding the topic of environmental innovation, this thesis will conduct semi-structured interviews with three different entrepreneurial firms within Sweden. A qualitative study as opposed to a quantitative study will allow us to not only understand “which” of the different pressures that are perceived as most significant in the environmental innovation process, but also allow us to explore “how” entrepreneurial enterprises make sense of said pressures. Several of the previous studies have mainly focused on which of the different pressures has the greatest effect but failed to explore why and how. A possible explanation for this could perhaps be found in their quantitative nature as opposed to having a qualitative one. Moreover, the aim is also to take the case firm’s perceptions of the different stakeholders into account, which in turn will allow us to shed a light on how entrepreneurial enterprises make sense of the different isomorphic and stakeholder pressures and thus explore which stakeholder is of highest significance in each situation.

1.3 Outline of the Thesis

The following thesis covers seven chapters. In chapter two, literature on environmental innovation and institutional- and stakeholder pressures will be reviewed and is the foundation of this thesis.

In chapter three, the methodological assumptions and research methods of the thesis are presented in order for the reader to understand how the research was conducted. Following, in chapter four, a description of each different case firm participating in the qualitative study for the thesis are introduced. The findings from the interviews with the case firms and subsequent analysis are combined in chapter five. Moreover, these findings are further discussed in chapter six. Lastly, in chapter seven the conclusion, limitations and suggestions for future research are presented in order to summarize and conclude the thesis.

1.4 Delimitation

Due to the limited scope of this thesis, several decisions have been made in terms of terminology applied and the field of study. Firstly, regarding the term *environmental innovation*, the authors imply innovations that aid in improving ecological sustainability. Therefore, excluding any other sustainable aspects of the product innovation, such as social or health aspects. This term will be clarified more in chapter 2. The authors are aware that the term entrepreneurial SME is a rather uncommon one, as it would traditionally only be described as SME. The addition of the term entrepreneurial aims to specify the fact that the SMEs are still in their entrepreneurial stages; they have only been active for a few years, are limited in organizational size, and have not reached a broader market with their products yet. Due to the definitions applied, one, out of the four case firms, was excluded due to their product not having an environmental sustainability focus but rather a social and health focus. Furthermore, since this thesis is innately exploratory and focused on the perceptions of the entrepreneurial SMEs there is the potential of biases in the data, explained further in chapter 3.

2. Theoretical Framework

The following chapter will present a brief overview of previous research regarding eco- and environmental innovation. It begins with a section on environmental innovation and disruption starting off with a short introduction and definition of innovation and disruption, followed by how environmental innovation has been defined and studied in broad terms. The subsequent section presents the pioneering scholars in the fields of institutional- and stakeholder theory. The section ends with articles applying institutional- and stakeholder theory to the landscape of environmental innovation. Ending with a conclusion of the theoretical framework. The following will help to create an understanding of what environmental innovation is and the different pressures affecting environmental innovation within organizations, thus aiding the query of how entrepreneurial SMEs in Sweden make sense of the isomorphic processes and stakeholder pressures on their environmental innovations.

2.1 Introduction to the theoretical landscape of environmental innovation

2.1.1 Defining disruption and innovation

In order to understand environmental innovation, a brief explanation about what defines innovation and how it is divided is necessary. Innovation takes different shapes and could be seen from different angles. Identified by Satell (2017) the four types of innovation that exist are defined as Breakthrough-, Sustaining-, Basic Research-, and Disruptive Innovation. These different types of innovation can be split up in a two-by-two matrix based on problem- and domain definition (Satell, 2017). The degree of definition of the problem which the innovation aims to solve and the domain, or market that the innovation is applied to thereby defines the type of innovation that is in the works. According to Satell (2017) *Breakthrough innovation* is when the problem is well-defined but not the domain. Whereas *Sustaining innovation* has a well-defined problem and domain, working to further develop and improve on existing markets, making incremental steps forward in technology and business methods. *Basic Research* on the other hand lacks definition in

both problem and domain definition. When the domain is well-defined, but the problem is not, *Disruptive innovation* occurs. The reason for this approach of splitting up the types of innovation is to show that disruption is a distinct form of innovation and the circumstances of which have a major effect on the way that innovation occurs (Bower & Christensen, 1995).

The characteristics of disruptive innovation are explained by Bower and Christensen (1995). They define disruptive innovations as value propositions that are different in combination from what has traditionally been offered to the market, often with sacrifices made to some aspects of the innovation. They further explain that disruptive innovations tend to open up for new markets to emerge, similar to radical innovation. However, for larger corporations, disruptive innovations are often very costly and do not directly contribute to corporate growth, as the systems in place are designated to existing products and incremental improvements, i.e., sustaining innovations (Bower & Christensen, 1995). As Bower and Christensen (1995, p.53) put it: many that fail disruption do not fail because “they make the wrong decisions, but because they make the right decisions for circumstances that are about to become history”. In other words, the decisions made, when trying to make disruptive innovation, have to be predictive of how the market will be in the future, rather than how it currently is today. Environmental innovation is by Satell’s (2017) definition closely related to disruption since the problem of human impact on the environment is well defined but what markets and methods of solving the problem is not. Furthermore, Bowers and Christensen’s (1995) characteristic definition that a disruptive innovation sacrifices on the value proposition, compared to non-disruptive innovations, as well as the mindset of making business decisions for future circumstances are in accordance with how environmental innovation could be defined.

2.1.2 Research on environmental innovation

Environmental- or eco-innovation, defined (Kemp, Arundel, & Smith, 2001 in Horbach, 2008) as processes which intend to lower or remove environmental damage through “new or modified processes, techniques, systems or products. Kammerer (2009 in Doran & Ryan, 2014) further goes to say that it should include all types of innovation that benefits the environment, regardless of intention. Other scholars further point out that a broader definition could be required in order to best distinguish the successful implementation of environmental innovations (Hemmelskamp,

1997). Díaz-García, González-Moreno and Sáez-Martínez (2015) created a model which divided the categorical definitions of environmental innovation into three. The first categorization by Hemmelskamp (1997) focusing on the effect, contrasting the second categorization by Rennings (2000 in Díaz-García et al. 2015), defining it as “Innovation processes towards sustainable development” (Díaz-García et al. 2015, p.9), indicating a motivational focus. A third is a combination of both motivation and the environmental impact of the innovation where innovation is “the process by which firms transition to a sustainable development model by improving the efficiency of resource utilization and reducing their negative impact on the environment at each link in the life cycle” (Ortega-Lapiedra et al. 2019 in Liao & Liu, 2020, pp.1852-1854).

Environmental innovations come in various forms. While researching the Spanish food and beverage industry, Triguero, Fernández & Sáez-Martínez (2018) divide environmental innovation into three behavioral types, namely: (1) Eco-product innovation, (2) eco-process innovation, and (3) eco-organizational innovation. In their multivariate study of open innovation in the agro-food industry of Spain they found that external knowledge sources, used both extensively and intensively, showed significant positive influence on all eco-innovations apart from eco-innovations on environmentally friendly products (Triguero et al. 2018). Meaning that the use and availability of external knowledge sources play a key role in being an eco-innovation driver. Additionally, Triguero et al. (2018) also found a positive relationship to all types of eco-innovation implementation and customer and stakeholder pressure, relating the result to the increasing market demand for eco-products (Cleff & Rennings, 1999; Kammerer, 2009 cited in Triguero et al. 2018). Further they explain that this increased demand for *eco-products* increases environmental innovation for both processes and products in the firm. Frondel, Horbach and Rennings (2007) studied organizational eco-innovation through the implementation of voluntary environmental management systems (EMS) such as ISO 14001 and EMAS. They conducted a bivariate probit model where they analyzed 899 German firm’s adoption of EMSs and actions of lessening their environmental impact. Interestingly, they found that pressure groups and motivations about corporate image had a significant effect on both abatement and EMS adoption, while policy instruments showed only effect on EMS adoption but not on actual abatement. They reflected on the firms’ actions being in “rational self-interest” (Frondel et al. 2007, p.158). Additionally,

Horbach (2008) found that environmental regulation, EMSs, and organizational changes provide good groundwork to drive environmental innovation. He further shows that expanding the firms' knowledge capital through technological advancements in research and development also proved to be a vital part in environmental innovation. However, he found no significant positive relationship between organizational size and environmental innovation.

Due to the increasingly high consumption leading to increasing production which puts a strain on the environment around us, more and more firms are going towards environmental innovation as a best practice choice to solve the problems caused (Liao & Liu, 2020). Researching the drivers of environmental innovation involves perspectives from *institutional theory* and *resource-based theory* (Chen, Yi, Zhang, & Li, 2018; Liao, 2019); *stakeholder theory* (Doran & Ryan, 2014); *innovation theory* (Liao, 2018); and *upper-echelon theory* (Liao & Zhang, 2020). Liao and Liu (2020) found, in their meta-analysis of driving factors in environmental innovation, that both environmental regulations and government subsidies showed positive effects on environmental innovation. In the market factor, customer demand showed significant positive correlation with environmental innovation whilst market concentration showed no correlation (Liao & Liu, 2020), further underlining previous research that customer demand impacts environmental innovation (Cleff & Rennings, 1999; Kammerer 2009; Triguero et al. 2018). Organizational size did have a weak effect on environmental innovation while being moderated by the cultural background of the firm (Liao & Liu, 2020). This was explained by the resource dependence of smaller firms, having less resources means that you have less to spend on environmental actions, compared to larger firms (Liao & Liu, 2020).

It is clear that pressures play a large role in affecting environmental innovation. Both Stakeholder theory and institutional theory are applied in order to analyze the drivers of environmental innovation. Whilst the authors of the thesis could not, to their best efforts, find a paper using both theories studying environmental innovation, Herold, Farr-Wharton, Lee, and Groshopf (2019)

created a framework applying both theories when analyzing carbon emissions disclosures showing how the two theories interact (figure 1).

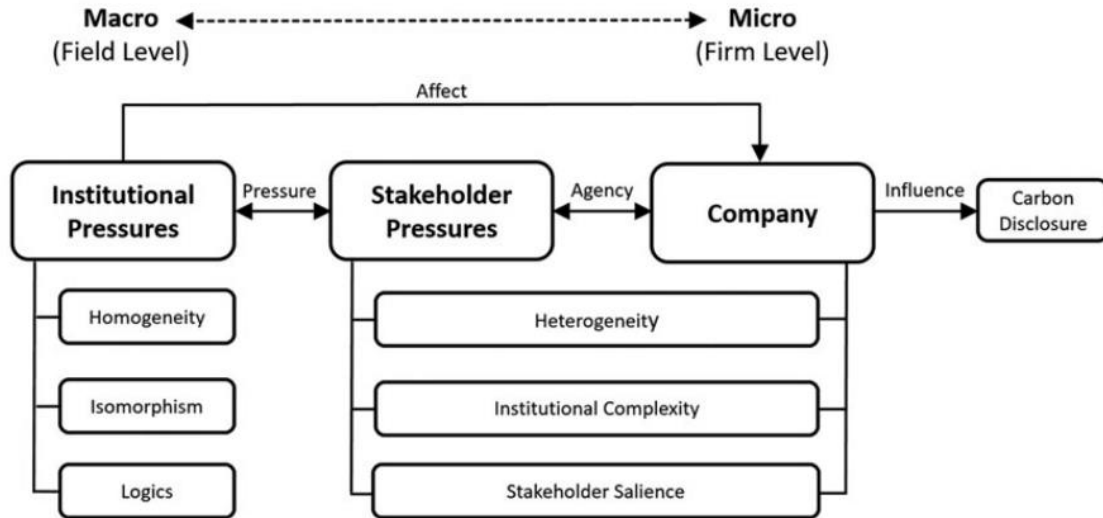


Figure 1: Institutional framework (Herold, Farr-Wharton, Lee & Groshopf, 2019, p.3)

2.2 Theories within environmental innovation

2.2.1 Institutional theory and isomorphic pressures

A way to understand why some companies might invest in environmental innovations is institutional theory. According to Meyer and Rowan (1977) a definition of institutional theory is how companies eventually react to certain pressures with the sole goal of adhering to norms and rules and thus be perceived as a legitimate actor within the given society. Hence institutional pressures have an effect on how companies eventually will act within the society (Meyer & Rowan, 1977). Two famous authors within institutional theory, and the first to define isomorphic pressures, are DiMaggio and Powell (1983). According to DiMaggio and Powell (1983), organizations are exposed to three isomorphic pressures: *coercive* isomorphism, *normative* isomorphism, and *mimetic* isomorphism. *Coercive* isomorphic pressures are those imposed by the government through law, and therefore pressures which the company is obliged to follow, such as regulations.

