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Sustainable Entrepreneurship and Finance: Exploring Entrepreneurial Decision-Making Process for Securing External Funds

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Abstract

The thesis explores the decision-making process of sustainable entrepreneurs for securing external funds by adopting the "triple bottom line" research perspective (Hall et al., 2010; Sarango-Lalangui, 2018). It delves into how sustainable entrepreneurs assess and exploit funding opportunities while balancing their economic and non-economic goals. The research addresses two primary questions: what does the decision-making process look like for sustainable entrepreneurs securing external funds and what factors influence their decision-making?

A comprehensive literature review highlights the unique challenges sustainable entrepreneurs face compared to traditional entrepreneurs, particularly in securing funding that aligns with their sustainability goals. The study adopts a qualitative, inductive approach, utilizing multiple case studies from Sweden and Denmark, known for their robust startup ecosystems and commitment to sustainability. Data were collected through semi-structured interviews with founders or co-founders of sustainable ventures, focusing on their experiences and strategies for securing external funds.

The findings reveal a three-phase decision-making process: opportunity assessment, opportunity exploitation, and post-funding evaluation. Sixteen factors influencing this process are identified and categorized into three main dimensions: the sustainable entrepreneur, the sustainable venture, and the environment. These factors include motivations, values, knowledge, attitudes, business models, legal structures, team dynamics, funding options, and external uncertainties such as political and economic trends.

The study contributes to both theoretical and practical understanding by providing an integrative framework for sustainable entrepreneurs' decision-making processes and offering insights into what factors SE have to consider as they navigate the complexities of fundraising while adhering to their sustainability mission. Ultimately, this research aims to enhance the financial viability of sustainable ventures and support the broader goal of achieving Sustainable Development Goals (SDGs).

Key Words: Sustainable Entrepreneurship, Entrepreneurial Finance, Decision-Making Process, Sweden, Denmark, Sustainable Development Goals (SDGs)

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Introduction

Extreme weather conditions resulting in 800 million endangered people, rapid sea level rising and cost of 1 trillion USD for businesses in the upcoming 5 years, land degradation, plastic pollution, deforestation, wildlife plants, animal extinction, over 821 million undernourished people, 25 million people in forced labour, 152 million children in child labour, and 700 million people in extreme poverty (Veglio, 2021). These global environmental, social, and economic problems underline the paramount importance of sustainable entrepreneurship, which many scholars consider an integral solution to these issues (Muñoz & Cohen, 2017; Shepherd & Patzelt, 2011). The reason is that sustainable enterprises are at the forefront of the change leading to sustainable development, utilising innovative solutions to address complex environmental and social issues (Shepherd & Patzelt, 2011; Schaltegger & Burrit, 2015). However, for sustainable ventures to drive positive change, they themselves need to be sustained.

Entrepreneurial finance has been recognized as one of the most crucial enablers for the existence and growth of start-ups (Cassar, 2004; Herkenhoff et al. 2016; Ko & McKelvie, 2018). Shepherd & Patzelt (2011) outline that the emphasis on generating economic gains may differ for sustainable entrepreneurs, distinguishing them from traditional entrepreneurs. Traditionally, the pursuit of entrepreneurship has been centred around creating value for stakeholders, primarily focusing on economic gains. However, a paradigm shift has occurred with the emergence of sustainable entrepreneurship in recognition of entrepreneurship as a solution to environmental and social issues, which has challenged the traditional view of entrepreneurship solely focused on creating economic value for stakeholders (O'Connell & Ward, 2020).

Sustainable entrepreneurs (SE), committed to acquiring both economic and non-economic gains, encounter a distinctive practical challenge in securing funding (Shepherd & Patzelt, 2011). Examples of non-economic gains include autonomy or identity fulfilment (Jayaratne et al. 2019). Evidence suggests that financial constraints, including shortages of funds and capital constraints, pose hurdles in the fundraising process for sustainability-oriented startups (Chang et al., 2014; Parekh & Attuel-Mendes, 2022). Understanding how upcoming sustainable ventures can navigate these challenges to improve their financial performance is crucial.

Sixty percent of entrepreneurs fail after six years; however, they state that any differences in their decision making styles play a major role in their high failure rate (De

Winnaar & Scholtz, 2019). Similarly, Shepherd & Patzel (2017) state that "strategic decisions firm leaders make have a major impact on the firm's future direction and performance." And given the SE's unique commitment to both economic and non-economic gains, their decision-making might significantly differ from that of traditional entrepreneurs while trying to secure external funds; however, the existing literature fails to account for this unique attitude of sustainable entrepreneurs as the research on decision-making is predominantly focused on the financial aspects of entrepreneurs' assessments of potential opportunities (Shepherd & Patzelt, 2017). This underscores the need for empirical inquiries to fill in the gap in the literature and explore the practical nuances of decision-making in sustainable entrepreneurship concerning financing, where decision-making is defined as the "process of choosing a preferred option or course of action from among a set of alternatives" (Gibcus & Ivanova, 2003).

Highlighting the importance of exploring an entrepreneurial journey over time, Muñoz & Cohen (2017) underscore that this exploration is pivotal for comprehending how business opportunities evolve within the co-evolving social dynamics of sustainable ventures. To gain deeper insights and allow for more informed decisions by sustainable entrepreneurs, we must unravel how sustainable entrepreneurs navigate the fundraising process under the uncertainties of investors' expectations while preserving the sustainability purpose of their ventures, a crucial aspect in their pursuit of both economic and non-economic objectives.

Hence, our research explores the following research questions:

RQ 1: What does the sustainable entrepreneurs' decision-making process of securing external funds look like?

RQ 2: What are the factors influencing the decision-making of SE while securing external funds?

Consequently, our research endeavors to make both theoretical and practical contributions to the field of sustainable entrepreneurship (SE). The theoretical dimension of our study aims to enhance an understanding of the intricate relationship between sustainable entrepreneurs and finance by delving into the dynamic processes of decision-making and factors influencing this decision-making. By addressing the aforementioned gap in existing research, we aspire to shed light on the dynamic decision-making process in connection with the unique fundraising journey sustainable entrepreneurs undergo as well as factors

influencing their unique decision-making focused on pursuing both economic and non-economic gains. Our understanding of external funds or external finance refers to all kinds of finance except for owner's equity (Quoreshi, 2015).

On a practical level, our study seeks to offer valuable insights into the fundraising process to sustainable entrepreneurs, providing them with knowledge of how the decision making process unfolds and tools to be more aware of different factors that might play a significant role in this process, with the aim of navigating the challenges associated with external fund acquisition and balancing economic and non-economic pursuits. As stated by Kumar and Sudarsanam (2022), an efficient decision-making process for entrepreneurs will go a long way in reducing the social cost, either by making a venture profitable or sooner realizing it's unviable, making the process of entrepreneurship efficient. Therefore, our intention is to help sustainable entrepreneurs make better decisions and be more efficient thanks to increased self-awareness and ultimately, our broader aim is to facilitate easier access to financing, foster the growth of sustainable businesses and contribute to the realisation of the Sustainable Development Goals (SDGs).

1. Literature Review and Theoretical Frameworks

The following chapter explores the theoretical foundation of our research by presenting the ongoing scholarly dialogues regarding sustainable entrepreneurship and finance and showcasing how our research addresses the identified gaps. We begin by introducing leading scholarly approaches to sustainable entrepreneurship, including the definition of sustainable ventures (1.1) After covering this basic ground, we move on to the exploration of sustainable entrepreneurship and finance, first explaining the relevance and second synthesizing the ongoing trends in the body of literature and demonstrating the need for further practical and theoretical research (1.2). At last, we explore the theoretical background of entrepreneurial decision-making and discuss the theoretical frameworks most suitable for investigating our research questions (1.3).

1.1 Sustainable Entrepreneurship

Sustainable entrepreneurship is a relatively new field of study that has surged in prominence and captured scholarly attention since 2006 (Rosário et al., 2022). The conceptual understanding of sustainable entrepreneurship has garnered significant attention due to its broad theoretical scope, acting as an inclusive umbrella term that encourages collaboration across diverse theoretical realms, resulting in its openness to variation in terminology, data, and methodologies (Shepherd & Patzelt, 2011). This diversity originates from the historical roots of the sustainable entrepreneurship field. Both as a phenomenon and a distinct research topic, it evolved from separate research streams on environmental and social entrepreneurship (Hockerts & Wüstenhagen, 2010, p. 481). As a result, sustainable entrepreneurship is defined through diverse lenses, showcasing its multifaceted nature.

The most significant research perspectives in this scope are Schumpeter's approach of "creative destruction" and the "triple bottom line" (Hall et al., 2010; Sarango-Lalangui, 2018). Creative destruction emphasizes market failure via environmental and social disruption, providing entrepreneurs with the opportunity to transition to a more sustainable entrepreneurial ecosystem. For instance, Hockerts and Wüstenhagen (2010) define sustainable entrepreneurship as the discovery and exploitation of economic opportunities that initiate sectoral transformation towards environmental and social sustainability. Schaltegger & Wagner (2010) see new ventures as key transformers of a sustainable economy, delivering innovative and sustainable solutions. Oviatt & McDougall (1997) add that sustainable

entrepreneurship concerns analyzing the sustainable and economic impact that ventures' performance has on local areas.

The triple bottom perspective, adapted by researchers such as Dean (2007) and Shepherd (2011), highlights relationships between individuals and opportunities. This perspective suggests that entrepreneurs are entirely aware of the direct and indirect environmental impact of their companies and that sustainable development is a crucial source of business opportunities and durable business models (Sarango-Lalangui, 2018). Dean and McMullen (2007) exemplify this by defining sustainable entrepreneurship as "discovering economic opportunities within market failures, particularly those relevant to environmental sustainability." A common characteristic of both approaches is the process definition of sustainable entrepreneurship, where emphasis is placed on different phases of entrepreneurial opportunity: discovery, creation, evaluation, and exploitation (Sarango-Lalangui, 2018).

In this research paper, "Triple bottom perspective" and Shepherd and Patzelt's (2011, p. 137) definition have been adapted; "Sustainable entrepreneurship is focused on the preservation of nature, life support, and community in the pursuit of perceived opportunities to bring into existence future products, processes, and services for gain, where gain is broadly construed to include economic and non-economic gains to individuals, the economy, and society." The reason we chose this perspective is that it aligns better with our research, which focuses on individuals and their recognition of funding opportunities. In contrast, a perspective like "Creative Destruction" might be more relevant if we were examining the impact of their actions on the market or their opportunity recognition in a broader context. Additionally, Shepherd and Patzelt's definition was chosen as it provides the most comprehensive definition that best encapsulates characteristics of the selected cases, as well as emphasizing the economic and non economic gains that are central to our research questions, as these make the sustainable entrepreneur's decision-making unique compared to conventional entrepreneurs.

Furthermore, since our research concerns sustainable ventures, we will define the criteria that classify ventures as sustainable. Building on the conceptualization of sustainable entrepreneurship, sustainable ventures are also defined in the literature either via the creative destruction perspective, where they are referred to as "businesses that integrate social, economic, and ecological objectives to transition towards a more sustainable future by replacing unsustainable practices with environmentally friendly alternatives" (Rosário, 2022), or via the triple bottom perspective, where sustainable ventures are enterprises that focus on

long-term social, environmental, and economic value creation for lasting positive outcomes (Senderovit et al., 2022; Nagy et al., 2022). For this research, we adopted the following definition: "sustainable ventures are commercially viable endeavours that advance the causes of environmental protection and social justice" (Muñoz & Dimov, 2015). This definition aligns with the triple bottom perspective and provides a simple yet succinct description of the selected ventures for this research.

Muñoz and Cohen (2017), in their systematic literature review on sustainable entrepreneurship, state that conceptual developments have been integral to the emergence of sustainable entrepreneurship as a scholarly field. The literature review shows that up until today, the entrepreneurship field of research has been dominated by positivist methodologies (McMullen and Dimov, 2013); however, in order to understand the sense making of the perceived opportunities, interpretative methods are required, as well as shift from researching the process of sustainable venturing as a set of decomposable blocks towards researching it as holistic analytical unit (Muñoz & Dimov, 2015). Additionally, the context of sustainable entrepreneurship research has been underexplored. According to Muñoz and Cohen (2017), future research in this field should aim to apply methodologies that capture the entire phenomenon and the interactions among various players. (such as civil society, local government, competition, etc.). Muñoz and Cohen (2017, p. 28) also highlight scarcity of opportunities, empirical research on sustainable entrepreneurs and their ventures. The call for a shift toward empirical investigations reflects a maturation of the field, moving beyond theoretical inquiry to embrace empirical research as a means to solidify understanding.

