SCALING SOCIAL BUSINESS MODELS: A LEAN STARTUP PERSPECTIVE

Master Thesis MSc. Business Administration

Tilka Somi
MSc Business Administration
University of Twente
June 2021

Master Thesis
Scaling Social Business Models: A Lean Startup Perspective

June 2021

Author

Name	Tilka Somi
Student number	[redacted]
Contact	[redacted]

Institution

University	University of Twente, Enschede, The Netherlands
Faculty	Behavioural, Management and Social Sciences
Study Programme	MSc. Business Administration
Track	Entrepreneurship, Innovation & Strategy
Course	Master Thesis

First Supervisor

MSc. X.Stegehuis
PhD Candidate
University of Twente, Enschede, The Netherlands
[redacted]

Second Supervisor

Dr. T. Oukes
Assistant Professor
University of Twente, Enschede, The Netherlands
[redacted]

Acknowledgements

In this document is my master thesis, written to complete my Master of Science in Business Administration with the specialisation track Entrepreneurship, Innovation & Strategy. Before you begin reading this master thesis, I would like to take the opportunity to thank some people who made it possible to write it.

First, I would like to thank my supervisors, MSc. Stegehuis and Dr. Oukes, from the University of Twente, for their guidance during my thesis. They challenged and supported me with their feedback, ideas and expertise time after time to bring my thesis to a successful conclusion.

Further, I would like to thank participants from the social enterprises who generously agreed to participate in the research, for their time and honesty. Without these individuals, this research would not have been possible.

Last but not least, I would like to thank my family, friends and boyfriend for their support, trust and patience. This process was not without its bumps, but they have motivated me throughout the writing process and have helped me get the best out of myself.

Tilka Somi
Enschede, June 2021

Abstract

Globally, the importance of social enterprises that efficiently provide for both social and economic interests increased. Their succes is linked with their ability to scale their social business models as a means of increasing their social impact. However, social enterprises face high levels of uncertainty in their scaling process, which requires an emergent approach, whereby responding to unexpected events is central. Therefore, this study approaches the social scaling process from the emergent approach lean startup, whose core is designed to operate under uncertain conditions. How the lean startup approach can contribute to scaling social enterprises is explored through four in-depth studies. First, it is shown that lean startup enable social enterprises to eliminate the uncertainty of their product or service and prevent wastage of resources in the scaling process. Second, it is shown that addressing the challenges in the scaling process may require a review of the enterprises' business model. Since changes to business models are accompanied by uncertainty and unknown knowledge, the study claims that lean startup can support the scaling process by shortening the process of adapted or new services in business models by quickly ascertaining the viability of proposed adaptations.

Keywords*: social enterprises, social business models, scaling social business models, lean startup, lean startup principles*

Table of Content

Acknowledgements III

Abstract IV

1. Introduction 1

1.1 Background 1

1.2 Importance 2

1.3 Research gap 2

1.4 Purpose of the study 3

1.5 Contributions 3

2. Theoretical background 3

2.1 Social business models 3

2.2 Scaling social business models 5

2.3 The lean startup approach 6

2.4 Lean startup in the scaling process 7

3. Methodology 7

3.1 Research strategy 8

3.2 Case selection 8

3.3 Data gathering 9

3.4 Data analysis 10

4. Case study results 12

4.1 Case study Medides 12

4.2 Case study The Social Gifter 13

4.3 Case study Social Trust Pension 15

4.4 Case study Agridex 17

4.5 Cross Case analysis 19

5. Discussion 20

References 23

Appendixes 28

Appendix A: Overview of the participants 28

Appendix B: Interview protocol 29

Appendix B: Coding schemes 30

Appendix C: Interview transcripts 30

1. Introduction

1.1 Background

Emerging enterprise forms of social enterprises continue to attract interest in practice and academia (Casasnovas & Bruno, 2013; Michelini & Fiorentino, 2012; Tykkyläinen & Ritala, 2020). In the capitalist system, two main types of enterprise can be distinguished. Profit-driven enterprises focus on maximising profits and, therefore, shareholder value, while non-profit enterprises focus on achieving social goals (Yunus et al., 2010). The separation between profit-driven enterprises and non-profit enterprises has resulted in the failure of profit-driven enterprises to efficiently meet social needs, while non-profit enterprises have been met with increasing financial pressure (Wilson & Post, 2011; Yunus, 2006). Therefore, there is growing interest in social enterprises that combine social and financial goals (Tykkyläinen & Ritala, 2020).

Social enterprises can be defined as companies for which social objectives (e.g., in education, welfare and health care; Weber et al., 2012) serve as the primary goal, but at the same time aiming to maximise profits to benefit society (Alter, 2007; Bocken, Fil, & Prahbu., 2016; Michelini & Fiorentino, 2012; Spieth, Schenider, Clauß, & Eichenberg, 2018). They have a hybrid approach, as they borrow from both profitable enterprises and non-profit enterprises: they borrow the profit orientation from profit enterprises and the social orientation from non-profit enterprises. A social business is designed and managed as a regular business enterprise, with products, customers, markets, expenses and revenues. However, social enterprises sell goods and services to repay the owner's investments and do not pay dividends. This makes them self-sufficient, with the primary goal of providing social value (Yunus et al., 2010). A promising perspective that aims to understand and articulate how social enterprises are configured to create and deliver social value is the business model (Tykkyläinen & Ritala, 2020). Like traditional business models, social business models map out the value created, captured and delivered by the social enterprise, as well as what income is generated to deliver this value (Müller, 2012). However, the unique feature of social business models is the broader understanding of value that is included, which encompasses social and economic value (Alter, 2007; Massa et al., 2017).

The success of social enterprises in achieving their social ambitions is depends on their ability to scale their social business models (Desa & Koch, 2014; Dees, Anderson, & Wei-skillern, 2004). The success of social enterprises hinges on their ability to create social impact and contribute to social change as opposed to achieving a competitive advantage. Therefore, social enterprises' ability to scale is a key metric in analysing their success (Dees et al., 2004; Tykkyläinen, 2019). Scaling is the process of increasing the social impact created by a social enterprise to better meet social needs (Bloom & Smith, 2010; Desa & Koch, 2014; Heinecke & Mayer, 2012 Weber et al., 2012). The importance of scaling in social enterprises has been confirmed by multiple studies (Bloom & Smith, 2010; Casasnovas & Bruno, 2013; Dacin, Dacin, and Tracey 2011; Short, Moss, & Lumpkin 2009; Spieth et al., 2018), though it has also been identified as a major challenge in other research (Bloom & Chatterji, 2009; Bocken, Short, Rana, & Evans, 2014; Casasnovas & Bruno, 2013; Mulgan, 2009; Rosca et al., 2017; Waitzer & Paul, 2011). Social enterprises appear to reach a bottleneck and generally remain small (Bacq & Eddleston, 2016; Bocken et al., 2016). Building on this, it is assumed that examining the scaling process is necessary as it enables social enterprises to address societal challenges.