Normative isomorphic pressures are those exerted by social institutions and business associations and are associated with professionalization (DiMaggio & Powell, 1983) however, in broader terms *normative* isomorphism can also stem from customers and suppliers (Delgado-Ceballos et al. 2012; Zhu, 2016 cited in Chen et al. 2018) guiding the firm when it comes to norms and moral standards within environmental innovations. *Mimetic* isomorphic pressures are those caused by other organizations surrounding the company. Thus, when uncertainty arises organizations model themselves after skilled companies and especially when it comes to innovation: “While there are those who consciously innovate, there are those who, in their imperfect attempts to imitate other, unconsciously innovate by unwittingly acquiring some unexpected or unsought unique attributes which under the prevailing circumstances prove partly responsible for the success. Others, in turn, will attempt to copy uniqueness, and the innovation-imitation process continues” (DiMaggio & Powell, 1983 p.151). Furthermore, when it comes to *mimetic* isomorphism according to DiMaggio and Powell (1983) the general customer base of a certain company can encourage *mimetic* isomorphism. Ultimately companies adhere to such pressures by changing internal procedures in order to gain legitimacy.

2.2.2 Stakeholder theory and stakeholder salience

Stakeholder theory was originally pioneered by Freeman in 1984. The theory suggests that organizations are influenced and pressured by different stakeholders which affect their actions within society. This means that stakeholder theory suggests that stakeholders surrounding the company demand action from the company (Freeman, 2001). However, finding a universal definition of stakeholders is hard to come by. Henriques and Sadosky (1999) find that four environmental stakeholders can be identified as: regulators, customers, non-governmental organizations, and the media.

In 1997 Mitchell, Agle and Wood noticed that there was a need to identify the different stakeholders and their stakeholder salience in order to distinguish between stakeholders and non-stakeholders (Mitchell, Agle & Wood, 1997). Stakeholder salience is by definition “the degree to which managers give priority to competing stakeholder claims” (Mitchell, Agle & Wood, 1997 p.854). Moreover, their definition of stakeholder is “Any group or individual who can affect or is

affected by the achievement of the organization's objective" (Mitchell, Agle & Wood, 1997, p.869). Hence their definition of a stakeholder is broad of its kind and instead Mitchell, Agle & Wood (1997) focus on defining the attributes of the stakeholder, which are power, legitimacy and urgency. The power construct is by definition "A relationship among social actors in which one social actor, A, can get another social actor, B, to do something that B would not have otherwise done" (Pfeffer, 1981 in Mitchell, Agle & Wood, 1997, p.869). According to Mitchell, Agle & Wood (1997) there are different power bases which the stakeholder can hold, those being either coercive, which is exerted through force or threat, or utilitarian, which is creating an incentive, based on financial resources or material ones, and normative power base which is a symbolic influence (Mitchell, Agle and Wood, 1997). Legitimacy is according to Mitchell, Agle & Wood (1997) "A generalized perception or assumption that the actions of an entity are desirable, proper, or appropriate within some socially constructed system of norms, values, beliefs" (Mitchell, Agle & Wood, 1997, p.869). Therefore, the different bases contain an individual base, organizational base, or societal base. Lastly, urgency is by definition according to Mitchell, Agle & Wood (1997), "the degree to which stakeholder claims call for immediate attention" (Mitchell, Agle & Wood, 1997, p.869), where the bases are dependent on the general time sensitivity or how critically these claims are, or in other words "the importance of the claim" (Mitchell, Agle & Wood, 1997, p.869). Even though such power, legitimacy and or urgency might exist, it is up to the manager to determine which stakeholders are salient. Thus, how managers give priority to the claims of the different stakeholders- meaning power, legitimacy and urgency of the stakeholder is defined as stakeholder salience (Mitchell, Agle & Wood, 1997).

According to Mitchell, Agle & Wood (1997) three levels of salience can be identified respectively: *latent*, *expectant*, and *definitive*. A stakeholder with one of either power, urgency, or legitimacy is defined as a latent stakeholder. Where the expectant stakeholder has two, and definitive stakeholder has all three attributes combined. Hence the definitive stakeholder is the most salient stakeholder (Mitchell, Agle & Wood, 1997). Adhering to these stakeholder pressures is a way for the company to gain legitimacy and by this strengthen its overall environmental performance (Guoyou et al. 2013). Moreover, it is a way to comply with regulations and thus gain the image from the media that the company intends and avoid certain penalties (Yarahmadi & Higgins,

2012). It is an interactive process where the power of the stakeholders and the perceived stakeholder salience is in interplay which ultimately affect the environmental innovation outcome of the company (Mitchell, Agle & Wood 1997; Henriques & Sadosky, 1999). According to Guoyou et al. (2013) acting on customer-, regulatory and community specific pressures in terms of environmental innovation is a way for the company to gain competitive strength by following customer demands and legitimacy from society by adhering to laws and regulations and local communities.

These stakeholders described above, and the way in which the manager and/or company will perceive different stakeholder pressures and their importance, will influence how they ultimately adopt innovation (Eiadat et al. 2008). However, there seems to be a debate among scholars whether stakeholder pressures have an effect on environmental innovation (Eiadat et al. 2008) which will be addressed in the next section. Furthermore, the literature is inconsistent when it comes to whether and how these stakeholder pressures affect environmental innovation (Zhang & Zhu, 2019).

2.2.3 Research on isomorphic pressures and stakeholder theory within environmental innovation

There have been several streams of literature within stakeholder theory and institutional theory in relation to environmental innovation (Rehfeld, Rennings & Ziegler 2007; Eiadat et al. 2008; Montalvo, 2008; Guoyou et al. 2013; Chan et al. 2015; Huang et al. 2016; Chen et al. 2018). The research landscape of stakeholder- and institutional pressures within environmental innovation is characterized by contradictory findings. Most literature on environmental innovation has focused on regulatory pressures (Rehfeld, Rennings & Ziegler 2007; Eiadat et al. 2008; Montalvo, 2008; Guoyou et al. 2013; Chan et al. 2015; Huang et al. 2016; Chen et al. 2018). Within the literature of how regulatory pressures affect environmental innovation an agreement is hard to come by. Several studies have found that coercive pressures have a positive effect on environmental innovation (Rehfeld, Rennings, & Ziegler 2007; Montalvo, 2008; Chan et al. 2015; Chen et al. 2018). According to Chen et al. (2018) a reason for this might be that regulatory, and thus coercive pressures, are brought by the government and that the company has less of a choice. Therefore,

the coercive pressures are more salient, as opposed to other pressures which are less “mandatory”. However, several studies contradict this notion and in fact find that coercive pressures do not have an effect on environmental innovations (Eiadat et al. 2008; Frondel et al. 2008; Guoyou et al. 2013) and that regulatory pressures cannot drive environmental innovation alone. Furthermore, Huang et al. (2016) found that while regulations have a somewhat effect on the organizations' green responses, the general impact of regulatory pressures on R&D investments when it comes to green innovations, did not have a significant impact. Similarly, Frondel et al. (2008) and Montalvo (2008), state that a single policy cannot drive environmental innovations forward alone. Moreover Jaffe, Peterson, Portney & Stavnis (1995) carried out a review of 100 studies. Whilst half of the studies showed a positive correlation between environmental regulation and business performance the other half showed a negative one (Eiadat et al. 2008). Due to the fragmented research landscape, it is hard to draw any definitive conclusion from previous studies on regulatory pressures within the field of environmental innovation.

Several scholars have studied the impact of customer specific pressures on environmental innovation (Montalvo 2008; Guoyou et al. 2013; Huang et al. 2016). However, when it comes to these customer specific pressures there seems to be a debate among scholars whether these pressures have an effect on environmental innovation or not. As previously mentioned, normative pressures can stem from customer pressures (Delgado-Ceballos et al. 2012; Zhu, 2016 cited in Chen et al. 2018). According to Chen et al. (2008) normative pressures, thus customer pressures, have a positive effect on green innovations. However, such pressures are not mandatory and not directly imposed on the company by force. A reason for why such pressures has a positive effect was unfortunately not emphasized in the paper. Although Chen et al. (2018) emphasizes that when it comes to normative pressures, it is a matter of self-interest of the manager of the company to decide whether to meet such environmental demand pressures from the public. Taking it further, Eiadat et al. (2008) found that general stakeholder demands are not perceived as important enough by those exposed to these pressures to drive environmental innovation forward. In their study they state: “Perceived importance of stakeholder pressures does not work: stakeholders, perceived by their level of importance to organizations, were found to have no statistical impact on firms’ decisions to adopt an environmental innovation strategy” (Eiadat et al. 2008, p.142). Similar to

Chen et al. (2008), other scholars (Montalvo, 2008; and Guoyou et al. 2013; Huang et al. 2016) found that pressures brought by customers are a great driver for environmental innovation. However, Montalvo (2008) found that if a firm perceives the customer not to be willing to pay a higher asking price for the environmental product it might affect the firm not to invest in such activities. Moreover, Guoyou (2013) found that, when it comes to customers, firms “respond selectively and differently to different stakeholder groups” (Guoyou et al. 2013, p.10), as opposed to previous findings which found that firms “respond to different stakeholders in a similar way” (Murillo-Luna et al. 2008, cited in Guoyou et al. 2013, p.10).

It is evident from the above literature, that there are contradictory findings when it comes to both stakeholder pressures and isomorphic pressures and how they affect environmental innovations. This motivated Zhang and Zhu (2018) to carry out a quantitative study with the aim of finding out how different stakeholder pressures motivated green innovation. The study found that both customers and regulatory stakeholders had a significant positive effect on green innovation. However, as several other studies that have been carried out regarding stakeholder pressures and isomorphic processes within environmental innovations, future research in other parts of the world than China is suggested in the study (Huang et al. 2016; Zhang & Zhu, 2018). Furthermore, since most of the studies investigated these aspects within bigger organizations, future research into SMEs is suggested (Chen et al. 2018). Literature within competitive and thus mimetic isomorphic pressures seems to be excluded from most of the studies. Huang et al. (2016) suggests literature that looks into competition and thus mimetic pressures.

2.3 Concluding remarks

The authors of this thesis aim to shed new light on the field of isomorphic processes and stakeholder theories when it comes to environmental innovation. As seen above, research within this topic has been rather fragmented and there are some contradictory findings. The authors of this thesis could not find a paper using a qualitative method combining research on both isomorphic processes and stakeholder pressures. Furthermore, the reason for why firms are more prone to follow certain pressures and or processes was excluded from the research, and further, deeper research was suggested. Additionally, future studies on other parts of the world were

suggested; researching how different processes and pressures influence environmental innovations. Lastly the very perception of different firms and how they make sense of environmental innovations was only highlighted by Eiadat et. al, (2008), where they suggested future analysis on how such perceptions are shaped and influenced when it comes to environmental innovations. As the above research highlighted there is also a need to look into other parts of the world (Huang et al. 2016; Zhang & Zhu, 2018).