1.2 Sustainable Entrepreneurship and Finance

In the context of sustainable entrepreneurship, sustainable ventures' unique commitment to both economic and non-economic objectives sets the stage for a distinct relationship with finance, distinguishing sustainable ventures from their conventional counterparts. Pursuing economic and non-economic gains emerges as a defining feature, marking a departure from traditional entrepreneurial finance paradigms (Vismara, 2019).

Beyond theory, the importance of understanding the relationship between sustainable ventures and finance is highlighted by the complexities and hurdles faced by sustainable enterprises in securing financial support. Scholars have recognized these difficulties with empirical evidence. For instance, De Lange's (2016) research of three hundred start-ups in

thirty cities reveals that investors avoid sustainable start-ups. Mansouri & Momtaz (2022) showcase a trend where sustainable ventures experience a reduction in annual returns post-funding, raising alarms about the sustainability of interest from traditional financiers and potentially limiting access to conventional funding avenues.

Addressing these challenges becomes paramount as Mansouri and Momtaz (2022) stress the need for sustainable start-ups to secure funding at valuations surpassing those of conventional start-ups. Additionally, the role of seed investors in influencing the emergence of new ventures underscores the importance of financial resources in driving social and sustainable entrepreneurial endeavors (Bocken et al., 2024). Thus, promoting sustainable entrepreneurship practices is closely linked to understanding the nuances of financial sustainable ventures, specifics on how sustainable entrepreneurs overcome financial constraints, and how they align investment incentives with sustainable gains.

The current research landscape of sustainable entrepreneurship and finances centres on deciphering the intricacies of financial constraints and discerning the optimal capital mix for sustainable ventures, as highlighted by Bonfanti et al. (2024). Another common area of research involves alternative financing options for sustainable entrepreneurs, referred to as sustainable finance, which consists of for instance, climate funds & green bonds (Aneja et al., 2023). Additionally, finance is also explored as a factor influencing sustainability-oriented behaviours, as observed in the works of Muñoz and Dimov (2015). Scholarly articles commonly delve into the relationship between various financing sources and sustainable ventures: shedding light on the sustainability orientation and impacts of traditional providers of financing, such as venture capitalists (VCs) and business angels (Vismara, 2019). Highlighting that differences in the financial system (commercial financial systems versus philanthropy-oriented financial systems) play a prominent role in influencing capital structure decisions (Sahasranamam & Nandakumar, 2020).

Literature further assesses philanthropic grants' role in the financial development of sustainable ventures (Lall & Park, 2022) and examines the roles of accelerators and incubators (Lall & Park, 2022; Ho & Yoon, 2022). Great emphasis is drawn to crowdfunding as a solution for the shortage of funds, in line with the idea that social ventures might find obstacles in securing finance through traditional financial institutions (Calic & Mosakowski, 2016) and can utilize their focus on social and environmental impact to gain the interest of a large number of socially and environmentally conscious individuals (Choi et al., 2008).

Thereby, the main focus of existing literature in sustainable entrepreneurship and finance is on understanding financial constraints, optimal capital mixes, and alternative financing options for supporting sustainable ventures. However, there's still a gap in comprehending the actual process of securing funding, especially in how sustainable entrepreneurs raise capital to sustain and advance their ventures while achieving their non-economic goals (Shepherd & Patzelt, 2011, p. 154). Bonfanti et al. (2024) underscore the scarcity of attention given to the unique financial challenges associated with securing capital for sustainable entrepreneurial endeavours. This shift from static analyses to temporal lenses aligns with the practical reason that the process of raising capital is inherently dynamic, evolving with the venture's progression (McMullen & Dimov, 2013). Muñoz & Dimov (2015) call for a shift in explanatory focus from efficient causes - whether something occurs - to elaborating the material, formal, and final causes of what specifically happens.

The importance of investigating how sustainable entrepreneurs secure funding is twofold. Firstly, securing funding is pivotal for launching and sustaining ventures. Therefore, sustainable entrepreneurs require a comprehensive understanding of these processes, drawing insights from the experiences of their successful counterparts. Secondly, the two-fold incentives (economic and non-economic) of sustainable entrepreneurs give rise to unique decision-making scenarios where the emphasis that sustainable entrepreneurs place on the generation of economic vs. non-economic gains likely differs across individuals (Shepherd & Patzelt 2011, p. 140) and for the individuals depending on their situations at a given time period. Examining wether and how the given emphasis changes based on dynamic external circumstances will provide a more nuanced understanding of the challenges linked to sustaining sustainable enterprises.

1.3 Entrepreneurial Decision-Making Process

While investigating the relationship between process and finance in sustainable entrepreneurship, an individual-level study takes center stage, emphasizing the pivotal role of individual sustainable entrepreneurs and their decision-making (Anand et al., 2021) as a key factor influencing a firm's failure or success (Åstebro & Bernhardt, 2003; Vanacker & Manigart, 2010) aligning with the "triple bottom line" research perspective (Hall et al., 2010; Sarango-Lalangui, 2018).

Research on entrepreneurial decision making till today has been employed by studying differences between entrepreneurs and non entrepreneurs decision making as well as comparisons among decision making of entrepreneurs themselves (Shepherd & Patzel, 2017). Scholars researching this subject have also explored how entrepreneurs make various decisions in different contexts and the impact of the context on their decision making (Shepherd & Patzel, 2017). Shepherd and Patzel (2017) divide entrepreneurial decisions into the following categories: Opportunity-assessment decisions, Entrepreneurial Career Decisions and Decisions on Funding Entrepreneurial Actions. Opportunity-assessment decisions are part of the entrepreneuri's decision making process when securing funds.

As Shepherd & Patzel (2017) state, the opportunity-assessment decisions were perceived by scholars as static actions, disregarding the fact that entrepreneurs change and hence their assessment of the opportunities. Therefore, they encourage further research to adopt a more dynamic view of opportunity-assessment decisions, the approach undertaken in our research. Additionally, the current state of research on entrepreneurial opportunity-assessment decisions predominantly focuses on the financial aspect of the opportunities but falls short on taking into account the influence of non-economic factors such as social and environmental factors on these decisions (Shepherd & Patzel, 2017). Even though social and environmental entrepreneurship research has revealed that non-economic factors drive many entrepreneurs, it has not adequately explored whether and how economic and non-economic factors influence decisions and whether there are tradeoffs between the two (Shepherd & Patzel, 2017).

Research on the factors influencing entrepreneurial decision-making is relatively scarce. However, several studies have identified key influences. Truong & My (2023) highlight that entrepreneurial background, family background, entrepreneurial ecosystem, entrepreneur's knowledge, social valuation, opportunity perception, attitude, business performance, and purposeful entrepreneurial competence influence the business decisions of generation Y entrepreneurs in Vietnam. Second Feng et al. (2022) research reveals that attention, memory, thinking, emotion, and sentiment affect an entrepreneur's strategic decision-making abilities. They also found that strategic decision-making and overall entrepreneurial performance are improved when entrepreneurs have a clear understanding of the influencing elements and the interactions between them.

1.4 Theoretical Frameworks for Entrepreneurial Decision-Making Process

The following chapter summarises the existing theoretical frameworks relevant to the entrepreneurial decision-making process. To our best knowledge, there is no entrepreneurial decision-making framework developed specifically for sustainable entrepreneurs and hence it's not included in this chapter. The scarcity of research on this topic further exemplifies the relevance of our study.

The theoretical frameworks on entrepreneurial decision making have been centred around the entrepreneur himself/herself and scholars have explored personal characteristics of an entrepreneur and its impact on his/her decision making. For instance, Ardakani and Avorgani (2021) proposed a conceptual model in which entrepreneurs' decision making is influenced by personal characteristics: risk-taking, information, and critical thinking. However, their research showed that only information has an impact on an entrepreneur's decision making. The relevance of this framework for our thesis is in the personal characteristics, which might be a relevant factor influencing sustainable entrepreneurial decision making.

Besides personal characteristics, scholars also explored the influence of cognitive processes on entrepreneurial decision-making. For instance, Mensah et al. (2020) place entrepreneurs at the center of decision-making in their conceptual framework, which is divided into personality traits and cognitive processes. His framework focuses on three primary personality traits: self–confidence, ambiguity aversion, and locus control. The cognitive skills in his framework are alertness to schema, tacit knowledge, and counterfactual thinking. Mensah's framework value for our research is also in the factors (personality traits & cognitive processes) that influence entrepreneurial decision making. Similarly to Ardakani & Avorgani, no particular implications for sustainable entrepreneurs are derived from his frameworks.

Other scholars explore how knowledge and experience influence entrepreneurial decision making in their theoretical frameworks; for instance, De Winnaar and Scholtz (2019) developed a theoretical framework built on traditional decision making theory in which they account for entrepreneurship-specific factors influencing entrepreneurs decision making such as high levels of uncertainty, risk, & time pressure. They developed a two lens conceptual framework to understand entrepreneurial decision making; additionally, their contribution lies in incorporating the external environment into the framework and not focusing solely on the

entrepreneur himself/herself. The two lenses of the framework are Recognition Primed Decision making (RPD), & Metacognitive Entrepreneurial Cognition (EC) (Winnaar & Scholtz, 2020). The RPD refers to the fact that entrepreneurs, utilising their knowledge and experience, will adapt a more intuitive manner of decision-making to make the chosen alternative work as opposed to choosing the best alternative (Winnaar & Scholtz, 2020). The metacognitive EC refers to an entrepreneur's external environment and its influence on an entrepreneur's thoughts and actions and the use of these in developing knowledge structures that later influence their decision-making. Haynie et al. (2010) further developed the framework for EM, Entrepreneurial Mindset, which highlights that entrepreneurs are not influenced only by external factors but also by motivation and their desired outcome. The relevance of this framework for our research lies in the factors influencing the decision-making of entrepreneurs. Even though our research question is based on factors specific to sustainable entrepreneur decision-making, we believe the factors in this framework still might be relevant, as we believe sustainable entrepreneurs are similarly influenced by internal and external factors.

Kumar and Sudarsanam (2022) have chosen a unique approach and developed an entrepreneurial decision-making framework for entrepreneurial ventures by integrating two approaches. First, decision making by thinking and decision making by doing, we do not consider this part of their framework relevant for our research as we do not divide decision-making into these categories; However, we include it in our theoretical frameworks as we see relevance in the second part of their framework, which is that they see the entrepreneurial decision making process as a setting of contextual bandits, which is together with associated costs impacted by decision problems, entrepreneurial ecosystem, and design of experiments. Our aim is to explore the decision making process in the context and hence the contextual bandits are of relevance. Limitation of this framework is that it has been developed by studying entrepreneurs in emerging economies while our research is focused on Sweden and Copenhagen. Nevertheless, we still believe the conceptual frame might be relevant for our research.

As Gibcus and Ivanova (2003) state, Mintzberg's model of unstructured decision processes is the most integrative and popular attempt to create a descriptive framework of the decision-making process in literature. According to Mintzberg (1976 as cited in Gibcus & Ivanova, 2003), strategic decisions are immensely complex and dynamic but it is possible to give them conceptual structuring. Mintzberg's model includes seven elements or stages of the

decision-making process: recognition, diagnosis, search, design (decision-makers modify available alternatives or create new ones that do not exist yet), screen (decision-makers set criteria that the ideal decision should meet), evaluation or choice, and lastly, authorization (not applicable for entrepreneurs as they are autonomous). Additionally, the model comprises three 'central phases' (identification, development, and selection), three sets of 'supporting routines' (decision control, decision communication, and political), and six sets of 'dynamic factors' (interrupt, scheduling delays, timing delays and speedups, feedback delays, comprehension cycles, and failure recycles) (Mintzberg et al., 1976, as cited in Gibcus & Ivanova, 2003). The usefulness of the theoretical framework for our research lies in addressing decision-making as a dynamic, multistage process, as we in our research similarly adapt the process view to the decision making of sustainable entrepreneurs. The limitation of this framework is its applicability to sustainable entrepreneurs; however, it still serves as a baseline and a comparison for our framework.

Shepherd and Patzel (2017), with the aim of addressing the need for an even more dynamic approach to entrepreneurial decision-making introduced a sketch of hierarchically nested concepts for future exploration of entrepreneurial decision making. In the proposed framework, entrepreneurs who make numerous decisions are "nested within different contexts", Examples of contexts might include location, industry, etc. The purpose of the hierarchical linear modelling analysis is to allow for researching one level of the nested data, for instance, the variance of the entrepreneurs decision making, while controlling for all other levels' influence, for instance, the entrepreneurs's network and her/his prior experience (Shepherd & Patzel, 2017). The second part of the framework suggests that different situations or time points are nested within entrepreneurs with the purpose of allowing for examination of decision making over time while controlling for the characteristics of the entrepreneur. This framework is relevant for our research as the hierarchical linear analysis allows us to study the economic and non-economic factors influencing entrepreneurial decision making while controlling for other factors, which at the same time allow us to investigate the causation of the factors. And the applicability of the second part of the framework in our research is in exploring decision-making as a process that develops over time. The limitation of this framework is that it has not been comprehensively developed, as Shepherd & Patzel (2017) state that it's more of a sketch. Additionally, it has not been developed specifically for sustainable entrepreneurs; however, we still consider it relevant as we focus on the dynamics of decision making and various factors influencing this process.

