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Evaluating Sustainable Business Models through an Impact Investing Perspective

A qualitative exploration

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Abstract

How do investors evaluate the sustainability of a business model? The evolution and evaluation of a sustainable business is a burgeoning field of research, but many questions surrounding investment decisions remain. Using inductive methods, this thesis examines the ways impact investors evaluate early-stage startups and then presents how these evaluation strategies contribute to the academic discourse. The insights put forth in this thesis is gathered through semi-structured interviews with impact investors and impact experts based in Norway.

The findings suggest four broad themes in investment deliberations, which we have presented in a framework. First, evaluation is not centered around a business model. Instead, impact investors' primary concern when evaluating a startup is the second broad theme, an impact driven value proposition. Third, the business model is suggested as all the activities aimed to achieve the value proposition. Fourth, impact investors execute financial and impact assessment that is concerned with knowledge and adaptability.

This study contributes to the discourse on the evaluation of sustainable business models in the academic field. An understanding of evaluating sustainable business models is not only beneficial to the academic field, but to startups and impact investors as well.

Acknowledgement

This thesis marks the end of our MSc in Innovation and Entrepreneurship at the Norwegian University of Life Sciences. It has been a journey where we along the way have discovered and been intrigued by solving social and environmental problems through business. This led us to the field of impact investing, and ultimately this thesis.

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We hope you find it interesting,

Kristine Ausen

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1.Introduction

Investors invest in various assets through various instruments. While most invest to earn profits, some invest with the intention to create social and environmental impact. No matter the area or aim of the investment, investment-decisions involve an evaluation of the business itself in order to understand the potential risk and reward. Investing in a business that solves social and environmental problems alters this evaluation. In addition to financial return and risk, impact investors evaluate the potential positive and negative social and environmental value the business could generate (GIIN, 2021; IMP, 2021). A business that focuses on creating positive value for society and the environment is referred to as one with a *sustainable business model* (Jørgensen & Pedersen, 2018; Aagaard, 2018; Bocken et al., 2015; Lüdeke-Freund & Dembek, 2017), that offers attractive investment opportunities for impact investors (EVPA, 2021; GIIN, 2021).

TOMS® shoes illustrate what kind of evaluations impact investors make. For 13 years, when a pair of TOMS® shoes was sold in an industrialized country, the company committed to donate a pair of shoes to an individual in an underdeveloped country (Lesavage, 2019; Taub, 2015). While the practice was in effect, the company donated 95 million pairs of shoes (Lesavage, 2019). For the individual receiving shoes, this made a meaningful difference. However, handing out large amounts of shoes saturated the local shoe market in the beneficiary communities, causing local shoe stores to go out of business. Local value creation disappeared, which had ripple effects on the local and state-level economy. In response, TOMS® shoes ended the practice in 2019 (Holman & Sutherlin, 2021). The negative impact of the TOMS® shoes donation program outweighed its positive impact. This example shows the evaluations impact investors make before and during an investment process and demonstrates the need for management, measurement and evidence-based investing strategies. This is one example of how a better understanding of the ways in which impact investors evaluate sustainable business models can contribute to the academic field on sustainable business models.

According to scholars (Jørgensen & Pedersen, 2018; Aagaard, 2018; Bocken et al., 2015; Lüdeke-Freund & Dembek, 2017), sustainable business models describe how a business creates, delivers, and captures financial, social, and environmental value. Put another way, sustainable business models show how the business works by describing what group of customers the business targets, what kind of product or service it sells, what markets it operates in, how the business is organized, how it makes money, and whether the total creates sustainable value (Jørgensen & Pedersen, 2018). How to evaluate whether the business model is sustainable has proven challenging; indeed, no holistic method for determining the sustainability of a given business model has been developed. But scholars have signaled the need for a holistic evaluation method (Aagaard, 2018; Bocken et al., 2015; Lüdeke-Freund, 2018; Lozano, 2018).

To address the need in academic literature for a holistic framework for evaluating sustainable business models, there must be a clearer understanding of early-stage startups. Ultimately, through an understanding of how early-stage impact investors evaluate startups, the field can be better informed on both investor method and evaluation. The question, then, is:

"What main factors are used to evaluate startups with sustainable business models through an impact investing perspective?"

To answer this, we conducted multiple in-depth interviews with experts and impact investors to understand and map current practices. The goal of this research is to contribute to the discourse on how to evaluate sustainable business models by: 1) understanding impact investors' current approaches and objectives in investment evaluation; 2) linking them to sustainable business model literature; and 3) offering a resource to practitioners, startups seeking investors, and the broader academic field.

1.2 Key Concepts

This section provides definitions of the core concepts that are used in this thesis.

A **Startup** "a human institution designed to create a new product or service under conditions of extreme uncertainty" (Ries, 2011, p.54).

Sustainability is defined by Brundtland as "meeting our own needs without compromising the ability of future generations to meet their own needs" (Brundtland, 1987).

Impact is defined by the Impact Management Project as "an outcome caused by an organization that can be both negative and positive, intended or unintended" (Impact Management Project, 2021).

An **impact startup** is a "entrepreneurial company with a business model that offers solutions to some of the welfare state's challenges - and thus contributes to a positive effect in society, while at the same time making money as a company" (Den sociale kapitalfond, 2021).

A sustainable business model creates, delivers and captures financial, social and environmental value (Bocken et al., 2014).

A **Business model** reflect how a business creates, delivers and captures value (e.g. Baden-Fuller & Haefliger, 2013; Inigo et al., 2017; DaSilva & Trkman, 2014)

An **entrepreneur** is a person who creates a new business and take a financial risk in the hope for profit (Hayes, 2021a)

Impact investors invest with an intention of creating social and environmental impact, combined with a financial return (GIIN, 2013a).

Stakeholders are the entities affected by the decisions and actions corporations take who have the power to influence their outcome (Freeman, 2010. p. 54; Reed et al., 2009. p. 3).

2. Theory

This section aims to provide a deeper understanding of impact investing and sustainable business models, and consists of three parts. First, we introduce impact investing, its background, definitions, and characteristics. Second, we address startups with a sustainable business model, and describe the characteristics of sustainable business models in more detail. Third, we discuss how to evaluate an impact startup, both from the academic field of sustainable business models and through an impact investors approach, including both impact and financial assessment.

2.1 Impact investing

Since the early 2000s, there has been an increased focus on moving capital so that it is best situated to address social and environmental challenges (GIIN, 2020). In 2019 about \$502 billion US dollars were invested in social and environmental impact endeavors, in 2020 it increased to about \$715 billion US dollars (Norton, 2020). The astonishing 42.5% increase in the market from 2019 to 2020 (Klein, Cole & Gertner, 2020) gives reason for optimism for a sustainable future. However, there is also reason for caution, as only 1% of the total investments made globally in 2020 were directed towards sustainable solutions (EVPA, 2021; Serneels, personal communication, May 4th 2021).

In 2020 Sir Ronald Cohen, known as the father of British venture capital and social investments (Healey, 2021), called for a radical rethinking of how we invest money (Cohen, 2020). In his words, we need an "impact revolution" (Cohen, 2020). Cohen suggests that to reach the Sustainable Development Goals¹ and other international agreements, there is an immediate need to redirect funds towards solving social and environmental challenges (Cohen, 2020).

¹ The United Nations [UN] Sustainable Development Goals [SDG] presents goals to ensure "peace and prosperity for people and the planet, now and into the future" (UN, N/A). The UN proposes doing so through 17 goals on climate and social issues ranging from 'quality education' to 'sustainable cities and communities' and 'gender equality' (UN, N/A).

2.1.1 Background on the field of impact investing

In 2007, the Rockefeller foundation identified a need for building a global industry aimed at investing with positive social and environmental impact (Harji and Jackson, 2012; Höchstädter & Scheck, 2015. p.449). They gathered essential representatives from governments, businesses, philanthropists, and investors to define the term *impact investing* (Höchstädter & Scheck, 2015. p.449). Impact investing combines the traditional financial objectives of an investment with philanthropic objectives (GIIN, 2013a; Louche et al., 2012; Höchstädter & Scheck, 2015. p.44).

Though the term impact investing is quite new, investing to generate socially beneficial outcomes is not a new concept. The World Bank International Finance Corporation (IFC) was established in 1956 with the intention of transforming developing countries through investments (IFC, 2021). Since then, impact investing has been shaped by governments, practitioners, academics, consultants and organizations.

Before moving further into impact investing, it is important to understand the term "investment". An "investment is an asset or an item acquired with the goal of creating income or (value) appreciation" (Hayes, 2021b). Investors can invest their money in a company with the intention that the company will increase in value. They do so with the intention that their initial investment will grow.

In contrast, impact investors invest with an intention of creating social and environmental impact, combined with a financial return (GIIN, 2021). Impact investing can be viewed as an equilibrium between finance and creating social and environmental impact, which is addressed later in this section. But we first must discuss different impact investors and their core characteristics in general.

2.1.2 The investment spectrum

Impact investors expect their investment to generate a positive social, environmental, and economic return. However, some impact investors are willing to sacrifice some financial gain to achieve greater social and environmental impact (Schwartz & Finighan, 2020; McCreless, 2017), known as concessionary returns (Brest & Born, 2013). Other impact investors are not

willing to sacrifice any financial return for impact, known as non-concessionary returns (Brest & Born, 2013). Either way, impact investors have the common goal of creating social and environmental impact in addition to financial return (O'Donohoe et al., 2010; GIIN, 2018; Drexler, Noble & Bryce, 2013).

2.1.3 Core characteristics of an impact investor

Impact investors have a variety of motivations behind their investments. They share four core characteristics according to the Global Impact Investing Network (GIIN). These are intentionality, evidence, impact management, and contributing to growth in impact investing (GIIN, 2021. p.1).

