

# Challenges and Approaches to Capturing Sustainable Value in the Food Industry

A Study of Sustainable Entrepreneurship in Sweden

by

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## **Abstract**

The purpose of this study is to investigate what challenges sustainable entrepreneurs in the food industry face when capturing value and how they aim to overcome them. To that end, we develop a theoretical framework based on relevant literature on sustainable entrepreneurship, entrepreneurial studies and environmental science. Furthermore, we conducted nine case studies, drawing from semi-structured interviews to founders and CEOs, of startups with sustainable marketing claims in the Swedish food industry. The results illustrate how sustainable entrepreneurs create value, where one major trend is the creation of sustainable value using waste or excess resources. Moreover, the findings confirm that it is challenging to successfully capture value when producing sustainable value. Three major challenges identified are that the market for sustainability is a niche market; the growth aspirations of sustainable entrepreneurs can interfere with the necessity to scale up; and that institutions might hamper innovative business ideas. Consequently, our paper identifies four main approaches to capture value: Co-creation with bigger firms to leverage resources and share risks; business model innovations on how to capture value; a shift of mindset to acknowledge business growth as a necessity; and involvement with institutions and networks to shape the possibilities in the market. Lastly, we set forth theoretical and practical implications for practitioners and future studies.

**Keywords**: Sustainable entrepreneurship, value creation, value capture, food industry, entrepreneurship.

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# 1 Introduction

In the following section, we introduce our topic "Challenges and Approaches to Capturing Sustainable Value in the Food Industry" by explaining the background and relevance and elaborating on the discovered research gap. Besides the reasoning why this topic is of interest and relevance, we want to state that we as authors have a genuine interest and passion for entrepreneurship and sustainability and hope that this work will be an inspiring and interesting read.

## 1.1 Background

The effects of anthropogenic activity on environmental change and deterioration have been extensively discussed in academic and political settings. Climate change (IPCC, 2014), biodiversity loss, land and water pollution and degradation, and resource depletion (MEA, 2005), are just a few of a long list of environmental issues connected to human activity (Rockström et al., 2009).

In this context, 'sustainable development' has been positioned as the dominant framework for reconciling the seemingly contradictory objectives of economic growth, social justice, and environmental protection. Proposed for the United Nations in a report prepared by the World Commission on Environment and Development in 1987, the document first defines sustainable development as the "development that meets the needs of the present without compromising the ability of future generations to meet their own needs" (United Nations, 1987).

The initial concern in business appears around the eighties, with the incorporation of sustainability concerns into Corporate Responsibility practices (Hopkins, 2016). However, with the emergence of entrepreneurship as an academic field there is a renewed faith in the role of innovation and entrepreneurship to provide a source of sustainable solutions and a 'way out' of environmental dilemmas (Stål & Bonnedahl, 2016).

Sustainable entrepreneurship, ecopreneurship or environmental entrepreneurship are all very recent terms in the entrepreneurship literature (Hall, Daneke & Lenox, 2010). Thus, the concepts have not been all equally or consistently defined. Although sustainable development has been around since the seventies, and the concerns of business and the environment since the eighties, the field of entrepreneurial theory has only recently started to consider the connections between sustainability and entrepreneurship (Hall, Daneke & Lenox, 2010).

Leading entrepreneurship journals, such as 'Entrepreneurship: theory and practice' and the 'Journal of business venturing' published their first articles related to entrepreneurship and sustainability as late as 2007; most with a focus on opportunity recognition (Hall, Daneke & Lenox, 2010). The fact that Sustainable Entrepreneurship (SE) is a rather new field, suggests that there are still plenty of opportunities for research. We specifically found research opportunities concerning how sustainable entrepreneurs face the challenges of creating and capturing social and environmental value, what we call sustainable value. In order to create sustainable value, entrepreneurs also need to be able to capture the value they create, however, literature suggests entrepreneurs often struggle to do so (Schaltegger, Lüdeke-Freund & Hansen, 2016). Few authors emphasize these tensions (Davies & Chambers, 2018), which poses the question of the reach and impact of entrepreneurship in transforming industries to more sustainable practices (Hockerts & Wüstenhagen, 2010). How sustainable entrepreneurs can capture value remains an underdeveloped field in entrepreneurial research. Thus our study aims to contribute filling this gap.

To do so, we will focus on entrepreneurial ventures in the food industry in Sweden. We consider the industry an appropriate context, as it has a high environmental impact and has recently attracted multiple sustainable entrepreneurs. Furthermore, we have a personal interest in the sector due to our own entrepreneurial plans. 'Food and drink' are among the three areas of private consumption that have the strongest impact on the environment, with 20 - 30%, according to a study of the environmental impact of products by the European Commission (Tukker et al., 2006). In the last years, the food and beverage industry has seen a huge amount of startups and innovation (Weinswig, 2016). The industry is expected to grow from 2015 to 2020 by 4,5% to around three trillion USD revenue (Weinswig, 2016). Those studies illustrate the food industry as a major industry that experiences innovation and attracts new ventures. At the same time, however, the value creation process in the food industry also creates significant environmental externalities. All this suggests there might be specific challenges and approaches

to creating and capturing value in sustainable ventures in this specific industry that have not yet been researched.

In Sweden, the food industry reported 177 billion SEK revenue in 2015 making it the fourth biggest industry (Livsmedelsföretagen, 2018). Between 2010 and 2015, 732 new founded and still operating "aktiebolag", the Swedish equivalent to limited companies, have been registered in the food industry (Livsmedelsföretagen, 2017). In no other industry were there more new registrations. Moreover, the study by the organization "Livsmedelsföretagen" (2017) found that around one-third of entrepreneurs were working with innovative products or services. Additionally, 70% position their product in the premium price category, which indicates the trend of focusing on high quality in niche segments. To sum up, the Swedish food industry delivers a highly relevant context for our analysis of sustainable entrepreneurship due to the growing entrepreneurial activity and the overall relevance of the industry as the main contributor to environmental degradation as well as the literature gap identified.

## 1.2 Research Purpose

This study intends to address two gaps identified in the literature. The first is related to the scope of studies in sustainable entrepreneurship. Most studies have focused on the entrepreneurial process, and more specifically, on how opportunities come to be (Cohen & Winn, 2007; Dean & McMullen, 2007; Stål & Bonnedahl, 2016). While several studies discuss how social and environmental value is created (Bocken et al., 2014; Schaltegger, Lüdeke-Freund & Hansen, 2016), there is yet, to our knowledge, no discussion about the challenges sustainable entrepreneurs in specific industries face when creating and capturing value except for Jolink and Niesten (2015).

Second, there are few studies concerning sustainable entrepreneurship in the food industry, especially considering the scale of its environmental impact. Most empirical studies work with a mixed sample of sustainable companies from different industries (for example Hockerts & Wüstenhagen, 2010; Pacheco, Dean & Payne, 2010). A few exceptions of studies focusing specifically on the food industry can be noted such as Tjärnemo and Södahl (2015) that focus on the retailer perspective; Lehner and Halliday (2014) focusing on the role of brands to create sustainable markets; Beckeman, Bourlakis and Olsson (2013) about role of manufacturers in food innovation; and Larsson, Andersson and Enberg (2005) a case study of eight

environmental entrepreneurs in the food industry focusing on their contribution to the Swedish region Järna.

In order to contribute to a more nuanced understanding of sustainable entrepreneurship in the food industry it is important to analyse and categorize major trends, similarities, and differences in the value creation and capture of entrepreneurs. Thus, the question that guides our study asks: What challenges do sustainable entrepreneurs in the Swedish food industry face when attempting to capture sustainable value and how do they try to overcome them?

Therefore, the purpose of this research is to study a sample of startups in the Swedish food industry and analyse their challenges and strategies concerning sustainable value creation and capture. To do this, we will analyse a collection of key aspects identified in sustainable entrepreneurship literature: sustainable business opportunities, growth motivation, value creation and value capture. This will help us developing insights into how sustainable ventures create value, what are the most relevant challenges when attempting to capture value created and the strategies they develop in response.

#### 1.3 Research Limitations

This research is intended as an initial approximation at the subject of sustainable entrepreneurship in the food industry. Given that academic research in the field is novel, the subject must be approached from an interdisciplinary perspective, drawing on theory from entrepreneurial studies, business administration, and sustainability studies. From a methodological perspective, the focus of this research is purely qualitative which means that the conclusions made cannot be considered a definitive list of challenges and strategies of sustainable entrepreneurs. Rather, the insights from this work would ideally fuel future research that goes into more detail into the specifics of the elements described in this and similar works.

#### 1.4 Outline of the Thesis

Having introduced the significance and relevance of our study (Chapter 1), we start by providing a comprehensive view of the existent literature introducing the main concepts that guide our study (Chapter 2). Thereafter, we present our methodological approach making the

research process transparent for the reader (Chapter 3). We continue by analysing the results of our study which show how sustainable entrepreneurs create and try to capture value (Chapter 4). Lastly, we discuss the implications of our study for sustainable entrepreneurs and possible future research directions for scholars (Chapter 5).

# 2 Theoretical Review

By examining the current research on sustainable entrepreneurship, we highlight where our research positions itself and reiterate the gap we seek to fill. In the course of this framework, we introduce Sustainable Entrepreneurship (SE) and dive into two main components of the concept in an effort to contextualise the salient elements of the field. Firstly, we focus on how sustainable business opportunities are exploited by entrepreneurs and on their attitudes towards growth. Second, we outline value creation and value capture, which contextualise the main challenge and focus of our research question for sustainable entrepreneurs.

## 2.1 Defining Sustainable Entrepreneurship

The specific connections between entrepreneurship studies and addressing environmental concerns are relatively recent (Hall, Daneke & Lenox, 2010). Overall, they are based on the idea that entrepreneurship has the potential to create positive disruptive changes through innovation that will help address social and environmental issues. This is based in part on an interpretation of Schumpeter's 'creative destruction' (Hall, Daneke & Lenox, 2010), together with a re-framing of the process of opportunity recognition in terms of addressing social and environmentally relevant market failures (or imperfections) through entrepreneurial action (Cohen & Winn, 2007; Dean & McMullen, 2007). Authors like York and Venkataraman (2010) suggest that under the appropriate conditions, entrepreneurship can assist and even "surpass, the efforts of governments, NGOs and existing firms to achieve environmental sustainability" (p.449). Literature suggests that SE refers to a combination of social and environmental concerns that will be addressed by the ventures. Nevertheless, as Hockerts and Wüstenhagen (2010) point out, often discussions on this subject focus only on the environmental aspects of sustainability.

No single definition of SE exists. Additionally, authors have used alternative concepts such as environmental entrepreneurship, ecopreneurship, green entrepreneurship, to refer to a more or less similar subject. It is no surprise, however, this definition is contested, considering the

definition of sustainability itself is not entirely agreed upon (Ramsey, 2015). Thus, below, we will discuss three approaches to defining the subject found in entrepreneurial literature, as well as present the definition we will be using as a guide when discussing SE.

The first approach is focused on how sustainability related opportunities arise. For Dean and McMullen SE is defined by the "alleviation of environmentally relevant market failures through the exploitation of potentially profitable opportunities" (2007, p.51). Furthermore, they argue that sustainable and environmental entrepreneurship are fundamentally different from social entrepreneurship because the latter is usually 'mission driven' while the former can be completely 'profit-driven'. In a similar fashion, Cohen and Winn (2007), following mainly Venkataraman's definition of Entrepreneurship (1997), define SE by "how opportunities to bring into existence 'future' goods and services are discovered, created, and exploited, by whom, and with what economic, psychological, social, and environmental consequences" (p.35). Here too, the origin of opportunities are at the focus of SE, and market imperfections with social or sustainable implications provide the source of such opportunities.

The second approach focuses on the disruptive potential of entrepreneurship. Hockerts and Wüstenhagen (2010) define SE from a Schumpeterian view, where the exploitation of market opportunities leads to disequilibrium that, when imitated, leads the "sector towards an environmentally and socially more sustainable state" (p.482). For the authors, SE does not refer to incremental changes, but rather to disruptive innovations. Their main claim is that new ventures, which are more flexible and innovative, will set the tone for the development of the whole industry.

The last approach introduces a more critical perspective based on 'strong sustainability' in entrepreneurship. For Stål and Bonnedahl (2016), rather than parting from the environmental approach, that examines opportunities in relation to market failures or imperfections, they start from an ecological economics approach. In ecological economics, the economy is a sub-system of the biosphere, and thus, must follow natural and physical laws. This leads to the conceptualisation of 'strong sustainability'. From a strong sustainability perspective, markets, "even when they are functioning according to their assumed principles, could systematically counteract the objectives of sustainable development by allocating away from basic needs towards purchasing power and being unable to internalize ecological boundaries." (Stål & Bonnedahl, 2016, p.78). Thus, strong SE needs to focus not only on market imperfections but on the undercurrents of resource consumption, specifically of critical natural capital.