As stated, our research is concerned with both internal and external factors influencing sustainable entrepreneurs decision-making and hence we found Bandura's (1986) theoretical framework most suitable for our research as he views human functioning as a product of the dynamic interplay of personal, behavioural, and environmental influences (Gibcus & Ivanova, 2003). His framework encapsulates both external factors (the environment) & internal factors influencing entrepreneurs, such as rationality, emotions, & intuition. The interdependent relationship between these three factors is outlined in the following framework for entrepreneurial decision-making:

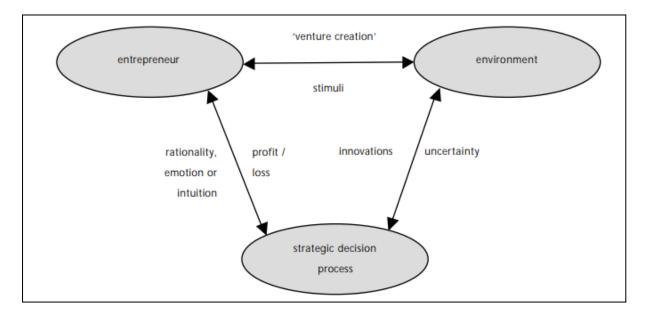


Figure 1.4 Bandura's framework for entrepreneurial decision-making, 1986 (as cited in Gibcus & Ivanova, 2003))

The entrepreneur's approach, whether rational, emotional, or intuitive, influences the decision-making process. Understanding the entrepreneur's decision-making tendencies is crucial in exploring how they shape their decisions and adapt to outcomes, whether profitable or otherwise (Gibcus & Ivanova, 2003). On the one hand, entrepreneurs also impact the environment (such as competitors, governmental agencies, customers, suppliers, and investors) through venture creation and subsequent decisions, and, on the other hand, they respond to environmental stimuli such as opportunities and threats. Our view does not align with Bandura's (1986) view in certain aspects, such as 1) we do not differentiate between rational, emotional, and intuitive influences; 2) the proposed framework is more in line with

Schumpeter's creative destruction perspective; therefore, in our discussion, we adapt the framework for the triple bottom perspective.

In this chapter, we presented a literature review of Sustainable entrepreneurship, where two key approaches were identified, creative destruction and triple bottom approach, as well as our approach & working definition of Sustainable Entrepreneurship. Followed by Sustainable Entrepreneurship & Finance section, which highlights the need for dynamic rather than static exploration of sustainable entrepreneurs capital raising process. Afterwards, a literature review of entrepreneurial decision-making process similarly revealed the need for a more dynamic rather than static view of the entrepreneurial decision-making process, as well as a need for holistic approach rather than studying entrepreneurial decision-making process in "decomposable blocks." Furthermore, literature on decision making does not take into account non-economic factors and their impact on entrepreneurs decision making, neglecting sustainable entrepreneurs. Lastly, theoretical frameworks for entrepreneurial decision making were presented, as well as the theoretical frameworks our research builds on. The existing theoretical frameworks have limited applicability for sustainable entrepreneurs as non-economic factors are not accounted for in these frameworks. Our aim is to contribute to and expand the existing body of knowledge presented in this chapter by addressing the identified gaps.

2. Methodology

This chapter aims to explain and justify the methodological choice for our research. Firstly, the elemental epistemological & ontological assumptions are explained, followed by a presentation and justification of our research design. Subsequently, the studied cases are introduced and the data collection from the studied cases is elaborated on. Next, the trustworthiness of our research is discussed, followed by an analysis of our data and lastly, ethical considerations for our research are outlined, as well as the limitations of this research.

2.1 Epistemological & Ontological Considerations

The research aims to advance the theoretical understanding of sustainable venture financing and entrepreneurs' Decision-Making Processes by studying the "how and why" behind the decisions sustainable entrepreneurs make when they are raising external funding. This study suggests that the decision-making process and the result of this process can be examined by analyzing the personal experiences and reflections of the interviewees. Consequently, the research's epistemological, ontological, and methodological considerations stem from an adapted interpretative stance, allowing us to comprehend the subjective meaning of the studied phenomenon (Bryman, 2012).

Regarding the ontological inquiries, our study is grounded in constructivism, understanding the SE decision-making process as an emergent reality in a continuous state of construction. Building on Becker's (1982) (as cited in Cluley, 2012) suggestion that: "no set of cultural understandings... provides a perfectly applicable solution to any problem people have to solve in the course of their day, and they, therefore, must remake those solutions, adapt their understandings to the new situation in the light of what is different about it," we believe that a sustainable entrepreneur's decision-making process to secure external funds unfolds similarly, not solely being determined by pre-existing characteristics. Individuals actively shape the social world they operate in and the categories they operate in. Therefore, we strive to examine the decision-making processes by which the financing reality of sustainable entrepreneurs is constructed. We base our understanding of this construct on the aforementioned definition, adapted from EIM (2013).

From an epistemological angle, we adopt the interpretive approach, as our primary concern is to understand human behavior (Bell et al., 2019). Building on Weber's (1947 as cited in Bell et al., 2019) description of sociology as a "science which attempts the interpretive understanding of social action in order to arrive at a causal explanation of its

course and effects," we aim to provide a "causal explanation" of the decision-making process through an interpretive understanding of this social action through in-depth interviews with the actors and their interpretation of their experiences and actions (Bryman, 2012). The research strategy chosen for this research was qualitative studies, which we believe will allow us to gain in-depth insights into the studied phenomenon (Bell et al., 2019; Scotland, 2012). Further elaboration of the qualitative strategy will be explained in the following section as we elaborate on the research design.

2.2 Research Design

The aim of this research is to contribute to the existing body of literature on the entrepreneurial decision-making process, focusing specifically on sustainable entrepreneurs decision-making for securing funds. In particular, our objective is to address the identified gaps, specifically by researching the entrepreneurial decision-making process of sustainable entrepreneurs as dynamic rather than static phenomenon & exploring factors influencing sustainable entrepreneurs' decision-making.

To accommodate this objective, we opted for a qualitative and inductive approach (Yin, 2010). Building on the constructivist understanding of the phenomenon, conducting qualitative rather than quantitative research allows us to gain insights into the complex decision-making process of an entrepreneur and the context of their decision-making as well as the influential factors. An inductive approach suits the aim of our research better than a deductive approach, as we aim to expand on the existing theories.

The research design applied in this study is a multiple-case study design, which, unlike single case studies, allows us to compare the cases and capture similarities as well as unique findings (Yin, 2010). Moreover, the case study research strategy has proven to be fundamental in theory building (Eisenhart & Graebner, 2007); as in-depth cases provide the basis for concrete, context-dependent knowledge (Flyvbjerg, 2006), we find this strategy suitable for this research.

2.3 Case Selection

Our research incorporates a multi-case study design with a purposive sampling approach (Bryman & Harley, 2019); this method was selected as the research question was pivotal and guided our case selection. Additionally, as Eisenhart & Graebner (2007) states, the multiple case design also enables more extensive exploration of the research phenomenon

and deeper theoretical elaboration. In particular, the representative/typical case sampling approach guides our case selection as we strive to explore cases that exemplify the decision-making process of sustainable entrepreneurs.

The criterion sampling approach was adapted for selecting the studied cases (Bryman, 2012). Employing the individual level of analysis, the unit of our study (case) is represented by the founder or co-founder of a sustainable venture that addresses social and/or sustainable problems who was involved in external fundraising. The selected cases for our research were initially identified first via our network and subsequently via the F6S (2024) network. F6S is a global community and deal platform supporting start-ups. The criteria based on which our cases were selected are as follows: a) age of the venture; b) size of the venture; c) location of the venture; d) external fundraising. Additionally, the start-ups have to have "sustainability" mentioned on their website/social media at least once and should address at least one of the sustainable development goals to be considered for our research.

The researched cases in our sample were no older than eight years, this age limit was chosen to ensure that the studied founders have been long enough running their venture and experiencing the fundraisers, but at the same time, not too old to ensure that the founders can still memorise and replicate their experiences when they were involved in the fundraising process.

Furthermore, our research focuses on micro and small-size companies as defined in the EU recommendation 2003/361 as we aim to offer practical implications for small-scale sustainable entrepreneurs.

Additionally, the geographical scope of our sample has been limited to Sweden & Denmark to find commonalities specific to this unique context rather than finding globally generalizable results for a broader population. The reason behind selecting these two countries as our areas of interest is twofold, first, these regions are known as being Start-ups & innovation hubs and second, these two regions are among the most sustainable in the world, which makes these locations ideal focus areas for our research. Denmark & Sweden have constantly, over the years, ranked among the top twenty Global Start-Up Ecosystems Index (2024) in the world. Additionally, these countries were ranked as the two most innovative countries in Europe, and Copenhagen was ranked as the best innovator in Europe based on the European Innovation Scoreboard 2023. As stated by Berry (2021), "Sweden is the most sustainable country within the world," and as stated by (Ioana & Ursache, 2023), "Copenhagen has earned a reputation as the world's most sustainable smart city." The reason

behind choosing both of these countries was to have variety in the geographical context ventures operate in to better assess how the environment, as one of the main components (Gibcus & Ivanova, 2003), might influence decision-making process.

Lastly, the selected cases had to be externally funded for us to research the founder's experience and decision-making process while raising these funds.

The following table [Table 1] provides a more detailed overview of the researched cases.

Case Study	Age	Size (employees)	Venture Description	Location	SDGs	Fundraising
Venture #1	8 years	5	Implementing a peer learning model for early prevention of school dropouts.	Lund	#04. Quality Education	Government Grants, employment by an organisation, CSR
Venture #2	7 years	12	Raising water consumption awareness through automated measurement systems.	Stockholm	#12 Responsible Consumption & Production	Business Angel
Venture #3	6 years	2	An Interactive Media library, explaining treatment procedures and informing patients in their own language - before, during and after treatment, worked for equality in healthcare.	Kalmar	#03 Good Health & Well-being	Government Grants/Innovation Competition Prize
Venture #4	5 years	10	Produces smart technology to enable scaling of reusable packaging	Copenhage n	#12 Responsible Consumption & Production	Business Angel, funding from Accelerator
Venture #5	4 years	6	Producer and retailer of sustainable household cleaning products.	Malmö	#12 Responsible Consumption & Production	Grants, 2 rounds of Business Angel investments, & small VC
Venture #6	3 years	2	The Venture reduces food waste by making chef produced meal kits from food waste	Gothenbur g	#12 Responsible Consumption & Production	2 rounds of Customer/Business Angel investments
Venture	2	1	Creates digital IDs	Copenhage	#12	Grant

#7	years		for clothing brands. So then they can track what happens to their garments after sale and push products to responsible reuse and recycling streams.	n	Responsible Consumption & Production	
Venture #8	3 years	2	Developing interest in science in kids by organising workshops and summer camps.	Malmö	#04. Quality Education	Grant
Venture #9	4 years	4	Manufacturing and selling design furniture from waste	Copenhage n	#12 Responsible Consumption & Production	Business Angel
Venture #10	5 years	1	Plant-based sports nutrition company which aims to design the future of nutrition. With plant-based protein and sustainable packaging	Copenhage n	#03 Good Health & Well-being #12 Responsible Consumption & Production	Funding from Icubator Business Angels

Table 1. Salected Cases

2.4 Data Collection

Data for this research was collected through semi-structured interviews with the founders or co-founders of sustainable ventures to gain insights into their perceptions of their experience with fundraising. The interview guidelines used can be found in Appendix A. During the interviews, open-ended questions were asked to allow for interviewees' extensions, elaborations, and inputs to be able to capture the interviewees' perceptions of events and social reality. If necessary, additional questions not included in the guideline were asked to elaborate on the unique experiences of the respondents. However, the basic structure for interviewing all of the cases was the same to ensure cross-case comparability (Bryman et. al. 1994). All the interviews were conducted online via Zoom call. Conducting interviews online gave us flexibility to cover a broader geographic area.

To ensure the effectiveness of the questionnaire in relation to our research questions, a pilot interview was conducted. Interview guidelines for pilot interview can be found in Appendix B. After analyzing the data gained from the pilot, the guidelines were altered for the upcoming interviews, changing question formulation into a more generalised, broader

manner with the aim of allowing the direction of the conversation to evolve more freely within the given scope of the topic.