1) **Intentionality** in impact investing is about intentionally making a net-positive social and environmental impact in addition to financial return in investments (GIIN, 2021. p.2; O'Donohoe et al., 2010). It is about intentionally allocating capital to businesses that offer solutions for social and environmental challenges.

2) **Evidence** includes the ability to prove the impact contribution of the investment. It is typically done through qualitative and quantitative analysis and measurement of the social or environmental problem and the businesses' impact. It allows the investors to identify indicators to understand the performance of the solution.

3) **Management** of impact performance is about using the data retrieved in evidence as part of the decision-making processes. Furthermore, it entails mitigating potential negative consequences of actions, and revealing the impact performance data to the investors. The approach is argued to improve capacity, ability to conduct impact analytics, and the rigor of the activities (Impact Management Project, 2021).

4) **Contributing** to the growth of impact investing is important to enable more impact through more impact investors. Practitioners (GIIN, 2021; IMP, 2021; EVPA, 2015) have proposed different ways of doing so, including encouraging transparency in investment decisions, sharing conventions, approaches, standards, strategies and performance, and sharing non-proprietary evidence. This transparency will help other investors better understand risk and increase their willingness to take risk of these investments.

An impact investor's intention is to generate social or environmental impact in addition to a financial return (GIIN, 2021). The companies in which they invest aim to create impact, while being financially sustainable. These companies are often referred to as sustainable companies or sustainable enterprises (IMP, 2021). This thesis refers to these companies as impact startups.

2.2 Impact startups and their Sustainable Business Model

Global sustainability issues require new business models that solve social or environmental problems (Evans et al., 2017; Aagaard, 2018). A startup is a company that creates a new product or service under extreme uncertainty (Ries, 2011, p. 54). Researchers state that startups are crucial for transitioning to an economy focused on social and environmental welfare (Schumpeter, 2008; Kroghrud, 2019; Cohen, 2020). Those startups have been acknowledged as powerful engines for social change and sustainable growth (Olsen, 2020). In the Nordic region, there has been an increasing interest in impact startups from a range of ecosystem players over the last few years (Olsen, 2020).

Zipline is one example of an impact startup. It offers drone logistics to hospitals to transfer blood in areas where infrastructure is inadequate, allowing for blood transport in areas that would not receive the service otherwise. Because Zipline is solving a prioritized problem for an underserved group, it is considered an impact startup. A company like this not only offers potential profit to investors, but it creates a net impact for society at the core of its business model. Zipline makes a measurable net impact (Cohen, 2020, p. 38). In fact, every fourth minute, someone's life is made better by a Zipline delivery (Zipline, 2021).

Existing literature does not provide a uniform definition of a startup that solves a social or environmental problem. They are referred to as sustainable enterprises, impact ventures, social ventures, impact enterprise, social driven ventures, and so on (e.g. Dees et al., 2004; Aagaard, 2018; IMP, 2021, Muñoz & Dimo, 2015). Although not yet defined by the literature, the concept has truly gained increasing attention during the past decade.

Hart (et al., 2003) defines a sustainable enterprise as an enterprise that contributes to sustainable development by delivering economic, social and environmental benefits

simultaneously (p. 56). The Social Capital Fund provides a nordic perspective on impact startups. They define it as an impact startup as an "entrepreneurial company with a business model that offers solutions to some of the welfare state's challenges - and thus contributes to a positive effect in society, while at the same time making money as a company" (Den sociale kapitalfond, 2021).

Before we create our definition, we need to define the term impact. Impact is an outcome caused by an organization that can be both negative and positive, intended or unintended (e.g. IMP, 2021; Hearn, 2016). Based on these definitions the working definition in this thesis for an impact startup is 'new ventures committed to making a net social and environmental impact, coupled with financial returns'.

2.2.1 Background on the Sustainable Business Models field

The concept of sustainable business models (SBM) and sustainable enterprises first appeared around 2000 (Senge et al., 2001). At the time, the intention was to encourage companies to contribute to the development of a more sustainable economic system and to integrate sustainability into their organizations (Rashid et al., 2013; Stubbs & Cocklin, 2008; Wells, 2013).

There has been a steady increase in publications using the term "sustainable business models" the last few years (Lozano, 2018); however, few describe the term and researchers have different definitions of the term. The term remains in flux with many researchers contributing to a common definition. In this section, we try to create an overview of sustainable business models.

A sustainable business model consists of the same principles as a business model: how a company creates, delivers and captures value (Osterwalder & Pigneur, 2010, p.14). Overall, a sustainable business model creates, delivers, and capture financial, social, and environmental value (Bocken et al., 2014). A business model is further described as a snapshot and description at a specific moment in time (Osterwalder et al., 2005, p.15). This makes it challenging when understanding sustainable business models as sustainability changes over time (Aagaard, 2018, p. 6).

Sustainable development was defined by Brundtland in 1987 as "development that meets the needs of the present without compromising the ability of future generations to meet their own

needs" (Brundtland, 1987). Brundtland's definition of sustainability is the foundation for the sustainable business model field (Aagaard, 2018). However, the connection between sustainability and business is considered hard by researchers and they point out that the operationalization of the concept into business is still fragile (Bansal 2005; Stubbs & Cocklin 2008; Zink et al. 2008; Carroll & Shabana, 2010).

In 1997, Elkington suggested the triple bottom line approach, which has become a widely acknowledged framework for understanding sustainability in business (Elkington, 1997; Aagaard, 2018; Bocken et al., 2019). The approach describes three pillars of sustainability in a business context: social, environmental, and economic (Bocken et al., 2014, p.46). The three pillars are described as three equally important principles of sustainable business models (Bradbury-Huang, 2010; Hansen et al., 2009; Schaltegger & Wagner, 2011; Aagard, 2019). The term has become part of the sustainable business model business lexicon (Economist, 2009).

While the concept of sustainable business models is developing, the triple bottom line approach has been used, communicated, and understood differently by researchers and practitioners (Schwartz & Finighan, 2020). It has been used as a sustainability framework for business, evaluating a company's social, environmental, and economic impact (Schwartz & Finighan, 2020). In 2018, Elkington published an article in Harvard Business Review (Elkington, 2018) that addressed the confusion about this term. Elkington proposed a change by clarifying that the approach has been used across sectors and in several different ways that were never intended. Elkington's goal with the triple bottom line in the first place was system change, and he describes it as a push toward a transformation of capitalism. The triple bottom line has shaped an entire academic field: sustainability with respect to business. The intention with the term was not an accounting system, but rather a genetic code as a way to operationalize the concept of sustainability in a business context. However, the term is still the foundation for the academic field as of today.

The different perspectives, ways of using the term, and different claims create challenges when defining sustainable business models (Aagaard, 2018, p.6). There has been confusion since sustainable development does not stand for a specific content, but rather seen as a process where social, environmental and economic values are balanced in endless actions (Lélé, 1991). Boons & Lüdeke-Freund (2013) addressed that there is no existing comparable conceptual notion of sustainable business models.

2.2.2 Defining Sustainable Business Models

The following section presents different researchers' definitions of a sustainable business model, in addition to this thesis' working definition.

Source	Definition
Stubbs & Cocklin, 2008	"A sustainable business model is "a model where sustainability concepts shape the driving force of the firm and its decision making [so that] the dominant neoclassical model of the firm is transformed, rather than supplemented, by social and environmental priorities." (p. 103)
Boons & Lüdeke- Freund, 2013	"A sustainable business model is different from a conventional one through four propositions, "1. The value proposition provides measurable ecological and/or social value in concert with economic value [] 2. The supply chain involves suppliers who take responsibility towards their own as well as the focal company's stakeholders [] 3. The customer interface motivates customers to take responsibility for their consumption as well as for the focal company's stakeholders. [] 4. The financial model reflects an appropriate distribution of economic costs and benefits among actors involved in the business model and accounts for the company's ecological and social impacts" (p. 13)
Bocken et al. 2013	"Sustainable business models seek to go beyond delivering economic value and include a consideration of other forms of value for a broader range of stakeholders." (p. 484)
Wells, 2013	"A business model for sustainability "would assists in the achievement of sustainability [by] following major principles [] for sustainability", which Wells defines as 1) resource efficiency, 2) social relevance, 3) localisation and engagement, 4) longevity, 5) ethical sourcing, and 6) work enrichment" (p. 65)
Upward & Jones, 2016	"A (strongly) sustainable business model "is the definition by which an enterprise determines the appropriate inputs, resource flows, and value decisions and its role in ecosystems, [in a way that] sustainability measures [which] are those indicators that assess the outputs and effects of business model decisions [] might be claimed as successfully sustainable." (p. 98)

Table 1: Selected definitions of Sustainable Business Models.

The selected definitions above, and most of the definitions on the field, see sustainable business models as an adjustment of the original business model concept, with some characteristics and intentions added to it (Geissdoerfer et al., 2018, p. 404). Most of the definitions either include concepts, principles and intentions that aim for sustainability, or they integrate sustainability to their value proposition, creation, delivery, and capture (Geissdoerfer et al., 2018, p. 404) The working definition of a sustainable business model for this thesis is:

"A sustainable business model creates significantly increased positive effects or significantly reduced negative effects for the natural environment and society through changes in the way a company and its network create, deliver and capture value" (Lüdeke-Freund et al., 2018, p. 147).

This definition was chosen because of its direct transferability to startups, and because it has sustainability as an integrated part of the value proposition, creation, delivery, and capture.

2.2.3 Conceptualizing Sustainable Business Models

There is no common framework of conceptualizing sustainable business models, and multiple authors (e.g., Joyce & Paquin 2016; Stubbs & Cocklin 2008; Upward & Jones 2016) have tried to define the characteristics of this developing concept. To understand the definition presented above, we need to understand what it means to create, deliver, and capture value in a sustainable business model, to conceptualize it.