The pursuit of scaling social impact is accompanied by uncertainty (Casasnovas & Bruno, 2013; Dobson et al., 2018; Spieth, Schneider, Glauß & Eichenberg, 2018; Yunus et al., 2010). Many previous studies on the scaling process of social enterprises have focused on a planned approach but have not addressed unexpected challenges that arise in the scaling process. Therefore, addressing societal challenges at scale, according to several authors, requires an emergent approach in which business models are consistently revised and adapted (Alter, 2007; Bortolini, Cortimiglia, Danilevizc, & Ghezzi, 2018; Evans et al., 2017; Sosna, Trevinyo- Rodriguez, & Velamuri, 2010 Yunus et al., 2010). In the literature, the emergent approach, whereby decision-making is a continuous and inductive change process, contrasts with the planned approach, in which decisions are made through an enterprise-wide systematic planning process (Neugebauer, Figge, & Hahn, 2015). Hence, in the present study, the scaling process is examined from an emergent approach to consider the unexpected challenges in the scaling process and provide a more comprehensive view of the scaling process as a whole.

1.2 Importance

To date, there are certain critical issues within society that few can ignore (Wilson & Post, 2011). Globally, and particularly in undeveloped countries, we still face millions of people dying of hunger, people living without sanitation, people who cannot afford education, and many more concerning issues (Hysa, Zerba, Calabrese, & Bassano, 2018). Despite many successful attempts to create a better world, the failed attempts are more. According to Hysa et al. (2018), a fundamental reason for these failed attempts is the division between profit-driven and non-profit enterprises. The separation between these entities has resulted in a system that fails to capture and integrate the many dimensions of human nature (Wilson & Post, 2011). While profit-driven enterprises have failed to efficiently meet social needs, non-profit enterprises face increasing financial pressure. For this reason, it is believed that these enterprises do not longer provide sufficient support to solve social problems (Wilson & Post, 2011; Yunus, 2006). This means that a new system that considers both social and economic concerns is needed (Hysa et al., 2018; Yunus, 2006). This increases the importance of examining hybrid social enterprises in which the two entities are merged to create a better social system. With their hybrid function, social enterprises align with the social purpose traditionally associated with non-profit enterprises and the economic rationality traditionally associated with profit-driven enterprises. The central idea is that examining social enterprises has the potential to address the world's social problems (Wilson & Post, 2011).

1.3 Research gap

In recent years, models and frameworks relating to the scaling process of social enterprises have been presented. Mulgan (2006) found that the sequential phases of idea development, prototyping, learning and adaptation were an important basis for achieving maximum social impact. Meanwhile, Perrini et al. (2010) mapped the process of achieving a successful social enterprise through identification, evaluation, formalization and utilisation, which ultimately lead to scaling. Weber et al. (2012) built a framework based on seven scale components (personnel, communication, alliances, lobbying, monetisation, replication and market forces) to test the possibility of scaling. All these studies documented the scaling process sequentially and from a planned approach (i.e., when a stage cannot be successfully completed, the scaling process ends). Although the planned approaches provide a useful framework, Mulgan (2006) showed that, in practice, the phases are not always sequential. Research has shown that social solutions are often located in uncertain environments (e.g., poorly developed countries), and social enterprises cannot afford to make costly mistakes (Casasnovas & Bruno, 2013; Dobson et al., 2018; Spieth, Schneider, Glauß & Eichenberg, 2018; Yunus et al., 2010). Here, an emergent approach that emphasises uncertainty and recognises that planning can be futile can help illuminate how social enterprises can scale under conditions of uncertainty.

While the utility of an emergent approach has been recognised (Alter, 2007; Bortolini, Cortimiglia et al., 2018; Evans et al., 2017; Sosna et al., 2010; Yunus et al., 2010), little research has been conducted on how social enterprises can withstand scaling their social business models from an emergent approach. Here, Dobson et al. (2018) took an important step by departing from existing models and frameworks and identifying how a social enterprise was able to geographically scale its business model under uncertainty. The authors highlighted continuous business model innovation as a mechanism for scaling. However, the study of Dobson et al. (2018) was based on a single case study of a social enterprise, which focused on tourism, in the developing country Belgium. There remains a lack of evendice as there are no other case studies addressing the same or other social contexts (i.e. low developing countries, different sector). This indicates that there is little empirical research on scaling social business models from an emergent approach. Also, to date, no study has examined how a given emergent approach can support social enterprises to act in more effective ways to scale their social business model. Therefore, the present study aims to expand on existing research and fill this gap in the literature by approaching the social scaling process from the emergent approach lean startup.

Lean startup is an approach whose core is designed to operate under uncertain conditions and where the process towards a scalable business model is central. The approach revolves around efficiently discovering what works and what doesn't work in the business model through experimentation. The cenrtral argument is that lean startup can support social enterprises by efficiently discovering potentially succesful adaptions in the business and herewith reduce the uncertainty of scaling their social business model. The present study argues that by examining the scaling process from the emergent approach lean

startup, this study advances the literature on emergent approaches and provides guidance for social enterprises on how to scale their business models when uncertainty is high.

1.4 Purpose of the study

Since social enterprises mainly operate in uncertain environments and encounter unexpected challenges, the purpose of the present study is to investigate whether an emergent approach, particularly the emergent approach lean startup, can contribute to the scaling process of social enterprises and help increase their social impact. To shed light on how social enterprises can achieve scale, focusing on the role of lean startup, the following research question was formulated:

'How do the lean startup principles affect the scaling process of social business models?'

By answering this question, the present study seeks to provide a new perspective on how social enterprises can successfully scale their business models and provide new avenues for future emergent research.

1.5 Contributions

The scaling process is an important but challenging part for social enterprises. While some research has been conducted on scaling from a planned approach, few studies have considered scaling from an emergent approach. As a result, there is little empirical evidence on how social enterprises should navigate uncertain contexts in their scaling process, which could hinder social enterprises' ability to increase their social impact. By examining in this study how the emergent approach lean startup can contribute to the scaling process of social enterprises, this research contributes to the literature on social scaling from an emergent approach. Here, the scaling process is depicted not as a planned process but as a learning process in which adapting and responding to challenges is key. This research can thus help social enterprises to increase their chance of success in scaling by adopting an approach that is in step with their dynamic environment. Lastly, since deploying the emergent approach lean startup is new, the present research also serves as a foundation for future study.