This thesis aims to explore all of the isomorphic processes when it comes to environmental innovations, combining *coercive*, *normative*, and *mimetic*, pioneered by DiMaggio and Powell (1983). Therefore, meeting the need for future research on mimetic isomorphic processes which has been suggested (Chen et al. 2018). Moreover, this thesis aims to integrate stakeholder theory using Mitchell, Agle and Wood’s (1997) different stakeholder attributes: *power*, *legitimacy*, and *urgency*, to not only identify the stakeholders but also their stakeholder salience. Furthermore, this thesis appears to be the first that carries out a qualitative study on how entrepreneurial SMEs within Sweden make sense of isomorphic processes and stakeholder pressures on their environmental innovations. A model (figure 2), based on the one formulated by Herold et al. (2019) aids in the explanation of how to approach the combination of the two theories.

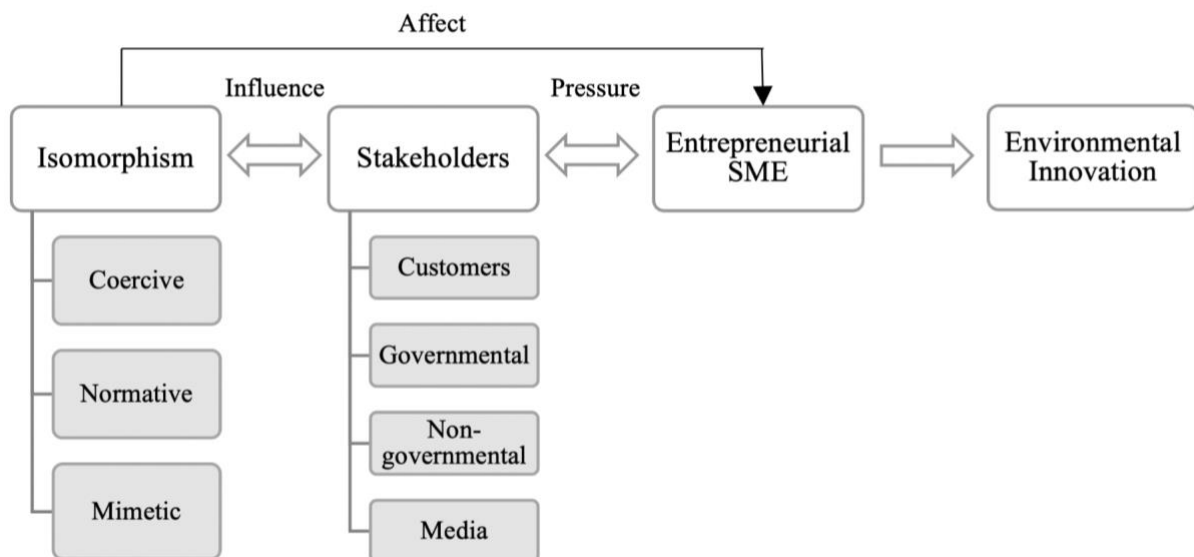


Figure 2: Modified Institutional framework

3. Methodology

3.1 Research Philosophy and Approach

The authors of this thesis aim to bring a greater understanding into *how* entrepreneurial SMEs within Sweden make sense of stakeholder pressures and isomorphic processes on their environmental innovations, by using the theoretical framework to analyze multiple-case study interviews. Given that most other studies, as presented above, have been conducted through a quantitative approach, the authors wish to bring deeper insights into the field by conducting an exploratory, qualitative research study (Bell, Bryman & Harley, 2019).

This thesis relies on the assumption that in general, the field of isomorphic processes and stakeholder pressures among our interviewees involves several different perceptions which the entrepreneurial SMEs have to make sense of. Thus, the thesis implied an ontologically constructionist approach, where social phenomena are created by social actors (Bell, Bryman, & Harley, 2019). A key point in the methodology was interpretivism which allowed the authors to distinguish and interpret the different perspectives of the interviewees (Yin, 2018). Because the thesis focused on sensemaking, the interviewees' subjective experiences and opinions were valued through the interpretive lens (Scotland, 2012). Since every individual construct their own reality in the context they inhabit and base their experiences on said context and construct (Scotland, 2012; Saunders, Lewis & Thornhill, 2012), each individual interview showed a reflection that was compared to other interviewees' perceptions. In order to acquire the perceptions from the individuals, a qualitative research method was deemed appropriate to gain in-depth knowledge (Bell, Bryman & Harley, 2019).

3.2 Research Design

As mentioned above, most studies cover the width of the environmental innovation landscape. However, there seems to be a lack of literature agreeing upon why firms might create such environmental innovations, and which stakeholder pressures and isomorphic processes seem to be most influential. Since the main aim of this study is to explore how entrepreneurial SMEs within

Sweden make sense of isomorphic processes and stakeholder pressures on their environmental innovations, the thesis was constructed through an inductive approach. This approach was carried out by having an exploratory approach to the research question. Thus, being open towards new findings within the theoretical framework and by also looking for contradictions and contributing to new theory if deemed appropriate (Saunders, Lewis & Thornhill, 2012).

The research question was thereby answered through a comparative multiple-case study design (Bell, Bryman & Harley, 2019), where several interviews were conducted and then comparatively examined with the theoretical framework provided in the previous chapter. Multiple-case studies provide more compelling evidence while also minimizing the likelihood of unusual scenarios getting caught in the data (Yin, 2018). Whilst this study might not have been replicable in its qualitative nature, hopes are that it is replicable in terms of applied method, in order to bring future findings by providing a groundwork for future research on environmental innovation from entrepreneurial SMEs (Yin, 2018).

3.3 Data Collection Method and Case selections

The main characteristic trait for the case firms was that they have developed or were currently developing a product which aimed to reduce the ecological impact on the environment. A multiple-case study provides a stronger base for the argument of building and developing the theoretical framework and the evidence is more applicable to a larger group (Eisenhart & Graebner, 2007). The general trustworthiness was therefore strengthened due to having several sources, through multiple cases and therefore more data was gathered concerning the phenomenon being studied (Yin, 2018). Hence, purposive sampling was used to highlight meaningful discoveries and relationships between the different cases. Purposive sampling is defined as choice of cases due to their suitability and strategic contributions to the research question (Bell, Bryman & Harley, 2019). For this study the authors selected three firms in separate industries but all working with products that aim to reduce the ecological footprint of humanity. Each entrepreneurial firm had, at the time, less than ten people working in the organization, and had been active for less than five years. Furthermore, within each case firm, two separate interviews were conducted with interviewees from various hierarchical levels of the firm, in order to deal with informational bias from the

interviews (Eisenhart & Graebner, 2007). The three categories are: *Idea Originator* or *Founder*, a *Co-founder*, and a *Current Employee* who does not have a co-founder status in the firm. However, with the exception of Percy Roc where, unfortunately, only one person was available for an interview. This was done in order to get a wider range of data as it then would represent several opinions and perceptions from one company as opposed to having one interview per entrepreneurial firm. Due to time constraints the authors of this thesis were not able to conduct more than six interviews, meaning three different companies are represented in this thesis, with one additional case firm being excluded from findings, for reasons explained in the data analysis section 3.4. The following data collection and case selection therefore aided the authors in reaching an answer to how entrepreneurial SMEs within Sweden make sense of isomorphic processes and stakeholder pressures on their environmental innovations.

The interviews (Appendix I) were semi-structured (Bell, Bryman & Harley, 2019). In order to mitigate bias, the interviews consisted of open-ended questions that covered the originating story of the interviewees and the firm; the interviewees' perceptions of the current processes at the firm; and the interviewees' perceived challenges that the firm currently face and have previously faced. This was done to get longitudinal information that provided further insight for the study. According to Yin (2018), a challenge when it comes to case studies is to avoid seeking the confirmation of pre-made assumptions through the collection of data. In order to avoid such confirmation biases the questionnaires were constructed as open-ended questions with no direct link to theory. More specifically the open-ended questions were free from any direct references to stakeholder pressures and isomorphic processes. However, the semi-structured questionnaire (Appendix I) still stuck to a specific format and area of questioning, specifically environmental innovation.

The authors of the thesis reached out to incubators with the specific requirement that the entrepreneurial case firms needed to engage in environmental product innovation and were provided lists of companies that would be interested in participating in the study. The companies in these lists were then contacted through email. The interviews were conducted with both authors of the thesis present. The interviews took place over Zoom, in English in order to avoid any language biases during the transcription. Each one of the interviews were recorded and then

transcribed. The case firms used for the study of this thesis are presented in chapter 4, Case setting. The authors of this thesis carried out six interviews, of around 33 to 52 minutes, with four different entrepreneurial firms working with sustainable product development, as presented in table 1.

Table 1: Interviews

| Case Firm | Name | Position | Medium | Date | Recording |
|-------------------|---------------------|---|---------------|-------------|------------------|
| Percy Roc AB | Bo Gauffin | Co-founder, Business Development Manager | Zoom | 18-3-2022 | 51:55 min |
| Skosh | Max van der Mars | Co-founder | Zoom | 30-3-2022 | 36:16 min |
| | Simon Ziolkowski | Co-founder | Zoom | 30-3-2022 | 39:37 min |
| Edgy Veggie AB | Katarina Furin | Co-founder, CEO | Zoom | 31-3-2022 | 33:41 min |
| | Ilaria Di Meo | Administrative manager | Zoom | 31-3-2022 | 36:13 min |

3.4 Data Analysis

Once the transcription was done, a thematic analysis was applied to categorize the data (Braun & Clarke, 2006), before producing the final analysis. Initially both of the authors familiarized themselves with the data by carefully reading the transcription several times in an active manner, while searching for possible meanings and interpretations within the transcription (Braun & Clarke, 2006). Following similar research methods to Gioia, Corley, and Hamilton (2013), the interviews were divided into first order themes where tensions were discovered through

codification in the firms' environmental innovation work. These were further divided into second order themes in accordance with theoretical applicability through codification and categorization (Gioia, Corley & Hamilton, 2013) where the authors further narrowed down. The initial codification and categorization were made separately by the two authors before being discussed, further categorized, and finally applied in the findings chapter. During the second order analysis the authors maintained a "willing suspension of belief" (Gioia, Corley & Hamilton, 2013, p.21) where the authors had a good understanding of the prior work but maintained an open mind to find points where new concepts could be found, in order avoid confirmation bias when applying the theoretical framework. The transcript was coded (Bell, Bryman & Harley, 2019) by both authors independently, identifying areas and aspects of the data which they found insightful and interesting in correlation to stakeholder- and institutional theory. Thus, this thesis only used the most occurring themes from the data and the richest quotes.

The questions that the authors of this thesis asked about the data were "what is the tension within the data?"; "What is the tension between the data?"; "Where are the similarities and differences?"; "Is this an exotic quote, or an ongoing theme within the interview?". Moreover, after all the quotes were identified and coded, the authors of this thesis evaluated each quote by asking "what is the ambition here for the entrepreneurial firm?"; if there was an ambition "what are the constraints and/or enabling factors for their environmental innovation then?". This allowed for the authors to relate the quotes to theory and have a clear structure of analysis, by showing the reader the clear ambitions, the constraints and/or enabling factors for their environmental innovation. The data was then compared to the theoretical framework in order to identify convergence or divergence between the data and theory. By doing so the authors were able to explore how the different individual entrepreneurial firms made sense of the isomorphic processes and stakeholder pressures and how they did so comparatively between the case firms (Bell, Bryman & Harley, 2019). One of the entrepreneurial firms was found to be irrelevant in terms of the research question and was subsequently excluded from the thesis. The different themes the authors of this thesis identified, presented in chapter 5, were: "The Business Logic Dilemma", "The Disruptors Dilemma", and "The Educators Dilemma" presented in table 2.