The value construction in sustainable business models is extended from one level; a single customer perception as target users toward a more holistic approach where target users are several stakeholders on all levels: individual, organizational, and societal (Pedersen et al. 2016; Schaltegger et al. 2016; Upward & Jones 2016; Aagaard, 2018; Porter & Kramer, 2011; Lepak et al. 2007).

The following sections describe how value on all levels can be achieved through a company's value proposition, creation, delivery, and capture. Multiple researchers have tried to define the characteristics of these aspects, but the linkages between them are still lacking in the literature (Bocken et al., 2014; Schaltegger & Wagner, 2011). This makes it difficult to create clear definitions. Even an academic inquiry on sustainable business models has further driven the need to understand the connection between value proposition, creation, delivery, and capture when a business integrates sustainability into its business model (Bocken et al., 2014; Schaltegger & Wagner, 2011). This has to be taken into account when the following sections attempt to create a holistic view of the definition.

Sustainable Value Proposition

A company's value proposition is the value its product or service delivers to the customer (Osterwalder et al., 2014; Teece, 2010), and is described as the core of any business model (Maurya, 2012). A value proposition describes the gains a customer can expect from the product or service that will directly or indirectly affect the customers and all stakeholders (Osterwalder et al., 2014).

A sustainable value proposition is the product or service that creates economic benefits while mitigating depletion in the environment and society (Boons & Ludeke-Freund, 2013). Companies that have sustainability truly embedded in its goals have a value proposition that prioritizes delivering social and environmental benefits for its stakeholders (Bocken et al. 2014, p. 53).

"The ultimate holistic approach toward the sustainable business case is to combine economic-oriented value propositions with environmental- and social-oriented value propositions" (Emerson, 2003; Bocken et al., 2015).

Bocken (et al., 2015) and Pedersen (et al., 2016) further address that with sustainable business models the value propositions go beyond the ordinary product, service, and process considerations, and instead enlist the triple bottom line logic as Elkington presented (Elkington, 1997).

Chou (et al., 2015) further points out two important factors that need to be linked for a company to have a sustainability-led value proposition. First, the company's mission must reflect the core business value and strategy. Second, the sustainability vision needs to indicate the direction of the social responsibility the company seeks (Chou et al., 2015, p. 50). Chou (et al., 2015) also argues that sustainability has to be an integrated part of a company's value proposition in order to be achieved. Boons and Lüdeke-Freund (2013) contribute with another perspective to the sustainable value proposition, arguing that it should provide measurable ecological or social value together with economic value. Bocken, Upward, and Jones address another potential advantage of integrating the social and environmental aspect into the value proposition: a reduction of a company's negative impact (Bocken et al., 2014; Upward & Jones, 2016).

Sustainable Value Creation

A company's value is created through the value proposition. The value creation consists of the resources, activities, and partnerships that a company applies to realize its value propositions (Osterwalder et al., 2014; Aagaard, 2018). The value creation has to be sustainable in itself to deliver sustainable outcomes (Aagaard, 2018). Lepak (et al., 2007) addresses that the sustainable value creation should include the individual, society, and all others affected by the business. If sustainability is an integrated part of the value creation, the value delivery and capture can evoke aspects of sustainability (Moratis et al., 2018, p. 5).

Sustainable Value Delivery

Value delivery is described as the distribution channels, suppliers, the technology, and product features (Osterwalder & Pigneur, 2010). The value delivery gives the maximum value provided to the customer by the service. Bocken (et al., 2014) describes that in a sustainable business model, the value delivery has to create social and environmental benefits through its channels and partners (p.43). To our knowledge, sustainable value delivery is not defined as a term, but is described that it can only possess or integrate aspects of sustainability when the value creation in itself is sustainable and creates sustainable outcomes (Moratis et al., 2018, p. 5).

Sustainable Value Capture

The value capture of a business model describes the cost structure and revenue model (Osterwalder and Pigneur, 2010). It is the value captured to the customer (Teece, 2010; Bocken & Short, 2016). Value capture is further described as how a business earns its revenues from the supply of goods, services, or information to customers and users (Teece, 2010). Some researchers include the social and environmental level into value capture to a larger degree (Lepak et al., 2007, Moratis et al., 2018) Similar to the sustainable value delivery, sustainable value capture can only be possessed when the value creation in itself is sustainable (Moratis et al., 2018, p. 5). Aagard (2018) further describes that the sustainable value capture is the company's economic and non-economic value achievements, and are closely linked to the sustainable value propositions (p.11).

Our approach of Sustainable Value Creation, Delivery, and Capture

Multiple researchers find it hard to define the characteristics of the value aspects in a sustainable business model because the linkages between them are weak (Bocken et al., 2014; Schaltegger & Wagner, 2011). Therefore, our approach presents a holistic and coherent picture of the value dimensions based on our literature review. The value dimensions of a sustainable business model in this thesis are presented in Table 2.

Sustainable Value Proposition is placed on top of the table as of the literature pointing out that value creation, delivery and capture can only be sustainable if the value proposition is sustainable. This is further underlined with the researchers describing it as the core of the business model (e.g. Maurya, 2012).

Sustainable Value Proposition

Provides environmental, social, and economic value through the service or product delivered

Sustainable Value	Sustainable Value Delivery	Sustainable Value Capture	
Creation	Gives the maximum value	A company's economic and	
Consists of the resources,	provided to the customer by the	non-economic value	
activities and partnerships that	service or product. It can only	achievements. It is closely	
a company applies and	consist of sustainable	linked to sustainable value	
implements to realize its	dimensions if the value	propositions. It can only	
sustainable value	proposition provides	consist of sustainable	
propositions	environmental, social, and	dimensions if the value	
	economic value through the	proposition provides	
	service or product delivered.	environmental, social, and	
		economic value through the	
		service or product delivered.	

Table 2: Characteristics of a Sustainable Business Models (e.g. Bocken et al., 2015; Pedersen et al., 2016; Osterwalder et al., 2014; Aagaard, 2018; Bocken et al., 2014; Moratis et al., 2018).

2.3 Evaluating sustainability in a business model

Having established the terms impact investing and sustainable business models, we address connection between them. An impact investor evaluates several different aspects of a business which are described below. The academic field of sustainable business models addresses the need for more knowledge on how to evaluate sustainability in a business model (Aagaard, 2018, p. 16; Bocken et al, 2019, p. 242; Geissdoerfer et al., 2018, p. 408). They express this gap in the research as a serious issue (Aagaard, 2018). Researchers have put a lot of effort into understanding sustainable business models and have developed different classifications and conceptual frameworks. Researchers have suggested different types (Tukker, 2004), ideal-types (Stubbs & Cocklin, 2008), archetypes (Bocken et al., 2014), pattern typologies (Lüdeke-Freund et al., 2018). Though helpful for understanding and conceptualizing a sustainable business model, these frameworks are not helpful for evaluating its sustainability.

As addressed, the research field of sustainable business models is still emerging. This creates limitations and challenges in the design of a framework for evaluating the level of sustainability of a business model (Aagaard, 2018, p. 18). To our knowledge, the only holistic framework for evaluating the sustainability of a business model was presented by Aagard in 2017. The framework presents a way to identify, understand, and evaluate sustainable business models and the level of sustainability in business models (Aagaard, 2018, p. 17). Aagaard further describes that the framework is proposed in a way to evaluate the level of sustainability of sustainability of sustainable business models across contexts, time, and dimensions. The framework is presented in figure 1 and is a tool consisting of 11 dimensions to improve the practical, theoretical, and empirical discussion and evaluation of sustainable business models (Aagaard, 2017).

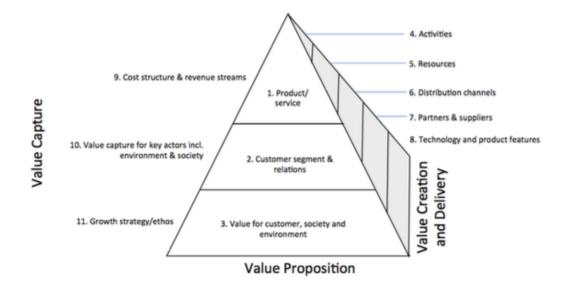


Figure 1: The Sustainable Business Model's Pyramid Framework for Evaluating Sustainability, source: (Aagaard, 2018, p. 12)

The framework divides the different aspects of value into three groups: Value Proposition, Value Capture, and Value Creation and Delivery. The framework is structured according to the conceptualization of a sustainable business model as presented in the last section. To our knowledge, the grouping of the different aspects of value is not further described in the book of Sustainable Business Models where the model is presented (Aagaard, 2018). This makes it hard to understand the purpose behind the different categories and subcategories. Accordingly, Aagaard has expressed the need for some further development of the framework within the assessment of the level of sustainability (Aagaard, 2018, p. 17).

This brings us on to the next section of evaluating a sustainable business model. An impact investor mainly evaluates two different aspects of a business before investing: the impact assessment and then a financial assessment.

2.3.1 Impact assessment for evaluating sustainability in business models

Impact investors evaluate the impact created by the company through an impact assessment (Cohen, 2020; Barber, Morse & Yasuda, 2021). Researchers in the field of sustainable business models argue that impact assessment can be a useful tool in exploring the ways business models can lead to improved financial, environmental, and social effects (Evans et al., 2017; Rauter et al., 2019).

The field of impact investing has, like the field of sustainable business models, struggled to endorse a common framework to measure and manage the environmental and social impact a business model has. However, one of the core characteristics of impact investing is impact measurement, as addressed in 2.1.4. Impact measurement takes into account the positive and negative impact of the underlying enterprise, as well as the investor's own contribution (Impact Management Project, 2021). Cohen (2020) states that, "If we regard impact investing as our rocket ship to social change, impact measurement is our navigation system" (p. 28). Impact measurement is about understanding and maximizing the social and environmental effects of a company (Impact Management Project, 2021). Evidence of social and environmental impact is important when mitigating risk. Some companies claim publicly to be sustainable, but impact measurement allows us to evaluate whether some of these claims are false.