For this thesis, we will take an inclusive definition of SE while acknowledging and including in our discussions other definitions and approaches. Following Schaltegger, Lüdeke-Freund and Hansen (2016, p.268):

Sustainable entrepreneurship is a sustainability mission-driven process of solving environmental and social problems of unsustainability by means of the exploration and exploitation of market opportunities created with innovative business models.

# 2.2 Opportunity Exploitation and Growth Motivations

Creating and delivering social and environmental value through innovative products, services and business models, and then being able to capture that value in order to survive and mature is at the core of this research. Before this, however, we must take a step back to analyse the source of sustainable opportunities, as well as the motivations of the entrepreneurs themselves. How sustainable entrepreneurs approach the creation and growth of their business will impact how they respond and adjust when faced with the challenges of capturing value. Thus, this section will explore SE literature regarding two salient moments: (1) the process of opportunity exploitation and (2) growth motivations.

#### 2.2.1 Opportunity Exploitation

The origin of entrepreneurial opportunities is at the core of the academic study of entrepreneurship (Shane & Venkataraman, 2000). Whether discovered, recognised or created (Sarasvathy et al., 2010; Shane, 2000), the study of the entrepreneurial process, including SE, must consider how opportunities come to be. Early literature on SE paid a lot of attention to the existence of social and environmental opportunities (Cohen & Winn, 2007; Dean & McMullen, 2007). Three main approaches to opportunities can be identified in the literature: (1) the market perspective; (2) the institutional perspective; and (3) the ecological perspective.

The first, from welfare and environmental economics, proposes that sustainable opportunities arise from market imperfections. The overall argument builds upon entrepreneurship literature and research, where opportunities may arise from the exploitation of 'market gaps' (see for example Shane, 2000). Dean and McMullen (2007) suggest the same happens with opportunities connected to environmental degradation. Market failures present opportunities

that can be seized by entrepreneurs for both profit and the reduction of negative environmental impacts. Several authors (Cohen & Winn, 2007; Dean & McMullen, 2007) analyse different types of imperfections that can be potential sources of opportunities (i.e. externalities, information asymmetries, flawed pricing mechanisms, inefficient firms and misuse of shared and public goods). As consumers and other market actors reject the creation of externalities produced by market failures, they become open to new firms that can exploit the gap.

The second perspective could be described as an institutional approach. For York and Venkataraman (2010), opportunities arise not only from the imperfections of the market but from external motivations of other actors. According to the authors, "entrepreneurs can contribute to solving environmental problems by (1) contributing to helping extant institutions (...) in achieving their goals, and (2) creating new, more environmentally sustainable products, services and institutions through doing things incumbent institutions do not, and cannot do." (2010, p.451). Pacheco, Dean and Payne (2010) follow a similar reasoning. Beyond discovering opportunities in market imperfections, entrepreneurs can create opportunities by developing institutions that can "change the rules of the game". This implies that entrepreneurs must also act to escape this 'prisoners dilemma' by developing the "necessary institutions that enable the exploitation of sustainable opportunities" (Pacheco, Dean & Payne, 2010, p.466). This agency of the entrepreneurs "implies the expansion of the concept of the sustainable entrepreneur from discoverer of opportunity in extant economic structures to the creator of institutional structures that improve the competitiveness of sustainable behaviours" (p.466).

The last approach could be called the 'ecological perspective'. It refers to innovations that improve sustainable performance by considering biosphere limitations and finding ways to produce value without relying on the exploitation of virgin or non-renewable resources. This perspective considers sustainable opportunities in entrepreneurship beyond only market imperfections (Stål & Bonnedahl, 2016). It would require a focus-shift towards the physical flows of production. Growing or maintaining economic output, while at the same time reducing material input is called decoupling (Wiedmann et al., 2015) and is part of the strong approach to sustainability (Stål & Bonnedahl, 2016). Actions in this perspective could be analysed within the eco-efficiency framework (discussed in Section 2.3.2). Eco-innovations aim at increasing the ecological efficiency of production, by moving from a state of 'patching' problems to redesigning system-wide solutions (Carrillo-Hermosilla, del González & Könnölä, 2009).

#### 2.2.2 Growth Motivations

Mainstream economic theories argue that financial gain is paramount in entrepreneurial behaviour. Thus, it would be reasonable to assume that, when given the opportunity, entrepreneurs would choose to grow their business. However, as previously discussed, sustainable entrepreneurs often start their ventures with missions beyond profit maximisation. Therefore, it is expected that their attitudes towards growth will be more diverse and nuanced. Literature on the subject usually focuses on business growth as a linear process of completing steps (Tunberg, 2017). However, as Tunberg (2017) suggests, entrepreneurial growth could also be approached as a social construction. Thus, our focus is not 'how much' sustainable ventures grow, but rather 'why' and 'how' do they grow.

Research into small businesses has shown a strong connection between firm growth and the founder's growth aspirations. Wiklund and Shepherd (2003) discuss how growth aspirations, moderated by resources and opportunities, have a great influence on whether a firm grows or not. They conclude that internal and external variables are only effective tools for growth as long as there is an intention to grow.

This connection is amplified by what entrepreneurs believe will be the effects of growth. Wiklund, Davidsson and Delmar (2003) explore how entrepreneurs' beliefs and attitudes about how their businesses would change by growing influences their decision to grow. If an entrepreneur believes the quality of her product is paramount and that growth would affect such quality, her attitude toward growth would be equally negative. Perceived changes in workload, employee well-being, control, independence or quality can influence the attitudes entrepreneurs have towards growth.

With this in mind, SE literature suggests some overall concerns entrepreneurs might have when considering or pursuing growth. First, they will be concerned about the sustainable impact of growth. Second, about the level of control and autonomy they have over their business. Finally, they will be concerned about survival.

Regarding sustainable impact, Hockerts and Wüstenhagen (2010), suggest a dilemma exists between size and impact potential. They posit that new firms are more likely to pursue sustainable opportunities. Conversely, bigger firms are less ambitious but have a broader reach. This implies, new ventures usually address a small niche and fail to reach the broader industry. Sustainable entrepreneurs could be torn between growing to increase their sustainable impact

and not growing so as not to lose flexibility as a larger firm. This is connected to the concept of mission-drift (Schaltegger, Lüdeke-Freund & Hansen, 2016): as the venture becomes larger, there is a risk that the sustainability standards are compromised in favour of other objectives.

A second concern is regarding control and independence. Sustainable missions in ventures are often the result of idiosyncratic lifestyle preferences and even forms of activism by their founders. Swan and Morgan (2016) for example, argue that lifestyle entrepreneurs value independence, flexibility and a sense of recognition for their contributions. Thus, if growth might imply a loss of equity or control, the prospect might become unattractive for founders.

Third, there is the issue of business survival. Often, as Delmar, McKelvie and Wennberg (2013) suggest, growth is viewed as a requirement to ensure firm survival. The reasoning behind it is that growth has the potential to increase profitability and that reaching a certain size can provide stability and the appropriate scale to compete effectively. However, the same study discovers that growth (measured as an increase in sales) might actually have a negative effect on survival because of the increase in risk.

# 2.3 Value creation and value capture

Creating and delivering sustainable value through innovative products, services and business models, and then being able to capture that value in order to survive and mature is at the core of this research. We introduce the concepts of value creation and capture in order to understand how sustainable entrepreneurs create value and why capturing can be challenging in the context of SE.

#### 2.3.1 Value Creation

The classical business model concept focuses on value creation and capture in order to achieve economic performance (or economic value). A commonly agreed and widely used definition states that: "a business model describes the rationale of how an organization creates, delivers, and captures value" (Osterwalder & Pigneur, 2010, p.14). Furthermore, business models can be used as a design tool for planning or describing how to operationalize strategy in different areas (Boons & Lüdeke-Freund, 2013; Osterwalder & Pigneur, 2010).

The concept of 'sustainable business model' focuses on value creation, delivery and capture in order to achieve economic, social and environmental performance. Boons and Lüdeke-Freund (2013) argue that the way sustainability fits into the business model concept is mostly unclear. They contrast sustainable business models to conventional business models, arguing that the former enable the firm to enter, connect or create markets with a sustainability driven innovation (Stubbs & Cocklin, 2008 provide a similar definition). This means that "the business model concept has to be linked to approaches of sustainable innovation to identify possibilities of creating sustainable value" (Boons & Lüdeke-Freund, 2013, p.12).

Sustainable business models incorporate economic, social and environmental components into the value proposition, where the latter two often become the core of the business model. According to Schaltegger, Hansen and Lüdeke-Freund's (2016) definition, "a business model for sustainability helps describing, analysing, managing and communicating (i) a company's sustainable value proposition to its customers and all other stakeholders, (ii) how it creates and delivers this value, (iii) and how it captures economic value while maintaining or regenerating natural, social and economic capital beyond its organizational boundaries." (p.6). This definition emphasizes the importance of balancing economic, social and environmental value. Making sustainability a core part of the business model, new ventures usually operate in a niche market (Schaltegger, Lüdeke-Freund & Hansen, 2016). In a similar vein, Jolink and Niesten (2015) identify the transformation of the "disvalue" of externalities, which can be found in business models of conventional products, into value for environmentally and socially concerned customers as a key variation in sustainable entrepreneurs business models. Additionally to capturing holistic value (Davies & Chambers, 2018), the financial value should be equally distributed among stakeholders (Schaltegger, Lüdeke-Freund & Hansen, 2016). Common in different descriptions and seemingly of central importance is the concept of value. Lepak et al. (2007) review how value is created by different sources and subjectively assessed by different targets or users. Most importantly, they make a distinction between the process of value creation and value capture — also known as value appropriation. The latter refers to the monetization of the produced value by the source of value creation. In contrast, value slippage describes the inability of an organization, individual or society to capture the value created, which means, for example, that competitors capture the value by imitating an innovation. Hence, an isolating mechanism, such as specific knowledge or legal barriers is needed to ensure an appropriate capture of the value created (Lepak et al., 2007). To analyse the value created we can assess and describe different components of a business model such as value proposition,

customer relationships, customer segments, channels and revenue streams (Osterwalder & Pigneur, 2010). Almquist, Senior and Bloch (2009) provide a categorization of value containing thirty different elements of value. The authors distinguish between functional, emotional, life changing and social impact value for the customer. Which elements are crucial for the venture differs among industries. For example, the values of quality, sensory appeal, variety, design/aesthetics and therapeutic value are critical elements within the food and beverage industry.

A distinct concept within entrepreneurship literature is the concept of co-creation or co-creation of value. Whalen and Akaka define "the co-creation of opportunity as an iterative process in which the joint development and communication of value propositions, derivation and determination of value and the (re)formation of markets both generate and shape market imperfections" (Whalen & Akaka, 2016, p.69). The authors position co-creation as a part of the entrepreneurial marketing process and refer mainly to the co-creation of value between the firm and the customer when talking about the actors involved in the co-creation process. However, the concept of co-creation has been used in a variety of contexts, amongst other things in the B2B context such as co-production and multi-firm partnerships (Ramaswamy & Ozcan, 2018).

#### 2.3.2 Creating Value from Eco-innovation

Creating environmental and social value requires innovating in how business models address sustainability. The connection between entrepreneurship and innovation in entrepreneurial literature has been amply discussed (see for example Landström, Harirchi & Aström, 2012). Specifically, SE has been linked to the idea of disruptive innovations that create sustainable benefits (Hockerts & Wüstenhagen, 2010).

Environmental innovation, or 'eco-innovation' for short, refers to a form of innovation where the results contribute to improving environmental performance and achieving sustainability targets (Carrillo-Hermosilla, del González & Könnölä, 2009; Rennings, 2000). Thus, it is relevant to discuss how environmental innovation is related to value creation and capture through both the motivations and, to a more limited extent, the impact of sustainable ventures in the food industry. The most comprehensive definition of eco-innovation we identified in the literature states that (Rennings, 2000, p.322):

Eco-innovations are all measures of relevant actors (firms, politicians, unions, associations, churches, private households) which; develop new ideas, behaviour, products and processes, apply or introduce them and which contribute to a reduction of environmental burdens or to ecologically specified sustainability targets.

Eco-innovation, occurs at three interconnected levels: technological, organisational, and social (Rennings, 2000). To understand eco-innovations in the context of SE we must look at the business models. For this, Bocken et al. (2014) develop a framework of archetypes for sustainable business models, where they describe mutually exclusive types of innovation that create sustainable value. The authors take general categorizations (technological, social and organizational) and describe types of innovation that have a major component within each group and have unique characteristics. The authors identify eight archetypes for sustainable business models. Table 1 lists and provides a short description of each of the archetypes.