2. Theoretical background

2.1 Social business models

The business model has been a well-known and growing concept in science and practice for years (Massa, Tucci & Afuah, 2017; Zott, Amit & Massa, 2011). However, the literature does not provide an explicit definition and the concept has taken several forms in the literature, such as a statement, description, representation, conceptual model and a framework (Zott, Amit & Massa, 2011). The definitions range from a way to exploit opportunities by creating value for all involved (Zott & Amit, 2010), a demonstration of the evidence on how the company creates, delivers and captures value (Teece, 2010) and a description of the enterprise and the path to achieving its goals (Massa et al., 2017). A more detailed and operational definition comes from Chesbrough & Rosenbloom (2002) using the following six functions:

- 'articulate the *value proposition*, i.e. the value created for users by the offering based on the technology;
- identify a *market segment*, i.e. the users to whom the technology is useful and for what purpose, and specify the revenue generation mechanism(s) for the firm;
- define the structure of the *value chain* within the firm required to create and distribute the offering, and determine the complementary assets needed to support the firm's position in this chain;
- estimate *the cost structure* and profit potential of producing the offering, given the value proposition and value chain structure chosen;
- describe the position of the firm within the *value network* linking suppliers and customers, including identification of potential complementors and competitors;
- formulate the *competitive strategy* by which the innovating firm will gain and hold advantage over rivals.' (Chesbrough & Rosenbloom, 2002, p. 533-534).

The collective purpose of the six functions is aimed at justifying the financial capital required to realize the model and defining a path to scale the business. Based on the different studies, it can be argued that a business model demonstrates how enterprises are managed to create and deliver value and how their income structure is designed. Moreover, the functions from the definition of Chesbrough & Rosenbloom (2002) are generally combined in the literature into three main elements of the business model: (1) value proposition, which identifies the company's customers and offerings; (2) value constellation, the structure to deliver the identified value proposition; and (3) profit equation, the financial translation of the value proposition and value constellation (e.g. turnover and cost structure) (Bocken et al., 2014; Dobson et al., 2018; Guo, Zhao, & Tang; 2013; Müller, 2012 Yunus et al., 2010). The different business model elements enable enterprises to outline the architecture of their business model (Teece, 2010). Thus, it can be stated that the demonstration of the business models is formed through the composition of the three components value proposition, value constellation and profit equation.

Business models can be approached from different perspectives (Evans et al., 2017). The literature has long focused on business models from an economic perspective, but interest in enterprises with social interests has grown (Geissdoerfer, Vladimirova, & Evans, 2018; Massa & Tucci, 2013; Schaltegger, Hansen & Lüdeke-Freund, 2016; Spieth et al., 2018). Enterprises with social interests (social enterprises) are referred to as financially sustainable enterprises with a focus on creating social value, by mitigating a social problem or preventing a market failure (Alter, 2007; Bocken et al., 206; Dobson et al., 2018; Yunus et al, 2010). The roots of social enterprises were created by movements such as Fair Trade, the driver of fair trade in goods and Community Development Corporations in the United States, a movement that started to stimulate economic growth in a less developed neighbourhood (e.g. job creation and affordable rents). An important characteristic of social enterprises is that profits generated by social enterprises are reinvested in the enterprise in order to achieve the social objectives (Alter, 2007). For this reason, social enterprises are also referred to as self-sustaining companies, as they sell goods and services to cover the company's investments (Yunus et al., 2010). Hence, social enterprises are both market and mission oriented, as they generate profits to simultaneously meet social needs (Alter, 2007; Bocken et al., 2016). With this, a social enterprise distinguishes itself from the traditional profit enterprises, as the profit is generated with the aim of increasing the social or environmental impact and not to maximize the share of money for its own interest. At the same time, the financial characteristic is what distinguishes a social enterprise from non-profit enterprises (Bocken et al., 2016) as non-profit enterprises do not focus their operations on fully recovering their costs (Yunus et al., 2010). Thus, a social enterprise is at the intersection of a traditional for-profit enterprise and non-profit and therefore has a hybrid function in the literature, partly for profit and partly non-profit (Alter, 2007). Social enterprises can be seen as any other regular enterprise as they can enter any desired market because they essentially have the same entrepreneurial mind-set (Alter, 2007; Yunus et al., 2010). Social enterprises are also set up and managed with products, services, customers, markets, expenses and income, but with the main purpose of serving society (Yunus et al., 2010).

A social business model provides an integrated picture of how social enterprises operate to deliver value and generate revenue. From the perspective of social enterprises, creating social value is the key component (Evans et al., 2017). Social enterprises aim to achieve social value by serving society, but at the same time creating economic value is necessary to cover full costs and thus be self-sustainable (Yunus et al., 2010). Therefore, business models in the context of social enterprises differ, because they contain a broader concept of value; economic and social value (Alter, 2007; Massa et al., 2017). The research by Yunus et al., (2010) makes a valuable contribution to how social enterprises can build a social business model and how social business models differ from traditional business models. First of all, Yunus et al. (2010) indicate that the value proposition and constellation are not only focused on the customer, but on all stakeholders. Second, the profit equation element in social enterprises is not aimed at maximizing financial profit, but at recovering costs. Finally, the motivation behind social enterprises is aimed at achieving social benefits, resulting in the new social profit equation component. Bocken et al. (2016) also mentioned that social business models have been conceptualized to include wealth-enhancing results in the business model. This means that the business model of social enterprises consists of four components, which are illustrated in Figure 1.

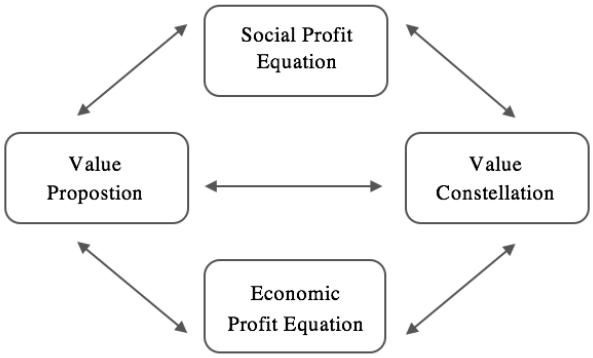

Figure 1. The four components of a social business model (Yunus et al., 2010).

Hence, in this study, the social business model is understood as *the demonstration of the value proposition, value constellation, social profit equation and economic profit equation, and the interaction between these elements.* The distinction between the main elements value proposition, value constellation, social profit equation and economic profit equation allows the research to identify an established social business model.