There is still work to be done on creating a holistic framework for impact measurement. Over the last few years, a myriad of different tools have been proposed to measure and quantify impact (Cohen, 2020). This led to enthusiasm when the Impact Management Project, together with governments, academia, practitioners, and investors, reached consensus on five different ways impact can be defined, described, and measured (Impact Management Project, 2021; GSG, 2021). The five different dimensions, as defined by Impact Assessment, are as follows:

1) "What" outcome is the company contributing to, both positive and negative, and how important is it to stakeholders? For example, Generasjon M, a company that employs teenagers to engage in social interactions with elderly, has an intention of improving the lives of elderly (intended positive outcome). This might have ripple effects, like improving the lives of teenagers (intended positive outcome) or giving the nurses at the retirement home more time for their main activities (unintended positive outcome).

2) **"Who"** experiences the outcome, and are they underserved with respect to the outcome? This includes all stakeholders, meaning everyone who is affected intentionally or unintentionally by the activity (Impact Management Project, 2021). Using the same example as before, it could be the nursing home (the customer), the teenagers (the employees), the elderly (the users), and everyone else affected by their solution.

3) "**How much**" describes the stakeholders experiencing the outcome, if that change is substantial along the axis of depth and duration. Ideally, the solution affects many people, has deep impact, and lasts for a long time. However, these factors are not supposed to be maximized along all of the axes as it depends on the company's complexity and size (Impact Management Project, 2021; Reisman, Olazabal & Hoffman, 2018). Going back to the example of Generasjon M, they have given 100 teenagers meaningful work, and that has affected many elderly persons. It has led to it being easier for the teenagers to get employed later, and because they were so young at the intervention (the action creating change), it is assumed that the intervention has a deeper effect. As Generasjon M is still a young company, the long term effects on the youth is unknown, and data to verify the assumed effects is not yet available.

4) "**Contribution**" aims to disclose whether the implications of the efforts were better than it would have been if they were not there. Looking at the impact startup Generasjon M again, would the lives of elderly be improved if the startup did not exist? Will their solution have additionality? Meaning that the contribution will actually lead to change in the outcome for the target group, that would not have occurred otherwise.

5) "**Risk**" is about the possibility of the impact being different than expected (Impact Management Project, 2021). What are the risks that the elderly do not experience less loneliness and inactivity after having worked at Generasjon M? If so, what are the consequences of that? Identifying and mitigating these risks is necessary to avoid outcomes like the one with TOMs® shoes.

These five different dimensions have been used for understanding, and going forward be used for measuring and managing impact. And they can be helpful to investors by giving them

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clarity about their impact goals and in managing their portfolio. The framework does not provide comprehensive data about the impact a company creates (Impact Management Project, 2021). But it can tell the investor what the potential impact is, which can be helpful before making decisions to invest or not to invest. Constantly evaluating and working with these dimensions helps ensure the highest level of positive impact over time. Done right, it can reduce the risk of having unintended negative effects. Along with impact assessment, financial sustainability has been emphasized by impact investors as important for the business to succeed in creating lasting long term impact. It is therefore a part of the evaluation process and is described as a financial assessment in the next section.

2.3.2 Financial assessment of a sustainable business model

Like traditional investors, impact investors perform financial assessments, often referred to as due diligence. A due diligence is a thorough assessment or an investigation of a company, usually to confirm and reveal facts or details about the acquisition (Chen, 2021). Because the field on impact investing is rather new, there is a lack of exclusive financial assessment tools for impact investors. However, the scope of impact investors in this paper are similar to venture capitalists because they invest in an early-stage company that has potential for high growth (Cohen, 2020; Šimić, 2015). A venture capitalist is a private equity investor who invests in companies with high growth potential (Janeway et al., 2021). This part presents the financial criteria on which venture capitalists base their investment decisions (Kollmann & Kuckertz, 2010).

A due diligence process can include up to 400 different parts (Kollmann & Kuckertz, 2010), generally categorized into four different dimensions (MacMillan et al., 1985): the personality of the entrepreneur, the experience and qualifications of the entrepreneur, the product or service, and market and financial considerations (Kollmann & Kuckertz, 2010., p. 742). Part of this evaluation is assessing the team's knowledge, skills, experience, and ability to adapt as important factors to be able to handle challenges (Visagie, 2011; MacMillan et al., 1985; Kollmann & Kuckertz, 2010).

Equally prioritizing the two objectives, impact and finance, can be challenging for impact investors. Capital investors who only invest for financial return without assessing the social or environmental impact have criticized impact investing (Schwartz & Finighan, 2020). One

of their claims is that investors cannot fix problems like the global economy, climate change, or illiteracy (Schwartz & Finighan, 2020). Furthermore some claim that there is a trade-off between financial returns and the impact the investors aim to create (McCreless, 2017; Golka, 2020). Achieving higher impact would require more subsidies, hence the profitability could be below market return (McCreless, 2017). However, both the critics and the leaders within the field of impact investing see changes in consumer trends, digitalization, and environmental depletion affecting what is profitable and not. Therefore, they agree there is room and a necessity for impact investing.

An impact investor's dual screening process of financial and impact assessment is presensented as a way of evaluating an impact startup. And, as addressed, researchers struggle to create a holistic framework for evaluating a sustainable business model. The purpose of this thesis is therefore to research if the impact investors perspective can adopt to the evaluation of a sustainable business model.

So far, the thesis has proposed an overview of an impact investor's perspective, how their investee is described through a sustainable business model, and how to evaluate a sustainable business model from the academic field of sustainable business models and from an impact investor perspective. Thus, our analysis explores how impact investors evaluate a sustainable business model. Which leads us to the next section, methods.

3. Methods

Through an exploratory inductive research method, we present insights gathered through interviews with impact investors and experts to understand their evaluation of sustainable business models (Johannessen et al., 2016). Both the research field and the impact investing field are new, and conceptualizing and increasing knowledge in the field is in continuous development (Saunders et al, 2009; Ghauri & Grønhaug, 2010). The field of literature on sustainable business models can be informed by the impact investors' process of evaluating impact startups. To that end, our research explores their thoughts and experiences in evaluating sustainable business models. This section presents the main steps of the research process: initial exploratory research, literature review, and semi-structured in-depth interviews. Finally it presents our data analysis and discusses validity, reliability and ethical considerations.

3.1 Initial exploratory research

In September 2020, we began our data collection process with ten informal exploratory interviews. The ten participants were recruited from our own network. Our intention with the interviews was to discover topics about impact, impact startups, and sustainable business models of focus for our thesis. We talked to investors, business developers, and entrepreneurs within the impact field in Norway. We asked each participant, "If you had five months to write a thesis, what would you write it about and why?" The 30-minute interviews resulted in nine different topics. Out of these nine topics, impact investing and sustainable business models were recurring topics discussed by the participants and highlighted as an area requiring further research.

During the Fall of 2020, we gathered insights through ethnographic observations to further understand the field on impact investing and sustainable business models. We did so by listening to podcasts like Bærekraftseventyret (Jørgensen and Pedersen, 2021)² and participating in events like Impact StartUp's Demo Day and Investor Day, Katapult Demo

² Bærekraftseventyret, or "sustainability adventure", is a podcast by Jørgensen and Pedersen, professors at Norwegian School of Economics, specialized in sustainable business models (Jørgensen & Pedersen, 2021).

Day³, and Sustainability-hub's conference on "State of Sustainability 2020"⁴. Insights were documented through field notes. These notes recorded information on the field today in Norway, the relations between the different participants, and relevant theory.

This initial step in our research gave us meaningful insights into the impact investing field in Norway and informed our next step on literature review.

3.1.1 Literature review

Our systemized literature review on sustainable business models and evaluation criteria for impact investors created the basis for the theory presented in section 2. Additionally, we found a lack of literature on impact investing. Based on our initial interviews, we knew the participants' sources of knowledge that formed our basis for theory on impact investors. The sources included Impact Management Project (IMP), Global Impact Investing Network (GIIN), Toniic, European Venture Philanthropy Association (EVPA), and Social Value UK.

Researchers have specified the need for a holistic framework on how to evaluate sustainable business models (Bocken et al, 2019, p. 242; Aagaard, 2018, p. 16; Geissdoerfer et al., 2018, p. 408). We knew through our initial interviews and research that impact investors evaluate startups. And therefore that impact investors potentially could inform the field on sustainable business models on how they evaluate early-phase impact startups. This led us to the primary data collection of this study: in-depth semi-structured interviews with impact investors and experts on impact who have relevant experience from the field.

3.1.2 Selection and recruitment of participants

The primary data was collected through in-depth semi-structured interviews. The data collection methods were approved by the Norwegian Centre for Research Data (NSD) in January, 2021. The participants were impact investors and experts in the field. We utilized the snowball method to recruit participants by asking existing participants to suggest new participants (Tjora, 2017, p. 202). There are two overarching reasons why we chose this

³ Impact StartUp and Katapult are programs that aim to help early-stage impact startups grow. At demo-day the startups present their business to investors and others who are interested. Impact StartUps investor day was an event for impact investors looking to invest in startups.

⁴ Sustainability hub presented the status of sustainability in business in Norway and ideas for development.

group as best suited to contribute to the discourse on sustainable business models. First, because of the initial discussions described in 3.1, we deduced that they could offer new perspectives on sustainable business models. Second, the field of impact is our line of work. Thus, we have an extended relevant network which we used to recruit contacts (Johannessen et al., 2016).

People from our network suggested relevant impact investors. Inviting participants relied on the theoretically defined criteria "core impact investor characteristics" explained in section 2. The criteria was based the Global Impact Investing Network's document on impact investing (GIIN, 2021). We utilized this criteria to ensure investors were recognized as impact investors, and not merely claiming to be so. The criteria holds four points for identifying legitimate impact investors: 1) they intentionally want to generate positive social and environmental impact; 2) they use evidence and impact data in the investment design; 3) they manage impact performance; and 4) they contribute to the growth of impact investing (GIIN, 2021). To identify the investors within the four criteria, we did background research and asked our network if they agreed.