Table 2: First and Second order categorization

| First order | Second order | Aggregate Dimensions |
|---|--|----------------------------|
| Hard to find suppliers | Tension between sustainable ambition and industrial arrangement | The Business Logic Dilemma |
| Making organic products are expensive | | |
| The costs of initiating parts of the production are high | Tension between being an entrepreneurial enterprise and having sustainable ambitions | |
| Wanting to be sustainable but being forced to follow in incumbents' | | |
| Limitations in resources for entrepreneurial SMEs | | |
| Want to change the behavior of the industry | Tension between disruptive innovation and incremental innovation | The Disruptors Dilemma |
| Other competitors have been successful | | |
| Wanting major change but achieving minor tweaks | | |
| Wanting to forge their own path but forced to follow others' steps | Tension between disruptive ambitions and reality | |
| Offering the product due to customer demands | Tension between innovative ambition and customer demand | The Educators Dilemma |
| Adapting to the customer | | |
| Trying to learn from the customer | Tension between learning from the customer and educating the customer | |
| Wanting to change customer habit | | |
| Educating the customer in order for the market to grow | | |

3.5 Ethical considerations

This thesis follows the ethical principles and considerations formulated by Bell, Bryman, and Harley (2019). During the interviews each interviewee was informed about the purpose of the thesis, and that it would be published after being carried out. All participants were given the opportunity to eliminate any data they found to be too personal, thereby ensuring that there would be no invasion of the participants' privacy (Bell, Bryman & Harley, 2019). Moreover, in order to enable transcription after the interview the meeting was, as above mentioned, recorded on Zoom, with the consent from the participants. The participants were also offered the opportunity to read over the transcription after it was carried out, in order to give consent of disclosed information within the thesis. Furthermore, all participants were given the opportunity to appear anonymous in the thesis if preferred.

3.6 Limitations

3.6.1 Research Design

Critiques of qualitative research often point to the lack of empirical evidence to generalize given the context of the unique characteristics and the case study format (Yin, 2018). Whilst this is mostly focused on single-case studies, it could be argued that it applies to multiple-case studies as well, although having two or more cases could ease the risk of catching outliers or other extreme scenarios (Yin, 2018). Furthermore, there is an added risk to a qualitative study of showing subjective results and proving to be more difficult to add in a generalized context (Bell, Bryman & Harley, 2019). In order to reduce these risks, the sample selection was made through purposive sampling where the case companies were selected due to their aim of producing a product that aims to reduce the environmental impact through consumption or use. The very nature of qualitative research comes with limitations regarding the formation of a general theory on environmental innovation. Instead, this thesis aims to understand how entrepreneurial SMEs in Sweden make sense of isomorphic processes and stakeholder pressures on environmental innovation. This thesis aims to contribute to the theoretical landscape by adding the context of the

organizational perceptions and processes with regards to stakeholder pressure and isomorphic processes.

3.6.2 Data Collection

In order to overcome the limitation of interview biases in qualitative research (Bell, Bryman & Harley 2019) the interviews were conducted as semi-structured interviews and open-ended questions. By doing so the authors of this thesis overcame the general confirmation bias when it comes to seeking to confirm preconceived notions. Furthermore, the thematic analysis in the data analysis helped the authors of this thesis to remain open and critical towards the collected data by avoiding the usage of quotations that were not a general occurring theme in the transcribed data, thus avoiding possible anecdotalism (Silverman, 2015). This also helps to strengthen the general trustworthiness of the thesis and study in question.

4. Case setting

4.1 Case Firm 1: Percy Roc AB

Percy Roc AB (Org. no: 559179-8854) is an industrial heating company focusing on the application of microwave technology to innovate in the field of industrial heating (Percy Roc, 2022a). Using artificial intelligence in combination with microwave heating technology they strive to reach the same or higher standard than what the current industrial ovens at much lower energy consumption levels. At the time of interviewing, Percy Roc had one paid employee and a total of five team members (Percy Roc, 2022b). The firm is based in Uppsala and was established in 2018 by Dragos Dancila, an associate professor at Uppsala university.

4.2 Case Firm 2: Skosh AB

Skosh AB (Org. no: 559258-1234) is a cleaning chemical company that focuses on creating cleaning solutions that reduce the amount of plastic waste and harmful chemicals (Skosh, 2022a). Their main products are cleaning tablets that can be dissolved in water for surface cleaning sprays, laundry detergent, dishwashing tablets for dishwashers, and reusable spray bottles for their cleaning tablets. Their chemical products are made with biodegradable components, their spray bottles are made of post-consumer recycled plastics, and their packaging are made of biodegradable paper materials (Skosh, 2022b). Skosh is a Malmö-based firm with eight team members and was founded by Simon Ziolkowski, Max van der Mars & Tom Hackenberg in 2020 after their studies at Lund University.

4.3 Case Firm 3: Edgy Veggie AB

Edgy Veggie AB (559259-5069) is a vegan food producer making seitan; an east Asian, vegetarian, wheat-based protein food (Edgy Veggie, 2022a). Seitan is used as a meat substitute, originally developed by Zen-Buddhist monks, and is made completely by wheat. Edgy Veggie's seitan is vegan and made with wheat from Sweden, salt, garlic, pepper, and proprietary spice blends for their flavored offerings (Edgy Veggie, 2022b). They work in accordance with the UN

Sustainable Development goals and their packaging is made from recyclable plastic and paper (Edgy Veggie, 2022c). Edgy Veggie was formed in 2020. At the time of interviewing, they had seven team members, and were registered at MINC, a Malmö-based incubator.

5. Findings and Analysis

Theme 1: The Business Logic Dilemma

During the interviewing process the authors found a number of discrepancies and tensions between the entrepreneurs' business logic and their sustainability goals and ambitions. While the entrepreneurs strive towards a more environmentally sustainable product, they are still limited by monetary and organizational constraints inherent to their nature being early-stage entrepreneurial SMEs. This tension between wanting to move away from the market practices, with the customers following, and having to move towards the market, in order to reach their customer given their limitations, creates an *isomorphic dilemma*. When establishing a firm, many entrepreneurs traditionally follow established business practices which could be seen as partly normative and partly mimetic isomorphic processes. Normative isomorphism is derived from societal norms and shapes the firm on the societal and cultural dimensions. Mimetic isomorphism stems from the market and industrial landscape that the firm acts in and affects the decision-making processes of the management (DiMaggio & Powell, 1983). This leads to the case firms moving towards more traditional business practices, forcing them to compromise on certain decisions. Additionally, the stakeholders of the case firms play a large role in many of these tensions in the decisions made by the entrepreneur. The stakeholder power, legitimacy and urgency ultimately affect the behavior and final outcome (Mitchell, Agle & Wood, 1997). When it comes to the tension between “business logic” and sustainability goals, the data from the interviews indicated that the two most influential stakeholders are the customers and competitors. The customers because of their purchasing power and the competitors because of their pricing strategies. The following subsection will delve deeper into and analyze how the interviewees describe how they work with regards to this tension of sustainability and “business logic”.

A common point between all interviewees were the “traditional” monetary constraints of young entrepreneurial ventures. When asked about the challenges facing their pricing model, Katarina Furin of *Edgy Veggie* stated their struggles in making the product itself more organic and sustainable. As a matter of fact, making a product environmentally sustainable, while keeping the prices attainable and also maintaining a solvent turnover and profit is quite difficult.

Katarina Furin: Yeah, yeah, that's true! I mean, of course, we would have loved to have organic wheat protein. That is not possible! That is like... four times as expensive as normal wheat gluten, so that [...] is much more expensive, so it's not even [worth] thinking about. And I've had that discussion with people that is really very deep into sustainability. And they're like: 'yeah, but you can't care about the pricing, You have to do this!' But then we won't exist. It's a matter of fact. So, I think it's much better to do whatever you can and maybe in future, when we are stronger, we can also affect our suppliers; we can tell them that: 'Look, now we want, we want organically, then fix it for us'. So, it's maybe the way you do it. I don't think anybody is gaining anything by, you know, closing down companies because it's... they have too high prices, or whatever the reason is.

In the case of pricing the seitan-products from *Edgy Veggie* the urgency of sustainability is perceived to be low. As Katarina Furin mentions, it is hard to take sustainability into consideration if you want to sell the product. Therefore, in order to compete with other vegan food producers, the competition seems to have a higher urgency, which goes against some sustainability goals and pushes *Edgy Veggie* in an isomorphic direction, closer to its competitors. Much of Katarina Furin's statement shows a very high level of ambition in terms of how they wish to work sustainably; working with more organic materials and making a change. However, since they are not at the organizational- nor market size, it would be potentially detrimental to switch over to a fully organic product. She sees that the customer has a clear intent in wanting a more sustainable product but is unsure whether they would actually pay the higher asking price; corroborating the findings of Montalvo (2008) where the perception of the customers' unwillingness to pay a higher price, limits the environmental aspects of the innovation. Fearing that the company might lose its capacity to survive in the market, because the amount of people willing to pay the higher price for a fully organic product, she postpones the focus on sustainability work in order to make the best out of the market that they are in, and later revisit the question when they are big enough to have the capacity and resources to have a product made from sustainable sources.

When talking about the development of environmentally sustainable products, Max van der Mars of *Skosh* presented their struggles in product development. Having a customized mold for a personal design was out of the question in terms of costs. And when the time came for their first

order of spray bottles, the manufacturer gave them a quote for the lowest order quantity of 100,000 bottles.

Max van der Mars: [...] So basically, the production is... it's all standardized parts because. We have been looking into customizing parts but the price you pay for a mold is just ridiculous and the minimum order quantities already, at the moment when we started were so high that we like and that's... As a designer I didn't even know right?! I know a lot about production, but as soon as you experience yourself [in] your start-up... You're knocking on their door, then they say: 'yeah, you want to produce bottles, you can start with 100,000' and then you're like: 'Oh, wow!'. And that's not even [a] customized [product].

As a young entrepreneur, Max van der Mars described *Skosh*'s ideal production process and how it changed when they came in contact with the industry. *Skosh*'s goals of creating their own product were halted when they realized the exorbitant costs involved in producing the packaging, in a way that was not even how they initially envisioned. The sheer utilitarian power of the manufacturing industry dissuades the creation of a customized product. In turn, this moves *Skosh* towards a mimetic behavior, as they are limited in resources and therefore bound to make decisions within the boundaries of both their own resources and the industry. In a further discussion regarding the material of the plastic bottles, Max van der Mars aimed for making a product made out of PET, *Polyethylene Terephthalate*, a commonly used recyclable plastic material. But just finding the right manufacturer who made spray bottles in PET was the more difficult part.

Max van der Mars: [...] Because I like the packaging, for me [it] was not like a huge challenge in the sense of that [in] the end, I know [about] PET-bottle[s], how [they are] produced, that we can make [the spray bottle] from recycled plastic. It's of course difficult to find a manufacturer who can do it for you. But the design and the development of it, that's not really that complicated.

While it is possible, as shown by *Skosh*, to make the packaging of your products more environmentally sustainable, in terms of which materials you are using, the difficulty lies within the global production infrastructure. Finding the right manufacturer, at a reasonable price for the

entrepreneurial firm is a daunting task. As mentioned above, while you can have the theoretical knowledge of how the production process would occur, it is a different issue when you actually try to turn that theory into practice. In order for other entrepreneurial SMEs to follow in the tracks of their sustainable predecessors, the production industry must shift further towards sustainable means of production. Simon Ziolkowski of *Skosh* also stressed some of the limiting factors of developing a sustainable product, when asked about any processes keeping *Skosh* from being more sustainable.