The number of cases was determined by the dynamic process of data collection and analysis until the "conceptual depth" was reached (Nelson, 2016), meaning until sufficient depth of our understanding of the emergent theoretical categories had been reached.

2.5 Data Analysis

The raw data collected through semi-structured interviews was analysed as follows: the audio files were transcribed using the AI program Rev.AI and organised using the tools of grounded theory (Bell et al. 2019, 521). The process of coding was utilized to break down the data into parts. To ensure internal reliability, open coding was done by both members of the research team for each interview, ensuring that we agreed on what we saw and heard (LeComte & Goetz, 1982). With the procedure of constant comparison, a close connection between the data gathered from different cases and conceptualization was maintained (Bell et al. 2019, 522).

2.5.1 First-Order Concepts

The open coding process unfolded in accordance with the Gioia Methodology (GM) (Corley & Gioia's, 2011): each discrete component of all the transcripts was labeled using the words and phrases of respondents, creating a list of first-order concepts. For example, the following quote: "*I think if it has just been money for the sake of money, like a capital fund, it, we haven't, we would not have gained any intellectual support.* [...] So it's, uh, some people will call it intellectual money." (Participant #9) was labeled as "perceived benefit of intellectual money vs just capital fund"; likewise, the quote: "Luckily our, um, angel investor, he has done like maybe five or six, uh, like companies started and then have an exit. So he knows a lot about the different options." (Participant #6) was coded as "Getting knowledge of Options through investor's experience"; and: "the Business Angels, I think, can do a lot of help because they're very personalized and they want to help. And it's, you know, it's like having another coach as well" (Participant #7) - "Investor as a Coach".

The value of concepts was determined by their usefulness showcased in frequency (Strauss & Corbin 1998) and how they related to the process of decision-making for securing funds. The concepts not related to the research questions were not considered during the next stage of second-order theme development.

2.5.2 Second-Order Themes

The selected first-order concepts were analysed to see emerging patterns and they were accordingly combined to produce second-order themes linking the empirical data to the theoretical concepts (Corley & Gioia, 2011).

As the purpose of our study is two-fold: 1. Describe the process of decisio-making and 2. Identify the factors infulacing the process of decision-making; using the same database of first-order concepts, we have developed two sets of second-order themes. The first, concerns process descriptions and the second - influencing factors.

To demonstrate, building on the examples provided in the previous sub-section, given first-order concepts were grouped under the second-order themes of (1) "Decison-Making knowledge acquisition through funding source" and (2) "Knowledge" and "Funding source". These twofold analyses allowed us to see the relationships between the influencing factors, without losing sight of the process's dynamic nature.

2.5.3 Aggregate Dimensions

The two sets of developed second-order themes were distilled into (1) three aggregate dimensions of decision making process phases (opportunity assessment, opportunity exploitation, and post funding opportunity evaluation), which were utilized for developing the framework for Sustainable Entrepreneurs' Decision-Making Process for Securing Funds [Figure 4.1]; and (2) three aggregate dimensions of factors infuancing different stages of the decision-making process (Sustainable Entrepreneur, Sustainable Venture, and Environment) for developing the following frameworks: Decision-making for Assessing Funding Opportunities [Figure 4.2.1] and Decision-making for Exploiting Funding Opportunities [Figure 4.2.2]. Finally, all three frameworks were synthesized into an integrated framework based on the links identified through second-order concept analysis [Figure 4.3].

2.4 Quality Assessment

The trustworthiness of this research stems from adapting Bell et al.'s (2022) criteria for trustworthy qualitative research. In the following section, the application of each criterion in this thesis will be described in detail.

Credibility. The credibility of the research was established in multiple ways. Firstly, by conducting a literature review prior to collecting primary data to ensure our familiarity

with the studied phenomenon. Secondly, by applying established research methods, i.e. in-depth interviews, for data collection. As Eisenhart & Graebner (2007) state, interviews provide a highly efficient way to collect rich, empirical data, particularly when the studied phenomenon, in our case, the decision-making of sustainable entrepreneurs when securing funding, is highly episodic and infrequent, as it occurs only when SE perseus external funds. Thirdly, the interviewees were assured at the beginning of the interviews that any personal data or company specific data would be anonymized to encourage openness and honest answers from the interviewees. Lastly, two researchers were conducting this research, participating in data collection & analysis to enhance accuracy in the interpretation of the data.

Transferability. In alignment with Gioia & Hamilton (2012), we believe that the concepts and principles derived from our studies are similar, potentially even structurally equivalent (Morgeson & Hofmann, 1999, as cited in Gioia & Hamilton, 2012), across domains and hence relevant to other domains despite studying unique individuals in unique contexts (Gioia & Hamilton, 2012). We believe that the studied cases exemplify general principles that are transferable from one setting to another for instance, due to the similarities in data from the broad range of industries the selected cases were coming from.

Dependability. Each step of this research was transparently documented to ensure it could be repeated. Transparency in this research can be seen for instance, by walking the reader through different alternatives to theoretical frameworks as well as methods, as opposed to just focusing on the ones we applied in our research and providing descriptions of all the studied cases.

Confirmability. The confirmability was applied in the research by conducting regular peer-debriefing with our classmates during the writing process of the thesis to ensure subjective interpretation elimination as well as presentation of our own opinion to enhance accuracy of our findings.

We believe that the trustworthiness of this research achieved by applying the aforementioned criteria will allow for knowledge expansion and accumulation within the research field (Bell et al., 2022).

2.6 Limitations

This research poses certain limitations related to literature review, research design, and the studied cases, which we will elaborate on in the following section.

Literature Review. In the literature review, articles focusing on various geographic locations or on specific niches were used, which might limit their applicability for our research; for instance, Truong & My (2023) researched generation Y entrepreneurs in Vietnam. However, due to scarce literature on this topic, we decided to include these articles in our literature review.

Research Design. Even though we strongly believe that the qualitative research design best suits the research questions, Bell et al. (2019) consider this research design subjective, and difficult to generalise and replicate. The matter of subjectivity has been addressed in this research by clearly defining selection criteria (c.f. Chapter 2.3) based on which representative/typical cases were selected. In regards to generalizability, we believe that the sample cases exemplify general principles that are transferable from one setting to another, as was explained in further detail in the "Transferability" subsection of Chapter 2.4. The replicability of this research was addressed by documenting and providing a transparent description of every step taken. For further details on transferability, please see subsection "Dependability" in Chapter 2.4.

Case Selection. The case selection for our research possessed certain limitations; the selected cases represented sustainable ventures; however, it was not within the scope of our studies to employ standardised, rigorous evaluation metrics to assess the sustainability practices of the studied cases. During the interviews, sustainability, non-economic gains, and motivations were discussed; however, we are aware that the respondents answers might be biassed. Additionally, as Ochieng (2009) states, the human language is ambiguous, and since the interviews were held in English, not all interviewees nor we are native English speakers, meaning there might be a potential loss or misinterpretation of some of the information even though all interviewees were fluent English speakers. Furthermore, the studied cases raised external capital from different sources, such as business angels, venture capitalists, government grants, etc.; hence, the results or their answers to the questions might be affected based on the source of the funding.

Findings and Discussion. Despite the robust findings from our inductive study, several limitations must be acknowledged. Firstly, our prior exposure to existing literature may have influenced our framework, introducing potential bias. As a preventative measure, we've constructed intensive and dual data structures to ensure all findings were incorporated without discrimination, allowing necessary alterations to the foundational framework. The dynamic nature of entrepreneurial decision-making and the diversity of funding sources bring

further complexities in our study. This diversity, while enriching our study, also complicates the direct comparability of cases. These limitations are addressed in the recommendations for further research [5.2]

2.7 Ethical Considerations

To ensure the research was conducted in accordance with ethical norms, we followed the principle of voluntary informed consent (Bell et al., 2019) Following ESRC framework for research ethics, research participants were given sufficient information about the scope of the research and the details related to the interviewing process before their agreement to participate.

Upon contacting respondents, they received a small synopsis describing the aim of the research and the research questions, elaborating on the criteria for why they had been selected. Before conducting the interviews, verbal consent was given for recording and storing the information in the form of a transcript, ensuring the deletion of the audio file once the transcript was written. The script of consent can be found in Appendix C. The names of individuals and any details regarding their company endeavors remain anonymous. Before starting the interviews, respondents were informed that they could withdraw from the process at any point without providing any explanation.

Furthermore, if asked by the respondents, the interview guidelines were shared beforehand and the interview was recorded by some of the participants, keeping and storing the recording with our consent. In some cases, as a request from the respondents, the findings of our study have been shared with them.

3. Findings

This chapter discusses the key findings of our study on sustainable entrepreneurs' decision-making processes for securing funding. The research reveals three interconnected phases in this process, influenced by 16 factors categorized into three main dimensions. The interconnections between these factors are provided in the discussion chapter.

3.1 Sustainable Entrepreneurs' Decision-Making Process for securing funds

The decision-making process involves three phases: opportunity assessment, opportunity exploitation, and post-funding evaluation. Each phase includes multiple decision-making activities related to securing funds. These activities and their relation to phases are presented in the following sub-sections, each with corresponding data structures [Figure 3.1.1; Figure 3.1.2; Figure 3.1.3].

3.1.1 Opportunity Assessment Phase

In the opportunity assessment phase, entrepreneurs identify potential funding sources through various decision-making activities. The emerging data structure highlights 6 categories of decision-making involved in this process [Figure 3.1.1]. The order presented does not represent the sequence in which these decisions occur. :

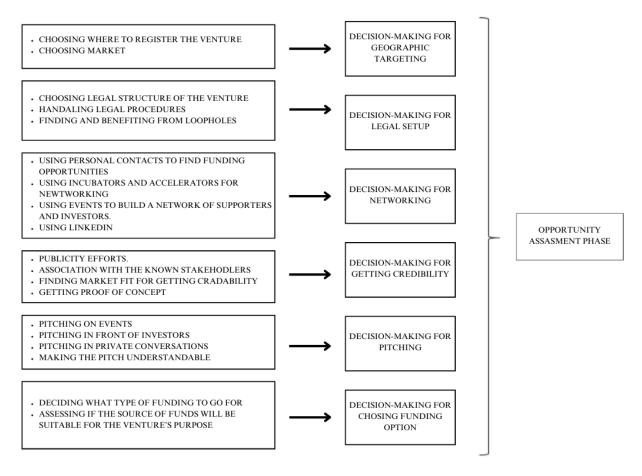


Figure 3.1.1 Data Structure for Opportunity Assessment Phase

Decision-making for geographic targeting. Geographic targeting involves choosing where to register and target markets based on funding opportunities and regulatory benefits. This can be seen in Participant 3's experience: "I registered my company there just to get that grant. I didn't live in that region but I registered my company there," which exemplifies the strategic decision of choosing a registration location based on available grants. Similarly, Participant 10's quote highlights the importance of market connections: "We have many connections with investors in France. One of our investors is a big celebrity and knows many French soccer players. It's a great networking opportunity," showcasing how networking opportunities can influence geographic targeting. Additionally, Participant 7 underscores the role of supportive regulations: "Paris has many anti-waste laws and offers grants and loans with good terms for female entrepreneurs," illustrating the significance of favorable regulatory environments in geographic targeting decisions.

Decision-making for Legal Setup. Legal setup involves deciding on the legal structure and compliance strategies to optimize funding access. Participant 1 highlighted the

impact of legal status on funding: "The first funding [...] was a pure grant [...] we didn't have, at the time we didn't have a legal entity, [...], which was pretty good too, because then it just went directly to us as private persons. You didn't have to tax it." Participant 4 recounted a missed opportunity due to legal complexities: "Maybe the biggest regret was hiring this, this shitty accountant back in the days [...] We missed the deadline and our holdings were controlled by individual lawyers while we were fundraising." Participant #3 described how they navigated funding restrictions by finding "loopholes" in the system: "I couldn't apply for government funding as a private company. So, I made a deal with a business developer at a hospital to be the project owner," showcasing innovative strategies to comply with funding eligibility criteria.

Decision-making for networking. Decision-making for networking involves strategic actions to build relationships for funding opportunities. Participant 2 exemplified using personal contacts: "We met an investor through a friend. I didn't know he was an investor until he asked if we were looking for money." Participant 5 highlighted the role of incubators: "I would say these incubators, their communities [...] the network of individuals and partners we work with [...] are probably the most important sources." Participant 1 illustrated the impact of pitching at events: "I was actually at a conference speaking about it, [...] a lot of people approached me after the talk and one of them was, was the CSR responsible from from [...] a huge company, [...] we started talking [...] and they gave us money to start programs." Participant 10 demonstrated the use of LinkedIn tools: "I used LinkedIn's sales navigator and free databases of investors to create a giant database."