We identified 11 impact investors relevant to our study, four of them agreed to participate in the study. We recruited the experts through the snowball method based on recommendations and referrals from the introductory interviews (Tjora, 2017, p. 202). This technique helped us to get access to some of the most prominent impact experts and investors in the field (Tjora, 2017, p. 202). The snowball method helped us access a larger, targeted group. The relevant literature points out that the snowball method can limit the variety of participants. However, it is also an effective way to recruit participants when they are not easily accessible (Tjora, 2017, p. 202). We contacted the potential informants by email and LinkedIn.

3.1.3 Semi-structured in-depth interviews

The main data for this thesis was collected through semi-structured in-depth interviews with impact investors and experts. The semi-structured interview guide allowed us to ask open questions and follow up on the topics of interest. Further, it allowed us to ask the participants to exemplify and clarify their thoughts and ideas (Bryman & Bell, 2011, p. 472).

The number of participants was not predetermined because we wanted to reach a point of saturation, i.e., when the same information repeats itself (Saunders et al., 2017, p. 1898). The results and analysis are based on eight interviews. All participants worked directly with impact and had extensive knowledge on the topic, either by being an impact investor or by working closely with impact investors and impact startups. Half of the participants worked directly with impact investments in private investment companies. The remaining four were experts on impact; two worked in companies that support impact startups and seek financing from impact investors, one was a professor in the field of sustainable businesses, and the last participant works in a finance institution on sustainable investments. All but one held senior positions in their respective companies. Total gender distribution was seven male participants, and one female.

All interviews lasted between 35-60 minutes, and were conducted online on the video conference tool Zoom, because of the constraints caused by the pandemic. Prior to the interviews we secured good wifi connection, made sure that our microphones and cameras worked, and practiced the interview guide. We both actively interviewed the participants and assigned the questions and follow-up questions between us. We had different computers and had a camera to interpret the participant's body language. The interviews were recorded on a tape recorder without video.

The semi-structured interview guide allowed us to create a conversation with the participants (Charmaz, 2014, p. 68). The interviews were designed to achieve two main goals: first, to make sure we understood the relevant terminology and diversity of perceptions and meanings; and second, to uncover important factors considered by impact investors when they evaluate impact startups.

First, we sought to understand how different impact investors and experts make sense of the concepts of sustainability and sustainable business models. As illustrated in section 2, the terminology and concepts on sustainability and sustainable business models can differ among participants. Consequently we found it necessary to understand these concepts before moving on to part two. We asked questions like "How do you define sustainability", and "How would you describe a sustainable business model?".

Second, we sought to understand how impact investors and experts view and evaluate a sustainable business model. As stated above, the investors and experts all have a close relation to evaluating sustainable business models and could therefore provide us with a deeper understanding of how they evaluate companies. Questions we asked included, "How do you evaluate sustainable business models?" We rarely got to ask more questions, because the investors listed different factors that we decided to follow-up in the interview. The interview guide is available in the appendix.

3.2 Data analysis

The first step in data analysis was to transcribe the recorded interviews. All interviews were held in Norwegian except one that was conducted in English. Relevant quotes presented in the results were translated into English.

The data analysis followed a step by step deductive inductive method (SDI): we worked from data to theory (inductive), and verified the theory with the data (deductive) (Tjora, 2017, p. 155). We started by reading through the first transcript where codes like words, sentences, paragraphs, statements or phrases were extracted from the document. We moved on to the next transcript with the same codes and made new ones when necessary. This is how we worked through the material, and developed a set of codes that were inductively generated from the data (Tjora, 2017, p. 197-198). From the codes, we extracted categories. For example, one of our categories was "impact assessment". From there we verified that the findings were consistent with our data.

We each followed the same process, but analyzed the data separately between us to strengthen the validity of our findings. When discussing the analysis, we found that our codes and categories were similar. Further, the different categories resulted in different propositions which led us to create a framework to illustrate the different categories and the relation between them.

The internal validity in qualitative research aims to see if the findings actually represent the reality of the participants (Johannesen et al., 2016, p. 232). Our interview guide had openended questions. During the interviews we summarized statements by asking, "if we understand you correctly, then..." to secure that our interpretations were aligned and to avoid potential misunderstandings and ambiguities (Flick, 2009, p. 388-389). Further we sent out follow up questions via email if we felt insecure about the meaning of an answer, something we did with three of the participants.

Prior to the interviews we prepared in three different ways. First, we had several pilot interviews with each other, but also with a colleague within the field of impact to assure that our questions were understandable and that the two of us (interviewers) were aligned. In an interview setting it is common to be in the same room. Online meetings differ, and we found that the dynamic was better if we all had seperate computers and sat in different rooms. Second, we provided information about the theme of the interviews to the participant, along with the consent form. In addition, we gathered background information specific to each participant prior to each interview which allowed discussion and specific follow-up questions.

As mentioned, our participant sample was recruited by convenience and the snowball method. This could result in the participants referring us to other individuals similar to themselves leading to a homogenous group (Saunders et al., 2017). This could potentially lead to decreased understanding because of a lack of variation in meanings, attitudes, practices, and experiences (Johannessen et al., 2016).

3.2.1 Reliability

In qualitative research, reliability aims to determine if the same results would be found if other researchers followed the same methods (Johannesen et al., 2016, p. 36). The impact investment field is neither static nor predictable because of the rapid development in practice and in academia. This leads us to speculate that conducting a similar research project at a later point in time has the potential to generate different results. Further, because there are different political, societal, and environmental difficulties in different countries, we recognize that it would be hard to apply the same study in a different geographical area. This decreases the reliability and generalizability of the results.

Data derived from an interview is dependent on the relationship between interviewer and participant (Johannesen et al. 2016, p. 36). Therefore, in the pilot interviews we practiced our own body language, voice, and vocabulary to become comfortable in the interview setting to

mitigate the participants not understanding us (Dalen, 2013, p. 92-94). This made it easier for us to ask follow-up questions and dig deeper in the participants' reflections. Further, because of the nature of the interviews, and potential business secrets, the interviews were anonymous. We have reason to believe this increased the reliability because the informants could speak freely.

3.2.2 Ethical considerations

The thesis is based on the research ethical guidelines (NESH, 2019) to ensure the necessary ethical considerations, rules, and judicial policies were followed. We first had the project approved by the Norwegian Center for Research Data (NSD). That entity determined the project to be in line with current privacy regulations (NSD, 2021). We then obtained voluntary written consent from each participant.

The data was handled confidentially, and we emphasized that the data would not be traceable. In the beginning of the interviews, we reiterated what had been specified through prior email correspondence: 1) interviews are anonymous, 2) participants could withdraw at any point from the study without explanation, and 3) we asked explicitly if recording the interview was acceptable to each participant and requested each one to verbalize their consent. We did not record with video to avoid unnecessary recording of the participant. Instead, one of the interviewers had their recorder visible in the video screen to show the participant we were recording by audio.

4. Findings and analysis

This section presents and analyses the findings from the semi-structured in-depth interviews with impact investors and experts. As described in the previous section, the interviews focused on the evaluation of sustainability in business models. According to our findings, the participants evaluate companies based on various factors, both sustainability driven and not. The latter includes a financial assessment. A financial assessment, according to our participants, consists of the value proposition, financial sustainability, and the startup's knowledge and adaptability. Sustainability driven factors include an impact assessment and its importance in relation to a company's value proposition. The section discusses additional factors considered by the participants when making an impact assessment: net impact, prioritized problem, the scope of the contribution, and measuring and maximizing the impact.

These factors were extracted from the interviews. We present the findings in a set of themes that each presents propositions. Finally, they are summarized in a framework for evaluating sustainable business models through an impact investing perspective.

4.1. Financial assessment

Our findings show that the participants make financial assessments in a manner that is similar to investors evaluating traditional investments (Šimić, 2015). However, the impact investors distinguish themselves from traditional investors by having an impact assessment added to the evaluation (GIIN, 2013a; Louche et al., 2012; Höchstädter & Scheck, 2015, p. 44). The participants evaluate both impact and financial elements before making an investment to ensure that the company can survive financially and create the intended impact. One of the participants states, "*When we assess companies, we have a financial due diligence and an impact due diligence*". As described in the theory section, due diligence is a thorough assessment of a company (Chen, 2021).

4.1.1 Financial sustainability

Proposition 1: A sustainable business model is one that can survive financially over time.

To settle on a common understanding of the term, we asked the participants if they could describe what a sustainable business model meant to them. We found that the majority of the

participants related the term sustainable business model to a business that can survive financially. One participant stated, "If you do not have a sustainable business model, you do not have a business that lives on its own". The participant explained that unless revenue exceeds expenses, it is not a sustainable business model. "It has to be a financially sustainable business model that provides the basis for creating lasting change". In other words, this participant linked financial sustainability to sustainable business models by saying that to create a sustainable business model, you have to be financially sustainable as well. The word sustainability has different meanings in different contexts. We did not want to lead the participants toward any given interpretation of the term, so we left the question openended. Unprompted, each of the impact investors referenced financial sustainability. The participants felt strongly about the need for financial sustainability to deliver the intended positive impact.

The participants further described some important factors with respect to financial sustainability. First, one of the participants described that it might take some extra time to reach financial sustainability for an impact startup, *"Financial sustainability will appear in the long run if you manage to create impact for the target group and the customer you provide a service to"*. Second, the majority of the participants described the importance of knowing the market potential and the customer's willingness and ability to pay in order to achieve financial sustainability. *"We must see that there is an ability to pay and a willingness to pay in the market"*. Without a viable customer base, a business will not secure sustainable income and will not be financially sustainable (Osterwalder, 2014). Another participant emphasizes, *"You need to know that there is a need for the service you provide. If no one wants to buy that service, there is no money in the cash register and you will not receive the value either. You have to have the need, otherwise there is never any sustainability". These considerations indicate that an impact investor evaluates if the startup can achieve financial sustainability.*

4.1.2 Business model and value proposition

Proposition 2: The business model is the foundation that creates the value proposition.