Simon Ziolkowski: [...] But that doesn't happen from day zero because you have limited budgets, you have limited supply chain opportunities and stuff like that, so it is a process for sure.

Limiting factors such as resources and capabilities affect how entrepreneurial SMEs can interact with the market and innovate in an environmentally sustainable way. As stated by Liao & Liu (2020) the organizational size has an effect on environmental innovation within an enterprise, given that smaller actors usually have less resources. This lack of resources is what Ziolkowski is emphasizing as a hindrance. Not only lacking the financial resources but also the human resources to organize supply chains and production processes in a way that would perfectly align with their idea. All of these factors force the entrepreneurial firm to follow the traditional business logic of other incumbents in the industry. Both Max van der Mars and Simon Ziolkowski's statements tell us that for early entrepreneurial firms, the sheer limitations that are inherent to being an entrepreneurial SME pressures the firm towards mimetic isomorphisms.

Similar to the response from Katarina Furin, when asked about how *Skosh* works with the challenges they face, Max van der Mars responded that they have clear goals which they do not want to compromise on but cannot fulfill until they reach a higher maturity as an enterprise.

Max van der Mars: So, we want to go all the way. We want to have the most sustainable solution that's out there for packaging and a lot of manufacturers could supply packaging with a plastic layer in there or aluminum layer in there. And we said like we don't want that, we want to be plastic waste free. Like 100% plastic waste free. Finding the right manufacturer, it took months. It took so many iterations, it took so many samples and then

we found one. And then the pricing was completely off. I think having sustainability as a core value; it makes a lot of decisions, a lot more. A lot more complicated than if you could just say I'm going for the cheapest. [...] like just I iterate over time, and I think what we did very well is we got like we said: "but this is our core values. So, we will not... compromise too much on it". But we could have gone faster in the beginning if he would have said: 'hey, you know what? We just start with that and maybe we can shift and iterate and improve overtime'.

The sustainability goal of their environmental innovations is as clear as it could be for *Skosh*. Describing how they will not compromise and the eagerness to “go all the way” while also staying in line with their core values illustrates their commitment to sustainability. However, wanting to be waste free as a core value is a highly time consuming and straining process for an entrepreneur which Max van der Mars emphasized through describing the additional decisions that needs to be made, when talking to manufacturers. As they realized that they were spending too much time on sustainability related decisions, they started moving towards a more isomorphic process. Due to this they are pushed towards a mimetic behavior that makes them postpone sustainability, similar to the case of *Edgy Veggie*, where they will revisit and reiterate on their processes in order to move away from said behavior.

Theme 2: The Disruptor's Dilemma

Another emerging theme from the interviews was the dilemma between wanting to change an entire industry as opposed to making smaller modifications through environmental innovations. Such behavior could be described as *Disruptive-*, or at times, *Radical innovation*, compared to the latter being *Sustained-* or *Incremental innovation* (Bower & Christensen, 1995; Satell, 2017). According to DiMaggio and Powell (1983), companies eventually change according to the industry through imitation, meaning mimetic processes. While such behavior often is seen to be due to uncertainty when faced with a problem and lack of appropriate solution, the story is very different among the entrepreneurs. For them it is in fact a matter of uncertainty, when it comes to identifying a gap in the market, and thus either transforming the market (disruptive innovation) or giving it a small tweak (incremental innovation). The authors refer to behaviors of acting contrary to the market as *non-mimetic*, where the entrepreneur is moving away from or disrupting industry standards by acknowledging systematic issues due to a lack of ethically and environmentally sustainable behavior among incumbents. By definition, companies tend to model themselves after successful companies within the industry (DiMaggio & Powell, 1983). However, it seems that the interviewees are questioning the legitimacy of their competitors, pointing to a lack of transparency related to their environmental innovations. Even though the competitors hold a power over the entrepreneurial firms, they do not have any urgency, since in fact they do not have any claim (Mitchell, Agle & Wood, 1997). Instead, it is up to the entrepreneurial firm to evaluate competitors' actions, and it seems that within the entrepreneurial firms these are often perceived as being illegitimate. Thus, there lies an intention in *non-mimetic* processes where, as opposed to imitating, they aim to disrupt and bring change. Such an example can be found when Simon Ziolkowski shared with us how they are trying to redefine the rules of the competition:

Simon Ziolkowski: It's not the industry at all, it's like it's us that wants to push industry. We see big conglomerates like Procter and Gamble, basically like all those companies that are mainly selling cleaning products, they are among the top ten of the most polluting companies in the world when it comes to plastic waste. [...] The only solution in our view is to reuse those containers and that's something [the big conglomerates] don't do and

that's something we want to show [is] possible in a very convenient, cost efficient, and eco-friendly way. Poke those [big conglomerates] and say: 'hey do better you know it is possible'.

Simon Ziolkowski then further shared how the ultimate goal of the company is to put an end to single use plastic. When questioned about whether there was other process that might affect *Skosh* when it comes to being environmental Simon Ziolkowski expressed the following:

Simon Ziolkowski: [...] *I mean it's of course the vision and mission with our company is to put an end to single use plastic waste and to shake up the cleaning industry to push for a more circular approach, to stop pollution no matter if it's plastic waste or toxic ingredients. If we want to take that fight then of course we also have to be on top of our game because we cannot point fingers at the 'dirty cleaning industry' on how things are currently done, when we are not having our 'ducks in a row' as you say.*

As Simon Ziolkowski expressed above, *Skosh* wants to change the behavior of the cleaning industry by showing that it is possible to transform the use of cleaning supplies, and plastic. As it is a part of *Skosh's* vision and mission to eliminate plastic waste and “shake up the cleaning industry”. Thus, it can be seen as non-mimetic behavior since *Skosh* aims to change the way the industry behaves. According to DiMaggio & Powell (1983), mimetic processes within a society cause organizations to imitate due to uncertainty. However, the behavior of the competition within the industry is discouraging *Skosh* from imitating, making them want to move away from the mimetic process. When delving deeper into how the challenges were affecting *Skosh*, Max van der Mars expressed that in fact it motivated him to show the competitors that they can do better.

Max van der Mars: [...] *I think it motivates more. I think it's more in a sense if, like this is something we need to disrupt. [...] And like, what is going to make a difference? But becoming aware of that, it can be better. I think that's a motivator. And seeing now that all these big companies are greenwashing a lot, I think it's a motivator to show that we can, we can make it simpler, way more simple and we can. Kind of make a change there and we're not going to do it alone like. There's a lot of competition out there also with cleaning tablets and we need them to make a shift. We need them to [...] urgently say to*

the big cleaning giants like: 'hey, guys, what you're doing is super ridiculous. This is a smarter alternative. Give it a try'.

The underlying motivation from *Skosh's* disruptive intentions comes from what *Skosh* perceives to be environmentally detrimental actions taken by incumbents in the industry and what they see is going on around them. They perceive a problem in the discrepancy of how companies declare their environmental actions and the actual products they bring to the market. What is inhibiting *Skosh* from acting on their sustainability goals are the power and size of the competitors influencing customers and suppliers. Whereas *Skosh* lacks the power and legitimacy as a small entrepreneurial enterprise in the market. While seen from *Skosh's* point of view, the competitors are lacking legitimacy seen through their questionable behavior when it comes to what is supporting their sustainable image. This ultimately emboldens them to disregard the mimetic isomorphic process that would traditionally play out over time according to DiMaggio and Powell (1983). Instead *Skosh* wants to show the way forward, through disruption.

Contrasting the way *Skosh* looked at the market with its vast number of strong competitors, Katarina Furin saw an opportunity in the market where there were none. When she was questioned about what might have influenced her in the direction of starting *Edgy Veggie*, she expressed how no one else had done it yet:

Katarina Furin: [...] *I was like: 'nobody else produced that type of product'. Personally, I can't talk for the others, but I thought that was missing that type of products on the market and if nobody else did it, well then maybe we should have a go at it.*

It seems that Katarina Furin identified an opportunity in the market when it comes to how other competitors had not acknowledged an existing gap. Thus, a lack of action from competitors caused Katarina Furin to start *Edgy Veggie*. However, employee Ilaria Di Meo from *Edgy Veggie*, expressed during the interview, when asked about why she felt a need to change the food industry, that it stemmed from wanting to leave a positive environmental impact, and make *Edgy Veggie's* product a viable option on the market. Ilaria Di Meo shared her example of *Oatly*:

Ilaria Di Meo: Yeah I mean that's the big hope for everyone, isn't it? To become so big that you are the new Oatly? They have had such a big impact that now everywhere in Sweden you go and there's cow milk and Oatly it's gonna be there. So yeah they managed to change the industry in that sense and that's of course what many vegetarian [...] product startups aim to do. It's like knowing that you've made such a big impact that you are a viable option. It's just taken for granted. [...] So once people start thinking that you know it's not like vegan it's just one thing then you know you'll have had an impact and you'll be the new Oatly.

While Ilaria Di Meo wants to change the food industry in general, there are incumbents that already have pushed for greater change, such as *Oatly*. Di Meo shares her aspiration in wanting to be similar to *Oatly* and have an impact on others around you. *Edgy Veggie's* desire to be disruptive in their innovation is therefore transformed to more incremental innovation since they are following in the footsteps of previous disruptors. Such a change could seem to stem from mimetic isomorphic processes within the specific niche of the food industry. Due to *Edgy Veggie* being within the same industry as *Oatly*, it is not unexpected that they would be exposed to such mimetic isomorphic processes and aspire to be as successful as other, similar producers. It is *de facto* such aspirations and behaviors that DiMaggio & Powell (1983) refer to as stemming from mimetic isomorphism where they might in this case find *Oatly* to be a legitimate, not to say successful, actor within the industry (Mitchell, Agle & Wood, 1997).

Theme 3: The Educator's Dilemma

Several of the interviews showed that the entrepreneurial firms had difficulties in educating the customer and instead adapting to them. Educating the customer implies that the customer changes their habits, without the innovation having to change, contrasting adapting to the customer; whereas the entrepreneurial firm needs to change the innovation in order to meet customer expectations and habits. Whilst DiMaggio & Powell (1983) do not explicitly mention customers in their isomorphic pressures, they do argue that a larger customer base can “*encourage mimetic isomorphism*” (DiMaggio & Powell, 1983, p.151). Thus, they emphasize the power that a customer base can hold towards a given organization, when it comes to the organization imitating other incumbents or changing their behavior according to the customer. The authors have identified such a theme within the data set, which is in fact the tendency of the entrepreneur(s) adapting to customers, in order to gain legitimacy and be a successful actor within the industry. Moreover, the authors identified a contrast in this aspect, which was the tendency of wanting to educate the customers. Thus, highlighting a tension in our data set. That being: adapting to customers versus educating customers. According to Mitchell, Agle & Wood (1997), it is not odd that an organization would adapt to its customers, especially not when considering the power which they hold. According to Mitchell, Agle & Wood (1997), a stakeholder holds a certain power when “a relationship among social actors in which one social actor, A, can get another social actor, B, to do something that B would not have otherwise done” (Pfeffer, 1981 in Mitchell, Agle & Wood 1997, p.869). However, the mere outcome of such stakeholder influence depends on the power bases, and the perceived urgency. An example of the strong power that the customer holds when it comes to sustainability within the company can be found when Ilaria Di Meo was questioned about why she is working with an environmental product, and what it is that makes it important for her. Ilaria Di Meo mentioned that it is the idea of offering good vegetarian products to people that want to shift from consuming meat in order to lower their carbon footprints. Ilaria Di Meo further expressed what is pushing her in the direction of offering a more sustainable product:

Ilaria Di Meo: Consumers want sustainable products and [...] you set a standard, consumers are gonna demand that it keeps being like that, or they're gonna turn and go somewhere else. Our target groups mostly do that because of the younger people who have a different way of shopping. [...] So again, it all goes to money. Who puts money in the company, who gives you money for free, and who buys the product with their money.