2.2 Scaling social business models

The general starting point of scaling is the growth of the enterprise (Bocken et al., 2016; Dobson et al., 2018). However, in social enterprises, this type of growth is a bit more nuanced, as it does not correspond to the growth of profit or non-profit enterprises. While the former focuses on maximum economic success, this is no part at all of the latter, because they are often financed externally through for example grants or people who are willing to support them in kind (Bocken et al., 2016). For social enterprises, generating turnover is the core of the company but the aim is to limit or tackle a social problem (Alter, 2007). Therefore, scaling in the context of social enterprises is understood as the process of increasing the social impact a social enterprise produces to better meet the social needs that a social enterprise seeks to fulfil (Bloom & Smith, 2010; Desa & Koch, 2014; Heinecke & Mayer, 2012; Weber et al., 2012). An important distinction that Bloom & Chatterji (2009) made within the process of scaling is wide scaling (i.e. serving more beneficiaries) and deep scaling (i.e. addressing more aspects of a single problem to provide a more holistic solution). The appropriateness of wide or deep scaling depends on the social ambitions of a company. When there is great variation (e.g. demographic and geographic variation) in the people the social enterprise tries to serve, it is more common to scale widely and replicate, while when there is little variation it is more common to scale deeply and grow from the initial enterprise (Bloom & Chatterji, 2009). Hence, in this study, scaling is understood as *the process of increasing social impact, which can involve reaching more beneficiaries and/or tackling multiple aspects of a problem.*

Scientists have argued that the process of scaling is documented from the perspective that a social enterprise has a validated business model (Perrini et al., 2010; Mulgan, 2006; Weber et al., 2012). Thus, getting to the scaling process involves a number of initial steps related to the business model. In the literature, the process starts with the identification of opportunities, in which it is discovered whether there is a need for a value-creating product or service. For social enterprises, this includes a product or service based on social change. Some social needs are obvious - such as hunger and homelessness - while others are not recognized - such as racism or domestic violence (Mulgan, 2006). The second phase is to market the idea to test enthusiasm (Mulgan, 2006) and to find out whether it makes an economic and social contribution (Perrini et al., 2010). The following phase is to formalize the mission and values, which provides a well-defined business model, which in turn contributes clear expectations about the possible outcomes and the creation of legitimacy. As a result of a formalized business model, the exploitation of the opportunities follows (Perrini et al., 2010). When an idea model has subsequently proven itself in practice, it can then be replicated, modified or franchised (Mulgan, 2006). This has been described by Weber et al. (2012) as the feature scalability, indicating that scalability must be based on a viable operating model of the social enterprise. This makes it important to ensure that the underlying business model is complete and all elements are defined. Thus, it can be assumed that scalability is a feature of a business model that determines the potential of the scaling process.

However, after an idea has been characterised by its scalability, a phase of innovation follows. Ideas may continue to change in practice because practice may reveal unintended consequences or unexpected applications. Thus, ideas evolve in practice as social enterprises develop experience about how ideas work best (Mulgan, 2006). Therefore, it is important to continue to adapt ideas to practice. According to Yunus et al. (2010), this can be achieved through experimentation, as underlying analysis will not sufficient. They describe experimenting as a specific form of knowledge acquisition, in which a series of small experiments related to social innovations are launched that enable enterprises to learn from failures on the path. Mulgan (2006) confirms that social innovations go hand in hand with failures down way the road and an idea can only develop itself in practice. Besides, the study by (Dees et al. 2004) shows that social innovations can spread in multiple forms and social innovations may need to change to adapt to new knowledge gained or other circumstances (Dees et al., 2004). Dobson et al. (2018) confirm that social enterprises in uncertain circumstances must learn from experiments by continuously adjusting their business model. When enterprises are unable to adjust their ideas, the innovator (i.e. social enterprise) fails, even when the idea itself is remarkable (Teece, 2010). More specifically, Mulgan (2006) argues that many social innovations do not fail because of flaws, but because of the lack of adequate mechanisms to promote and adapt them. For this reason, it is important to consider scaling as a learning curve in which learning and adaption are central (Mulgan, 2006). The study by Dobson et al. (2018) has shown that considering scaling as a learning curve, in which the business model is identified and adjusted through experiments, is important for robust growth and the reduction of uncertainty. A direction towards experimental learning that can be fundamental for solving problems where solutions are uncertain is the application of the Lean Startup method. The next chapter provides more insights about this method.

2.3 The lean startup approach

The core perception of lean startup is that many enterprises have failed in the past as a result of a lack of customer acceptance, and not through offering a bad product or service. The traditional advice for a business model was to write down a business plan and then executing it linearly (Chesbrough & Tucci, 2020). The lack of market testing and validation resulted in waste in terms of time and money for many enterprises trying to get the product or service to potential stakeholders (Nobel, 2011). This is the opposite of the Lean start up methodology - inspired by the lean principles (minimizing waste in terms of efficiency, time, resources and energy) - which is all about avoiding offering a product or service that no one wants (Bocken & Shiur, 2019; Chesbrough & Tucci, 2020; Harms & Schwery, 2020; Nobel, 2011). This is achieved by the central principles iterative experimentation and early customer insight (Harms & Schwery, 2020). By sharing the product/service at an early stage, customer feedback can be gathered to refine it. This creates an iterative build-measure-learn feedback loop (Chesbrough & Tucci, 2020) that allows enterprises to respond more effectively to the market and offer appropriate products and services (Hart et al., 2016). The lean start-up process is a repeated cycle until the entrepreneur achieves a validated and scalable business model (Harms & Schwery, 2020). Validation refers to the use of real data to highlight the progress of the process (Mansoori, 2017). Therefore, one of the core principles of lean startup is validated learning, which revolves around learning from data that is provable and useful, resulting in product improvements in the cycle process.