Overall, the participants describe a business model as a presentation of the company as a whole. As one of the participants stated, "*We look at the business model as the whole*

company. The business model is an example of how the company creates value". In the participants' view, it can change to create the intended impact. Further emphasized with this participant's view on a business model, "*I assume that the business model is wrong*". However, the participants describe it as a motor to reach the value proposition, "*How to get to the goal is the business model*".

When looking at how the literature presented in section 2, described a business model, we can see a difference. A business model defined by the literature is how a company creates, delivers, and captures value (Osterwalder & Pigneur, 2010, p. 14). The participants focus more on the value proposition than the business model in the evaluation, "*The foundation of the business model has to be the value proposition because that is where the impact is created*". According to one participant, the value proposition is, "*simply put, what you answer when someone asks you, what do you do*?"

The participants describe the value proposition as the center of the evaluation of a business. However, they do not see the value proposition as an integrated part of the business model like the literature suggests. "You build the business model around your value proposition". Our participants indicate that the value proposition is the goal, while the business model is described as the strategy of how to reach the goal. "In the strategy, you set the level of ambition of the company based on the social value creation you want to achieve. How to get to the goal is the business model". This could indicate that the business model is a means to reach the value proposition.

4.1.3 Value proposition

Proposition 3: The participants evaluate if the impact creation is embedded in the value proposition.

The participants actively seek business models where the social or environmental intention is embedded in the value proposition. *"You have a problem and a solution to that problem. ... Therefore, I think the framework of value proposition into impact investing is important".* The participants seek startups whose goal is to solve social or environmental problems -- meaning that their product or service has a positive impact in itself. It is not enough that the impact is merely a *"side service"* to the value proposition. As another participant points out: *"Does the business model actually deliver impact in itself?"*. This underscores the fact that the value

proposition is at the core of the business and that the business model is the strategy to reach the goal, as proposition 2 proposes. Chou (et al., 2015, p. 50) supports this concern and explains that sustainability is an integrated part of a sustainable business company's value proposition. The value proposition is the core of the business model and the business model is the way of achieving the value proposition (Maurya, 2012; Osterwalder et al., 2014).

4.1.4 Knowledge and adaptability

Proposition 4: The participants evaluate the knowledge and adaptability in regards to change the business model according to the market

The participants emphasize that it is normal for early-stage startups to make changes to their business model. They consider this typical given the timing of the investment in the early-stage startups. "*I assume that the business model is wrong*". The participants describe that early-stage companies are working from hypotheses and assumptions, which means their strategies and models have not yet been validated by customers and the market in which they seek to operate. The businesses get evidence of what works and what doesn't after entering the market and operating in it. They can then make alterations to their strategy or value proposition accordingly. One of the participants describes that, "*It is possible that they (early-stage impact startups) are successful with their business model, but from experience, we know that companies have to go through a lot of things. Because you test the business model when entering the market, interacting with the customers and how the team works"*. As the participants describe, changes in the business model will appear as the market is developing.

Further, the participants describe the importance of gathering and constantly searching for knowledge. A startup is operating under extreme uncertainty (Ries, 2011, p. 54) which requires constant knowledge development. One of the participants highlighted the importance of knowledge about the market, *"I think that's the most important thing; understanding the market in which the company operates. Based on that, it understands the size of the market and the stories of the target group".*

Further, one of the participants expressed the need for knowledge about the problem the business is intending to solve. "*It requires quite a bit of knowledge. And it's about problem*

understanding. What problems am I trying to solve? What are the root causes? Be open to the fact that you need more data to understand the problem". Our findings therefore indicate that knowledge is an important factor for impact investors.

Moreover, the participants address another factor that applies directly to the team behind the business. A startup team executes the business model to stay on track with the value proposition and make alterations (McCreless, 2017). "*Companies must adapt to stay on track with the future*", and "*The team must manage with changes in the market*", the participants address the adaptability of the team. As the market changes rapidly, the business team needs to be adaptable. Many participants further highlight the importance of the team, "*We exclude companies that do not have a team we believe in, because teams are the most important factor*". Ultimately, the participants will not invest in the company if they do not believe in the team. In fact, one of the participants said, "*if we do not have faith in the team, it does not matter if the solution is good*."

The participants emphasize that the team behind the business have to discover the market changes, apply knowledge and experience to solve them, and know when to pivot if necessary. These are important factors when evaluating a company.

4.2 Assessing Impact

Proposition 5: Impact assessment is part of the evaluation of an impact startup.

The participants highly emphasize the importance of evaluating a company's impact creation. "What actual **changes** does the company create?", "How much **change** have they created?", "The key thing is **measurement**", "Is the impact **measurable**?". These four quotes illustrate their focus on the impact the company creates and the measurability of that impact.

Our third proposition was that "*the participants evaluate if the impact creation is embedded in the value proposition.*" The participants highlight the need for an impact assessment of that impact creation. As an impact investor, the intention is to achieve both social and environmental impact in addition to a financial return (GIIN, 2021; O'Donohoe et al., 2010). This part of the results focuses on assessing the impact created in the value proposition. Impact assessment is described by the literature as a process of evaluating the effect the company has both social and environmental, positive and negative, intended and unintended (Impact Management Project, 2021). All the participants emphasized the importance of impact assessment while discussing how to evaluate sustainability in a business model. The participants further explained different factors that they see as important when assessing impact. These factors are described in the following sections, under propositions 5a-5d, and are as follows: net impact, prioritized problem, contribution, and managing, measuring and maximizing impact.

4.2.1 Net impact

Proposition 5a: The participants evaluate if the companies deliver net positive impact.

The first factor of an impact assessment is to evaluate if the company makes a net positive contribution. "You should search for truth and result in a new way. Is it net positive what you are doing? Yes or no?" The participant expresses the term **net impact**, a measurement used to assess the sum of the positive impacts of the activity and the negative impacts of the activity (positive outcomes + negative outcomes = net outcome) (GIIN, 2021). The investors strive to create net positive impact. In short, the impact must do more good than bad. This factor is crucial to "intentionality," one of the characteristics presented in the theory of an impact investor has to contribute a **net** positive environmental and social impact along with a financial return in investments (GIIN, 2021, p. 2). Both the literature (GIIN, 2021) and our participants recognize net impact as an important measurement for impact investors to consider.

Further, net impact can describe the difference between the terms "sustainability" and "impact". Sustainability, according to Brundtland, defined in section 2, is about doing no harm, whereas impact is defined as an outcome caused by an organization that can be both negative and positive, intended or unintended (2021). As the participants are impact investors and experts, sustainability might not satisfy their intention. With that said, it is essential to note that this perspective depends on the type of impact investor. They have different motivations and there seems to be a difference based on where they place themselves according to the investment spectrum described in section 2. The participants represented in

this thesis might have varying motivations and perspectives. However, we can conclude that they all are searching for companies that deliver a positive net impact.

In the process of evaluating the net impact of a company, the participants address another dimension: externalities. An externality is an unintended positive or negative outcome on a third party, and not part of a transaction. The participants express the importance of looking at any externalities a company can trigger because an enterprise's activities can potentially always generate unintended externalities. "We are not just looking to see if it contributes in a positive way, but in a negative way too. We look at emissions and value them.". The participants describe that in order to determine if a company's impact is net, they must consider the company's negative contributions. A factor the participant addresses in this quote are the potential emissions a company could create. This is seen as an externality and must be accounted for in order to know if the company has a positive or negative outcomes. "We look at the risk side, but also at the potential upside of a company". The participants address the importance of looking at the potential risks, both positive and negative. By managing the impact, the positive contributions can be increased and the negative contributions can be reduced (Impact Management Project, 2021).

The participants also consider the risk of not achieving the intended impact when evaluating. "You also have to consider if you are going to assess the impact in it, then you also have to say okay, if you do it then it will make someone feel they get less ownership of solutions X." When contributing to a specific target group, it might affect other underserved groups in a negative way. The Impact Management Project also addresses the "**risk**" of not achieving the intended impact as one of the five dimensions of evaluating impact as presented in section 2 (Impact Management Project, 2021).

4.2.2 Prioritized problem

Proposition 5b: The participants evaluate if the problem is prioritized by society.

The participants address the need for the impact created by the company to respond to a prioritized social problem. The participants are concerned with solving a significant social problem, not a problem that has other potential solutions. An impact investor takes a risk with

investing in these types of startups, therefore it is crucial to know that the environmental or social impact return is for a greater outcome for the society.

Several of the participants pointed this out:

"The problem must be **prioritized**. It must be important enough" "How **important** is the problem they are addressing? What impact does it create?" "Contribute to solve a **bigger societal problem**"

One of the participants describes that using the United Nations' SDG's is a way to analyze if the problem is prioritized by the society. "*The way I assess this is that all the 17 Sustainable Development Goals describe some important problems that need to be solved. Some are more important than others*". There are probably several ways of doing this, and IMP also supports the participants' decision of following the SDGs. Moreover, IMP also points out that it is possible to use the stakeholder's view on the prioritization of the problem (Impact Management Project, 2021).

4.2.3 The scope of contribution

Proposition 5c: The participants evaluate the contribution of the impact based on its scale, depth, and duration.

The next aspect of evaluating impact that the participants point out is categorized as the scope of the contribution. The participants describe three different aspects related to this dimension:

- (1) Scale, in terms of the number of people experiencing the outcome;
- (2) Depth of the outcome; and
- (3) Duration of the outcome.