Table 1: Sustainable Business Model Archetypes (adapted from Bocken et al., 2014)

Groups	Archetypes	Description		
	Maximize Energy and Material Efficiency	Reduce resource consumption and optimize efficiency.		
Technological	Create Value from Waste	Incorporate waste streams as inputs for new value creation and harness underused resources.		
Tech	Substitute with Renewables and Natural Processes	Address resource constraints to reduce environmental impact and increase business resilience.		
	Deliver Functionality rather than Ownership	Create value without additional material consumption.		
Social	Adopt a Stewardship Role	Stakeholder engagement to provide environmental and social benefits.		
	Encourage Sufficiency	Promote behaviour that reduces production and consumption.		
tional	Repurpose for Society/Environment	Focus primarily on creating social and environmental value rather than profit.		
Organizational	Develop Scale Up Solutions	Maximize impact of social or environmental solutions through scale.		

In this context, how to characterise what constitutes an incremental innovation versus a disruptive innovation? Here, the framework of eco-innovation might be useful (Carrillo-Hermosilla, del González & Könnölä, 2009). Incremental innovation refers to changes that are gradually implemented and do not upset existing structures or systems. Radical innovation refers to changes that aim at supplanting or destroying existing components or entire systems.

From this, Carrillo-Hermosilla, del González and Könnölä (2009) identify three design dimensions for eco-innovation:

- (1) Component addition: the development of solutions that, although might increase environmental performance, do not represent a significant change in how the production system itself operates (also called 'end-of-pipe' solutions).
- (2) Sub-system change: Associated with the concept of eco-efficiency, sub-system change innovations increase the quantity of goods and services produced while reducing the resources needed to produce them.
- (3) System change: system-wide redesign where innovation seeks to integrate fully social, economic and environmental objectives (also called biocompatibility or eco-effectiveness).

#### 2.3.3 Value Capture

One of the key challenges is designing business models in such a way that enables the firm to capture economic value for itself through delivering social and environmental benefit (Bocken et al., 2014, p.44).

Bocken et al. (2014) highlight value capture in sustainable business models as a key challenge when it comes to designing the business model. To understand the role value plays in the context of SE, Davies and Chambers (2018) provide a conceptualisation of different types of value. The authors divide value into economic, social and environmental (see Figure 1). Furthermore, they introduce "holistic hybrid business models as a key mechanism for sustainable value capture". However, it remains unclear to what extent parallel or hybrid business model configurations are used by sustainable entrepreneurs (Davies & Chambers, 2018). In parallel business models, depicted in the middle of Figure 1, potential tensions arise from the company providing different kinds of value. Concretely, one part of the business is used to create economic value while another is used to create environmental or social value

(sustainable value). In this configuration, conflicts might appear through the competition for shared resources of the firm (Davies & Chambers, 2018). In kind, other authors argue that a separation and unrelated treatment of different values will more likely lead to mission drift and tensions (Battilana et al., 2012; Austin et al., 2006 in Davies & Chambers, 2018).

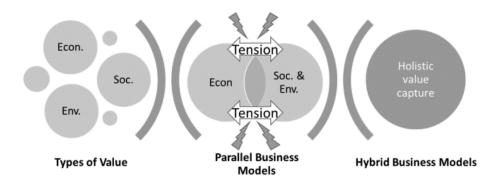


Figure 1: Value integration in sustainable business models (Davies & Chambers, 2018, p.384)

Davies and Chambers (2018) suggest that hybrid businesses are able to create holistic value to overcome possible tensions. The main tension identified in their study was the question of how companies distribute their profits and moreover that their external interactions have a high potential leading to tensions, as institutions have problems working with hybrid organisations.

Other challenges they identified (Davies & Chambers, 2018) can be seen in Table 2.

Table 2: Challenges capturing value in hybrid organizations

Challenge	Solution		
Higher prices due to sustainable production	1) targeting higher priced customers		
processes and not enough customers willing to	2) making their value proposition exclusive		
pay the premium price	by limiting the supply		
Problems with the distribution due to ethical	1) Sell to big retailers without having		
conflict of working with big retailers or time	discussions about sustainability		
intensive and costly process of dealing with	2) Sell through the internet		
independent retailers			

#### The impact of the created value

An ongoing debate in academia exists about the impact of corporations and new ventures on sustainable development. While some authors argue entrepreneurship alone can lead to the transformation of whole industries (Weidinger, Fischler & Schmidpeter, 2014), others consider an interplay between the efforts of corporate players and new ventures is needed (Hockerts & Wüstenhagen, 2010). Schaltegger, Lüdeke-Freund and Hansen (2016) argue that "sustainable development of the economy and society can be achieved only if the entirety of markets and society, or at least very large parts, become more sustainable." (p.269). Acknowledging that many sustainable ventures have no growth ambition, they suggest business model replication or mimicry can lead to a scalability effect. The former refers to competitors copying the business model, whereas the latter means that corporations adapt or adjust products/services.

Sustainable business models commonly acknowledge issues such as local production, fair labour costs, sustainable sourcing and so on. This consequently may limit the size of the business. Hence, sustainable business models might be less scalable than classical business models. This can be problematic, as the impact on the societal level might remain small compared to large corporations. In a paper called "Greening Goliaths versus emerging Davids (...)", Hockerts and Wüstenhagen (2010) question the general assumption or hope of many authors in entrepreneurship, that new ventures can solely solve future environmental or social problems. They conclude that for a sustainable transformation of industries, both corporate CSR initiatives and new venture's innovative business models need to coexist.

# 3 Methodology

This chapter provides an overview of the qualitative research elements used throughout the research process of this thesis and acknowledges its limitations. We will explain first, how we approached our research; second, the way we sampled our case study; third, a short introduction to our cases and lastly, how we collected and analysed our data.

# 3.1 Research Approach

We approached our research with a mix of an inductive and deductive approach. In the inductive approach, theory is determined as the outcome of research and in the deductive approach, the researcher starts with theory and tests assumptions through fieldwork (Bryman & Bell, 2015). Our study followed a deductive approach by using existent theory and building upon the knowledge foundation, concretely this means we started by reviewing literature in the field of SE. From there, we defined a gap in the literature and our research question. Nevertheless, our approach also entailed inductive reasoning elements, as we kept our interviews open in order to discover new knowledge. This means for example, that after the first interviews we adjusted the research question and continuously worked on the literature. Our reasoning could hence be described as a third approach which is described by several authors in the research literature as abduction: "abduction is the act of proposing speculative—but plausible—conjectures about the nature of a phenomenon, and hence what kinds of evidence might increase the prospects of further insights into it" (Folger & Stein, 2017, p.307). "The inference is from "Huh?" to "Aha!". "Huh?" refers to curiosity about a phenomenon. "Aha!" refers to a point at which a reasoning process makes some types of explanations seem more promising (worthy of investigation) than others." (p.307). We approached the topic of SE in the food industry talking to startups and kept our research question open at the beginning. Our "huh" is what we found particularly interesting when conducting the first interviews, concretely the challenges to capture value and how startups think about approaching them. The "Aha" refers to what we call the context in our study, meaning the explanations of why the particular entrepreneurs face those challenges.

With our focus on multiple cases within the food industry, we did not follow a linear or standardised research process, rather we went back and forth between empirical research and the building of theory, which would "expand 'our' understanding of both theory and empirical phenomena" (Dubois & Gadde, 2002, p.555). According to Eisenhardt and Graebmer (2007) theory building from case studies "is one of the best (if not the best) of the bridges from rich qualitative evidence to mainstream deductive research." (p.25). Our cases of nine different startups in the Swedish food industry provided material and explanations by the founders. In this way, we analysed the business models and challenges from the perspective and thoughts of the entrepreneurs. Interviewing people in their working context is a preferred way in social science to understand the reality through the interviewees' experience and perceptions (Alvesson & Sköldberg, 2009). This means that we were not analysing the business model directly, which could mean reading their business plan (if available) or analysing other company material. However, there are limitations to our research as well.

A common critique on qualitative research is that the external validity is problematic due to the small sample size and case study approach (Yin, 2006). "The implicit assumption is that theory building from cases is less precise, objective, and rigorous than large-scale hypothesis testing." (Eisenhardt & Graebmer, 2007, p.26). Nevertheless, this also means that new hypotheses can be created and tested by future research. Moreover, a possible critique on our study could be the way we approach our knowledge contribution. We aimed to give voice to the entrepreneurs and hence were not overcritical with their answers. Also, we have a genuine interest for the topic which could lead to a positive bias towards our interview partners. However, having said that, we believe that a good relationship and common mindset or beliefs with the interviewees enabled us to gather honest and open answers.

# 3.2 Research Design

The sample was defined using a theoretical sampling method (Bryman & Bell, 2015). First, having defined the Swedish food industry as our area of focus, we decided to only contact ventures that communicated green, ecological or sustainability claims in their public information (i.e. websites, Facebook, etc.). Our aim was to only include ventures that, regardless of their actual environmental impact, were signalling concerns about environmental issues. Second, we limited the size of the sample by including only ventures whose origins were

entrepreneurial, thus we focused on ventures which are not older than seven years to ensure covering the most recent innovations and talk to startups that are in a rather early phase. Figure 2 illustrates the theoretical sampling model.

Following these criteria, we searched for cases through two approaches. First, we searched for ventures in databases with the highest probability of finding suitable cases, such as the rosters of Swedish incubators, accelerators (i.e. Minc, Krinova, Ideon Innovation) and business support organizations (i.e. Almi). Second, we started a snowballing process with our first interviews; asking all interviewees to suggest other Swedish ventures that met our criteria. Based on this approach, we contacted 35 entrepreneurs and were able to interview nine of them.

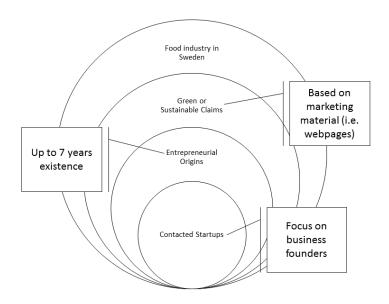


Figure 2: Theoretical sampling approach

### 3.3 Data Collection and Analysis

We used semi-structured interviews to collect data. An interview guideline was developed (see Appendix A) containing questions related to our fields of interest as defined by the research question and literature reviewed. To improve the quality and relevance of our questions we made two pilot study interviews with one startup and one expert in the food industry. Moreover, the questions were adjusted throughout the process based on our first coding and emerging topics we discovered. Overall, the main questionnaire stayed the same. Questions related to the entrepreneurial process, such as opportunity identification and growth ambitions, provide context to understand why certain decisions related to value creation and capture were taken.

All interviews were transcribed and interviewees agreed to answer follow-up questions if necessary. Table 3 shows the nine startups we interviewed and in what type of business activity they engage in. Further information about the startups interviewed may be found in Appendix B.

Table 3: Interviewed sustainable ventures in the Swedish food industry

Venture	Interviewee	Founded	Type of Business
Rescued Fruits	Björn (CEO)	2014	Juice Production from Food Waste
Gro'Up	Edith (Founder)	2016	Social Food Space
Gram	Rowan (Founder)	2016	Zero Waste Food Retailer
Happy Onion Farm	Charlotte (Founder)	2015	Urban Hand Labour Farm
Ekofisk	Linda (Project Leader)	2013	Ecological Fish Farm
Sensefarm	Anders (Founder)	2013	Farming Technology
Entofoder	Erik (Founder)	2018	Feed Production from Insects
Get Raw	Carolina (Founder)	2013	Healthy/Organic Snacks
Food for Progress	Anna-Kajsa (Founder)	2011	Plant-based Processed Foods

By collecting data through semi-structured interviews we were faced with extensive and roughly-structured data, which is a common problem in qualitative research (Bryman & Bell, 2015). We used a grounded theory approach to analyse our qualitative data as it enabled us to categorise our results and find similarities and differences across our cases. The following tools are used in grounded theory: theoretical sampling which describes an ongoing process with refinement of ideas rather than boosting sample size; coding, which describes a "constant state of potential revision and fluidity" (Bryman & Bell, 2015, p.578); theoretical saturation which means that enough data within the category are reached; and constant comparison which means comparing the phenomena that have been coded in different categories. We adjusted the coding on an ongoing basis; as we discovered new interesting ideas in one interview we looked for similarities in other interviews. For our coding we used the software Nvivo 11 which helped us structuring and coding the transcribed interviews while keeping a good overview across the different cases. The point of saturation seemed to be reached after six interviews where we could already observe interesting findings relating to our topic. Each of the authors did at least two passes of coding through the interviews plus additional rounds for specific topics. We then discussed the coded nodes and made adjustments to increase their validity. In total, we coded thirty-seven distinct nodes that have been aggregated into eleven aggregated nodes shown in

Table 4<sup>1</sup>. This process of iteration and independent coding of each author helped overcome some of the limitations of the coding approach (Bryman & Bell, 2015).