As Ilaria Di Meo expresses above, the very reason she is working with an environmental product is due to customer demands. Therefore, an adaptation to the customer is made, due to the power which the customer holds. Moreover, such demands from the customers might be seen as individual legitimate claims, since it is in fact the reason *Edgy Veggie* is offering an environmental product; to meet customer demands. By this the customer holds a certain claim, and therefore has a certain urgency and power. However, the perceived urgency from the above statement seems to stem from the fact that there is a financial incentive, to adapt to customers, in order to gain revenue streams, that being a utilitarian power base. Furthermore, Ilaria Di Meo interestingly expressed that competition ultimately ends up being a customer matter:

Ilaria Di Meo: Yes, for sure and that again ends up being a matter of consumers. If you're not good enough [the customers are] going to go to your competitor, or [the customers are] going to find a competitor that is better.

It seems that the role that the customer plays is in fact intertwined with general competition. There is a need for *Edgy Veggie* to adapt to customers, thus mimetic behavior is identified, which stems from the broader customer base. The fact that customers can cause such mimetic processes is not peculiar; contrarily according to DiMaggio & Powell (1983), such customer pressures cause uncertainty. As Ilaria Di Meo shared with us, “if you are not good enough [the customers are] going to go to your competitor, or [the customers are] going to find a competitor that is better”, in times of uncertainty *Edgy Veggie* either look upon other competitors and thus mimic their behavior in order to ensure customer legitimacy, or they do better than the competition and which is *non-mimetic* in that case.

Moreover, Katarina Furin shared with us, during the interview, how reaching the customers is rather difficult for them, but also how it is difficult to change their general habits. When questioned about some of the challenges she is experiencing she shared the following:

***Katarina Furin:** [...] I think it's a big part that isn't sort of won over yet. And why that is, you can discuss, but we think that part of it is because people find it difficult. When I started not eating meat, my father asked me: 'what will you eat? There's nothing to eat!' I was like: 'There's a lot to eat!'. But when people plan their dinner, you very often start with the protein. 'Should we have minced meat? Should we have beef, chicken?' and then you start from that. When you take that away for a lot of people, [it creates] big problems, 'what on Earth should I cook now?'. Now there's minced vegetarian meat, [which] sells pretty good and I think that is because it's quite easy. So, if you're doing a bolognaise, you can just as well swap to plant-based, it's just as easy. But if you want to make your chicken stew or whatever, it's harder. [...] We have a "block" which you should, sort of, think about as a piece of meat. Use it as a piece of meat! Whatever you do with the meat, try and use it the same way and it works pretty well, actually. But it's a lot of people to win over and that will take time.*

As seen above Katarina Furin expresses that in order for *Edgy Veggie's* market to grow they need to educate the customers. Moreover, Katarina Furin mentions how a big part of this market is not won over yet. Thus, it seems that a lack of educated stakeholders, might hold back the revenue streams of *Edgy Veggie's* products. Therefore, the urgency of such stakeholder claims seems to be high. Meaning that if the customer is not educated and willing to try new things, *Edgy Veggie* might fail in selling their products to certain customers, therefore the customer holds a utilitarian power over the entrepreneurial firm and its environmental innovation. Ultimately this might affect the environmental innovation of *Edgy Veggie*, due to a lack of educated customers and a willingness to adapt instead of changing customer habits.

During the interview with Simon Ziolkowski from *Skosh*, he spoke about what influenced their environmental development process. One of these influences was wanting to put the customer first. However, taking all customers into account could pose a challenge:

Simon Ziolkowski [...] I mean customers, obviously. Because we communicate to a sustainable audience, I think customers usually tend to come first. What they want and what they think is important. But here also, in our size it's hard when you get two customers that say something. I mean it doesn't really represent the thoughts of the whole community. Is it just those two specific people? I think that's why we tend to, and love to put the customer first. Because I think generally that's what you should do.

Simon Ziolkowski and *Skosh* are very keen on meeting the customer demands but are questioning the feedback given by some of the customers, feeling that they might not be representative of the whole customer base. They want to make the best product possible, which needs input from the customer. However, they still want to educate the customers and bring improvement to the industry, which puts them in a dilemma. It seems from the above statement that the stakeholder, being the customer, holds a great power over *Skosh*, due to them adapting to their demands. *Skosh* puts their customer, and what they find important, first. Thus, the urgency of the stakeholder claim is rather high, due to the relationship with the stakeholder is important for *Skosh*, not only for them personally but also in terms of revenue streams. However, interestingly enough it seems that such adaptation depends on the general customer base. Therefore, mimetic isomorphism, when it comes to the customers, is dependent on the general customer base, meaning no adaptation from *Skosh* if the customer base is too small. Furthermore, Max van der Mars expressed that the customers are important, but changing already existing consumers' habits is a challenge, when working as a startup with an environmentally sustainable product. When asked about some of the challenges that *Skosh* is experiencing he shared with us following:

Max van der Mars: [...] I mean communicating like joining us on our mission because... Together we can make a difference. Like: 'yeah, yeah. What cleaning bottle do I use... Like, really?' [...] I think there are eco-actives. People are consciously aware of things like: 'hey I want to do better, and I want to contribute' and that's a small group and then the majority of the people they are just like, 'convenience'. It should be cheaper, and if I really make the step, I want to see my impact. I wanna see that I make a difference. There has been, I think that has been a challenge in the seconds since we now cover the eco-active people quite a bit. And now disrupting a habit. Of changing to something more

sustainable, that's definitely easier said than done. Like you going to the cleaning aisle. Grabbing this tablet instead of the bottle you have been taking for years, that's disruption. I think that is the major challenge.

As Max van der Mars shared above, *Skosh* is trying to disrupt a habit among the customers of cleaning products. It seems that *Skosh* wants to educate their customers, not only to do better, but to join *Skosh* on their mission, and make a difference. It seems that this lack of education among the stakeholders, that being the customers, is driving *Skosh* to continuously find a solution to the problem. Interestingly, the general will of *Skosh* seems to be met with some resistance from their customers. However, the customer still seems to have a power over *Skosh*, that being a utilitarian power which is based on them gaining financial resources. Even though *Skosh* is met with resistance, when it comes to educating the customer in terms of choosing a more sustainable option, the stakeholder in fact still holds power over *Skosh*. Given the small customer base that an entrepreneurial firm has, the resistance therefore leaves *Skosh* without power (Mitchell, Agle & Wood, 1997), effectively meaning that adaptation is necessary. Since they put the customer first and thus are perceived to have urgency, the customer in fact influences *Skosh* to keep on fighting for legitimacy, by having an environmental innovation.

Wanting to educate the customer is something that Bo Gauffin of *Percy Roc* shared as well during the interview; however, he also emphasizes how going to the market with something new is a challenge. He shared the following when asked about whether there are any other factors that are influencing his work with environmental innovation in your company today:

Bo Gauffin: *I've always seen a challenge in going to market with something completely new. [...] What I've learned from doing that, is that it's not so easy to be the first one. Because as I was working in Philips, we were introducing microwave ovens to the market. As for kitchen and cooking, it was very difficult to get people to understand that this was something that they could need, and they shouldn't be worried about the microwave. The people were a bit - so to say - they were not taking this to themselves until other companies started selling the same type of product, [like] when Electrolux and Miele, and all the others came.*

Bo Gauffin then went further and used Tesla as an example:

***Bo Gauffin:** Until Tesla came and suddenly everyone saw that you can go [...] up to 500, 600 kilometers on one charge and then everybody says: 'well, it's... It's possible'. So, I think that what we're doing is also to try to show the market for our product that this is possible. I see it as a very big challenge in this, that I want to take, I want to take on the challenge.*

Moreover, Bo Gauffin was then asked when developing these types of solutions what he saw as the biggest challenges when it comes to the innovation process of the product. He mentioned:

***Bo Gauffin:** [...] One big challenge is that before we meet [with] potential customers, we have to find out what their cost is today; [what] type of process they are running. It's not that easy to get that information and to [compile] that information so that we can turn that information into – so to say, 'what do they gain with our product?'. [...] So, in the beginning when you are introducing a new technology to the market and then your way of processing things, there is a lot of information gathering to understand the situation they are in right now, and to understand how they could benefit from our solution, and what the arguments are. Sometimes we think that we have an argument, but when we start talking to them, we see that there is another need they have. That could be stronger and then we can find that as the better argument. So, you have to work both closely with potential customers and you have to find information in different ways. [...] Well, not a problem, but in some way a problem to gather the right information when you have a completely new solution.*

It seems that *Percy Roc* is actively trying to educate the customer, however, as Bo Gauffin mentioned, in order to do so they need to know more about the customer. It seems that Bo Gauffin finds a great challenge in bringing a new solution to the market, and to convince the customer. Thus, it seems that the customer holds a great power in the case of *Percy Roc*, since they adjust their solution and continuously try to learn from their customers. The customer can get *Percy Roc* to do something that they would not have done otherwise (Mitchell, Agle & Wood, 1997). Thus, it seems that normative isomorphisms are pushing *Percy Roc* to keep on developing their

environmental innovation. However, as Bo Gauffin shared above, being the first on the market can be difficult; when other players start to enter, some sort of accepted norm is introduced illustrated in Bo Gauffin's example of Tesla. When mimetic processes are existing in the market, meaning that offerings in the market are becoming more similar due to more players, they are more socially accepted by the customer, and thus adopted. A possible explanation for such can be found in when mimetic isomorphisms are more exercised, socially constructed systems of norms are built, and therefore it becomes more legitimate (DiMaggio & Powell, 1983; Mitchell, Agle & Wood 1997).

In a practical sense, summed up by Bo Gauffin: in order to educate the customer, and be a disruptive innovator that creates change, some level of learning and adaptation from the customer must occur. Commonly among all interviews, many are steadfast that their innovation will create change, as long as the customer wants it and is willing to buy it. For that to occur, education is needed. However, the amount of adaptation to the customer demand varies between the entrepreneurial firms and there is no clear path for the balance to be made in order to have the most effective innovation.

6. Discussion

From the analysis of the findings three themes were presented where the authors found similarities in perceptions and behaviors regarding the dilemmatic situations they faced. These three dilemmas were named (1) The Business Logic Dilemma, (2) The Disruptor's Dilemma, and (3) The Educator's Dilemma. As presented the business logic dilemma represents the cases where the interviewees pointed to a tension between what they wanted to do and what they were able to do, given their inherent confinements of being an entrepreneurial SME. Both *Skosh* and *Edgy Veggie* told a tale of business decisions that were taken due to limited means of negotiation; being monetary constraints. Because of their limitations they were pushed to conform to traditional business practices, thus leading them to a path of mimetic isomorphism. Contrasting Frondel et al. (2007), where environmentally sustainable activities are seen as acts of "rational self-interest", the environmental innovation made by both *Skosh*, and *Edgy Veggie* is perceived as counter to that rational self-interest. The reason for this is that they perceive that it goes against what they believe is necessary for their business to thrive or survive. In this dynamic scenario, the suppliers hold salience over the two respective firms, where all three stakeholder attributes are perceived to be present (Mitchell, Agle & Wood, 1997). Perhaps inadvertently, in the case of two of the firms, the supplier acts as a barrier, preventing the environmental innovation from being as sustainable as possible. Ultimately this creates some level of uncertainty where due to monetary constraints the entrepreneurial SME model themselves after other competitors, and thus the environmental innovation is postponed, until more resources are obtained. This uncertainty arrives when the firm realizes that their original product idea is not producible given their current constraints which leads them to falling back on what is seen as traditional business practices from other incumbents in the same industry.