These factors are related. When asking one of the participants what was most important in regards to evaluating the sustainability of the business model, the participants present these three factors in tight relation to each other:

"There are a few factors (...) The more people you are involved in positively influencing, and the greater the impact on these people you have, and how long in the future you will influence these people."

This statement succinctly summarizes the next section which consists of three dimensions (1) **scale,** (2) **depth,** and (3) **duration.** The category "how much", in section 2, by Impact Management Project also consists of these three dimensions and highlights the importance of seeing these factors in relation to each other (Impact Management Project, 2021).

The first factor is **scale**. The participants address the aspect of how many people that experience the impact. "You must do something that means something to many, otherwise there is no point". Another participant also addresses the same aspect. "How many people do you help?". The participants are concerned with how many people will experience the intended impact and state that the more people you can affect, the higher impact you will create. Importantly, this factor cannot be used alone; it must be considered in relation to the next two factors: depth and duration (Impact Management Project, 2021). Moreover, a participant even points this factor out as another way of determining if the company is solving a prioritized societal problem: "How many people you have an impact on, for example, can be a way of looking at it". The participants look at the number of people affected when evaluating the impact and priority.

The next factor the participants highlight is **depth**. "...*[I]f I got another button on my shirt compared to you saving my life, the significance of the impact is different*". Depth means the degree of change experienced by stakeholders. This factor should, like scale, be seen in connection to the other factors. One company, such as TOMS® might affect 95 million people with new shoes (Lesavage, 2021), and another company like Generasjon M might affect 50 elderly persons through teenagers engaging in social interactions with them.

Lastly, the participants stress the importance of a lasting change. The **duration** is defined as the period for which stakeholders experience the outcome (Impact Management Project, 2021). "Also, one must have an ambition to make a lasting change ... dare to focus on the problem and want to make a lasting difference for a group". As the participant states, the results from the activity should be a change that actually leads to a long-lasting result for the target group (Impact Management Project, 2021). A long-lasting result means, according to

IMP (2021), that the change will last as long as the possibility of being brought back to the preceding situation is minimal.

4.2.4 Managing, measuring, and maximizing the impact

Proposition 5d: The participants evaluate if the company's impact can be measured.

Measurable impact is one of the criteria for assessing impact that all the participants point out. When impact is measurable, investors are able to collect data on the impact's effect. Impact can be measured through qualitative or quantitative data. Traditional investors look for evidence of financial return. While impact investors look for a financial return, they also look for a return in impact. As they look for a return on impact, they are concerned about evidence, which is another core characteristic of an impact investor as presented in the theory section above.

"Not just reporting on financial return, but also doing it on human, social, and natural capital level. Basically measure to what extent you are depleting or contributing to human, social, and natural capital level. You have to internalize those thoughts and ask yourself whether your business model works."

The participant addresses that there is a need for measuring the environmental and social return. When impact is measured, an entity can manage its impact in order to maximize it (Impact Management Project, 2021). Another participant pointed out the need for managing impact, "*Maybe adjust some factors in the business model in order to maximize the impact*".

One of the participants pointed out, "*The startup doesn't explicitly have to say and point out that they have a measurable net positive impact, but we have to see it and believe in it*". The participant addresses that the impact doesn't have to be measurable at the investment time, but it does at some point. Another participant addressed that, "*The impact must be measurable, positive and additional*". An impact investor is concerned about evidence on impact, as addressed earlier in this section. However, as the impact investing spectrum described in section 2, some investors are more willing to sacrifice financial gain to achieve social and environmental impact than others. These two last quotes can illustrate this theory in practice, as the last quote could illustrate an impact investor who is more concerned about

the impact of the previous quote. Either way, as the theory also describes, they all have a common goal of creating social and environmental impact in addition to obtaining a financial return (O'Donohoe et al., 2010; GIIN, 2018; Drexler, Noble & Bryce, 2013).

4.3 Summary of the propositions

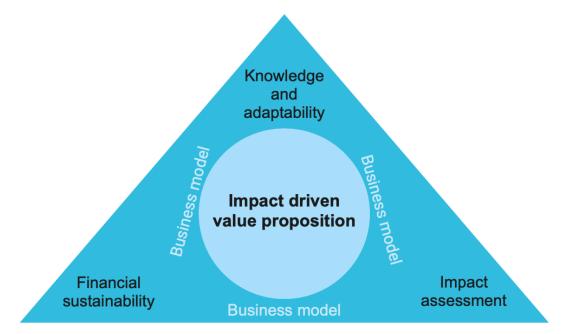


Figure 2: Evaluating Sustainable Business Models through the perspective of impact investing

Through analyzing the different propositions, we are able to present the findings in a framework. It suggests a holistic view on how to evaluate sustainable business models from an impact investing perspective. This section describes how the framework portrayed in figure 2 was developed and what role the propositions played in creating it.

First, the participants had a different perspective on sustainable business models than the literature presented in section 2. Our findings indicate that **financial sustainability** is a fundamental part of their evaluation processes. This finding led to the creation of the first proposition and, in turn, the first corner of the framework.

Second, the participants do not use the **business model** as a framework for the evaluation process. It is the motor that creates the value proposition addressed in proposition two. They

describe the business model as the motor running the value creation, delivery, and capture of the business. Thus, the business model represents the darker blue areas in the framework.

Third, as proposition 3 states, impact is embedded in the value proposition, and that is the "core" of their evaluation. As such, value proposition is the core of the framework, named **impact driven value proposition**.

Fourth, the top corner of the framework is **knowledge and adaptability** and it derives from proposition 4. The theory presents these factors as part of a financial assessment, however the participants indicate that this factor is separate because of its importance in the evaluation process.

Finally, proposition 5 is **impact assessment**. The participants indicate that this factor assesses the impact created in the value proposition and sees how the company manages it. It does not assess all the other dimensions of a business model like the literature suggests. The participants further presented different factors in an impact assessment, but, since we propose a holistic approach to evaluating a sustainable business model, we have not included the sub-propositions in the model.

5. Discussion

This section discusses the framework presented in Figure 2. It addresses the factors in the model and relates the factors to theory. The framework creates the foundation for answering our research question of this thesis:

"What main factors are used to evaluate startups with sustainable business models through an impact investing perspective?"

The first factor represents the center of the evaluation and is described by our participants as an **Impact driven value proposition**.

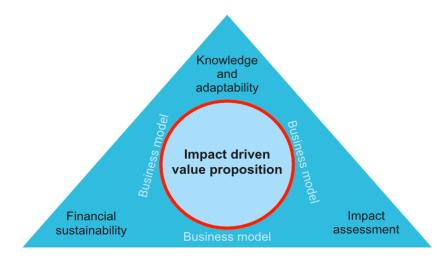


Figure 2a: Evaluating Sustainable Business Models through the perspective of impact investing - Impact driven value proposition

According to the participants, the social and environmental impact must be part of the value proposition that is created and delivered through the product or service the company delivers. Because the literature (Aagaard, 2018; Boons & Ludeke-Freund, 2013; Emerson, 2003; Bocken et al., 2015) and the participants both address that the sustainability creation has to be embedded in the value proposition, we suggest that it should be the center of an evaluation framework. However, the term presented in the framework is impact driven value proposition, and differs from the terminology used in the literature, "Sustainable value proposition. The participants describe a value proposition that is driven by the impact creation. In contrast, Boons and Lüdeke-Freund suggest that a sustainable value proposition is a product or service that earns economic benefits while retaining the environment and developing society (Boons

& Lüdeke-Freund, 2013). Boons and Lüdeke-Freund's perspective diverges from our participants' perspective because it focuses on economic benefits while preserving impact. Their perspective's main focus is economic benefits, because sustainability is additional to the value proposition (Boons & Lüdeke-Freund, 2013). Our participants seek an impact driven value proposition, which is defined as when the product or service created by a business intends to solve a social or environmental problem. Informed by our participants,we propose a new aspect of sustainable value proposition: an impact driven value proposition.

The literature describes the value proposition as the "core of the business model" (Maurya, 2012). The participants also emphasize the importance of the value proposition. However, literature differs from our participants' perspective because it sees the value proposition as a separate part, described as the goal of the business model.

The literature on sustainable business models is derived from literature on business models (Jørgensen & Pedersen, 2018; Aagaard, 2018; Bocken et al., 2015; Lüdeke-Freund & Dembek, 2017). Traditional business models did not account for negative externalities as we do today. Because the foundation is different today, it could strengthen our findings indicating that impact investors have a different perspective in the evaluation. However, these different views might only indicate different perspectives on the same phenomenon. Yet, an explanation could be their different view on the business model, which leads us over to the next factor in the framework.

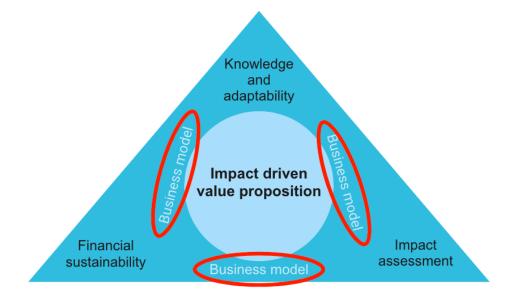


Figure 2b: Evaluating Sustainable Business Models through the perspective of impact investing - Business model

The business model is placed in between all factors in the framework, and is represented by the dark blue area. According to our participants, the business model describes the activities the company executes in order to achieve the intended impact driven value proposition. The business model connects the other factors in our model and is situated accordingly. According to Osterwalder and Pigneur (2010), a business model is a description of the company's value creation, delivery, and capture. It is described as a snapshot of a specific moment in time, something that our participants emphasize as well. However, the framework on business models has not focused on sustainability. Our findings indicate that the equation for sustainable business models looks different to a traditional business model. Because the product itself has to deliver sustainability, and that the three dimensions: financial sustainability, knowledge and adaptability, and impact assessment make out the business model.