Table 4: Coding aggregated nodes and sources

Aggregated Nodes	Number of sources	Number of references	Number of words coded
Value Creation and Capture*	9	71	5,008
Growth Orientation*	9	23	2,012
Institutional networks**	7	17	1,079
Mission drift / Sustainability trade-offs*	8	15	1,064
Opportunity Recognition*	8	16	1,036
Competition**	5	11	716
Business model archetypes*	9	14	543
Eco-innovation*	8	10	524
Definitions of sustainability**	5	6	482
Sustainable Impact*	4	6	325
Market Size**	4	5	228

Table 4 is organized according to the number of quotes and words coded in each concept node. This means that these topics were discussed more extensively and with more depth in the interviews. In order to be consistent, the analytical section was designed considering the prominence of these topics.

### 3.4 Chapter Summary

In our research, we used a qualitative approach by conducting nine semi-structured interviews with startups in the Swedish food industry. By providing the context of specific cases we contribute to the existing literature by analysing our interviews with a grounded theory approach. The strength of our research lays in the open and flexible approach to describe the

<sup>&</sup>lt;sup>1</sup> A full list of coding nodes developed in the research may be found in Appendix C.

real challenges, meaning things that our interviewees talk about, of the startups and their strategies to overcome those. The results are analysed by coding the transcripts through literature and empirical driven concepts. The limitation of this study lies in the size of the sample which could be argued is too small for a generalisation of the findings.

# 4 Analysis and Discussion

In this chapter, we present and discuss the findings of our research which focus on the value creation of sustainable entrepreneurs in the Swedish food industry (4.1) and the challenges and approaches when capturing value (4.2). We end with a discussion of the overall findings (4.3). Where appropriate, quotes from the interviews are included to illustrate our arguments. Additional supporting quotes are included in Appendix D.

# 4.1 Creating Sustainable Value in the Food Industry

This section starts by summarising our findings related to the sustainable value created by the ventures interviewed, from the perspective of their founders and managers. Two approaches described in the theoretical section were identified as useful for this analysis. The first, using the frameworks of eco-innovation developed by Carrillo-Hermosilla, del González and Könnölä (2009). The second, focusing on the sustainable business model archetypes developed by Bocken et al. (2014).

Based on the framework for eco-innovation discussed in the theoretical section, we analysed how the current business models of sustainable ventures attempt to either create (1) component addition, (2) sub-system changes, or (3) system changes. Immediately it was clear, however, that judging their system impact with precision is beyond the aim and scope of this research. Nevertheless, by applying this framework to the analysis, we discovered a trend where most ventures interviewed are attempting to innovate through sub-system or system changes. Examples of sub-system changes can be found in the ventures dealing with waste or underused resources. While most of their business follows industry standards; their key resources create environmental value. This is the case of Ekofisk, where their only differentiator with other local fish farms is the use of reclaimed heat from a mining company. It could be argued, however, that the whole operation of fish farming is a sustainable alternative to ocean fishing. Only the case of Sensefarm could be called a truly end-of-pipe solution. In their case, their product has the potential to increase farming efficiency and resource optimization while not addressing core

unsustainable farming practices. True system change is an elusive concept in the food industry. This is perhaps related to the stage of growth of the startups and the uncertainty about their impact. Ventures like Gram or Entofoder have the potential to disrupt their respective industries, i.e. the packaging and the fish feed industries, but it is not clear whether such potential would be reached.

Given the limitations of this approach, we focused instead on the sustainable business model archetypes. As can be seen in Table 5, most of the archetypes are represented in one form or another. Although the results of nine interviews cannot be generalized to the entire food industry, they highlight key concerns that relate to sustainability practices in the food industry. Nearly all ventures combine technological elements, usually related to key resources, with some type of social or organizational element.

Table 5: Sustainable business model archetypes of businesses interviewed

Groupings	Archetypes	Startups	
cal	Maximize Energy and Material Efficiency	Ekofisk, Gram, Sensefarm	
Technological	Create Value from Waste	Ekofisk, Entofoder, Rescued Fruits	
Techr	Substitute with Renewables and Natural Processes	Entofoder, Food for Progress, Get Raw	
Social	Deliver Functionality rather than Ownership	Gro'Up	
01	Adopt a Stewardship Role	Food for Progress, <b>Get Raw</b> , Rescued Fruits	
	Encourage Sufficiency	Ekofisk, <b>Gram</b> , Happy Onion Farm	
izati onal	Repurpose for Society/Environment	Gro'Up, Happy Onion Farm	
Organizati onal	Develop Scale Up Solutions	Entofoder, <b>Food for Progress</b> , Gro'Up, Sensefarm	

At the technological level, we observed how at least seven of the nine ventures interviewed were actively attempting to create value by either increasing energy and material efficiency, creating value from waste, or creating renewable substitutes for unsustainable practices. These interventions are closely connected to the approach found in the literature of opportunities arising from market imperfections (Cohen & Winn, 2007; Dean & McMullen, 2007; Shane, 2000). Particularly, there seems to be a trend related to reclaiming waste or underutilized resources as inputs to the value chain. For example, Rescued Fruits and Entofoder exploit the opportunity of food waste as an input for their products, while Ekofisk utilizes excess heat from industrial processes to heat up their fish tanks. Entofoder uses food waste to feed insects that will then become fish feed. They are attempting to compete with the unsustainable practice of obtaining fish feed from ocean resources.

At a social level, we found that quite a few ventures were focused on promoting more sustainable consumption and the intake of healthier products. This stewardship role assumes that by creating or retailing healthier, organic or fair-trade products, it influences both supplier and consumer towards more sustainable practices. Gram, for example, invests a lot of effort trying to educate their suppliers in how to reduce packaging in waste when delivering products and at the same time the founder constantly delivers public lectures about the zero-waste lifestyle. Get Raw focuses a lot on highlighting the health benefits of their snacks. However, we found that several ventures interviewed put little effort into educating their consumers from a sustainability point of view. They rather focus on delivering an attractive and high-quality product that consumers will buy primarily because they enjoy it rather than for the environmental benefits they might be creating.

From an organizational perspective, we found that more than half of the ventures interviewed are trying to innovate in how they organize internally and connect with suppliers, partners, and consumers. For example, central to Happy Onion Farm's business model is an innovation in how the startup interacts with consumers, where they pay in advance for a share of the harvest rather than for each individual product. Additionally, some ventures find their opportunities by aiding or replacing the role of public institutions and thus creating social and environmental welfare. For instance, receiving concessions from local governments to utilize real-estate in exchange for creating sustainable value for the community. This is consistent with the approach to institutional sources of opportunities found in the literature (Pacheco, Dean & Payne, 2010; York & Venkataraman, 2010). Gro'Up, for example, rents their facilities from the municipality at lower costs to promote gentrification of the neighbourhood. Happy Onion Farm uses municipal lands as part of a sustainable development project of the Malmö Commune. Another approach to organization is co-creation with other companies (Whalen & Akaka, 2016), especially larger ones. Entofoder, Food for Progress and Ekofisk discussed the benefits of

alliances with larger companies as strategies for scaling, surviving and increasing impact. Entofoder, for example, is discussing an alliance with a biogas company to 'share the waste'. Food for Progress allied with a food processing factory that used to produce meat products and now only focuses on plant-based products. Ekofisk has a synergy with the mining company that produces the excess heat.

To sum up, for the food industry, it seems that the creation of sustainable value is closely linked to the material components of how products are sourced and processed. This is especially true for those ventures developing products, but also a concern expressed by those developing services. Social value is being mostly created by a combination of educating key suppliers and partners, as well as the consumer, while forms of alternative ownership are more common with ventures offering services than products. Nearly all the ventures are attempting organizational innovations to their business models, either by creating new ways of engaging consumers and key partners or collaborating with public and private institutions.

## 4.2 Capturing Value: Challenges and Approaches

The interviews showed a diversity of missions and hence different approaches to creating sustainable value and on profitability or value capture. As some literature suggests, capturing value might be problematic in the context of sustainable entrepreneurs and consequently, the value created cannot be captured or might be captured by others in the market, also known as value slippage (Lepak et al., 2007). As further suggested by Lepak et al. (2007) there are mechanisms to protect the firm from competition and value slippage. Surprisingly, however, the sustainable entrepreneurs interviewed were mostly not concerned about competition. Alternatively, they emphasised they would like to have more competition because that would mean that their mission was further promoted. Overall, all interviewed ventures showed a strong knowledge and interest in sustainability and regard the subject beyond their own business and impact.

We identified three main challenges and seven sub-challenges the ventures have faced. Moreover, four different approaches were outlined to overcome those challenges. Figure 3 shows a summary of the challenges and approaches, as well as the cases that commonly faced those challenges. In the following, we will describe each of the sub-challenges in detail and provide concrete examples from our empirical data. The section is divided into the three main

challenges we identified, called: sustainability as a niche market, achieving sustainable impact, and institutions and networks. Each section also contains an analysis of approaches to overcome the presented challenge. These approaches reflect either future intentions or present actions each venture is taking to address their challenges.

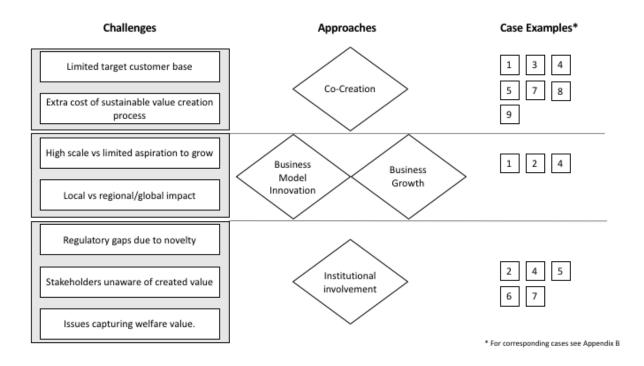


Figure 3: Summary of challenges and approaches to capture sustainable value

#### 4.2.1 Sustainability as a niche market

A common challenge for sustainable ventures in the food industry is capturing the created value, as explained before. Most ventures we interviewed operate in a niche market and charge premium prices in order to capture the additional environmental or social value they create (Schaltegger, Lüdeke-Freund & Hansen, 2016). However, being profitable in the food industry is often a matter of volume. We identified two challenges our entrepreneurs face in the context of operating in the sustainable niche market: (1) limited target customer base; and (2) complex and high-cost processes. One promising approach for growing and escaping from the sustainable niche market for early adopters is co-creation (Ramaswamy & Ozcan, 2018; Whalen & Akaka, 2016). In what follows, we scrutinise the discovered challenges and elaborate on co-creation as one approach to overcome those.

#### Limited customer base and reach

Having a limited target customer base and operating in a niche market is a characteristic of many of our cases. Operating in a niche market means that it is possible to charge a premium price in relation to *less sustainable* competitors in the market and try to provide high quality. This is in line with the findings from "Startuprapporten" (Livsmedelsföretagen, 2017) where 70% of startups in the Swedish food industry position themselves in the premium segment. First, the startups are aware of the type of customers and why they are willing to pay a premium price for their product or service.

It's organic, and made of 100% natural, real ingredients. I think a lot of people are willing to pay more for a high-quality product nowadays. We tick a lot of boxes, which motivates the price. But in the end the product has to taste good because otherwise no one would want to buy us. *Carolina / Get Raw* 

Our interviewees think there is an increased consumer awareness, particularly in Sweden, of the advantages of high quality or sustainable products, which often leads to an increased willingness-to-pay higher prices. However, there seems to be a gap between the perceived additional value for the consumer and the product or service offered. Consequently, this means the consumer decides what value is provided for him (Lepak et al., 2007) and if he is willing to pay for that value. The economically reasonable price the venture would need to charge is even higher than what the niche customer is able or willing to pay.

There is a lot of perspectives to include in this, because we have a small production our product would actually need to cost even more. But then that price wouldn't be attractive to the consumers. *Linda / Ekofisk* 

Additionally, it seems some sustainable entrepreneurs do not want to price their products any higher than they already do. Instead, they wish to make their products available for a broader customer base, sometimes seeming more philanthropic than business savvy. This can be explained by the main focus of achieving and building their business model in line with their environmental or social mission (Dean & McMullen, 2007).

... we don't charge a lot for our services. We are actually aiming more and more to have free services. And we are flexible in the pricing, we approach every person as a single individual. *Edith / Gro'Up* 

### High production costs

Moreover, having a high price does not lead to higher margins for most. On the contrary, many of them struggle to have positive margins. Several building blocks in the business model of sustainable startups can lead to the inability to be economically sustainable and capture the additional value they create (Osterwalder & Pigneur, 2010). The startups commonly face complex and high-cost processes: e.g. produce small quantities as they focus on a local production or sourcing; engage in highly manual labour processes; distribute personally and locally or have high sourcing costs. Overall, they operate with highly cost-intensive processes to create the additional sustainable value.