The cycle process is shaped by a number of main activities. First of all, entrepreneurs map out their vision - based on the business model - in which it is determined which direction the company wants to go (Eisenmann, Ries & Dillard, 2012; Mansoori, 2017). The second step is to formulate testable hypotheses from the business model elements (Bortolini, Bortolini, Cortimiglia, Danilevicz & Ghezzi, 2018; Eisenmann et al., 2012; Mansoori, 2017). Any statement in a business model is an assumption until it has been proven to be correct (Gutbrod & Münch, 2018). However, not every assumption can be tested, therefore it is important to prioritize (Eisenmann et al., 2012). A way to realize this is to first define leap-of-faith assumptions - business model assumptions that can have the greatest impact on the success or failure of the idea - and then prioritize them based on the dimensions ‘’time to impact’’ and ‘’magnitude of impact’’. The former describes when the assumption will have an impact, and the latter describes how big the impact is on the business model if the assumptions are incorrect (Gutbrod & Münch, 2018). The third step focuses on building experiments to test the business model hypotheses. A well-known example is by specifying a minimum viable product (MVP), which is the least number of functions and activities needed to enable entrepreneurs to validate or reject assumptions (Eisenmann et

al., 2012; Mansoori, 2017). Subsequently, the results are evaluated and this can lead to three possible actions: persevering, pivoting or perishing (Bortolini et al., 2018; Eisenmann et al., 2012; Mansoori, 2017). When tests validate the hypotheses, and feedback does not lead to modifications, the entrepreneur can continue on his current path. Alternatively, when tests validate the hypotheses and feedback leads to opportunities, the entrepreneur can pivot, and when tests reject the hypotheses, and there is no possibility of adjustments, the entrepreneur should stop. When all business model hypotheses have been validated, there is a product–market fit (i.e. a product that profitably meets customers' needs) (Eisenmann et al., 2012; Mansoori, 2017). However, even when all assumptions have been validated, the goal is to continue to optimise the business model. This is why rigorous experimentation never ends (Eisenmann et al., 2012). Therefore, one of the guiding beliefs of lean start-up is build-measure-learn; here, the feedback loop continues until all stakeholders are satisfied with the latest version of the MVP.

According to Blank (2013), the lean startup methodology has three central principles: (1) acceptance that the approach is based on a series of untested assumptions; (2) listening to customers when testing assumptions; and (3) iteratively experimentation, which goes hand-in-hand with customer feedback. Iterative experimentation is the ability to perform different experiments on different elements of the business model (Harms & Schwery, 2020). By simultaneously experimenting with stakeholders, the business model can be built iteratively by including the interests and objectives of various stakeholders in the business model during the lean startup cycle (Bocken & Snihur, 2019). Importantly, both successful and failed experiments in this process contribute to the identification of deeper knowledge and new ideas (Chesbrough, 2020; Bocken & Snihur, 2019). Thus, it can be assumed that lean startup is all about promoting rapid learning from failures, reducing risk and preventing product/service failures.

2.4 Lean startup in the scaling process

By applying lean startup in the scaling process, social enterprises can work systematically towards solving social problems. Lean startup is often discussed in the context of achieving a product-market fit, whereby all assumptions from the business model have been validated, and the business model is judged to be scalable. Following this, in the literature, the process of scaling assumes that social enterprises have a validated business model (Perrini et al., 2010; Mulgan, 2006; Weber et al., 2012). Although achieving a product-market-fit and scaling are generally discussed as two separate processes in the literature, there is significant overlap in the ultimate goal of the processes, as both ultimately aim to aid in problem solving. The lean startup process focuses on creating products and services that meet customers' needs and solve problems (Eisenmann et al., 2012) and the scaling process focuses on spreading this added value to solving problems at scale.

The contiunous process of solving problems in an uncrtain environemnt may call for innovations in different existing business model elements (i.e. business model innovation). The future cannot be predicted and social enterprises find themselves in uncertain circumstances, therefore, it is important not to design a business model and hope for the best. However, it may be too easy to advise longer existing enterprises to behave like startups by continuously reviewing their business model. This is because startups are temporary enterprises seeking a sustainable and profitable business model, while existing enterprises are already engaged in implementing an existing business model (Blank, 2013). In a business model innovation, the social enterprise revises its current business model to discover new sources of profit by finding new combinations of value proposition and value constellation. A literature review conducted by Geissdoerfer et al. (2018) showed that business model innovation can refer to both changes in individual elements of the business model and changes in the entire business model. In terms of business model innovation, there is an important distinction between designing a business model and reconfiguring a business model. The design of a business model leads to the initial iteration of the business model of an enterprise or startup, while reconfiguration refers to changes in the business model used by existing enterprises (Chesbrough & Tucci, 2020). By making adjustments to yield a better way of doing business, enterprises that are exposed to uncertainty can respond to new sources of value creation (Schneider & Spieth, 2013).

Given that lean startup provides an approach in which enterprises can rapidly discover, under conditions of uncertainy, whether innovations offer sufficient value so that resources are not wasted, it is suggested that lean startup can help social enterprises efficiently address challenges in the scaling process of their business model. Lean startup focuses on learning from failures and recommends a series

of experiments using continuous rapid iteration processes to validate business model elements (Silva et al., 2019). According to Yunus et al. (2010) launching a series of small experiments helps minimise risk and maximise a company's learning so that the success potential of a change can be efficiently determined. In this way, lean startup offers a way to take into account the uncertainty so that the innovations in the business model can be managed. Therefore, employing lean startup principles in the scaling process – in which experimentation is central – can reveal potential adjustments to the business model based on newly acquired knowledge. Hence, it is expected that applying lean startup will enable social enterprises to continue learning during the scaling process, which keeps their business models scalable.

3. Methodology

3.1 Research strategy

There is a lack of knowledge on the scaling process of social enterprises from a lean startup approach. This implies that the study is exploratory in nature, with an emphasis on discovering new ideas and insights. A qualitative approach was considered appropriate with regard to the exploratory nature of the study, as qualitative approaches are suitable in situations that seek to explore, interpret and gain a deeper understanding of a particular phenomenon (Gill, Stewart, Chadwick, & Treasure, 2008). To produce an in-depth understanding of the scaling process for social enterprisees, the present study adopted a holistic multiple-case research approach. According to Eisenhardt and Graebner (2007, p. 25), 'case studies are rich, empirical descriptions of particular instances of a phenomenon that are typically based on a variety of data sources'. A multiple case study method is considered suitable for answering 'how' questions, as it provides detailed insights that go beyond static results (Ćwiklicki & Pilch, 2020; Rowley, 2002). Analysing multiple cases allows for a deeper understanding of social enterprises and enables the differences, similarities and relationships between cases to be identified (Ćwiklicki & Pilch, 2020; Gustafsson, 2017; Starman, 2013). A further advantage of analysing multiple cases is that doing so yields robust, accurate and generalisable results (Eisenhardt & Gaebner, 2007).

The research was designed to identify generalisable results between the cases. However, in the light of case studies, the aim was not to obtain statistical generalisation but instead to yield theoretical generalisation. This is achieved when causal relationships are recognised between cases that can be supported by logical argumentation (Hillebrand, Kok, & Biemans, 2001). The inclusion of multiple cases reinforces the logical argumentation because cases can replicate each other (i.e., at least two cases may be structurally comparable, thereby increase reliability). In addition, cases can be used as an extension to clarify distinctions in the argumentation of the phenomenon under investigation (Hillebrand, Kok, & Biemans, 2001). Thus, the multiple cases enable findings to be confirmed or refuted.