Decision-making for gaining credibility. Decision-making for gaining credibility involves efforts to establish a venture's reputation and trustworthiness. Participant 8 exemplified the use of publicity: "We were good at getting features in newspapers with cool photos of kids doing science stuff, which provided free marketing. [Through this] we had people paying for the course before we did the course. So we were always cash positive." Partnering with reputable stakeholders enhances credibility, as Participant 1 noted: "Partnering with Lund University brought a strong brand association, which helped in contacting schools and securing steady funding." Achieving product-market fit validates the business model and aids in scaling. Participant 7 explained, "Once you hit product-market fit, you know you can replicate success easily. Then it's time to raise big external funds." Proof of concept is crucial for demonstrating viability. Participant 6 emphasized, "We had nine months to get proof of concept and then aimed to find an angel investor, with support from various organizations."

Decision-making for pitching. Decision-making for pitching involves various strategies to present a venture compellingly to potential investors and stakeholders. Participant 4 exemplified pitching at events: "*I pitched at a private banking event from UNK Bank in Denmark. The wealthy individuals there liked the pitch..*" Participant 5 highlighted pitching for an acceleration grant: "*We pitched for an acceleration grant [...]. One of the jury members, a business angel, later invested in us.*" Participant 2 noted how the decision to pitch in private convesations helped secure funds: "*It was like a connection from a friend of mine.* [...] And so I started to blurt out all of the issues we had. [...] About an hour and a half into the conversation, he asked if we were looking for money." Participant 3 highlighted the importance of clear communication: "People laughed at us and didn't understand what we were doing. We spent three months refining our concept and pitch in clear language, and then everyone understood it."

Decision-making for choosing a fund option. Decision-making for choosing a fund option involves selecting funding sources that align with the venture's needs, purpose, and values, especially considering sustainability. Participant 1 exemplified the assessment process of determining whether a type of funding suits the venture: "We would love to do crowdfunding because we have a big, engaged community. They could help spread our project even more, but managing many shareholders could be complicated." Participant 6 further elaborates how the search is motivated by the needs of the company: "We were looking for support organizations. There are many regional initiatives that want to help new companies start, so we pursued that route." Participant 7 emphasized choosing investors who understand sustainable growth: "VCs want to see high growth, but I want to ensure I'm choosing investors who understand that sustainable ventures don't grow as fast."

3.1.2 Opportunity Exploitation Phase

The opportunity exploitation phase focuses on leveraging identified opportunities through negotiation and securing funds. Similar to the previous phase, the order presented

does not represent the sequence in which these decisions occur.

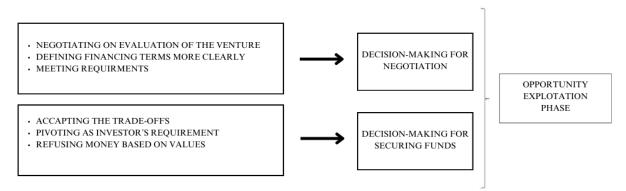


Figure 3.1.2 Data Structure for Opportunity Exploitation Phase

Decision-making for negotiation. Decision-making for negotiation involves the decisions entrepreneurs make to negotiate the terms and conditions of funding with potential source of funds. Negotiating the valuation of the venture is a critical aspect. Part of the negotiation process involves deciding on the valuation of the venture, as exemplified by Participant 6: "With Danish angels, the terms are worse in terms of valuations and liabilities. I don't have any Danish investors, but I did consider some." Participant 5 highlighted the importance of clearly defining financing terms: "We struggled in our negotiations with angels because we didn't have clear financing terms. This prolonged conversations and caused some leads to drop out because we weren't clear about our strategy." Furthermore, Meeting specific requirements set by investors is another key aspect. Participant 3 emphasized the importance of adhering to criteria of government grants: "One requirement was that 50% of participants must be women. For our project, it was about equality and including immigrants, so we ensured we had diverse nurses from different departments."

Decision-making for securing funds. Decision-making for securing funds encompasses the actions and strategies sustainable entrepreneurs undertake to acquire funding. Participant 6 shared their experience of accepting a lower valuation to keep their business running: "We hoped for a higher valuation based on advisor recommendations but settled for a much lower one. We were happy to continue despite the big trade-off [...] as we had no other options." Writing detailed grant reports is a common requirement for ventures with organizations as a legal set-up. Participant 3 discussed the extensive reporting needed for big grants: "When you get big grants, you have to write a lot of reports. It's a headache and time-consuming, and you must fit the criteria to use the money, often adjusting your

product to get the funds." Pivoting to meet investor requirements can be crucial. Participant 10 had to adjust their brand strategy based on investor feedback: "Our main investor thought the brand would be more successful in Europe if it was more inclusive, not just plant-based. This pivot was necessary, although it might have been counteractive in Japan." Or SE can decide to refuse money, as participant 7 did to protect the purpose of the venture: "I was very headstrong and being true to my values and the values that I wanted to see from the company. So we didn't get investment, and we continued without the investment."

3.1.3 Post Funding Opportunity Evaluation

In the post-funding evaluation phase, entrepreneurs assess the value and impact of the secured funding and decide on the next steps. The data structure for this phase includes two main categories of decision-making [Figure 3.1.3].

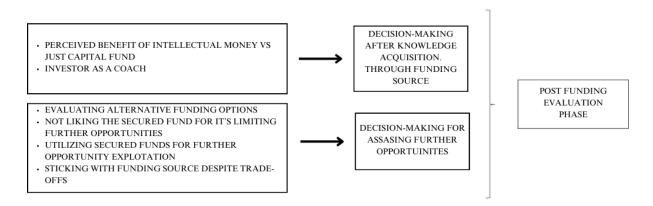


Figure 3.1.3 Data Structure for Post Funding Opportunity Evaluation

Decision-making after knowledge acquisition. Decision-making after knowledge acquisition from investors involves considering the intellectual contributions from investors, such as advice and mentorship. The value of intellectual contributions versus just money is emphasized by participant #9: "If it had just been money for the sake of money, we wouldn't have gained the intellectual support we really needed. We call it 'intellectual money' because it brings more to the table than just funds." Participant #4 highlighted the advisory role of their investors: "We talked to business angels who were more like advisors, helping us with strategy and sales." Participant #6 showcases how current source of funds bring knowledge about further options: "Luckily our angel investor he has done like maybe five or six companies. [...] So he knows a lot about the different options."

Decision-making for Assessing Further Opportunities. Decision-making for assessing further opportunities involves evaluating the suitability of secured funds and exploring additional funding options if desired. Participant #10 described how utilizing investor's connections played crucial role for boosting funding rounds: "*He helped me secure about 80% of the investors for the round, which was huge.*" Leveraging an investor's social capital can enhance credibility and access to resources as Participant #1 mentions:"*Being associated with University X brought significant social capital and credibility.*" However, Current funding sources can sometimes limit future opportunities as Participant #10 has experienced: "*The incubator owned the majority of the company, making the investment process messy and limiting our flexibility. We had to mitigate the situation to satisfy all parties involved.*" However, unlike participant #10 who bought out the incubator to pursue further options, SE can continue with current funding despite trade-offs as illustrated in Participant #1's example: "*Pace is so slow at X, [...] it was a very complex situation, in a way that like he really wanted to have full control and it was not easy. [...] And so I just had to, had to prioritize what would create the biggest impact."*

3.2 Factors Influencing Decision-Making Process of Sustainable Entrepreneurs

The findings reveal that the decision-making process of sustainable entrepreneurs is influenced by 16 factors, categorized into three main groups: the sustainable entrepreneur, the sustainable venture, and the environment. The following sub-sections detail each factor and its impact on the process, supported by corresponding data structures [Figure 3.2.1; Figure 3.2.2; Figure 3.2.3].

3.2.1 Sustainable Entrepreneur

The sustainable entrepreneur category focuses on the internal factors influencing SE during decision-making. Sustainable entrepreneur refers to entrepreneur focused on sustainable practices for social and environmental impact (Tavanti, 2023).

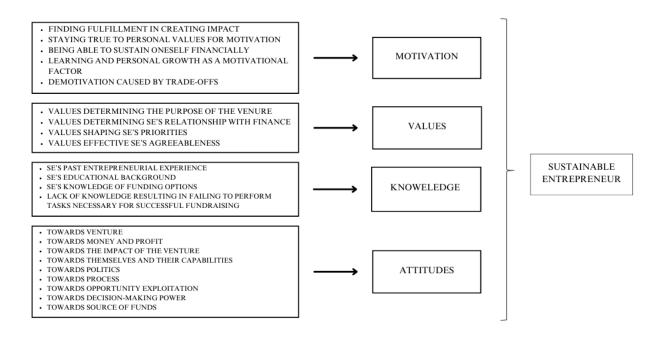


Figure 3.2.1 Data Strucutre for Influencing Factors of Sustainable Entrepreneur

Motivation. Motivation as an energy that drives individuals to take action toward achieving specific goals (Harahap et al., 2023) encompasses the driving forces behind an entrepreneur's decisions, including staying true to personal values, sustaining oneself financially, and experiencing personal growth. Participant #5 emphasized the importance of seeing tangible results: "*It's been always a motivation to see the impact. We had a tracker showing how much waste we saved and CO2 emissions avoided.*" Participant #7 noted the importance of staying true to personal values: "*I wanted to stay true to my values; otherwise, I wouldn't be motivated to continue with the company.*" Sometimes, motivation might not be linked to the impact aspect of the venture. Participant #8 was driven by the desire for personal growth: "*I wanted to try out the company format. Maybe that was more important than thinking about [...] what to do with it.*" Furthermore, demotivation can arise from the tedious process of fundraising. Participant #3 stated: "*I would rather have spent time programming and developing the tool than doing the reporting for the grant. Of course, it's demotivating sometimes, but that's part of the whole process.*"

Values. Values as transsituational goals varying in importance, guiding principles in individuals' lives (Cieciuch et. al. 2015) can determine the purpose of the venture and shape the entrepreneur's relationship with finance. They influence priorities while evaluating funding options and impact decision-making agreeableness. Participant #7 highlighted how values drive the mission: "*My purpose has really been to reduce waste. The overall purpose*

and mission for me and my values have not changed." Values can lead to significant financial decisions, as Participant #1 noted: "We gave back half a million, probably a very stupid decision, but it was driven by our values, even though we could have paid salaries and done some work with it." Values also determine which financial partners are considered suitable. Participant #9 said: "We looked very hard at the values of the company when seeking funding." Furthermore, values affect the willingness to compromise on certain business directions. Participant #7 shared: "They wanted us to become more of a resale platform, but I didn't want to promote unsustainable consumption. So, I decided not to work with them."

Knowledge. Knowledge includes past entrepreneurial experience, educational background, and understanding of funding options. It also considers how a lack of knowledge can hinder fundraising. While talking about fundraising challenges, Participant #2 noted, "*I don't come from a production background. I've never produced a product that's supposed to end up on shelves.*" Education can enhance an entrepreneur's decision-making process. Participant #1 shared, "*Being an academic, it was easier for me to Google things and do research. It really helped and added credibility when writing applications.*" Participant #3 added, "*My background is in design. The nice thing is that you can apply design theory to almost any industry.*" Participant #6 underlined the importance of knowing what funding sources are available, "*We knew investors, but we didn't know about subsidies or government financing options when we started.*" A lack of knowledge on how to handle entrepreneurial endavours can hinder efforts, as Participant #4 stated, "*We missed the deadline [...] We couldn't sign documents with investors because we didn't control the company.*"

Attitudes. Attitudes refer to mental tendencies that evaluate entities along an evaluative continuum and can predict and influence behavior (Johnson et al., 2022). The entrepreneur's perspectives on themselves, their venture, the environment, and the process showed to be relevant in decision-making process. Entrepreneurs can decide whether to collaborate or remain independent based on their attitudes towards decision-making power. Participant #9 said, "We looked into joining up with other companies and investment partners, but decided to do it independently with our own brand and intellectual money." Participant #10 noted, "The company had no activity because neither person was willing to invest without owning it." Attitudes towards money influenced decision-making as well. Participant #8 stated, "Bringing in external capital means investors want to make money. I didn't do this to make money. That was never the purpose, and money would've ruined it a little bit." Attitudes towards the venture's purpose push entrepreneurs to ensure their mission

aligns with their funding sources. Participant #9 explained, "It cannot only be about money. It has to be profit, planet, and people in combination." Participant #7 added, "My purpose has been to reduce waste, and my values haven't changed. I don't need to change my values to attract investment." The alignment of investors with the company's mission is crucial. Participant #6 explained, "They liked the impact part of the company, so we didn't have to compromise on our mission. They want to see results, but we knew that from the start and understood we need to be earning money." Entrepreneurs' attitudes towards themselves and the fundraising process also direct their actions. Participant #6 noted, "We're not the best people to manage this long-term, and I don't see myself working on this for the next 15 years," adding, "I don't like going out and pitching my idea." Conversely, Participant #10 showcased a different attitude: "I'd always done this kind of stuff, and the intent was really to try and get something going," adding, "You try to get warm intros, but sometimes you just have to reach out if someone fits what you're looking for."