So it's more the problem of being a small shop so that we can't drive the prices down. I think that is not any different from being some other organic or small independent store, they have similar prices and buying prices to what we do. *Rowan / Gram* 

Collecting and working with the fruit in the production means small volumes, small business, high costs per unit, because you have to have a lot of recipes, a lot of labels and salesforce. *Björn / Rescued Fruits* 

You have to sell it out yourself you cannot go to the big chains and the big distribution companies. You have to go to the cafes and restaurants yourself around Sweden to start with and that is not an easy game. *Björn / Rescued Fruits* 

It was hard to find the right producer since we have a high-quality product and only use natural ingredients and no preservatives and additives. The normal producer couldn't produce it. *Carolina / Get Raw* 

To sum up, the market for sustainable entrepreneurs that produce in a small-scale is expected to be and remain a niche market. However, many of the entrepreneurs referred to trends and the evolving awareness of customers. This poses the question of whether operating in a small niche is a challenge that can be overcome and if so, how do entrepreneurs think about escaping the niche. The challenge is to find a balance where a mission-driven startup, engaging in activities that profit-driven competitors do not seem to consider worthy pursuing, can remain economically sustainable and stay in the market. This is what Davies and Chambers (2018) describe as holistic value.

#### Co-create

Making a high quality and appealing product not only for a small customer base but for a bigger audience is how entrepreneurs can escape their customer niche. However, startups usually do not have the muscle to scale up a production from scratch. The food industry is mainly dominated by big retailers who dictate the prices and decide what customers will buy. Hence, one solution for startups is to co-create and partner up with big stakeholders that can enable them to leverage their product and brands with up-and-running resources and processes (Whalen & Akaka, 2016). The example of Food for Progress illustrates how co-creation can lead to growth, profitability, and sustainability.

First, it was just me and my business and that was a struggle with no income. ... And then when I met Anders and we started to work together we could actually produce in large scale because they had the infrastructure and the production facilities and everything. For him it was about moving into more sustainable products and produce more plant-based and accelerating, get speed to do that. It takes a lot of guts to cut down big meat contracts to be able to do a transition... *Anna-Kajsa / Food for Progress* 

Finding the right partner that shares the venture's mission and is willing to take a risk is the key to scaling up in this case. Food for Progress managed to scale up and today has 60 employees. They still consider co-creation as the key to further scale and grow their business.

My company would have been dead if I haven't met Anders. What we say it's cocreation, we say you can't achieve anything alone. What we have co-created together in the early days with the help of friends and what we create now with innovation companies. And now we have a new era, where we want to go to different continents and so on, and finding good agreements and financial structures around co-creation is the key to development. And it's much more complicated than I want it to be. *Anna-Kajsa / Food for Progress* 

The key of co-creation according to Food for Progress is to reach a balanced agreement of sharing risk, possibilities, and resources. Concrete examples of co-creation efforts of the venture are the co-branding with a private label of a big retailer in Norway or the search in Australia for companies with a similar business approach to share infrastructure. However, this process is not without difficulties and disappointments.

### Look for alternative markets

Another approach is to find alternative markets to operate and sell in, while waiting and working on the customer base until it becomes big enough. For example, Entofoder is searching for alternative customers to market their product to, before they can switch to their initial target market when the external conditions allow for it.

The short term goal to find profitable market segments, where we can charge a lot for a kilo. In the long run, then it is all about fish farms, because that is when we can make an impact. *Erik / Entofoder* 

In a similar fashion, as the limited willingness of most customers to pay premium prices is constraining the size of the B2C market, the startup Sensefarm is struggling to sell the additionally created value to B2B partners.

If you go to an agriculture fair, you won't find anyone talking about sustainability or market themselves as that. What they market themselves as is more down to earth "this will solve your problem". The farmers buy stuff when they see it really benefits them in their daily work. *Anders / Sensefarm* 

Looking for alternative markets can also be observed in the marketing strategy of the ventures. To address a broader audience with their products, some of the ventures adjust their communication to a broader target group by communicating sustainability added value in second or third place and try to directly compete with other "unsustainable" products in the market to reach customers and get into the mass market. The environmental aspects of the product are not the focus of the communication with the customer, instead, taste and look are what matter. The example of Food for Progress shows how the communication to the customer is mainly based on visual elements and taste. The packaging does not emphasize sustainability claims.

I think that mainly we constructed the brand in a way that they should choose it because they get cravings for it because it looks good and taste good and then all the other comes with it. *Anna-Kajsa / Food for Progress* 

Especially when it comes to food, another main problem the ventures have to solve is to appeal to the consumers' taste. As the consumer decides what value is provided for him (Lepak et al., 2007), appetizing products seems to be a non-negotiable part of the value proposition. The paradox here is that a more sustainable production does not seem to be the main concern or

benefit that can be communicated to the consumer in the first place. Unfortunately for the ventures, they have to invest more effort in communicating the advantages clearly to the customer to justify higher prices. The approach here suggests that sustainability concerns should be at the back-end of what the startup does. No matter how sustainable their product or service is, the consumer will also be strongly motivated by factors such as the image, taste, and quality (Almquist, Senior & Bloch, 2009).

### 4.2.2 Achieving sustainable impact

The scale of the business and its operations can play a major role in a startup's ability to capture value. In this regard, some of the ventures we interviewed 'start small and think small' where others 'start small but think big'. We identified two main challenges entrepreneurs face concerning business growth: (1) A clash between individual growth aspirations and external factors such as the high scale of the industry; and (2) ambiguous thoughts on how size and growth influence their impact. Further, we identified two main ways founders can overcome those challenges. The first approach focuses on the business model, where ventures try to run parallel business models or find ways to integrate value capture into their current business model in an innovative way. Those configurations look similar to what Davies and Chambers (2018) describe as business models for holistic value capture, and our cases show concrete examples of how ventures try to do this. A second approach is to scale up the business. However, this approach is met with mixed responses, as growth is sometimes perceived as unsustainable or leading to a shift in their values. As Wiklund and Shepherd (2003) elaborate, the founder's aspiration is the main concern besides economic factors when discussing firm's growth. Moreover, this approach is often limited by the configuration of the business model itself as not scalable. Concretely, the strategy and operations of the business in the industry make it hard to scale, as for example, the needed infrastructure is not available. Further, a limited ability and willingness to acquire the additional financial resources can be a reason. The mentioned points will be explained further in detail below.

### Individual growth aspirations vs high scale of the industry

A variety of orientations towards growth have been identified in the interviewed ventures. Some ventures we interviewed expressed growth as a necessity in order to survive. They did not, however, seem to be growth oriented or have a generally positive attitude towards growth. This can be explained by the fact that their business model and personal values incorporate elements

such as local production, organic production, zero waste production or closed loops which are related to views of strong sustainability (Stål & Bonnedahl, 2016) such as dematerialization and other sustainable development principles (Rennings, 2000). Our findings support the idea of the literature on SE which suggests that the founders might be concerned with mission-drifts (Hockerts & Wüstenhagen, 2010) and survival (Delmar, McKelvie & Wennberg, 2013). Moreover, the initial opportunity discovery process, and specifically the personal reasons why the founder started the business might play a significant role in the attitude towards their own business growth (Wiklund & Shepherd, 2003). The fact that most founders we interviewed started their business out of a personal concern towards unsustainable practices and with a strong focus on a mission might explain the limited willingness to grow. Surprisingly, however, only two founders expressed the risk of sustainability drifts as a major concern when talking about growth, while most of the ventures seemed rather indifferent. The venture Happy Onion Farm focuses on working with manual labour. Further growth for this venture would mean the need of using machinery, which would be considered a drift from their mission.

You could grow a lot on a small piece of land and you don't need to have acres and acres. Actually when you have that what it means is that you have to have big machines and you will be dependent on a lot of fuel and so on. *Charlotte / Happy Onion Farm* 

In a similar vein, Gro'Up recognises the limitations of their size, as they have a close connection to the community they work with and have main concerns about social issues they want to address in the specific region of Malmö.

I think that we are very small at the moment and I think that we can scale up slightly, it is just a matter of having more people hired actually. But there is a limit absolutely, we cannot grow into an immense establishment, or if we do then we have to change our approach a little bit. Edith / Gro'Up

Other ventures we interviewed, on the other hand, acknowledge business growth and scale production as a necessity in the food industry. This is interesting, as opposed to the smaller thinking ventures, which illustrate the size and efficient operations of big companies with a focus on profits as a major part of the unsustainable operations and impact of the industry.

### How size and growth influences impact

The main difference between those ventures is the way they think about and justify the impact that they have on the society and on the market. Differences in how the business model might

impact the market and the society on different levels could be explained with different categories of innovations and their impact as Carrillo-Hermosilla, del González and Könnölä (2009) suggest in the model of eco-innovation. Whereas small thinking ventures emphasize qualitative and direct impact they have on communities, bigger thinking ventures refer to the use of the current system as a necessity to reach as many people as possible and have a quantitative impact.

I think it already had an impact beyond just this physical shop. We had so much press coverage and there really seems to be much more discussion in social media and the word for packing free went into the Swedish dictionary the year we opened the shop. ... I think there is little changes that we make but I do hope on a bigger level we can have some impact on legislation even if it's just accelerating the conversation. *Rowan / Gram* 

However, one might argue about the different ways of impact. One main problem or challenge we presented as our central theme remains, which is capturing value. If small ventures are not able to survive in the market, their impact will remain temporarily. Nearly all of the ventures we talked to were concerned about building a sustainable economic business and were aware of a need to grow in some form in order to survive in the market.

We have to produce more, we have to scale to a big farm to be able to make revenue. That's what I think. Not this small scale, it doesn't work. We also need to be able to offer a wider range of products based on the same fish like filets. *Linda / Ekofisk* 

### Adjusting the business model

One interesting approach some of the ventures mentioned is to be innovative when it comes to revenue streams in their business model. The ventures describe different options which can be closely related to what Davies and Chambers (2018) describe as parallel business models and holistic hybrid business models. The social food space Gro'Up was thinking about an example of the first type of business model:

One way would be to start a catering company that is the money making engine that then feeds the rest. Edith / Gro'Up

However, the problem is that resources are needed in order to run a parallel business and that the resources of the firm collide with the business that is running in parallel (Davies & Chambers, 2018).

... but since we only have one kitchen we can't be in the situation where one chef and one kitchen is constantly occupied with catering because then we wouldn't do all these other things. We wouldn't have the tenants, we wouldn't have the kids; we wouldn't have anything. So it's always hard to make anything happen with the capacity we have. *Edith / Gro'Up* 

The founder is concerned and not willing to give up on the main mission and reason the business exists in the first place. One could argue that in this situation the importance of the creation of sustainable value clearly overweighs value capturing. Operating as a profitable business thus can lead to a struggle of the values of the founder and the economic necessity of value capture without recurring to sustainable trade-offs in the business<sup>2</sup>.

Both personally and professionally I find myself a bit like against the wall because there has to be another way, there just hast to. *Edith / Gro'Up* 

A second approach mentioned is what Davies and Chambers (2018) describe as holistic hybrid business models. Here, economic, social and environmental value are all integrated into the business model. A good example of trying to create a holistic business model is Happy Onion Farm which is seeking to grow their customer base through their innovative 'Community Supported Agriculture' model, while not requiring additional land or labour.

Most organic farmers are forced into the model of the conventional farmer with big scale production and not that much variety, because otherwise it is not financially sustainable. And that is not what we wanted to do. So then we started to talk about CSA - Community supported agriculture which is basically a cooperation between the farmer and the consumer as a co-producer (...) this year for example we already have 20 families signed up and they already paid for the coming crop that they will collect from mid-June to November. So what we take a collective risk financially and that for us is key. This is how we can have some kind of sustainable finances. *Charlotte / Happy Onion Farm* 

Another example is the zero waste shop Gram which considers different options of delivering their value to the consumer in order to reach a broader audience:

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<sup>&</sup>lt;sup>2</sup> A week before finishing this manuscript we received news that Gro'Up had filed for bankruptcy. However, we were not able to get an update about motivations for this decision.

I think there are lots of other directions it can go in; whether it is more shops or a shop-in-shop concept for supermarkets. There are different ways to go to make it more economically viable. *Rowan / Gram* 

### Scale up

The last approach to overcome small size is to think big from the beginning. Some of our ventures prefer, as said before, to have an impact on a large scale.

Large scale is what makes transition happen, it's working with changing consumer patterns and bringing volumes to the market. So we have always aimed for the big partners to work with us to be able to strengthen the power of infrastructure. I wouldn't put my effort into some handicraft artisan good business, I think there are other people who make that great and love doing that, what turns me on is big transition. *Anna-Kajsa / Food for Progress* 

The second group of ventures recognise the need to grow as a strategy for survival. This means that at their current size, they are unable to produce the necessary cash flow to continue their operations in the long term. Entofoder, for example, is aware that the only way to be competitive with their sustainable substitute for fish feed made from insects is to use economies of scale.