3.2 Case selection

The social enterprises were selected with the non-random convenience and purposive sampling techniques. Convenience sampling was used, and access was gained to social enterprises based on their accessibility through the supervisor of this research and the researcher's network. Both the researcher and the supervisor took a leading role in approaching and maintaining contact, depending on the level of access. In addition, utilising a purposive technique, cases were selected based on certain characteristics (Etikan, Musa, & Alkassim, 2016). Purposive sampling was chosen to enable an enhanced focus on participants with the right information and experience. Given the aim of the study and its focus on social business models, not every enterprise was relevant to participate in the study. For this reason, cases were selected based on two primary criteria:

i. The enterprise is social in nature and uses a hybrid logic: it pursues a clearly expressed social purpose while at the same time striving to achieve economic value.
ii. The social enterprise has a scalable social business model. This means that the underlying social business model is complete, and all elements (i.e., value proposition, value constellation, economic profit equation and social profit equation) are defined.

Given the circumstances surrounding the Covid-19 pandemic, all enterprises were contacted by phone or email. When approaching the enterprises, the aim of the research and the expectations for

participation were indicated to provide a clear picture of what was involved. The sampling process yielded four social enterprises: Medides, The Social Gifter, Social Trust Pension and Agridex. Table 1 lists the social enterprises that participated in the study. To protect the confidentiality of the case enterprises, it was decided to anonymise the enterprises by means of fictitious names. To compare the cases, all cases were assessed to ensure that they conformed to the set criteria. One notable difference between the cases was their geographical background. The cases were both African and Dutch enterprises; however, given the similarity of the number of cases, comparisons could be made. In line with the literature, the business model concept was used to provide a consistent picture of how the participant enterprises operated and generated revenue. Following Yunus et al. (2010), it was assumed that social business models contain four core elements: value proposition, value constellation, profit equation and social profit equation. These core elements for the participating enterprises are shown in Table 2.

Table 1. Overview of the social enterprises.

Social Enterprise	Founded	Product/Service	Social Objective	Country
Medides	1987	Several medical products	Prevent people from working unhealthy	The Netherlands
The Social Gifter	2018	Payroll Giving Platform	Encouraging people to donate money to charity	The Netherlands
Social Trust Pension	2016	Pension product	Reduce poverty among the elderly	Africa
Agridex	2018	Crowdfunding platform	Facilitate financial capital for the agri-sector	Africa

3.3 Data gathering

Following the principles of case studies, data were collected from multiple sources. Interviews are an important and efficient data collection source (Eisenhardt & Gaebner, 2007; Gill et al., 2008). Interviews were used in the present study as the main source of information. The primary purpose of the interviews was to understand the growth and scaling practices of social enterprises. Interviews were conducted from February to March 2021 through online programs, such as Microsoft Teams and Zoom. A total of 13 interviews were conducted (see Appendix A). Two to five interviews were conducted per participating enterprises to capture different perspectives and gain an in-depth understanding of the enterprises' approach to scaling. When multiple participants provided similar information in response to the interview questions, triangulation occurred, meaning that valid statements could be made based on the interviews. The participants were divided into the following categories: (a) founders, (b) managers and (c) external partners. The supervisor of this research was present during seven of the interviews conducted with African enterprises because access to these enterprises had been provided by the supervisor, and the supervisor also used these interviews for own research. To ensure consistency in the study, the questions related to the scaling approach were asked by the same researcher in all interviews.

The interviews were semi-structured, with questions formulated in advance and an interview protocol designed to provide guidance during the interview. To gain more insights into the enterprises' approach to scaling, questions, such as 'Can you describe how company X has grown in recent years?' were asked. Further interview questions were focused on discovering whether the enterprises had applied an emergent or planned approach by asking questions such as 'how did company X realise this growth?' and 'what is your approach to further scale up?' Following the applied approach, the interviews focused on tipping points and benefits when analysing the scaling process. Though the interviews were guided by the questions, discrepancies occurred when it was believed that doing so could yield more relevant information (Gill et al., 2008). Therefore, the semi-structured method allowed for further exploration of responses or comments from interviewees. Each interview lasted an average of 30–60 min and was recorded and transcribed with consent from the participants. In addition to the semi-structured interviews, additional information on the cases, such as news stories and website content, was collected during the same two months in which the interviews were conducted to ensure that the

information was current. The data collected acted as a supporting tool in the formulation of the interview questions and were subsequently verified and clarified during the interviews. The information was also used to clarify and supplement the collected interview data during the interpretation of the results. This information helped in analysing the results in the appropriate context and minimising interpretation. The use of multiple data sources ensured data triangulation and improved the validity and reliability of the results.

3.4 Data analysis

To understand how the scaling process occurred within the cases and to not compromise the richness and dynamism of the data collected, the grounded theory strategy is used to analyse the data. Generally, this strategy is used to achieve inductive theory building (Langley, 1999), where new theories are built based on the collected data (Eisenhardt & Gaebner, 2007). This study follows Langley's (1990) study, where the grounded theory strategy revolves around the systematic comparison of data units and the gradual construction of categories that describe an observed phenomenon. Analysing these categories should result in the identification of patterns to integrate the process data into a coherent whole. Grounded theory generally employs a bottom-up approach in which a theory emerges from the data (Eisenhardt & Gaebner, 2007). However, as this study used a specific approach, lean startup, the theory is inseparable from the empirical data. Therefore, the focus was to observe data to arrive at a new theory while using an abductive approach. In an abductive approach, there is a continual switching back and forth between theory and data (Awzuie & McDermott, 2017).

The small sample size ensured that an in-depth analysis of each case could be achieved. To fully exploit the richness of the data while looking for more general patterns, the study moved from within-case analysis to cross-case analysis. In doing so, this research followed Eisenhardt's (1989) within-case analysis, where the approach is to familiarise oneself with each case as an independent entity. This allowed for unique patterns to be identified for each case before subsequently generalising the patterns between multiple cases (Eisenhardt, 1989). Patterns were identified in conjunction with a cross-case search with the underlying policy of selecting categories and then looking for similarities and differences between cases. Process coding was used to categorise the data; as part of this process, the interviews were transcribed before open coding was conducted. The interviews were read line by line, and notes were taken. The most important material was then labelled to determine themes. To remain as accurate to the data as possible, the notes were made using the same language referenced in the interviews. The second level of coding applied was axial coding. While open coding mainly focuses on emerging themes, axial coding refines and categorises these themes. Axial coding aims to arrive at overarching codes that lead to main themes based on the similarities and dissimilarities between the open codes. At the third level, selective coding is a continuation of axial coding at a higher level of abstraction. This is conducted by comparing and relating the axial codes (Williams & Moser, 2019). The axial codes and selective codes were compared in the English language. The coding process was an iterative process in which the interviews were analysed multiple times, and the list of categories was repeatedly revised.