As *Skosh* mentioned, other players on the market are "part of the top ten polluters in the world". It is possible to argue that the mimetic isomorphism is in fact unfavorable for the general outcome of environmental innovation similar to the conclusion of Bower and Christensen (1995), that business decisions that seem right today, might not be adjusted for the changed future of tomorrow. Further, it seems that those who are constrained in resources are forced to look at other actors in

the market, where in fact the opposite actions would lead to a more favorable outcome for the sake of the environmental innovations in the market. Thus, highlighting the very problematic issue of mimetic behavior within entrepreneurial SMEs, where the imitation in fact contradicts the ambition of the disruptive act leading to a lessened positive outcome for the environment.

The behavior in which the entrepreneurial firm acts against unfavorable actions such as imitation, was investigated in the disruptor's dilemma chapter. The firms actively distanced themselves by disrupting industry standards and practices, through the acknowledgement of systematic issues when it comes to the sustainability decisions made by the incumbents in the industry. An example of such can be found when *Skosh* emphasized a lack of what they saw as legitimate behavior from the larger corporations in the industry, in turn, causing *Skosh* to move away from industry practices. As previously mentioned such behavior is referred to, by the authors, as being *non-mimetic*, where the disruptor rejects the behavior of other incumbents as opposed to imitating them. This could be explained by their entrepreneurial nature, but this is outside of the scope of this thesis and would require deeper studies. However, according to DiMaggio & Powell (1983) organizations mimic one another when exposed to uncertainty, both organizational and technological, and tend to adopt attributes which could be identified as the main cause of other's success. In the case of *Edgy Veggie* this behavior was identified, where the firm saw a role model in the case of the vegetarian milk substitute company, *Oatly*. Even though there might be a difference in perception and action, such perceptions might in the end lead to practical actions, and therefore it can be argued that eventually *Edgy Veggie* will model themselves accordingly. Similar to both *Skosh* and *Percy Roc*, *Edgy Veggie* has the ambition to bring change to an entire industry. However, in their niche category within the larger food industry, they are in fact not the first-moving disruptor, but instead are incrementally innovating in terms of adding more products that add variety in the market. Perhaps with the goal of disrupting the larger industry through the help of all other firms within their niche. According to DiMaggio & Powell (1983) it is not unseen but merely natural that *Edgy Veggie* would want to aspire to be as *Oatly*, especially when it comes to innovations: "While there are those who consciously innovate, there are those who, in their imperfect attempts to imitate others, unconsciously innovate by unwittingly acquiring some unexpected or unsought unique attributes which under the prevailing circumstances prove partly

responsible for the success. Others, in turn, will attempt to copy uniqueness, and the innovation-imitation process continues” (DiMaggio & Powell, 1983, p.151). However, it still highlights a general issue, in the sense that if the innovation-imitation is blindly adopted, the environmental innovation might be affected negatively. One can question whether the mimetic processes in fact serve a greater purpose or prove to be detrimental for environmental innovation. As seen in the case of *Skosh*, competitors do play a role when it comes to their environmental innovation, however, as opposed to following the footsteps of other incumbents and imitating them through mimetic processes, they want to show them the way forward. Therefore, it could be argued that, in this case, it is in fact the very inception of the *imitation game*, where the disruptors are showing the way forward, setting precedents, when it comes to their environmental innovation. By doing that, they change the rules of the game with the goal of having others following suit and where it might be the very inception of the sustainable imitation exercised through disruption. Whereas, in the case of *Edgy Veggie*, they do in fact “copy uniqueness, and the innovation-imitation process continues” (DiMaggio & Powell, 1983, p.151), such imitation could be seen as favorable if in fact it influences environmental innovation in a positive manner. In the chapter, it became clear for the authors that the way that the case firms made sense of the pressures and processes provided no singular, common, salient stakeholder. The stakeholder theory is dynamic (Mitchell, Agle & Wood, 1997) and the pressures from different stakeholders vary depending on the situation of the entrepreneurial SME, which could be a reason for why the case firms did not perceive the same urgency from similar stakeholder groups. Another reason for failing to find a common salient stakeholder group between the case firms could be the fact that they are all active in different industries and markets and by that they are also exposed to different kinds of competition.

The Educators Dilemma portrayed the difficult balancing act that the case firms had to consider when approaching the customer. On one hand, an environmental innovation wants the customer to change their habits, meaning that the case firms educate the customer how to act in a more sustainable way. On the other hand, contrary to educating the customers, the firms also want to approach them, and therefore some level of adaptation to the customer is needed in order to reach the customer. The isomorphic processes at play here, commonly found throughout the findings, were mimetic and normative in nature. As presented, when a customer group is a definitive and

salient stakeholder, they can affect the way the firm organizes and models itself (Mitchell, Agle & Wood, 1997). Simply put, the customers want what they want. If the firm does not comply with customer demands, they miss out on the financial gains, existing in the customers' utilitarian power base, which might even lead to the demise of an entrepreneurial SME. This power held by the customer, as a stakeholder, could therefore influence mimetic isomorphic tendencies, as seen in all three of our case firms. Even though all of the case firms are met with some resistance they continue to develop their environmental innovations and adapt to the customer. However, it seems that all of the case firms wish to be educators but realize that in order to educate your customers you need to learn from them and have some sort of adaptation. Being first-to-market with a novel product appears to require a certain level of necessity for adapting to and learning from the customer. The force of the normative isomorphisms and the general salience of the customer is still strong enough to keep the disruptors bringing their environmental innovations to the market. However, as evident from the findings, when mimetic isomorphisms are more present, the customers are more willing to adapt, due to legitimacy, highlighting that competition and customers are intertwined and are stronger forces of driving environmental innovations forward when combined. The customer stakeholder holds a power when "one social actor, A, can get another social actor, B, to do something that B would not have otherwise done" (Pfeffer, 1981 in Mitchell, Agle & Wood, 1997, p.869). Even though the customer is influencing the firm when it comes to them learning from them and adapting, it does not necessarily mean that the firm in fact would do something which they would not otherwise have done, since the disruptor has a clear mission and vision of what they want to bring to the market, which is, no matter what, always an environmental innovation.

There was a surprising lack of coercive isomorphism in the findings. Although previous studies have proven that coercive isomorphisms have an effect on environmental innovation (Rehfeld, Rennings, & Ziegler 2007; Montalvo, 2008; Chan et al. 2015; Chen et al. 2018), the interviewees did not show or perceive any tension. Because of the logical unwillingness of the entrepreneurial SME to go against any rules or regulations, the coercive elements were taken for granted in the decision-making process.

7. Conclusion

7.1 Aim of the thesis and main findings

This thesis aimed to investigate how entrepreneurial SMEs within Sweden make sense of isomorphic processes and stakeholder pressures on their environmental innovations. The authors wanted to establish a broader understanding of institutional and stakeholder pressures, through semi-structured interviews with entrepreneurial case firms that are developing or have developed environmentally innovative products.

The findings of this thesis have shown that perceptions of stakeholder pressures and which stakeholder is perceived to cause them to vary. The interaction with stakeholders led the case firms towards isomorphic tendencies, however, interestingly enough the reason for this can be found in how they are constrained by resources and their general size, both in terms of market share and organization. The findings showed compromises and necessary sacrifices made in order for the firms to function. This was shown in the way that the firms interacted with the stakeholders when it came to following business logic versus sustainability goals; adapting to the customer versus educating the customer; and disrupting the market versus making incremental innovations.

Ultimately, these dilemmas and how the entrepreneurial SMEs made sense of them affected the environmental innovations. Initially the authors observed that the interviewees indicated that they were postponing some sustainability aspects in their environmental innovations in order to survive with the intention of revisiting these aspects in the future or reiterating over time. The findings also indicated that despite the case firms having the ambition to carve out their own path, they moved towards mimetic isomorphism for some reason or another, supporting the claim that uncertainty induces imitation. Furthermore, compromises between educating the customer and adapting to the customer were seen to be necessary, when it came to the environmental innovation products offered by the case firms. Similar to most things in life, everything is a give-and-take, where both the environmental innovators and the steadfast industries and markets must come to terms with how they mutually can help the planet instead of settling for mutually assured destruction. The customers carry a portion of this burden as well, with how their habits influence

even the most disruptively minded innovators, but as the IPCC report (2022) mentions, in order to save the planet, it requires an effort from all aspects of humanity.

7.2 Limitations

This thesis was limited in its findings based on numerous factors. The first one being that the thesis only managed to get one interview from the case firm *Percy Roc*. An additional interviewee from this case firm could have given more data that could have been analyzed, and a second perspective from within the case firm and by this making it more representable. Moreover, this thesis had three case firms that were represented. Having more case firms could have strengthened the general analysis and conclusion. In contrast, having a single case study could have given more depth in how the isomorphic and stakeholder pressures are perceived throughout the whole entrepreneurial firm.

Furthermore, this thesis looks into the general perception and interaction with isomorphic and stakeholder pressures. Since the thesis investigated how the interviewees make sense of isomorphic processes and stakeholder pressures on their environmental innovation, such perceptions might have been biased. The selection of interviewees could also serve a role in presenting a subjective bias based on their occupational position within the case firm. This happened due to convenience for the case firms and could have been mitigated by selecting interviewees based on their specific role and not through the convenience of the case firms. An additional bias that might affect the outcome of the thesis is the social desirability bias, whereas the interviewees may have over-reported on traits that are deemed socially desirable and under-reported on traits that were not. At the end of the day the authors were speaking to interviewees as corporate representatives, despite efforts to avoid it. Furthermore, the case firms are from three separate industries but share a commonality of environmental product innovation. The findings could therefore look different if all three case firms were active in the same industry.

Moreover, this thesis did not look into the general outcome of such pressures and therefore does not show how the isomorphic pressures and stakeholder pressures are affecting the general outcome of the environmental innovation. Instead, it focuses on the perceptions and interactions.

7.3 Practical Implications and Future Research

This thesis shed light on how entrepreneurial SMEs within Sweden made sense of Isomorphic processes and Stakeholder pressures on their environmental innovations, through a qualitative multi-case study. Previous studies that investigated the effects that isomorphic pressures and stakeholder pressures had on environmental innovations, were of a quantitative nature. Moreover, these studies, as far the authors know, focused on larger organizations (Rehfeld, Rennings, & Ziegler 2007; Montalvo, 2008; Eiadat et al. 2008; Guoyou et al. 2013; Chan et al. 2015; Huang et al. 2016; Chen et al. 2018), where this thesis instead focused on entrepreneurial SMEs. To the authors' limit of knowledge, this is the first study to look into how entrepreneurial SMEs make sense of such pressures within Sweden. Due to this, our findings show how entrepreneurial SMEs make sense of isomorphic and stakeholder pressures when it comes to environmental innovations for the first time. The authors hope that this thesis will encourage others to study how isomorphic pressures and stakeholders affect the general landscape and outcome of environmental innovations within Sweden as well as the rest of Europe. Especially since the disruptors are those who bring change to the market when it comes to environmental innovations, thus highlighting the importance of academia shedding a light on the phenomenon. The non-mimetic discovered in the findings could be an interesting topic to further dissect, and the authors recommend studies focusing on the underlying reasonings for why entrepreneurial SMEs have an ambition to carve out their own paths.

The authors of this thesis suggest future research to look into what the actual outcome of the isomorphic and stakeholder pressures are on environmental innovations in entrepreneurial SMEs. Additionally, the authors of this thesis suggest that a larger sample size of entrepreneurial SMEs is applied to the former proposed research. A qualitative analysis of entrepreneurial innovation in Sweden could also provide novel information that would provide a framework of understanding and help expand the general landscape of entrepreneurial research.