It is a bit of a strange business. Primary production of feed is all about scale, because there are large scale advantages. *Erik/ Entofoder* 

Then we just have to grow the business because you have to sell volumes otherwise you won't survive. *Carolina / Get Raw* 

Overall we can conclude, that business growth plays an important role in the value capture for ventures in the food industry. Different challenges related to scalability, attitude towards growth and consequences in operations have been discussed and we showed how the ventures try to overcome them. It is a paradox that many of our interviewees emphasized that scale and size are extremely important in the food industry because this is how the market currently works. Some ventures, however, want to stay small and have limited growth ambitions, while at the same time realising that it is a struggle to survive at their scale. One could dare to say that our sustainable entrepreneurs strongly believe in change and want to have a great impact. At this point in time, however, it seems that they are trapped in niche markets where they can't sufficiently capture value to survive (as explained in Section 4.2.1.). Food for Progress was the venture that was able to best capture value, focusing on scale and growth and hence becoming

part of the big food industry. Their secret to staying mission focused can be seen in the offering of a sustainable product per se, combined with an extremely strong focus on education of suppliers and partners. This venture aims to ignite change by changing the mindset of industry actors while playing by some of the rules of big companies when it comes to the distribution and ways of marketing their products. This at the same time leaves the founder with more sustainability challenges that come with size. Lastly, for us, the question of who will have the biggest impact on transforming an industry into having more sustainable practices cannot clearly be answered. Following Hockerts and Wüstenhagen (2010), we posit that it requires a combination of entrepreneurs that aim for small and local impact and those that aim for large-scale sustainable businesses. Those two parties can have an immense impact on transforming behaviour on different levels (local and more qualitative towards customers vs. regional or global and more towards suppliers and retailers). Thus, we have tried to explore some approaches on how small ventures can overcome the challenges of being small and remain in the market.

### 4.2.3 Institutions and networks

We asked our interviewees about their involvement with other stakeholders beyond their core business model, such as government agencies, NGOs, lobbying groups or other networks. The reason behind this was that literature suggests that sustainable entrepreneurs tend to work closely with public and private organizations also generating sustainable value, and in some cases may even "surpass their efforts" in creating such value (York & Venkataraman, 2010). Alternatively, if existing institutions are insufficient, sustainable entrepreneurs may create or promote the appropriate institutional frameworks to advance their mission (Pacheco, Dean & Payne, 2010). Thus, we set out to know, beyond the expected connection with key partners and suppliers, if involvement with other institutions influenced their business activities and entrepreneurial process.

All startups reported some type of institutional involvement, but not to the same degree and for the same reasons. Below, we will explore some of the challenges they have tried to solve and how institutional networks helped them to overcome them. We identified the following types of challenges: (1) regulatory gaps due to novelty; (2) stakeholders unaware of created value; and (3) issues capturing welfare value.

### Regulatory gaps due to novelty

Eco-innovations can come at the price of being so novel that existing legislation is unclear, contradictory or even inexistent. We found that startups that are closer to what could be considered 'sub-system' or 'system changes' in the framework for eco-innovation (Carrillo-Hermosilla, del González & Könnölä, 2009) had more issues in this respect than those with 'end-of-pipe' solutions. Thus, for the innovation to be effective, they require governance changes as well. In the case of Ekofisk, for example, the synergy they have established with the mining company seems to be difficult to understand for authorities.

"The challenge today of working with the latest technology and with industrial symbiosis is that it's so new and so innovative that Swedish authorities have problems seeing how this can work on a practical level when it comes to the discrepancy between different authorities. That is actually the biggest challenge today." *Linda / Ekofisk* 

In the case of Entofoder, not only does novelty make it difficult for their insect-based product to fit into existing legislation, but that same novelty makes authorities pay closer attention to their activities.

"It is very much like any question that we ask the agricultural department, they just say 'no'. And then we ask how other farmers having normal things like cattle, what do they do, and they just break the rules but we can't because we're one of very few insect farms and therefore they will audit us and look if we are doing everything." *Erik / Entofoder* 

The existence of these regulatory gaps can really halt the development of a business. We found this is particularly true in the food industry, where regulatory institutions mostly follow the precautionary principle where it is better to deny something unknown than to approve something that could potentially be harmful. As a result, ventures like Entofoder have spent a great deal of their time only dealing with legislation challenges.

### Stakeholders unaware of value created

Another issue identified is related to educating, not only consumers, but also other relevant actors in the industry. In order to establish relations with key stakeholders such as suppliers or B2B purchasers, several of the ventures interviewed had to invest time educating them about the sustainable value and even sustainable principles of their business model. For example, Food for Progress has the practice of showing videos about sustainable global challenges when meeting key stakeholders such as retail chains.

"We educate business people, we educate the whole food area.. We force really big retailers in the country to actually assure a whole bunch of sustainability stuff and imagine better theories. We stick the whole food logic into the way we work and we show them [the video] we have on our site, about the Anthropocene..." *Anna-Kajsa / Food for Progress* 

Thus, we see that mission driven ventures are also interested in, and benefiting from, sharing the sustainable principles that guide their actions. Creating awareness and even 'hype' about their innovative approaches also helps with the bottom line. Often this includes charging for speeches or study visits to their locations.

We are connected in a network so we help each other but the point would be to develop a lot more, giving lectures about what we are doing. Getting people that want to do visits at the farm, and for some reason, for that kind of thing people are willing to pay a lot more for your time, right? Then they will pay you 2000-3000 SEK for an hour. *Charlotte / Happy Onion Farm* 

### Issues capturing welfare value

One of the ventures interviewed, Gro'Up, is very focused on creating value that produces social and environmental welfare. They have programs for children education about food and sustainability and immigrant integration into the food industry. However, this value cannot be captured from the beneficiaries and thus they must look for alternative ways to capture such value.

We have been from day one knocking on all the doors and saying "we believe in food, and food is the tool we use" we can work with social integration we can work with creating more jobs in Malmö, give us the means to do it and we will show you what we can be. *Edith / Gro'Up* 

Gro'Up believes that their best bet is to work with the local, and eventually national, government to receive the funds they need to run their activities. Additionally, they are constantly looking for opportunities in the government to be able to capture the value they are creating.

Here in Malmö actually, the city externalizes assignments that are on the public agenda worth 5 million SEK each year to smaller private entrepreneurs because they feel like they also create a better system in the city. We are keeping our eyes and ears open

constantly, because some meetings of politicians are technically open but nobody goes, but we go and listen. *Edith / Gro'Up* 

Five out of the nine ventures interviewed confirmed being involved, or in the process of becoming involved, with some type of business association in the field they are working on. Often, these associations are a way to increase their lobbying power and influence policy.

What we are trying to do is really difficult as an individual or as a single aquaculture firm, that is why we joined with other aquacultures in Sweden and we decided to work together with them. Working as an organisation it is way easier to lobby towards the local government and national government. *Linda / Ekofisk* 

Additionally, one of the reasons for associating has to do with harnessing resources, knowledge and educating both the industry and consumers about their product. In some cases as well, they are involved with a larger network of sustainable entrepreneurs. This was related to their mission as a form of activism.

We work with a lot of other social enterprises. There is a beautiful network of social enterprises in Malmö led by Coompanion. And they have created this group of entrepreneurs who all are running profitable businesses but with a very strong social mission and we meet them here and we have like a little clique. *Edith / Gro'Up* 

In conclusion, these networking efforts seem to contribute to strengthening their business models and in some cases are the source of opportunities to capture additional value. This is consistent with SE literature (Pacheco, Dean & Payne, 2010; York & Venkataraman, 2010) and signals the possibility of a closer collaboration between public and private institutions to create sustainable welfare.

### 4.3 Discussion

Throughout the analysis, we attempted to answer the question of what challenges sustainable entrepreneurs in the Swedish food industry face when attempting to capture sustainable value and how they try to overcome them. Our research question implies that sustainable entrepreneurs are somewhat different from other entrepreneurs. Moreover, it suggests that there are challenges that are particular in the context of sustainable entrepreneurs as well as in the food industry. Lastly, it evidences that the sustainable entrepreneurs interviewed are seeking to

overcome their challenges and will probably not be able to survive in the market if they do not act. All these assumptions allow us to present a focused analysis, however, we need to also critically discuss the implications, meaning, and limitations of our results.

This study contributes to the field of sustainable entrepreneurship, and by proxy, to entrepreneurship studies in general. We believe that many of the challenges identified when capturing value, as well as the approaches taken by our interviewees, are often applicable to the struggles of sustainable and other ventures alike. Consequently, this would imply that sustainable entrepreneurs can benefit directly from the knowledge and experience produced by entrepreneurial studies.

However, perhaps the most distinguishing factor that separates sustainable entrepreneurs from other entrepreneurs is the strong role their mission plays in their business decisions. In several of the case studies, a strong sustainable orientation imposed limitations on the decisions regarding their business model as well as attitudes towards growth. Conversely, with entrepreneurs whose commitment to sustainability was circumstantial or secondary, these limitations did not apply to that extent. As new ventures in general and corporate incumbents adopt more sustainable practices, and customers come to expect them, the limitations of ventures with strong sustainability orientations might turn into competitive advantages.

As introduced before, entrepreneurship literature suggests the ability of entrepreneurs to transform industries and ignite change (Stål & Bonnedahl, 2016). This is the heroic picture drawn in the context of SE and specifically of ventures in the food industry (Hockerts & Wüstenhagen, 2010). On the backdrop of our findings, which lay out a variety of challenges and the limited ability or willingness of sustainable entrepreneurs to overcome them, this illustration seems overly confident. However, we think that local and small ventures can have an impact by changing minds in a sustainable manner, as they are strongly mission driven and knowledgeable about how to address sustainability concerns at the core of their business model. Moreover, there seem to be sustainable entrepreneurs that aim to make an impact on a bigger scale and reach out to the mass-consumer. If these ventures fight for igniting change, as Food for Progress is doing, and are able to avoid drifting away from their mission we see a huge potential of entrepreneurship to transform the food industry towards more sustainable practices. However, those cases seem rare at the moment. Furthermore, big corporations threaten more than support a sustainable transformation by copying only the products but not the whole mindset and principles of those upcoming sustainable ventures.

It must be noted, however, that sustainable transformations do not happen in an isolated fashion. Technological, social and institutional factors are all interrelated and work together. As York and Venkataraman postulate, from a broader philosophical perspective "environmental problems will not be solved only by innovations which create new products and services, but also by creating new ways for society to answer the question of 'How should we live?'" (2010, p.452). This not only implies that SE has the potential to disrupt markets towards more sustainable lifestyles, but that such innovations can have multiple points of origin. This means that many of the early stage sustainable startups we interviewed can have an impact on the societal level beyond the value they can capture as a company in a more classical economic sense.

### 4.4 Chapter Summary

In this chapter, we analysed and discussed the results of our interviews by examining how our startups create sustainable value by using a framework of sustainable business model archetypes. Moreover, we discussed challenges and approaches to creating value providing examples from the interviews. Finally, we discussed the major findings and implications of our analysis in the context of SE and sustainable value creation and capture.

## 5 Conclusion

This study aimed to contribute to the field of SE by exploring and analysing what challenges sustainable entrepreneurs in the Swedish food industry face when attempting to capture sustainable value and how they try to overcome them. Our study has attempted to address gaps in the literature related to creating and capturing sustainable value, as well as a lack of industry-specific studies. We are confident to have achieved this purpose, within the identified limitations, and created results that will be useful for practitioners and future researchers. To achieve this purpose, we:

- a) Developed a theoretical framework based on existing literature about sustainable entrepreneurship; relevant contributions to entrepreneurial literature related to value creation and capture; and relevant contributions from sustainability and environmental sciences,
- b) Interviewed a diverse sample of food entrepreneurs in Sweden whose startup ventures have sustainability claims and learned about their approaches to creating sustainable value and the challenges they face when capturing such value.
- c) Identified, categorised and analysed challenges related to value capture in order to contribute to and fill the gap in the literature on why sustainable entrepreneurs in practice struggle to capture value
- d) Identified and analysed approaches intended to overcome value capture challenges in order to give practical advice to sustainable ventures in the food industry

## 5.1 Practical Implications

Our findings suggest several courses of action for sustainable new ventures in the food industry. First, the outlined challenges show a variety of issues that ventures might commonly face in the industry. We suggest that co-creation, business model innovation, business growth as well as networking or lobbying with institutions can be strategies to overcome the challenges related to value capture. Therefore, our study recommends to use different ways to scale up the business

in order to avoid being trapped in a continuous struggle to address a sufficient amount of customers and to be able to charge a sufficient price to cover additional costs. However, we acknowledge that suggesting ways to grow the business might often not align with the founders' initial ambition or background to start the business. Nevertheless, what we have seen from our research is that size plays a major role in the food industry. Hence, we clearly recommend sustainable entrepreneurs who consider entering the food industry to, at least, think big while starting small. The four approaches we discovered might be used jointly or isolated depending on the challenges the sustainable ventures face. As our analysis indicates, specific ventures will face different challenges which depend on their business model and degree of innovativeness, where specific approaches can be used to deal with those challenges. Lastly, in particular, we illustrated specific examples for co-creation and business model innovations which should encourage sustainable entrepreneurs to search for and find different ways to capture the value they create.