The coding process was data-driven to which the next step was to reflect the theory on the data. Based on the theory, lean startup was operationalised through the three primary principles: (1) a series of untested assumptions; (2) listening to customers; and (3) iteratively experimentation. Also, the theory indicated that lean startup is a cycle process, which suggests that the three principles are interrelated and the lean startup process only functions when all the principles are deployed. The selective codes were analysed to see whether it showed a connection with one of the principles. When this occurred, an analysis followed of how the application of the principle was reflected in the case. Subsequently, based on the coherence of the principles, it was assessed whether lean startup was recognized in the cases. By reflecting the data on the lean startup principles and using the lean startup principles as a guide during the analysis, an iterative process emerged between data and theory.

Table 2. Social business models' of the cases.

	Social Business Model			
	Value Proposistion	**Value Constellation**	**Profit Equation**	**Social Profit Equation**
Medides	• Improve the quality of daily life • Medical devices to make people work healthier • Focused on the Health Care industry • Internationally oriented	• In-house development and production • Special formulas behind the electrically-driven products • Partnerships to strengthen innovation forces	• Products are delivered to dealers at a cost • Free of charge for the end user	• Clinical data • Software in the product that keeps track of when work is done within and outside international standards
The Social Gifter	• Digital payroll platform • Making doing good effortless • Direct donation from the salary of an employee to an own chosen charity • For all salaried employees	• Digital platform with a dashboard • Tax benefit for employees • No fundraising costs for charities • Partnerships with charities, investors, the tax authorities and an IT company	• The employers pay a fee per employee for the service of The Social Gifter • Fees are based on the number of employees per company and not the number of participants • Service is free of charge for the end user	• Number of donations to charities • Impact facts of the charities
Social Trust Pension	• Pension scheme for the Ghanaian people • Equal combination of a pension and savings account • Mainly for the informal market • Financial security in the future makes people from the informal sector less vulnerable	• Digital Payment Platform • Possibility of cash and mobile payments • Pension clinic to share information about the social security systems in Ghana • Partnerships with the custodian bank, fund manager, National Pensions Regulatory Authority, Access Bank, Union of informal workers, Software providers, Vodafone, AirtelTigo	• Fee structure by law • Collectively, the fees amount to 2.5% of the net asset value, of which 1.33% is paid out to PPT • Service is free of charge for the member	• Number of participating Ghanaian members as they are encouraged to save for a good future
Agridex	• Debt crowdfunding platform • Giving agri businesses in Ghana access to funds • Making access to finance easier for businesses to get good ideas off the ground	• Digital service platform • Agri business can upload their projects and people can fund agricultural projects • Agri businesses invest their project with the money and then pay it back • Partnerships with banks and service providers	• Commissions • Agri businesses have to pay 5% of the collected end amount of the project	• Schedule based on performance • Successful projects; project objectives achieved

4. Case study results

4.1 Case study Medides

4.1.1 Towards a validated business model

Medides began in 1987 as an Industrial design office of medical products for the health care sector. The company focused on designing products that enable people to work in a healthier way. In the late 1990s, the company identified a need among their clients to manufacture the products they designed. For this reason, at the turn of the century, the CEO of Medides made a shift in the value constellation and profit equation in the business model. Developing health products remained central, though more funds were generated by supplying the products. The supply of products started to gain the upper hand, and the company subsequently realised that they had opportunities in creating their own product line using their own brand rather than producing products for other companies. Therefore, to arrive at a validated business model as a startup, Medides adjusted the business model elements profit equation and value constellation based on market needs.

4.1.2 The scaling process

In the last few years, Medides has generated profitable numbers, growing around 10% per year in turnover. The scaling process has focused on reaching health care institutions with their products to enable more people to work healthier. Medides' scaling process has a wide-reaching approach, as they aim to reach as many beneficiaries (i.e. healthcare institutions) as possible. There is also high variation, desptite the home-based country is the Netherlands, Medides targets the international market (i.e. all of Europe). To scale their products, Medides discovered on the route that a challenge is capacity in either more employees or more product expertise. This has also required geographical thinking about opening multiple branches (e.g. in other countries) or building up product expertise to be so distinctive that geographical distance hardly plays a role. To approach their challenge, Medides decided to build more expertise in their products because, according to the CEO of Medides, products are simpler to scale than the number of employees in different countries. Medides has built up its expertise in products by moving closer to the market and end customer. As the CEO of Medides described, ‘a successful product is a product that solves a problem of the person who buys’. To create successful products that can be scaled, Medides gets into the users’ shoes for each of their products. This starts with interacting with customers, such as through interviews, before the product development process starts. Subsequently, at each stage of the product development process, a field test is performed to determine whether the product development should continue. The fundamental reason for field testing is to obtain direct feedback from the market. Consumers can say things they do not mean, and because of this Medides, does not blindly rely on customer wishes but instead verifies their wishes. Testing does not stop with the release of a product that has been previously validated to meet a need. By evaluating customers’ reaction to products after delivery, Medides can identify what aspects of the product the customer likes so that they can focus on these elements and optimise their products. As a result, more expertise is built, which improves the quality of the products. By offering higher-quality products, Medides can produce more efficiently, as producing large quantities is only sensible when customers are willing to purchase them. By producing more efficiently, Medides saves time and money and can successfully scale their products.

4.1.3 Lean startup principles in the scaling process

The analysis showed that the lean startup principles of listening to customers and conducting iterative experimentation have been a guiding light in Medides' scaling process (see Table 3 for a number of representative quotes that confirm this). In order to scale their products, it is important for Medides to increase their product expertise. By applying the lean startup principles at every stage of the product development process, which starts with defining the user group and ends with the release of the product, and continuing after product release, Medides is able to offer products with a high level of expertise. This expertise is reflected in the social value that Medides seeks to create for end customers; here, the CEO provides an example: ‘I remember that we once developed a new children's hospital bed where the nurses had the experience, finally someone who just thinks as a nurse thinks’. According to the CEO,

listening to customers and implementing their feedback iteratively has led to better-than-average products and have been their scaling success competence. Further, the lean startup principle working from a series of untested assumptions has not been explicitly identified. Nevertheless, a connection has been found. Listening to customers and conducting iterative field tests have helped verify customer needs. This means that, during the product development process, customers' unverified needs are tested before adjustments are made to products, and customers' needs are adopted as untested assumptions. Hence, in this case study, principles are applied at product level, and business model elements have had the same broad outlines during the scaling process. Nevertheless, the principles are applied in the scaling process to help the company stay focused on creating added value for customers by continuously dissecting their value proposition and addressing any issues with products that could jeopardise the purchase of the product.