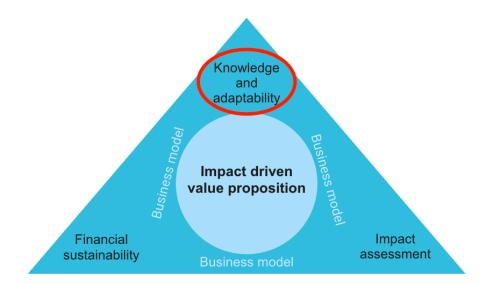


Figure 2c: Evaluating Sustainable Business Models through the perspective of impact investing - Knowledge and adaptability

The first cornerstone of the framework is **Knowledge and adaptability**. According to the participants, this factor influences the other factors, which is why it is placed in the top corner. Our participants suggest that the chance of achieving the intended impact and financial sustainability increases as a result. This factor influences the others because it calls for constant consideration of the problem and the market and according adaptations. The team behind the business is included in this dimension, as they are actors responsible for accruing knowledge and practicing adaptability. Our participants are not the only ones to

emphasize the value of teams in an evaluation: it is also common for other investors, such as venture capitalists (Šimić, 2015). Knowledge and adaptability influences a businesses ability to be financially stable and to make an accurate impact assessment, and, therefore, heavily influences the company's ability to deliver on an impact driven value proposition.

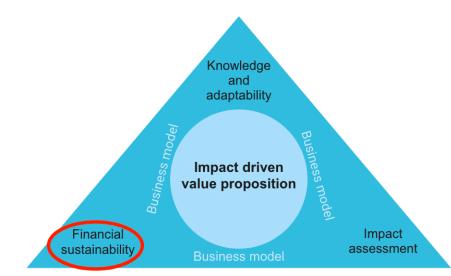


Figure 2d: Evaluating Sustainable Business Models through the perspective of impact investing - Financial sustainability

Next, the participants describe the need for **financial sustainability** in order to deliver the intended impact. As addressed in the theory section, there is no recognized method for doing a financial assessment from an impact investing perspective. However, the perspective of impact investors can be aligned with venture capitalists that have a detailed and comprehensive evaluation process as mentioned in the theory section (Cohen, 2020; Šimić, 2015). The literature on venture capital suggests that the financial assessment process includes considering factors such as the entrepreneur, the product or service, the market, and financial considerations (Kollmann & Kuckertz, 2010). These factors differ from our participants' perspective as they mainly focus on potential for financial sustainability.

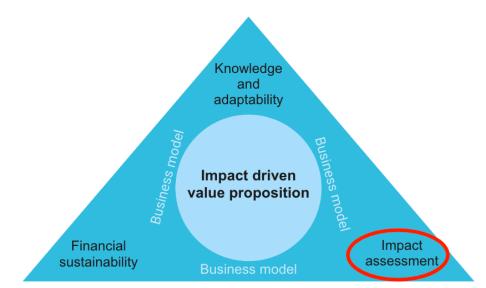


Figure 2e: Evaluating Sustainable Business Models through the perspective of impact investing - Impact assessment

The last factor of the framework is **impact assessment**. The participants describe this part of the evaluation as an assessment of the impact the company creates through its impact driven value proposition. As presented in the theory section, an impact assessment is not part of the evaluation tool proposed by Aagaard (2018). It is highlighted as a subject worth exploring because several researchers argue that impact assessment could be used as a tool for exploring new ways to improve financial, environmental, and social impact (Evans et al., 2017; Rauter et al., 2019; Aagaard, 2018, p. 17).

The participants see the need for evaluating the impact in the impact driven value proposition, which represents the source of impact. For example, TOMS® shoes can try to take peripheral measures to make an impact, but we need to focus on their value proposition. The question then is: do the shoes, sold and donated, contribute to a net positive social or environmental effect? If the value proposition does not create net positive impact, then our findings indicate that it is not an appealing investment object for the impact investors.

This framework captures the conclusions of our study, and focuses on the relations between the factors in Figure 2. Our findings indicate that the factors within the framework are essential through an impact investing perspective. In the interviews, our participants indicated that they would not invest in a company that failed to address even one of these factors, and that an impact driven value proposition was necessary for them to even consider evaluating the other factors. The next part of this thesis discusses theoretical and practical implications, future research, and limitations of the study.

5.1 Theoretical and practical implications

We have studied the impact investing field in Norway to explore how impact investors and experts evaluate sustainable business models. Beyond what theory implies, our findings may contribute to a broader understanding on the evaluation of sustainable business models. More research is needed to verify and generalize these claims. The results provide a new way of considering the process for evaluating sustainable business models. The participants consider the impact driven value proposition most essential, followed by financial assessment, knowledge and adaptability, and an impact assessment.

There is a notable discrepancy between the participants and the literature. There are multiple explanations for this discrepancy. For one, the investors look at early-stage companies that may not have developed their business model, because they do not have a business yet. In turn, it could explain why they are not mentioned by literature. Also, impact investors have a different focus than traditional investors, so the expansive research on traditional investors does not apply. Further research is needed to explore the difference between traditional and sustainable business models. The findings in this study can have practical implications for startups seeking funding from impact investors, for stakeholders working with impact startups, and for impact investors.

First, investors interested in impact investing could find our proposed framework useful. This framework will help impact investors distinguish between companies with an impact driven value proposition and those without one.

Entrepreneurs and startups who are seeking investments can also benefit from the framework. The framework can guide startups toward establishing impact at the core of their value proposition. Further, when preparing to meet an impact investor, having an idea of what the impact investors are looking for will give them an advantage. With the framework in mind, they know to gather relevant intelligence on finances and impact to show the investors they possess relevant and useful knowledge and are open to input. Last, we believe the framework may be beneficial to stakeholders that support impact entrepreneurs. It can help support stakeholders like accelerator programs or incubators by providing entrepreneurs with information, knowledge and know-how on how impact investors operate. However, because our study was limited to Norwegian impact investors and experts, we recognize that these findings are not necessarily generalizable to a broader global market. This is a narrow sample. Still, we believe our study could be of value to actors in the field of impact investing. We will expand on our study's limitations in the following paragraph.

5.2 Future research and limitations

The field of impact investing in Norway is developing quickly. To our knowledge, this thesis is the first study that aims to look at sustainable business models through the perspective of impact investors. Therefore, there are several limitations to our study, and great potential for future research to look at aspects of the field that remain unexplored.

First, there are limitations related to the sample size of four impact investors and four impact experts. There are different types of impact investors, and our sample represents different groups. But, our investors have a lot in common: they all operate in Norway and are recognized impact investors according to our core characteristics analysis. However, they are not representative of all impact investors. Interviewing more investors in different groups could potentially have strengthened our study. Hence, a larger study is needed to generalize the findings. Future research could benefit from interviewing additional investors. However, seeing that we reached a saturation point leads us to believe that the sample was representative for the group interviewed.

Second, our goal was to observe how impact investors evaluate sustainable business models. However, we found that the term sustainable business models has different meanings to impact investors and academia. This discrepancy would be interesting to explore further through in-depth interviews with additional impact investors. Interviews with others who could benefit from a mutual framework, like startups and governments, could lead to greater focus and consensus in the field. Additionally, we found that impact assessment is a tool used by impact investors when evaluating startups. Future research could look at how this evaluation tool may be useful to literature on sustainable business models. It could be interesting to research the extensiveness of impact assessment, but a larger sample than the one we studied would be needed to do so.

Third, we find it important to address the participants' perspective on sustainable business models because it differs from the literature presented in section 2. Scholars present a sustainable business model as one that creates significantly increased positive or reduced negative effects on social and environmental challenges through capturing, delivering, and creating value (e.g., Bocken et al., 2014; Stubbs and Cocklin, 2008; Wells, 2013). Our participants agree with the goal set by the researchers, but they have disagreements regarding the terminology: they see a sustainable business model as a financially sustainable business model. Given the significance of the term in academia and in practice, this discrepancy might lead to miscommunication and resulting consequences in the development of the fields. Therefore, we suggest that more research is needed to form a common definition of the term sustainable business model.

Finally, impact investing as a field is constantly developing. This makes it challenging for research to keep up. We see the gap between sustainable business models and impact investing as an area with great research potential. Our hope is that this thesis can contribute to awareness and discussion in the fields on sustainable business models and impact investing, ultimately leading to an increased interest in moving capital to solve social and environmental challenges.

6. Conclusion

The fields on impact investing and sustainable business models are developing quickly. Through eight in-depth semi-structured interviews with impact investors and impact experts, we propose a framework for evaluating sustainable business models through the perspective of impact investing. The framework includes four main factors that should be considered when evaluating an early-phase impact startup from an impact investing perspective. The framework does not use a business model as its focus, but rather centers an impact driven value proposition, with the business model as a motor to create the intended impact, and the three corners: knowledge and adaptability, financial sustainability and impact assessment.

Finally, we hope this study can inspire additional research on sustainable business models and impact investing.

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8.Appendix

Appendix 1: Interview guide: Evaluation of sustainable business models

Present ourselves.

Present the study, and why we have chosen to talk to the participant.

A. Definition of important concepts

- a) This part of the interview will be about definitions of the terms we use.
- b) How would you define sustainability?
- c) How would you define a business model?
- d) How would you define a sustainable business model?
- e) How would you define a sustainable company?

B. Evaluation of sustainable companies

This part of the interview will be about how you and your company assess whether the company is sustainable, and your experiences and experiences related to this.

- a) In practical terms, how do you assess whether a company is sustainable today / your own company?
- b) How do you evaluate sustainable business models?
- c) What do you think is missing when it comes to evaluating sustainable business models?
- d) What do you think is good when it comes to evaluating sustainable business models?
- e) How does whether the company is sustainable affect their investments (to the investor)?

Support questions:

If we have understood you correctly.. How do you experience that? Can you tell us a bit more about that? What do you mean by that? Can you elaborate? Do you have an example?



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