### 5.2 Future Research

At a macro level, our research seeks to contribute to a broader discussion about SE that seeks to discover "the conditions where entrepreneurship simultaneously creates economic growth, while advancing environmental objectives and improving social conditions" (Hall, Daneke & Lenox, 2010, p.440). This research has brought up challenges that sustainable ventures in the food industry face and possible approaches to overcome them. Future research could focus on either one of those aspects to assess them in more detail. A possible question to ask would be if certain approaches work more successfully than others. Another possible direction would be to test and possibly support our research contribution by conducting a quantitative study and ask for specific challenges and approaches discovered.

## References

- Almquist, E., Senior, J. & Bloch, N. (2009). The Elements of Value, vol. 68, no. 2, pp.25–60.
- Alvesson, M. & Sköldberg, K. (2009). Reflexive Methodology: New Vistas for Qualitative Research., Los Angeles; London: SAGE, 2009.
- Beckeman, M., Bourlakis, M. & Olsson, A. (2013). The Role of Manufacturers in Food Innovations in Sweden, *British Food Journal*, vol. 115, no. 7, pp.953–974.
- Bocken, N. M. P., Short, S. W., Rana, P. & Evans, S. (2014). A Literature and Practice Review to Develop Sustainable Business Model Archetypes, *Journal of Cleaner Production*, vol. 65, pp.42–56.
- Boons, F. & Lüdeke-Freund, F. (2013). Business Models for Sustainable Innovation: State-of-the-Art and Steps towards a Research Agenda, *Journal of Cleaner Production*, vol. 45, pp.9–19.
- Bryman, A. & Bell, E. (2015). Business Research Methods, Oxford University Press.
- Carrillo-Hermosilla, J., del González, P. R. & Könnölä, T. (2009). Eco-Innovation, London: Palgrave Macmillan UK.
- Cohen, B. & Winn, M. I. (2007). Market Imperfections, Opportunity and Sustainable Entrepreneurship, *Journal of Business Venturing*, vol. 22, no. 1, pp.29–49.
- Davies, I. A. & Chambers, L. (2018). Integrating Hybridity and Business Model Theory in Sustainable Entrepreneurship, *Journal of Cleaner Production*, vol. 177, pp.378–386.
- Dean, T. J. & McMullen, J. S. (2007). Toward a Theory of Sustainable Entrepreneurship: Reducing Environmental Degradation through Entrepreneurial Action, *Journal of Business Venturing*, vol. 22, no. 1, pp.50–76.
- Delmar, F., McKelvie, A. & Wennberg, K. (2013). Untangling the Relationships among Growth, Profitability and Survival in New Firms, *Technovation*, vol. 33, no. 8–9, pp.276–291.
- Dubois, A. & Gadde, L. E. (2002). Systematic Combining: An Abductive Approach to Case Research, *Journal of Business Research*, vol. 55, no. 7, pp.553–560.
- Eisenhardt, K. M. & Graebmer, M. E. (2007). Theory Building from Cases: Opportunities and Challenges, *Academy of Management Journal*, vol. 50, no. 1, pp.25–32.
- Folger, R. & Stein, C. (2017). Abduction 101: Reasoning Processes to Aid Discovery, *Human Resource Management Review*, vol. 27, no. 2, pp.306–315.
- Hall, J. K., Daneke, G. A. & Lenox, M. J. (2010). Sustainable Development and Entrepreneurship: Past Contributions and Future Directions, *Journal of Business Venturing*, vol. 25, no. 5, pp.439–448.
- Hockerts, K. & Wüstenhagen, R. (2010). Greening Goliaths versus Emerging Davids -

- Theorizing about the Role of Incumbents and New Entrants in Sustainable Entrepreneurship, *Journal of Business Venturing*, vol. 25, no. 5, pp.481–492.
- Hopkins, M. (2016). CSR and Sustainability: From the Margins to the Mainstream: A Textbook, Greenleaf Publishing.
- IPCC. (2014). Climate Change 2014 Synthesis Report Summary Chapter for Policymakers, *Ipcc*, p.31.
- Jolink, A. & Niesten, E. (2015). Sustainable Development and Business Models of Entrepreneurs in the Organic Food Industry, *Business Strategy and the Environment*, vol. 24, no. 6, pp.386–401.
- Landström, H., Harirchi, G. & Aström, F. (2012). Entrepreneurship: Exploring the Knowledge Base, *Research Policy*, vol. 41, no. 7, pp.1154–1181.
- Larsson, M., Andersson, E. & Enberg, S. (2005). Trust and Resilience A Case Study of Environmental Entrepreneurs in Järna, *Ekologiskt lantbruk*, vol. 47.
- Lehner, M. & Halliday, S. V. (2014). Branding Sustainability: Opportunity and Risk Behind a Brand-Based Approach to Sustainable Markets, *Ephemera:Theory of Politics in Organization*, vol. 14, no. 1, pp.13–34.
- Lepak, D. P., Smith, K. G., Taylor, M. S., Lepak, D. P., Smith, K. E. N. G. & Taylor, M. S. (2007). Value Creation and Value Capture: A Multilevel Perspective, *The Academy of Management Review*, vol. 32, no. 1, pp.180–194.
- Livsmedelsföretagen. (2018). The Swedish Food Federation, Available Online: https://www.livsmedelsforetagen.se/in-english/ [Accessed 7 May 2018].
- Livsmedelsföretagen. (2017). Startuprapporten, Stockholm.
- MEA. (2005). Ecosystems and Human Well-Being: Synthesis, *Ecosystems*, Washington, DC.
- Osterwalder, A. & Pigneur, Y. (2010). Business Model Generation, Self Published.
- Pacheco, D. F., Dean, T. J. & Payne, D. S. (2010). Escaping the Green Prison: Entrepreneurship and the Creation of Opportunities for Sustainable Development, *Journal of Business Venturing*, vol. 25, no. 5, pp.464–480.
- Ramaswamy, V. & Ozcan, K. (2018). What Is Co-Creation? An Interactional Creation Framework and Its Implications for Value Creation, *Journal of Business Research*, vol. 84, no. September 2016, pp.196–205.
- Ramsey, J. L. (2015). On Not Defining Sustainability, *Journal of Agricultural and Environmental Ethics*, vol. 28, no. 6, pp.1075–1087.
- Rennings, K. (2000). Redefining Innovation Eco-Innovation Research and the Contribution from Ecological Economics, *Ecological Economics*, vol. 32, no. 2, pp.319–332.
- Rockström, J., Steffen, W. L., Noone, K., Persson, Å., Chapin Iii, F. S., Rockstrom, J., Steffen, W. L., Noone, K., Persson, A., Chapin, F. S., Lambin, E., Lenton, T. M., Scheffer, M.,

- Folke, C., Schellnhuber, H. J., Nykvist, B., De Wit, C. a, Hughes, T., Van Der Leeuw, S., Rodhe, H., Sorlin, S., Snyder, P. K., Costanza, R., Svedin, U., Falkenmark, M., Karlberg, L., Corell, R. W., Fabry, V. J., Hansen, J., Walker, B., Liverman, D., Richardson, K., Crutzen, P., Foley, J., Lambin, E., Lenton, T. M., Scheffer, M., Folke, C., Schellnhuber, H. J., Nykvist, B., De Wit, C. a, Hughes, T., Van Der Leeuw, S., Rodhe, H., Sörlin, S., Snyder, P. K., Costanza, R., Svedin, U., Falkenmark, M., Karlberg, L., Corell, R. W., Fabry, V. J., Hansen, J., Walker, B., Liverman, D., Richardson, K., Crutzen, P. & Foley, J. (2009). Planetary Boundaries: Exploring the Safe Operating Space for Humanity, *Ecology and Society*, vol. 14, no. 2.
- Sarasvathy, S. D., Dew, N., Velamuri, S. R. & Venkataraman, S. (2010). Three Views of Entrepreneurial Opportunity, in Z. J. Acs & D. B. Audretsch (eds), *Handbook of Entrepreneurship Research*, New York, NY: Springer New York, pp.77–96.
- Schaltegger, S., Hansen, E. G. & Lüdeke-Freund, F. (2016). Business Models for Sustainability: Origins, Present Research, and Future Avenues, *Organization and Environment*, vol. 29, no. 1, pp.3–10.
- Schaltegger, S., Lüdeke-Freund, F. & Hansen, E. G. (2016). Business Models for Sustainability: A Co-Evolutionary Analysis of Sustainable Entrepreneurship, Innovation, and Transformation, *Organization and Environment*, vol. 29, no. 3, pp.264–289.
- Shane, S. (2000). Prior Knowledge and the Discovery of Entrepreneurial Opportunities, *Organization Science*, vol. 11, no. 4, pp.448–469.
- Shane, S. & Venkataraman, S. (2000). The Promise of Entrepreneurship as a Field of Research, *Academy of Management Review*, vol. 25, no. 1, pp.217–226.
- Stål, H. I. & Bonnedahl, K. (2016). Conceptualizing Strong Sustainable Entrepreneurship, *Small Enterprise Research*, vol. 23, no. 1, pp.73–84.
- Stubbs, W. & Cocklin, C. (2008). Conceptualizing a 'Sustainability Business Model', *Organization & Environment*, vol. 21, no. 2002, pp.103–127.
- Swan, C. D. & Morgan, D. (2016). Who Wants to Be an Eco-Entrepreneur? Identifying Entrepreneurial Types and Practices in Ecotourism Businesses, *International Journal of Entrepreneurship and Innovation*, vol. 17, no. 2, pp.120–132.
- Tjärnemo, H. & Södahl, L. (2015). Swedish Food Retailers Promoting Climate Smarter Food Choices-Trapped between Visions and Reality?, *Journal of Retailing and Consumer Services*, vol. 24, no. C, pp.130–139.
- Tukker, A., Huppes, G., Guinéer, J., Heijungs, R., de Koning, A., Van Oers, L., Suh, S., Geerken, T., Van Holderbeke, M., Jansen, B. & Nielsen, P. (2006). Environmental Impact of Products (EIPRO)—Analysis of the Life Cycle Environmental Impacts Related to the Final Consumption of the EU-25, *European Comission*, Seville, Spain.
- Tunberg, M. (2017). Rethinking Small Firm Growth.
- United Nations. (1987). Report of the World Commission on Environment and Development: Our Common Future A/42/427 Annex.

- Weidinger, C., Fischler, F. & Schmidpeter, R. (2014). Sustainable Entrepreneurship: Business Success Through Sustainability, *Springer*.
- Weinswig, D. (2016). Taking A Bite Out Of The Food Industry: Startups Change The Game, *Forbes.com*, Available Online: https://www.forbes.com/sites/deborahweinswig/2016/07/20/taking-a-bite-out-of-the-food-industry-startups-change-the-game/#60cb1761a318 [Accessed 26 January 2018].
- Whalen, P. S. & Akaka, M. A. (2016). A Dynamic Market Conceptualization for Entrepreneurial Marketing: The Co-Creation of Opportunities, *Journal of Strategic Marketing*, vol. 24, no. 1, pp.61–75.
- Wiedmann, T. O., Schandl, H., Lenzen, M., Moran, D., Suh, S., West, J. & Kanemoto, K. (2015). The Material Footprint of Nations., *Proceedings of the National Academy of Sciences of the United States of America*, vol. 112, no. 20, pp.6271–6.
- Wiklund, J., Davidsson, P. & Delmar, F. (2003). What Do They Think and Feel about Growth? An Expectancy-Value Approach to Small Business Managers' Attitudes Toward Growth, *Entrepreneurship: Theory and Practice*, vol. 27, no. 3, pp.247–270.
- Wiklund, J. & Shepherd, D. (2003). Aspiring For, and Achieving Growth: The Moderating Role of Resources and Opportunities, *Journal of Management Studies*, vol. 40, no. 8, pp.1919–1941.
- Yin, R. K. (2006). Case Study Reserach Design and Methods, *Clinical Research*, vol. 2, pp.8–13.
- York, J. G. & Venkataraman, S. (2010). The Entrepreneur-Environment Nexus: Uncertainty, Innovation, and Allocation, *Journal of Business Venturing*, vol. 25, no. 5, pp.449–463.