3.2.2 Sustainable Venture

The sustainable venture category highlights the internal elements of the venture itself that influence the decision-making process.

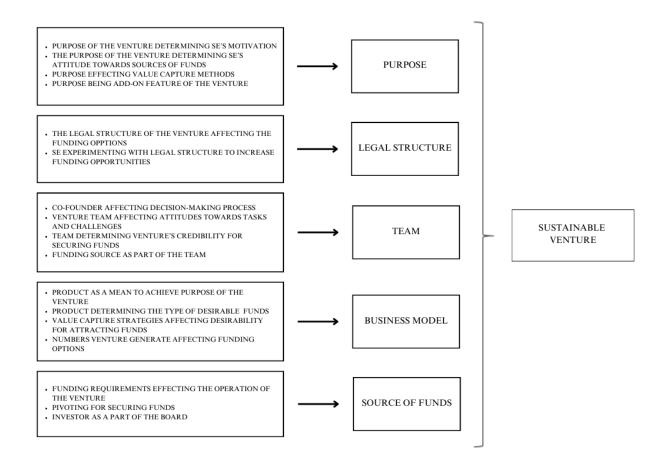


Figure 3.2.2 Data Strucutre for Influencing Factors of Sustainable Venture

Purpose. Purpose as the object or intention for which a thing exists (Jones-Khosla & Gomes, 2023) influences an entrepreneur's motivation and attitude towards funding sources. As discussed above, Participant #5 derives their motivation from the tracker showing how much waste their venture has saved. Purpose can also determine what type of funds SE will go for, as illustrated by Participant # 4: "*It was clear I wanted an investor who always, uh, impact driven because then they couldn't understand your mission. [...] So we definitely go for impact because for us it was really clear there's [...] higher chance to get investment in. So that was definitely ruled out that we just go to a very financial driven." Participant #7 highlighted how purpose shapes business model decisions, resisting unsustainable practices: <i>"They wanted us to become more of a resale platform, but that was not my intent. I don't want to promote unsustainable consumption.*" However, for some sustainable purpose can aslo be just an additional feature of the venture, not the main focus as illustrated by Participat #10: "I was exploring multiple things. Um, I wasn't dead set on sports nutrition. I was actually a bit maybe against nutrition because I know that in nutrition, the margins can be a bit bad."

Legal Structure. The legal structure encompasses the formal setup of a venture, affecting funding options and operations. It includes experimenting with different structures to increase funding opportunities. Participant #8 discussed the constraints of being a nonprofit: "With the nonprofit comes a lot of democratic structure and administration. You couldn't build capital within the organization as a single person." Participant #1 considered a hybrid model to leverage both nonprofit and for-profit advantages: "A hybrid model allows you to apply for grants as a nonprofit while maintaining a purpose orientation and potential for profit reinvestment." Participant #7 Showcases the importance of legal setup to excess specific funds: "For a lot of grants, you need to have a registered company."

Team. The team category focuses on the role of co-founders and team members in decision-making, shaping attitudes towards tasks and challenges, and determining the venture's credibility for securing funds. Participant #3 described complementary personalities with their co-founder: "*We are super different personalities. I am the visionary, and she was the down-to-earth one holding me back.*" Participant #1 highlighted distinct roles that contributed to success: "*My co-founder was the marketing guy, more entrepreneurial than I was, while I was the engineer.*" Diverse expertise within a team drives growth, as noted by Participant #6: "We had knowledge in food, IT, and finance, but needed someone with experience to teach us how to scale." Strong, credible teams attract investors, as Participant #4 explained: "*Investors liked us as a team and what we built, but it was more about personal connections than professional business angels.*" Considering funding sources as part of the team, Participant #5 emphasized their strategic involvement: "*Business angels are deeply involved in strategic decisions, aiming for returns on their investments.*"

Business Model. The business model outlines the venture's approach to generating revenue and creating value, essential for attracting investment and ensuring sustainability. Participant #2 illustrated how the value proposition of the venture was a channel for his desire to "use our skills for a bigger purpose, and then instead of just waiting for an idea, we brainstormed [...] until we found water." Participant #4 ellaboreted how type of product determines the suitability of funds: "Crowdfunding makes sense for a physical product because you invest and then get something in return." Furthermore, value capture methods can determine the need of external funds, or lack their of incase of Participant #8 who only applied to small grants: "Money wasn't the problem. We managed finances by ensuring income preceded expenses, staying cash positive." Finally, financial metrics can limit funding

options, as Participant #10 highlighted: "We couldn't pitch VCs because our revenue levels weren't sufficient."

Source of funds. The source of funds refers to the funding options SE decided to exploit. For Participant #4, funding requirements impacted their business model and operations resulting in pivot: "*Talking to investors, we learned that they are scared of physical products and prefer software because it's easy to scale. This led us to change our business model in general.*" After accepting the funds from investors, they can gain decision-making power through equity or being part of the board, consequently influencing SE's decision-making process. Participant #4 mentions: "*Especially with business angels it's very personal. [...] Later on uh as soon as they have a seat on your board or or they own a lot of shares in your company they basically make pressure to tell you Hey you have to reach this milestone. <i>[...] You don't have this flexibility anymore.*"

3.2.3 Environment

The environment category examines external factors that influence the decision-making process of sustainable entrepreneurs.

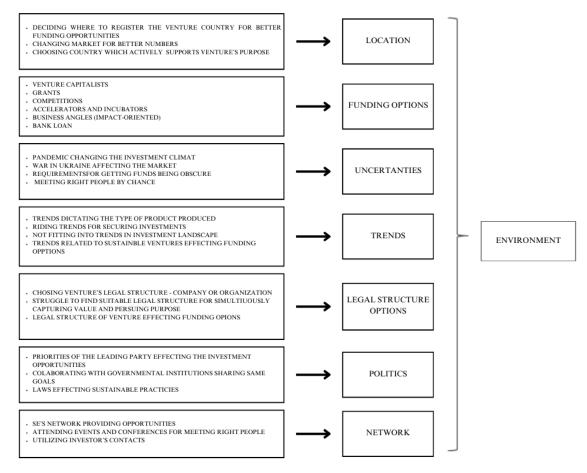


Figure 3.2.3 Data Strucutre for Influencing Factors of Environment

Location. Location refers to the geographic context that affects a venture's funding opportunities. During the opportunity assessment phase, it was noted that the registration location of a venture influences its access to available grants and financial support. This was a key reason why Participant #3 registered their company in a region where they did not reside. Similarly, the significance of the chosen market and the supportive regulations and financial incentives of the country were discussed with examples from Participants #10 and #7.

Funding Options. Funding options for sustainable entrepreneurs (SE) include various sources of capital such as venture capitalists, grants, competitions, accelerators, incubators, business angels, crowdfunding, bank loans, and CSR initiatives. However, for most participants, VC was not a viable option due to the focus on numbers. Participant #10 explained: *"We couldn't pitch VCs because our revenue levels weren't sufficient."* Government grants are another option, as noted by Participant #3: *"If you really want grants from the government, you need to apply right away in the right time because they don't stay*

forever." Innovation competitions also provide opportunities for funding, as illustrated by Participant #4: "National Geographic was hosting an ocean plastic innovation challenge. We applied and became finalists for the \$4 million prize pool." Accelerators and incubators offer initial funding and support, with Participant #4 stating: "We already had the convertible note from the accelerator program." Business angels are another source, with Participant #5: "One of the jury members at our pitch was a business angel who later invested in us." Crowdfunding is viable, as Participant #6 noted: "We would love to do crowdfunding because we have a big, engaged community of happy customers who could help spread the project." Bank loans are also an option, though challenging, as explained by Participant #4: "Getting money from banks is very tricky because they see too little revenue to pay off the loan." CSR initiatives provide funding aligned with corporate goals, as Participant #1 shared: "After a talk, the CSR responsible from a huge company in Lund approached us. They gave us money to start programs, so schools didn't have to pay for it, which I loved."

Uncertainties. Uncertainties defined by Rajagopalan et al. (1993 as cited in Gibcus & Ivanova, 2003) as 'rate of change' involve unpredictable external events that can impact the venture's decision-making process. The pandemic forced Participant #4 to pivot their strategies when initial plans became unviable: "So we wanted to work with closed-loop environments like festivals, food courts. But then Corona hit and it was clear this doesn't work." The war in Ukraine disrupted the investment climate, causing investors to delay decisions, as explained by Participant #6: "We had really bad timing because the war in Ukraine started [...] all investors were like, great idea, but not now." Serendipitous encounters can lead to unexpected funding opportunities, as seen in the case of Participant #6: "We had the luck that one of our customers knew an angel investor, and she found our product so good that she told them about it and then they together invested."

Trends. Trends refer to prevailing market and industry patterns influencing the venture. Participant #10 notes the importance of trends during product development process: "Because at the time, it was before the big kind of plant-based hype, but you did have health benefits with lifestyle benefits. You had the animal rights benefits, and then you had the environmental benefits. So I think it was all quite nice that it did everything." Participant #3 leveraged current trends to secure investments: "These trends are coming all the time. [...] If you really want grants from the government, you need to apply right away at the right time." The importance of fitting into trends within the investment landscape was underlined by

Participant #10: "A lot of these sustainable-focused investors are really looking at more like new technologies. I pursued many of them [...] and it just didn't work."

Legal Structure Options. Legal structure options involve the frameworks within which the venture operates, including choosing between company or organizational structures, and how these impact funding options. Participant #8 explored different structures by transitioning from nonprofit initiatives to a company format, revealing differences in tax reporting and the complexities of shutting down a company versus a nonprofit: "So the years leading up to that I've been leading summer science camps as part of a nonprofit. At this point, I wanted to try out the company format. What is different, I guess, is what you report to the tax office." Participant #1 highlighted the challenges in finding suitable legal structures: "The system is not designed for sustainable entrepreneurs. When they created these legal entities, they didn't have sustainable entrepreneurs in mind." Participant #3 demonstrated how legal structure choices can impact funding options: "I couldn't apply for government funding as a private company. So, I made a deal with a business developer at a hospital to be the project owner."

Politics. Politics involves the influence of political factors on investment opportunities. Changes in political leadership can directly impact business opportunities, as Participant #3 states: "It worked well for me to get this money in beginning because we had a stream of refugees coming to Sweden. So the authorities were giving grants to these projects. [...] but the politics switched in Sweden. When I tried to sell my solutions for Guttenberg county, the politicians there had become the right-wing party [...] They don't like immigrants, so I couldn't sell my language solutions to them." Partnerships with government bodies are an option for SE, as long as they align with the government's goals. Participant #1 shared: "We had collaborations with 25 municipalities, and we got about 2 million every year in grants and from our partners." Participant #3 elaborated on how new sustainability laws in the EU can influence business operations: "Here in the EU, we have GDPR and other jurisdictions. Now there are new laws coming about, some new laws about sustainability."

Network. Network refers to the connections and relationships that can provide opportunities for funding and growth. Networking is viewed as a process of entrepreneurs to spread outward to other actors (Adjie Ahmad Darajat et al., 2023). Participant #2 benefited from a serendipitous introduction through a personal connection: "*We met an investor, I didn't know it was an investor, and it was like a connection from a friend of mine.*" Attending events and conferences can create meaningful connections, as Participant #1 shared: "*I was at a*

conference speaking about it, like social innovation day [...] A lot of people approached me after the talk, and one of them was the CSR responsible from a huge company with much property in Lund." After securing funds, SE has the opportunity to leverage investors' contacts, as Participant #10 highlighted: "He's not a traditional investor; he's an entrepreneur with two big exits. He helped me bring about most of the round, around 80% of the investors."

The findings presented in this chapter illuminate the intricate decision-making processes of sustainable entrepreneurs as they secure funding for their ventures. Our study identifies three key phases in this journey: opportunity assessment, opportunity exploitation, and post-funding evaluation. Each phase encompasses a series of interconnected decision-making activities vital for the success and sustainability of these ventures. The study identifies 16 factors influencing the decision-making process, categorized into three main groups: the sustainable entrepreneur, the sustainable venture, and the environment. The interconnectedness of these phases and factors requires a dynamic and flexible approach, with decisions in one phase influencing subsequent phases. This chapter sets the stage for the discussion chapter, which will delve deeper into these findings, exploring their implications for sustainable entrepreneurship and providing a comprehensive analysis of the decision-making processes and factors identified.