References

- Bell, E., Bryman, A. & Harley, B. (2019). *Business Research Methods*, 5th edn, New York: Oxford University Press.
- Bhattacharya, U., Hsu, P. H., Tian, X. & Xu, Y. (2017). What Affects Innovation More: Policy or Policy Uncertainty?, *Journal of Financial and Quantitative Analysis*, vol. 52, no. 5, pp.1869–1901.
- Bower, J. L. & Christensen, C. M. (1995). Disruptive Technologies: Catching the Wave, *Harvard Business Review*, no. January-February, pp.43–53.
- Braun, V. & Clarke, V. (2006). Using Thematic Analysis in Psychology, *Qualitative Research in Psychology*, [e-journal] vol. 3, no. 2, pp.77–101, Available Online: <http://www.ncbi.nlm.nih.gov/pubmed/11752478>. [Accessed 22 March 2022]
- Chan, H. K., Yee, R. W. Y., Dai, J. & Lim, M. K. (2016). The Moderating Effect of Environmental Dynamism on Green Product Innovation and Performance, *International Journal of Production Economics*, [e-journal] vol. 181, pp.384–391, Available Online: <http://dx.doi.org/10.1016/j.ijpe.2015.12.006>. [Accessed 17 February 2022]
- Chen, X., Yi, N., Zhang, L. & Li, D. (2018). Does Institutional Pressure Foster Corporate Green Innovation? Evidence from China's Top 100 Companies, *Journal of Cleaner Production*, vol. 188, pp.304–311.
- Cleff, T. & Rennings, K. (1999). Determinants of Environmental Product and Process Innovation, *European Environment*, vol. 9, no. 5.
- Díaz-García, C., González-Moreno, Á. & Sáez-Martínez, F. J. (2015). Eco-Innovation: Insights from a Literature Review, *Innovation: Management, Policy and Practice*, vol. 17, no. 1, pp.6–23.

- DiMaggio, P. J. & Powell, W. W. (1983). The Iron Cage Revisited: Institutional Isomorphism and Collective Rationality in Organizational Fields, *Source*, Vol. 48, American Sociological Review.
- Doran, J. & Ryan, G. (2016). The Importance of the Diverse Drivers and Types of Environmental Innovation for Firm Performance, *Business Strategy and the Environment*, vol. 25, no. 2, pp.102–119.
- Edgy Veggie. (2022a) Om Oss, Available Online: <https://edgyveggie.se/om-oss/> [Accessed 18 May 2022]
- Edgy Veggie. (2022b) Frågor och svar - Edgy Veggies Produkter, Available Online: <https://edgyveggie.se/fragorochsvar/edgy-veggies-produkter/#fragor> [Accessed 18 May 2022]
- Edgy Veggie. (2022c) Frågor och svar - Klimatpåverkan och Hållbarhet, Available Online: <https://edgyveggie.se/fragorochsvar/klimatpaverkan-och-hallbarhet/#fragor> [Accessed 18 May 2022]
- Eiadat, Y., Kelly, A., Roche, F. & Eyadat, H. (2008). Green and Competitive? An Empirical Test of the Mediating Role of Environmental Innovation Strategy, *Journal of World Business*, vol. 43, no. 2, pp.131–145.
- Eisenhardt, K. M. & Graebner, M. E. (2007). Theory Building from Cases: Opportunities and Challenges, *Source: The Academy of Management Journal*, Vol. 50, pp.25–32
- Freeman, E. (2001). Stakeholder Theory of the Modern Corporation, *Perspectives in Business Ethics*, vol. 3, pp.33–48.
- Fronzel, M., Horbach, J. & Rennings, K. (2008). What Triggers Environmental Management and Innovation? Empirical Evidence for Germany, *Ecological Economics*, vol. 66, no. 1, pp.153–160.

- Gioia, D. A., Corley, K. G. & Hamilton, A. L. (2013). Seeking Qualitative Rigor in Inductive Research: Notes on the Gioia Methodology, *Organizational Research Methods*, vol. 16, no. 1, pp.15–31.
- Guoyou, Q., Saixing, Z., Chiming, T., Haitao, Y. & Hailiang, Z. (2013). Stakeholders' Influences on Corporate Green Innovation Strategy: A Case Study of Manufacturing Firms in China, *Corporate Social Responsibility and Environmental Management*, vol. 20, no. 1, pp.1–14.
- Hemmelskamp, J. (1997). Environmental Policy Instruments and Their Effects on Innovation., *European Planning Studies*, [e-journal] vol. 5, no. 2, p.177, Available Online: <http://ludwig.lub.lu.se/login?url=https://search.ebscohost.com/login.aspx?direct=true&AuthType=ip,uid&db=23h&AN=9706045674&site=eds-live&scope=site>. [Accessed 20 February 2022]
- Henriques, I. & Sadorsky, P. (1999). The Relationship between Environmental Commitment and Managerial Perceptions of Stakeholder Importance, *Academy of Management Journal*, vol. 42, no. 1, pp.87–99.
- Herold, D. M., Farr-Wharton, B., Lee, K. H. & Groschopf, W. (2019). The Interaction between Institutional and Stakeholder Pressures: Advancing a Framework for Categorising Carbon Disclosure Strategies, *Business Strategy and Development*, vol. 2, no. 2, pp.77–90.
- Horbach, J. (2008). Determinants of Environmental Innovation—New Evidence from German Panel Data Sources, *Research Policy*, vol. 37, no. 1, pp.163–173.
- Hörte, S-Å, & Halila, F. (2008). Success Factors for Eco-Innovations and Other Innovations, *International Journal of Innovation and Sustainable Development*, vol. 3, pp.301–327.
- Huang, X. X., Hu, Z. P., Liu, C. S., Yu, D. J. & Yu, L. F. (2016). The Relationships between Regulatory and Customer Pressure, Green Organizational Responses, and Green Innovation Performance, *Journal of Cleaner Production*, [e-journal] vol. 112, pp.3423–

3433, Available Online: <http://dx.doi.org/10.1016/j.jclepro.2015.10.106>. [Accessed 17 February 2022]

IPCC. (2022). Climate Change 2022: Mitigation for climate change [pdf], Available at: <https://www.ipcc.ch/report/sixth-assessment-report-working-group-3/> [Accessed 10 April 2022]

Jaffe, A. B., Peterson, S. R., Portney, P. R. & Stavins, R. N. (1995). Environmental Regulation and the Competitiveness of U.S. Manufacturing: What Does the Evidence Tell Us?, *Journal of Economic Literature*, [e-journal] vol. 33, no. March, pp.132–163, Available Online: http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=PubMed&dopt=Citation&list_uids=11893638. [Accessed 21 February 2022]

Kammerer, D. (2009). The Effects of Customer Benefit and Regulation on Environmental Product Innovation. Empirical Evidence from Appliance Manufacturers in Germany, *Ecological Economics*, vol. 68, no. 8–9, pp.2285–2295.

Karlson, N., Sandström, C. & Wennberg, K. (2021). Bureaucrats or Markets in Innovation Policy? – A Critique of the Entrepreneurial State, *Review of Austrian Economics*, vol. 34, no. 1, pp.81–95.

Liao, Z. (2018). Institutional Pressure, Knowledge Acquisition and a Firm's Environmental Innovation, *Business Strategy and the Environment*, vol. 27, no. 7, pp.849–857.

Liao, Z. & Liu, Y. (2021). What Drives Environmental Innovation? A Meta-analysis, *Business Strategy and the Environment*, [e-journal] vol. 30, no. 4, pp.1852–1864, Available Online: <https://onlinelibrary.wiley.com/doi/10.1002/bse.2720>. [Accessed 20 February 2022]

Liao, Z. & Zhang, M. (2020). The Influence of Responsible Leadership on Environmental Innovation and Environmental Performance: The Moderating Role of Managerial Discretion, *Corporate Social Responsibility and Environmental Management*, vol. 27, no. 5, pp.2016–2027.

- Meyer, J. W. & Rowan, B. (1977). Institutionalized Organizations: Formal Structure as Myth and Ceremony, *American Journal of Sociology*, vol. 83, no. 2, pp.340–363.
- Mitchell, R. K., Agle, B. R. & Wood, D. J. (1997). Toward a Theory of Stakeholder Identification and Salience: Defining the Principle of Who and What Really Counts, *Academy of Management Review*, vol. 22, no. 4, pp.853–886.
- Montalvo, C. (2008). General Wisdom Concerning the Factors Affecting the Adoption of Cleaner Technologies: A Survey 1990-2007, *Journal of Cleaner Production*, vol. 16, no. 1 SUPPL. 1, pp.S7–S13.
- Percy Roc. (2022a). Percy Roc, Available Online: <https://percyroc.se> [Accessed 18 May 2022]
- Percy Roc. (2022b) Team, Available Online: <https://percyroc.se/team/> [Accessed 18 May 2022]
- Rehfeld, K. M., Rennings, K. & Ziegler, A. (2007). Integrated Product Policy and Environmental Product Innovations: An Empirical Analysis, *Ecological Economics*, vol. 61, no. 1, pp.91–100.
- Rennings, K. (2000). Redefining Innovation - Eco-Innovation Research and the Contribution from Ecological Economics, *Ecological Economics*, vol. 32, no. 2, pp.319–332.
- Satell, G. (2017). The 4 Types of Innovation and the Problems They Solve, *Harvard Business Review*, Available online: <https://hbr.org/2017/06/the-4-types-of-innovation-and-the-problems-they-solve>. [Accessed 18 February 2022]
- Saunders, M., Lewis, P., & Thornhill, A. (2012). *Research Methods for Business Students*, 6th edn, London: Pearson Education.
- Scotland, J. (2012). Exploring the Philosophical Underpinnings of Research: Relating Ontology and Epistemology to the Methodology and Methods of the Scientific, Interpretive, and Critical Research Paradigms, *English Language Teaching*, vol. 5, no. 9, pp.9–16.
- Silverman, D. (2015). *Interpreting Qualitative Data*, 5th edn, London: Sage.

Skosh. (2022a). About Us, Available Online: <https://en.skosh.se/pages/about-us> [Accessed 18 May 2022]

Skosh. (2022b) Frequently Asked Questions, Available Online: <https://en.skosh.se/pages/about-us> [Accessed 18 May 2022]

Triguero, A., Fernández, S. & Sáez-Martinez, F. J. (2018). Inbound Open Innovative Strategies and Eco-Innovation in the Spanish Food and Beverage Industry, *Sustainable Production and Consumption*, vol. 15, pp.49–64.

Yarahmadi, M. & Higgins, P. G. (2012). Motivations towards Environmental Innovation: A Conceptual Framework for Multiparty Cooperation, *European Journal of Innovation Management*, vol. 15, no. 4, pp.400–420.

Yin, R. K. (2018). Case Study Research and Applications: Design and Methods, edited by R. K. Yin, 6th edn, SAGE Publishing.

Zhang, F. & Zhu, L. (2019). Enhancing Corporate Sustainable Development: Stakeholder Pressures, Organizational Learning, and Green Innovation, *Business Strategy and the Environment*, vol. 28, no. 6, pp.1012–1026.

Appendix I: Interview Guide

Origin Story

- How did it all start with your entrepreneurial company? Describe how you were motivated to start a new venture
- What were the specific factors that may have pushed you in a certain direction?
- How did they influence you?
- When and why did you decide to become an entrepreneur?
 - (non-founder) Why did you decide to work at an entrepreneurial firm?

Processes

- How are you working with environmental innovation processes today?
- Why are you working with it, and why is or isn't it important to you? (What is it about it that makes you think that?)

Challenges

- How did you initially interact with environmental challenges that you faced in the early stage of the venture?
- Which are your biggest challenges when working with environmental innovation, currently? And how do you work with them?