## Appendix A

### Interview Questions

- 1. Briefly tell us about you and what your business is about?
- 2. How did you identify this business opportunity?
  - a. Is connected to your past professional or personal experiences?
  - b. Were social or environmental concerns important factors when developing your idea?
  - c. Were you trying to address any specific problem?
  - d. How do you use sustainability claims in your positioning within the market?
- 3. What was your goal/mission with creating this business?
  - a. Is it a 'profit-driven' or 'mission-driven' company?
  - b. Is it connected to lifestyle choices?
- 4. Is your current business aligned with your initial goal?
  - a. What do customers value most about your company/product?
  - b. Does your company create social and environmental value? Is your customer aware of this value?
  - c. What were the problems/conflicts between your values/aspiration and the operationalisation within your business?
  - d. Where did you face trade-offs between your personal goals and the adjustment to industry norms/ conflicts?
- 5. Do you consider your company/product innovative?
  - a. How does it impact: (1) The market (2) Society (3) The environment
  - b. Is your business model aligned with sustainable goals (green, circular, cradle-to-cradle, biobased, closed loop)
  - c. Do you think other current business models in the industry are unsustainable? If so, please explain why?
  - d. Do you see threats from corporations/ other ventures copying your business model?
- 6. Are there any elements outside of your core business that create social or environmental value?
  - a. Donations / Events / Customer Education / Policy Influence / CSR (Marketing)
- 7. What is your vision for the future of your business?
  - a. If price would not matter, what would you change in your product?
  - b. What are your plans for growing/scaling your business and what are the main challenges you see? (linked to your mission)
- 8. What does sustainability mean to you?

# Appendix B

In the following section we give a short introduction to the start-ups and our interviewees to provide the context for our analysis. We focus on a short description of how and why the business was started and what the mission is. Further, we provide the professional background of the interviewee, which is the founder of the business in seven of our nine cases.

### 1 Gram / Rowan

Rowan Drury started the zero-waste shop Gram in 2016 as a personal project. She was frustrated with the amount of waste personally produced and after changing her own behaviour she decided to start a company with the mission to reduce waste from food packaging. As she says "I wanted to have a change in my life and I wanted to do something different and meaningful". Her professional background is in Marketing and she had no prior experience of starting a business or working in the food industry.

### 2 Edith / Gro'Up

Edith created the social food space in 2016 together with her co-founder which mainly takes a financing part in the venture. Her professional background is in social anthropology and cultural studies. She started Gro'Up as she always had a huge interest in the agency that food can have in society: "I wanted a place that is socially innovative when it comes to food that teaches and spreads knowledge and awareness about food in different ways".

### 3 Carolina / Get Raw

Carolina founded the brand Get Raw producing healthy snacks in 2013 with the mission to provide healthier snacks for consumers eating raw food being on holidays: "I realized that you can make actually sweets that are good for you. And I thought ... why don't you find any on the shelves at home? So that was the starting point for Get Raw." Her professional background is in service management retail and entrepreneurship studies and she has always been working in the restaurant industry.

### 4 Charlotte / Happy Onion Farms

In 2015 Charlotte, an anthropologist, and her co-founder started Happy Onion Farms as a personal project: "I am someone who is looking for the meaning of life and went on an urban organic farming one year course, five years ago. And I realized I wanna work with that." As the municipality in Malmö had a project to use land that is not exploited, she had the opportunity to start the farm.

### 5 Linda / Ekofisk

In 2013 the company Boliden Bergsöe was looking for ways to make use of excess heat they produce while recycling used car batteries and build a fish agriculture. Linda's professional background is in sustainable business development and has an interest for local food production, moreover she describes "I sort of had a background of how to take ideas of a business from a piece of paper and actually making something out of it and they needed help with that, this is how I started here."

#### 6 Erik / Entofoder

Erik founded Entofoder, which is farming insects as a feed supply, in 2018 because he wants to build up a huge scale business that contributes to more sustainable practices in the food supply chain. "If I am going to put a label on myself, I've used "food system activist" or "food production system activist" in Sweden." His professional background is in economics and he has prior experience of starting new ventures.

### 7 Anders / Sensefarm

Sensefarm was established as a company in 2014 and provides technology that makes farming more resource efficient. Anders started the company coming from an Engineering and computer science background and had no specific interest or experience in the food industry, however his co-founder did. "We had done consultancy work in the agriculture industry for a sugar producer in Sweden and Denmark and done measurements outdoors. They didn't want to have that as a product themselves so they said 'can't you make this into a product' we give you access to the farmers and they will just buy the equipment from you."

### 8 Anna-Kajsa / Food for Progress

Food for progress was started in 2011 by Anna-Kajsa and her co-founder. "The business is that we are trying to drive a new food logic. We are trying to be a part of transforming the whole food industry on all levels. And we have started in the consumer end by bringing transformative products into the market." Her professional background is in media and communication and she worked in the food industry before.

### 9 Björn / Rescued Fruits

Rescued fruits was started in 2014 and is producing juice from food waste. Björn joined the company as a CEO in 2017 and he worked in management positions in corporates before and had no experience in the food industry. He explains why he joined rescued fruits: "Running companies I have done, growing organisation, working with production and lean management I have done. And I have a big heart for the food industry."

# Appendix C

### Disaggregated node structure in NVivo 11

### HIERARCHICAL NAME

Nodes\\Archetype

Nodes\\Archetype\(ORG) Repurpose for Soc&Env

Nodes\\Archetype\(ORG) Scale Up Solutions

Nodes\\Archetype\(SOC) Encourage Sufficiency

Nodes\\Archetype\(SOC) Functionality instead of Ownership

Nodes\\Archetype\(SOC) Stewardship

Nodes\\Archetype\(TECH) Energy or Material Efficiency

Nodes\\Archetype\(TECH) Renewables & Natural Processes

Nodes\\Archetype\(TECH) Value from Waste

Nodes\\Business model

Nodes\\Business model\Value Capture

Nodes\\Business model\Value Capture\Economic Value

Nodes\\Business model\Value Capture\Social - Environmental Value

Nodes\\Business model\Value Creation

Nodes\\Business model\Value Proposition

Nodes\\Competition

Nodes\\Definitions of sustainability

Nodes\\Eco-innovation

Nodes\\Growth Orientation

Nodes\\Growth Orientation\Capped growth (no growth orientation)

Nodes\\Growth Orientation\Economy of Scale

Nodes\\Growth Orientation\Grow to impact

Nodes\\Growth Orientation\Grow to survive

Nodes\\Growth Orientation\Organic growth

Nodes\\Growth Orientation\Subsistence or 'Lifestyle' Orientation

Nodes\\Impact

Nodes\\Institutional Lobbying

Nodes\\Market Size

Nodes\\Market Size\Mass Market

Nodes\\Market Size\Niche Market

Nodes\\Mission Drift

Nodes\\Opportunity Recognition

Nodes\\Trade-Off Sustainability

Nodes\\Value Capture Issues

Nodes\\Value Capture Issues\Market

Nodes\\Value Capture Issues\Regulatory

Nodes\\Value Capture Issues\Supply Chain

# Appendix D

## Further relevant quotes organised by topics

Arguments	Supportive Quote
Creating sustainable value in	"The issue is that when today we farm fish, we collect two kilos of
the food industry (Ch. 4.1)	fish from the ocean and we feed that to farmed fish, and we get
	one kilo of fish out. So with the exponential growth and food
	demand, then farmed fish is an excellent idea if we can just break
	away from this 'fish meal' that we feed them with, and that's where
	the insects come in." Erik / Entofoder
	"we don't talk much about sustainability to the consumer, we let
	media do that We educate business people, we educate the whole
	food area. But we don't educate the consumer." Anna-Kasja / Food
	for Progress
Sustainability as a niche market (Ch. 4.2.1)	
Limited customer base and	but many people that are our type of customers, hipsters or
reach	environmentally oriented people, they pay something extra
	because our products are more expensive. And they get something
	that has more soul in it compared to when you go for regular, large
	industry apple juice for instance. Björn / Rescued Fruits
	industry approjuted to instance. Zjetny resource rusts
	But they need to know the extra added values to buying our fish
	instead of buying a salmon from norway or frozen fish that is
	imported from Asia for instance. The challenge has been to make
	it attractive, simple and easy enough to understand. And when it
	comes to food it has to taste good. If it doesn't taste good you're
	not gonna buy it anyway. But for us the most important things to
	communicate there are that it's a good fish, it's a tasty fish, it's
	produced locally in Sweden and it's green listed. Linda / Ekofisk
	So everything we do is the highest price and that's a challenge to
	communicate the product and its benefits to the customer so they

know what they are buying. Because a lot of people just think "oh it's so expensive". Carolina / Get Raw

Our price should be based on us two working and getting a decent hourly salary, which we are not there yet but that is the model and the plan. Charlotte / Happy Onion Farm

Some people want me to be the same price as ICA but I can't. We are a tiny shop and I don't see how that works. But I try to compare our prices all the time with the good organic brands and what they sell it for online and in the big supermarkets and I try to stay the same as that or a bit under. But big organic brands are not cheap, but it is what it is. Rowan / Gram

We could do a high premium high end product, but we wanted to keep the price as low as possible and to package it as a weekday product. Carolina / Get Raw

I would love it to be cheaper and more available to more people and that is why i think business growth is the only way to do that. To make our margins better but also to bring some of the prices down on that of more regular everyday products. When you compare the price of buying beans up the road from Kristianstad it is so much more expensive than importing beans from China, and that is insane. Rowan / Gram

High production costs

Of course the price of production is not the best but that is part of the game. If you want to save it you have to put in effort." Björn / Rescued Fruits

And we also noticed that going to markets is a lot of work. You have to start harvesting the day before and then you come back in the morning and you stand at the market the whole day, very long and hard day, and you have no guarantee how much you can sell, and you always end up with stuff that is over that becomes waste and you do not make that much money. Charlotte / Happy Onion Farm

Co-Create

So instead we are now talking to big customers who we know have, once we do scale up, it is going to be pretty big, but we want to sell the whole first year production before we start producing. But it is a fairly big company that we are working with, but the reason for it is that they can just go to the bank and borrow the money that we need to invest in the plant. Erik / Entofoder

Look for alternative markets

Because when we talk to the fish farmers they go like "oh and here is the price I'm paying today", and Swedish fish farmers are outcompeted anyways on costs by the Norwegians... so that is why we are looking at like, "Hum, the wild birds, I wonder how much people spend at feeding the birds". Or, dogs, "would you like a climate friendly dog snack". Erik / Entofoder

# Achieving sustainable impact (Ch. 4.2.2)

Individual growth aspirations vs high scale of the industry

Another example would be: Also the zero waste shop Gram is considering to stay small, while recognising the need of it could be that I say "it is just gonna be this shop" but maybe then it has to run as a cooperative or something like that, because financially I can't. I think if it develops a bit more it could just be enough to have a staff member, but then I think it would be good to have some kind of volunteer system as well to keep it. Rowan / Gram

How size and growth influences impact

I think that right now, if we are just thinking like quantitatively, I don't think that our impact is very big. But if you consider a more qualitative approach, I think our impact is getting better and better and bigger and bigger Edith / Gro'up

I think we can have an impact because we make healthy accessible and fun and tasty so we will impact the consumer to inspire them to eat better, to snack better. And since the consumer wants to buy those kind of products hopefully they will buy us instead of the bad products. And then the bigger companies have to change their direction in order to satisfy the customers and in that way we manage to change their direction, and then we are happy. Because

we want the industry to move to a better way, towards a more natural way of eating, back to basic actually. Carolina / GetRaw

It feels like in order to survive economically I think the business has to grow, but I do think it could survive as a small shop. I just have to change the model a bit. And I don't think that economic growth is necessarily the right way, like becoming a big corporation, maybe no. It is just a value to run as a cooperative and get the community involved, that has a different value. Rowan / Gram

# Institutions and networks (Ch. 4.2.3)

Stakeholders unaware of value created:

I do a lot of talks, where I do talk about the shop, but it's mostly about the problem with waste. So I go to school groups and I talk. Doing a talk about getting rid of plastic in the general workplace and then lots of talks with various press events and at companies. It has always been much more than this small food shop, it is about conversations about waste problems. Rowan / Gram

We are keeping our eyes and ears open constantly, because some meetings of politicians are technically open but nobody goes ... but we go and we listen and if they say this is the problem number one on the agenda, like Malmö needs more urban development or Malmö needs more jobs or whatever, we note it down. Edith / Gro'Up

There is this small 'Insect businesses of Sweden', so we have a small organization. I try to stay away from talking to them because every time I ask a question they assume that I am already doing it. Erik / Ento Foder

I am involved in some groups, transition Skane and transition Malmö groups who try to make the area more independent and have a lots of independent businesses and bring in local currency and things like that, I am involved with them." Rowan /Gram