4. Discussion

In the following chapter, we examine the relationship between the identified decision-making process phases and influencing factors and analyze our findings in relation to the body of literature discussed in the literature review. Consequently, we develop an integrative framework that showcases how our findings answer our research questions.

4.1 Framework for Sustainable Entrepreneurs' Decision-Making Process

Based on our findings, SE's decision-making process for securing external funds is dynamic and can be divided into three distinct phases: the opportunity assessment phase, the opportunity exploration phase, and the post-funding evaluation phase, as shown in the framework below [Figure 4.1].

Our findings align with existing literature on the entrepreneurial process. Sarango-Lalangui (2018) identifies a common characteristic in both approaches as the process definition of sustainable entrepreneurship, emphasizing different phases of entrepreneurial opportunity: discovery, creation, evaluation, and exploitation. Similarly, Shepherd & Patzel (2017) categorize entrepreneurial decisions into opportunity assessment, entrepreneurial careers, and funding entrepreneurial actions. Decisions often involve uncertainty about the external world, and the decision-making process often begins with information gathering, proceeding through likelihood estimation and deliberation, until the final act of choosing (Gibcus & Ivanova, 2003). Our research adds a unique understanding of how and which of these phases might occur specifically within the context of fund acquisition decision-making, encompassing opportunity assessment, opportunity exploitation, and post-funding opportunity evaluation phases.

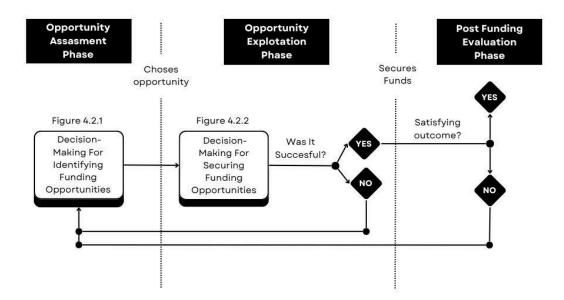


Figure 4.1. Framework for Sustainable Entrepreneur's Decision-Making Process while Secuing External Funds

Opportunity Assessment Phase. In the Opportunity Assessment Phase, the SE engages in the decision-making process to identify funding opportunities. In the Opportunity Assessment Phase, the SE engages in the decision-making process to identify funding opportunities. The duration of this phase varies (exp. 1 year for Participant #6; 2 years for Participant #7). Opportunity-Assessment Decisions are central to entrepreneurship, focusing on the identification and pursuit of opportunities (Shane & Venkataraman, 2000). Before an individual pursues or acts upon a potential opportunity, he or she must assess it (Bakker & Shepherd, 2017; McMullen & Shepherd, 2006). During this time, the SE actively or passively explores various funding options. The phase concludes when the SE selects one or more funding opportunities to pursue, transitioning into the Opportunity Exploitation Phase, as illustrated by the following quote from Participant #9: "We spoke to more companies about funding what we were doing [...] So the people we went into business with have the right values and understand that this is not just the case of making money."

Factors influencing the searching process are presented and analyzed in Section 4.2.1.

Opportunity Exploitation Phase. The Opportunity Exploitation Phase begins once the SE decides to act to secure a chosen funding opportunity. The phase aligns with Shepherd & Patzel's (2017) categorization of "funding entrepreneurial actions" and is broadly defined as a phase when an entrepreneur "has perceived an entrepreneurial opportunity and decided to act upon it" (Kuckertz & Wagner, 2010). During the exploitation phase, the SE's action might vary depending on what type of funds they want to attain: they might negotiate with investors (Participant #4: "*I was speaking to probably 130 VC investors since August till now*"), write reports for securing grants (Participant #3: "*you can spend more time writing these reports and try to fit in to that criteria just to get the money*"), or participate in competitions (Participant #4: "*National Geographic was hosting an ocean plastic innovation challenge. We applied and became finalists for the \$4 million prize pool.*"). The SE either successfully secures the funds or fails to do so. If unsuccessful, the SE returns to the searching phase to explore other options. Successful negotiations lead to the next phase, the Post-Evaluation Phase.

Factors influencing the process of securing funds are presented and analyzed in Section 4.2.2.

Post Funding Evaluation Phase. Even though decision-making for securing funds formally ends once SE secures funds, findings show that the dynamic process continues as SE enters the evaluation phase, which is broadly understood as a process when entrepreneurs evaluate whether proposed opportunities fit (Kuckertz et al. 2017). This phase determines whether the secured funds meet the venture's needs and expectations. If the funding conditions and implications are satisfactory, the SE decides to continue with the chosen source, concluding one cycle of the decision-making process. If the SE is not satisfied with the funding conditions, even if the funds are accepted, the SE re-enters the searching phase. For example, Participant #3 started to look for different types of grants because "government grants are not speaking to me anymore. 'Cause they slow you down." This iterative process leverages the experience gained to explore and secure better opportunities. However, it can be the case that the SE is not satisfied but still doesn't continue to search for alternative funds. For example, Participant #1 explained that the way he got funding was why the venture eventually failed: "I found it was for it to die." However, he continued with the venture because "I felt the impact would probably be bigger [...] Having steady funding was a huge benefit. It reduced a lot of stress, allowing us to focus on making an impact." These findings support Winnar and Scholtz's (2020) analysis, which posits that an entrepreneur's external environment and its influence on their thoughts and actions contribute to the development of knowledge structures that later impact decision-making. This showcases the cyclical nature of decision-making in sustainable entrepreneurship, where feedback from the funding process informs future decisions, adding a dynamic element to traditional static frameworks.

In summary, our research outlines the multi-phase decision-making process for Sustainable Entrepreneurs (SEs) securing external funds, covering Opportunity Assessment, Opportunity Exploitation, and Post-Funding Evaluation. These phases align with theories by Sarango-Lalangui (2018) and Shepherd & Patzel (2017) on opportunity discovery, evaluation, and exploitation, but also add a new perspective. Empirical evidence from participants supports our framework [Figure 4.1], highlighting the complex assessment and iterative post-funding evaluations, illustrating the complex, cyclical nature of entrepreneurial decision-making. The next section will explore the specific factors influencing this process and the challenges SEs face in securing sustainable funding.

4.2 Factors Influencing Decision-Making Process of Sustainable Entrepreneurs

In this section, we discuss the factors that influence the decision-making process of sustainable entrepreneurs for securing funds. To understand the dynamic and unique-to-case nature of the process, it's important to examine the various factors that play a role in the decision-making phases identified above. The following sections explain how these factors influence each other by exploring several experiences of research participants and show how the findings link to the existing literature.

4.2.1 Decision-Making For Identifying Funding Opportunities

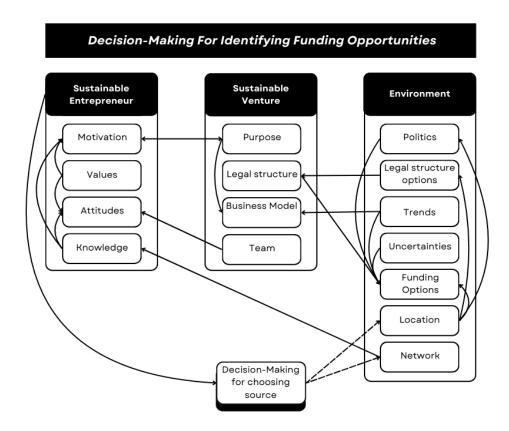


Figure 4.2.1 Framework for Factors Influencing Decision-Making For Identifying Funding Opportunities

The findings suggest that three major elements influence the decision-making process for choosing a funding source. First, the sustainable entrepreneur (SE) acts as the decision-maker, directly shaping the decisions made. Second, the sustainable venture defines the scope within which the entrepreneur navigates. Third, the environment determines the available funding options and the context in which they are rooted. This aligns with the literature, which states that the most theories concerning the decision-making process (Mador, 2000; Mintzberg, 1976) gravitate around a model of decision-making, which comprises three components: the environment, the specific characteristics of the decision to be taken and the entrepreneur himself (Ivanova & Gibcus, 2003); however, our findings showcase the importance of the third factor - venture itself.

According to Haynie et al. (2010), entrepreneurs are driven not only by external factors but also by their internal motivations and desired outcomes. The Entrepreneurial Mindset (EM) framework highlights that these personal factors significantly influence their

entrepreneurial journey. Furthermore, Mensah et al. (2020) emphasize that under conditions of uncertainty, the cognitive processes and personality traits of an entrepreneur play a complementary role in decision-making. Our research revealed that the motivations, values, attitudes, and knowledge of a sustainable entrepreneur shape their decision-making processes. These findings align with Truong & My (2023) in that they highlight the importance of an entrepreneur's knowledge and attitudes. The developed framework contributes to existing research by illustrating how these personal factors uniquely impact sustainable entrepreneurs.

For example, the experience of Participant #7 illustrates how knowledge fuels their motivation ("*I found this course on circular fashion online* [...] *I was so shocked* [...] *did not know that all this waste was occurring* [...] *And I was like, okay, I gotta do something.*") resulting in shaping the purpose of their venture: "*The purpose behind this is really to reduce waste.*" Furthermore, knowledge of funding options and attitudes towards the purpose of their venture influence their attitudes towards the process of securing funds, as showcased in their decision: "*There are a lot of impact investors out there now, and I don't think I have to change my values to have an investment and I won't.*"

In the pursuit of suitable funds, Participant #7 made several decisions, including changing location ("as soon as I get to Paris, there are a lot of loans and grants for female entrepreneurs [...] and I'll be applying to those") and attending events for networking ("we were also able to use that grant to go Change Now, which is a big summit in Paris. [...] I just met some investors at Change Now, so I'm in touch with them,") as both location and network influence funding options.

Moving on to the sustainable venture, findings suggest that the venture's purpose, legal structure, business model, and team influence the decision-making process of securing funds. For example, the case of Participant #3 shows how their decision-making was influenced by the legal structure of their venture: "*I asked myself if I'm the project owner, I can't apply for government money because then I would be seen as a private company. So I agreed with a business developer at the hospital that they would be the project owner.*" This aligns with Mensah et al. (2020), who highlight that the entrepreneur's knowledge and cognitive skills, including alertness and tacit awareness, are critical in adapting to legal constraints and identifying viable business models.

As discussed by Vermeulen, Petru Curseu & Gestel (2008), entrepreneurs respond to environmental stimuli, such as opportunities and threats. Our findings suggest that the environment comprises political factors, legal structure options, trends, uncertainties, funding options, location, and networks, all of which influence the decision-making process. The political landscape and existing legal structures define the scope of available funding options. The experience of Participant #3 illustrates these dynamics: "It worked well for me to get this money in the beginning because we had a stream of refugees coming to Sweden. So the authorities were giving grants to these projects. I fit in, I get the money. [...] but the politics switched in Sweden. When I tried to sell my solutions for Guttenberg County, the politicians there had become the right-wing party [...] They don't like immigrants, so I couldn't sell my language solutions to them." The participant further elaborates on how emerging trends play a role in this process: "And these trends are coming all the time [...] if you really want grants from government, you have to act right away because they don't stay forever."

Furthermore, findings suggest that uncertainties play a role in shaping decisions, supporting Mensah et al. (2021). Uncertainties influence the investment landscape, pushing entrepreneurs to adjust to new contexts, as illustrated by Participant #6: "We had really bad timing because the war in Ukraine started [...] all investors were like, great idea, but not now. [...] We did all these connections and efforts, but found no result from it."

As the factors are interconnected, there are indirect influences as well. For example, values can indirectly influence the business model through the entrepreneur's motivation and the venture's purpose: "*They also wanted us to become more of a resale platform. [...] I don't want to promote unsustainable consumption, and I think there's a fine line in resale that I wanna be careful about.*"

Lastly, the interaction between these factors makes the decision-making process dynamic. This aligns with the notion of tacit knowledge, as highlighted by Ancori et al. (2000), which forms through past experiences and helps entrepreneurs make coherent decisions amidst uncertainties. Participant #4 illustrates this by showcasing how the experience gained in securing funds led them to pivot: "We were invited to fly to Washington DC where we pitched our idea and didn't win any prizes, but got a lot of feedback from the jury and mentors. We came back, started working on it, and adjusted our approach." Similarly, changes in one factor can trigger changes in others they influence, directly or indirectly.

4.2.2 Decision-Making for Exploiting Funding Opportunities

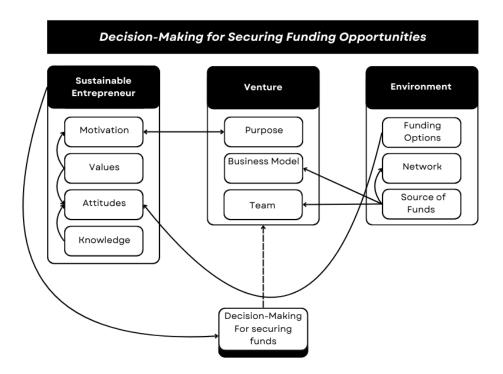


Figure 4.2.1 Framework for Factors Influencing Decision-Making For securing Funding Opportunities

The framework for decision-making in securing funding opportunities also highlights three major elements that influence the process: the sustainable entrepreneur (SE), the venture, and the environment. However, sub-categories differ from the previous framework not only by quantity but also in what manner they influence the decision-making process. These differences are discussed in this sub-section.

Truong & My (2023) attention to how background and ecosystem influence attitudes that affect business decisions becomes more relevant in the phase of securing funds as SE have more close interaction with external factors and to reach desired outcome, change might be required. If adjustments are needed, SE either decides to accept potential trade-offs and secure funds or rejects the money. Showcased factors interplay in this process as follows:

Returning to the experience of Participant #7, they rejected the funding for the requirements of the investors because it didn't align with their values and purpose of the venture: "They wanted us to have a new CEO. [...] And they also wanted us to be more of a resale platform [...] I don't want to promote unsustainable consumption." The participant

further elaborates: *I wanted to stay true to my values; otherwise, I wouldn't be motivated to continue with the company.*"

As mentioned in previous section, the attitudes and knowledge of further funding options influenced the decision-making of Participant #7. A similar relationship can be seen in case of participant #4: "We said no to some of these investors. [...] It shouldn't be money only, like investment money. There's so much money out in the world, and even though it's tough for us to get money, there's so much money out there.".\

In other cases, SE decided to accept trade-offs to secure funds: Participant #3 decided to alter the business model in order to secure grants. ("You can't really use the money as you wish because it must meet the criteria. So it means [...] you adjust the product to fit with that just to get the money so you get forward with something"); Participant #6 acknowledged trade-offs of evaluation ("Advisors said that we should be at this evaluation, but we ended up like being somewhere much lower [...] so yeah, that was the trade off, a big, a big trade off. But on the other hand, we had no other options"); And Participant #10 pivoted as a requirement of an investor ("He had said if he wanted to come on board, this was what he wanted. And I had no kind of qualms about it. [...] we hadn't discussed the pivot that much, but I, I agreed with the pivots.")

Negotiations can also lead to shared understanding between SE and investors, like in the case of Participant #6 ("*They were like they liked the impact part of the uh of the company. So that was great. Otherwise, it would've been a really hard choice uh to choose between no impact or no survival of the company.*") and #9 ("*We have changed what we should report, uh, in board meetings. So it's not only financial results, but also sustainable results.*")

4.3 Integrative Framework

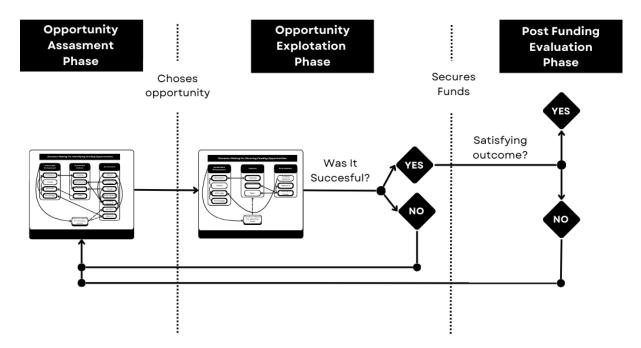


Figure 4.3 Integrated Framework

The integrated framework incorporates elements from the previous two frameworks and illustrates how factors influencing the entrepreneurial decision-making process interplay with its phases. This framework emphasizes the dynamic and interconnected nature of decision-making for securing funds. Experience, knowledge, and social capital gathered through this process iterate each factor relevant to decision-making. This adds a new understanding to Kumar and Sudarsanam's (2022) view of the entrepreneurial decision-making process as a setting of contextual bandits, where contextual bandits can be understood as a single phase of the framework, the whole framework, or circles of returning from the evaluation to the assessment phase. Therefore, if an entrepreneur in the post-funding evaluation phase decides to secure more funds, they will return to the first phase, but the factors will be transformed.

A sustainable entrepreneur must continuously adapt to new information and changing circumstances, ensuring that each decision aligns with the overall goals and purpose of the venture. For example, in some cases, after securing funds, the source of funds might become part of the venture as investors might come on board and have decision-making power (Participant #4 " *as soon as they have a seat on your board or or they own a lot of shares in your company they basically make pressure on you to tell you hey you have to reach this*

milestone. [..] You don't have this flexibility anymore"), that can be seen as a trade-off. However, this also might open up new funding opportunities for SE as the source of funds can bring more knowledge (Participant #6: Luckily, our angel investor, he has done like maybe five or six companies [...] So he knows a lot about the different options.) and expand entreprneuer's network (Participant #10: he brought around 80% of the investors in the round itself. Um, so that was, that was huge as well. Right. And some of these investors are quite big, there's like a few French celebrities.") This results in a continuous cycle of fundraising.

To summarize, the decision-making process for sustainable entrepreneurs to secure funds is contextual and cannot be fully understood without considering the dynamic processes occurring over time. These processes alter various factors influencing an entrepreneur's decision-making for securing funds. This evolution is best illustrated by the following quote from Participant #1: "*I have to say money is not so sensitive to me as it used to be. Before, money was almost like a bad thing. If I had to do it again, I would go heavy on financial sustainability as well. Because money is so good. If you want to make an impact, it's a really good thing."*

5. Conclusion

This thesis explored the decision-making processes of sustainable entrepreneurs in securing external funds, focusing on their unique challenges. Through qualitative case studies from Sweden and Denmark, the study identified a three-phase decision-making process: opportunity assessment, opportunity exploitation, and post-funding evaluation.

Key influences on these processes include the entrepreneur's motivations, values, knowledge, and attitudes, as well as the venture's purpose, legal structure, business model, and team dynamics. External factors like funding options, location, uncertainties, trends, legal frameworks, and politics also influence the decision-making process.

5.1 Research Contributions and Practical Implications

This study advances the field of sustainable entrepreneurship and finance by addressing the decision-making processes for securing external funds, a topic previously underexplored in the literature.

The research contributes to the field of sustainable entrepreneurship, specifically "triple bottom line" perspective (Hall et al., 2010; Sarango-Lalangui, 2018), by following Muñoz and Dimov's (2015) suggestion and employing interpretative methods to understand the sense making of the perceived opportunities related to securing external funds. Additionally, the developed frameworks capture the phenomenon of finance aquisition, contributing to better understanding the context in which sustainable entrepreneurs operate and addressing Muñoz & Dimov's (2015) call for a shift to elaborating on the causes of what happens.

Building on Bandura's framework for entrepreneurial decision-making, the study offers, to our knowledge, the first framework capturing decision-making framework of sustainable entrepreneurs securing funds, creating a foundation for further theoretical explorations. Furthermore, the integrated framework presented is dynamic, contrasting with traditional static models, continuing Shepherd and Patzel's (2017) as well as Kumar and Sudarsanam's (2022) aim to address the need for an even more dynamic approach to entrepreneurial decision-making. The exploration of various factors allowed us to exemplify how sustainable entrepreneurs balance financial goals with social and environmental objectives, challenging the conventional focus on economic value alone.

Practically, the findings offer actionable insights for sustainable entrepreneurs, guiding them on how to leverage geographic advantages, optimize legal structures, and build

effective networks to secure funding. SEs are made aware of various important factors and possible trade-offs involved in the decision-making process. This research helps SE understand and learn from others' experiences, which they can leverage in their own journey. Specific strategies shared in this study include practical tips on geographic targeting, legal setup, networking, and engaging with investors. These strategies enhance SE's chances of securing necessary funds, ensuring long-term sustainability and success. Consequently, As stated by Kumar and Sudarsanam (2022), an efficient decision-making process for entrepreneurs will go a long way in reducing social costs.

Additionally, this research informs investors about the unique needs and challenges of sustainable ventures, suggesting tailored approaches to better support these businesses. Polic-makers can utilize the study to create a more supportive environment for sustainable entrepreneurship, facilitate easier access to financing and encourage the growth of sustainable businesses.

In conclusion, this study bridges the gap between existing research and practical application, fostering the success of sustainable ventures through innovative theoretical frameworks and practical strategies. Overall, the research supports economic growth, innovation, and sustainability, contributing to reaching the Sustainable Development Goals (SDGs).

5.2 Future Research

While this study has advanced our understanding of the decision-making processes of sustainable entrepreneurs, several avenues for future research remain. These areas can build on our findings and address some of the limitations identified in the methodology chapter.

Future research employing quantitative methods could provide a more nuanced understanding of these relationships and explore the strength of influence between identified factors. Additionally, in-depth studies on the dynamics of specific funding sources like venture capital, angel investment, grants, and crowdfunding can offer a greater understanding of their influence on decision-making process. Furthermore, it will link our findings to the main focus of existing literature in sustainable entrepreneurship and finance - understanding financial constraints, optimal capital mixes, and alternative financing options for supporting sustainable ventures (Bonfanti et al., 2024; Aneja et al., 2023; Muñoz & Dimov, 2015).

Investigating regional and cultural differences can reveal how local ecosystems and regulatory environments impact entrepreneurial decisions. Longitudinal studies tracking the long-term outcomes of funding decisions could identify strategies that lead to sustainable success. Further research can also examine the role of policy frameworks and institutional support in shaping funding decisions, providing insights specifically targeting policymakers.

Addressing these areas will enhance our understanding of the decision-making processes in sustainable entrepreneurship, benefiting entrepreneurs, investors, policymakers, and scholars.

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Appendix A - Interview Guidelines

Profile of the start-up

- 1. Could you tell us about your start-up?
- 2. What is the purpose of your enterprise?

Opportunity recognition

3. What was your motivation for starting a company?

Timeline of securing funds

- 4. What financing options were available for you when you started your venture? (when you came up with the idea)?
- 5. Can you describe your entrepreneurial journey? (with a focus on capital acquisition from the beginning until now/end?)

For each milestone

Actions for seducing funds

- 6. How did you get to know about this financing option? (the funding opportunity you secured?)
- 7. What challenges have you encountered while acquiring funds? And how did you deal with them?
- 8. What effect did the financing have on your start-up: in terms of A) economic gains; B) sustainable goals?

Tradeoffs and their influence

- 9. Were there any trade-offs you had to accept (to get the finances)? What was the reason behind accepting these tradeoffs? / Going for this type of funding anyway?
- 10. How did these trade-offs change your motivation? (towards the purpose of the venture?)
- 11. How did these trade-offs affect your emotions? /(emotional attitude towards the purpose of the venture?)
- 12. Could you get the needed funds any other way?Were you actively looking for other options?Was the financing you got your most preferred option?
- 13. How did receiving the financing influence your next actions?
- 14. After receiving the funds, did your outlook on financing/ or future financing change in any way?

Appendix B - Pilot Interview Guidelines

Profile of the Start-up

1. Could you describe what your start-up is about?

2. What is the purpose-driven aspect of your enterprise?

Opportunity recognition

3. What was your motivation for starting a start-up to tackle this issue?

Timeline of securing funds

4. What did you initially know about the financing opportunities you had for your venture when you came up with the idea?

5. Can you define the most important milestones of securing funds for your venture from the beginning until now/end?

For each milestone

Actions for seducing funds

6. How did you acquire knowledge about the funding opportunity you secured?

7. What were the challenges you encountered while gaining funds? How did you deal with them?

8. How does this financing choice result in start-up performance: A) economic gains; and B) sustainable goals?

Tradeoffs and their influence

9. What were the tradeoffs (obligation) and why did you agree to the conditions anyway?

10. How did they change your motivation towards the purpose of the venture?

11. How does it change the emotional attitude towards the purpose of the venture?

12. Were you aware of any alternatives or actively searching for them? What was the ideal scenario for getting funds?

13. How did securing the funds, the knowledge you gained in the process, and your experience in general influence your further actions?

14. Did they change your approach to securing funds for future rounds?

Appendix C - Script of Consent

Hello,

Thank you for taking the time to participate in this qualitative interview. My name is Elene and my colleague's name is Simona (or vice versa), and we are conducting this interview as part of our master's thesis research at Lund University's Faculty of Entrepreneurship and Innovations.

Please note that this interview is being recorded to create an accurate transcription and analyze the data. However, the recording will not be shared with anyone outside of the research team and will be deleted once transcribed. Any personal information you provide, such as your name or specific company details, will be kept strictly confidential.

The purpose of this interview is to delve into the decision-making processes of sustainable entrepreneurs when securing funding, while also balancing economic and non-economic gains.

Your participation is entirely voluntary and you have the right to withdraw from this interview at any point if you feel uncomfortable or no longer wish to participate.

The interview is expected to last approximately one hour.

Before we begin, do you have any questions or concerns about the interview?