Table 3. Representative Quotes Medides.

Lean startup principles	Representative quotes	Interviewee
A serie of untested assumptions	*'Sometimes they say one thing but actually mean another. […] getting the wishes and requirements clear and verifying them every time and not blindly relying on what someone says they would like to have.'*	Business Development Manager
Listerining to the customers	*'But we are very clearly customer need-driven and we also want real solutions.'*	CEO
	'So, by getting into their shoes, we've actually learned that as a part of our success competence from the start.'	CEO
	'Sometimes you can think it works one way, but if people have a different opinion, yes, then it won't bring success.'	Business Development Manager
Iterative experimentation	*'[…] a piece of analysis and information always starts by defining the user group, which problem of that user group do you tackle and what are those key user scenarios. […]. And if you write down those usage scenarios, then you also have a kind of test scenario.'*	CEO
	'And actually, we try that at every stage of development until we actually bring the product to the market and even then, we do post market surveillance'	CEO
	'Actually, before we roll out anything, we always do a field test. So, we are actually going to test in practice what the feedback is from the market, whether they want adjustments or just collect feedback about what could be improved, what should remain in it and those kinds of aspects.'	Business Development Manager

4.2 Case study The Social Gifter

4.2.1 Towards a validated business model

The Social Gifter launched in 2018 as a digital platform that enables employees to easily donate money from their salary to charity. The organisation's first two years were a set-up phase designed to validate the business model. The organisation conducted a field analysis during which they engaged in discussions with experts from different sectors, made a field trip to London – a city in which the concept had already been trialled – and had conversations with their own network to determine receptivity to the idea. The field analysis generated several basic principles that the platform could comply with. Based on these principles, a prototype of the platform was built, and a pilot was designed. The pilot enabled the organisation to learn what worked so that no unnecessary investments were made. The pilot resulted in the disposal of the first version and the creation of a new platform that better met market needs. The pilot also led to changes in the profit equation of the business model. During the pilot, the profit equation changed from asking for a fixed amount per participating organisation to asking for a fee per employee. This change arose due to feedback from employers. Hence, The Social Gifter gradually made changes to the value constellation and the profit equation during its start-up phase to arrive at a validated business model.

4.2.2 The scaling process

Since 2020, The Social Gifter scales the platform to open up the untapped potential that lies in people's desire to do good. The scaling process aims to increase the number of employers and gifters on the platform, which indicates wide scaling. When more employers offer the platform, more employees can make a donation. The organisation's scaling ambition is to raise 100 million donations to charities in 10 years. The data does not provide figures for the current number of gifters; nevertheless, the participants indicated that they had seen the number of gifters increase every month over the last year. The organisation is still adjusting the platform in the scaling process to reach as many employers as possible, as the Manager of Operations and Legal explains: 'we are constantly adjusting and adapting in all kinds of areas. […], different cases arise with every employer'. The Social Gifter offers customers room for suggestions for improving the platform. The customer feedback process is organic, and suggestions are mainly addressed when (potential) customers feedback that the platform is missing something. By subsequently holding discussions with customers to map out their wishes, The Social Gifter then decides whether or not to implement the customer suggestions. However, it may not always be possible to implement all suggestions at once due to conflicting suggestions. For this reason, The Social Gifter filters the suggestions and decides which customer suggestions should or should not be implemented. In addition, the organisation notes that as the platform becomes more popular, and more customers connect, changes cannot be implemented as quickly; for example, before implementing a change, they must first investigate how the change will affect other elements of the platform. According to the participants, it is inevitable that the further the company scales, the more changes must be formalised by developing a system to collect suggestions and make the rationale for decisions clear. The organisation has taken the first step of collecting suggestions before a decision is made, though no such system has yet been developed.

4.2.3 Lean startup principles in the scaling process

The Social Gifter applies the principle of listening to customers to further scale the number of gifters on the platform (see Table 4 for representative quotes). By listening to the customers, the organisation has made the platform more attractive by implementing requested suggestions. However, as they focus on a broad target group – all organisations in the Netherlands – listening to customers means that new ideas are brought along; for example, a frequently mentioned idea by their customers has been to enable employees who work abroad for Dutch employers to participate in the platform. As other countries have different regulations, charities and tax systems, this would require changes in both the value proposition and value constellation of the current business model, since the platform would then apply to a larger group, and this would require a revised structure to accommodate this. Thus, to scale the platform geographically, the interpretation of the value proposition and value constellation must change, as the present business model focuses only on the Dutch market. Further, the principles of working from a series of untested assumptions and iterative experimentation have not been identified in the scaling process. While lean startup is about validating suggestions through experiments, customer feedback is implemented or omitted from the point of view of The Social Gifter. Thus, despite being open to changes based on customer feedback, suggestions are not validated based on actual field data. Since the principle listening to customers cannot in itself imply lean startup, it can be argued that no recognition of lean startup was found in the scaling process of The Social Gifter.

Table 4. Representative Quotes The Social Gifter.

Lean startup principles	Representative quotes	Interviewee
A serie of untested assumptions	-	
Listening to the customers	*'It is just very interesting to a certain group and we want to serve them as best we can.'*	Head of Engagement
	'[…] we can't figure out in advance how large organisations work and how it fits in with their own way of working, so those are conversations we're having right now.'	Manager Customer Succes
	'Look ultimately you are selling your service to employers so for employers it just has to be very clear. They really have to believe that it adds value to their organisation.'	Manager Customer Succes
Iterative experimentation	-	

4.3 Case study Social Trust Pension

4.3.1 Towards a validated business model

Social Trust Pension was established in 2015 to give elderly people in Ghana a stable retirement through a pension scheme. The Social Trust Pension aims at the informal sector audience (i.e., individuals who are not salaried workers), as these people tend to be financially vulnerable. In total, 85% of the workforce in Ghana is informal and has no access to government savings plans or private pensions. [1] The analysis did not reveal exactly how the Social Trust Pension arrived at a validated business model. However, there are signs that changes have been made to their initial business model. Social Trust Pension began with cash payments and subsequently developed a digital USDD code that allows members to save digitally in a fast and secure environment. Further, the organisation began with a simple Excel spreadsheet and without robust software; now, they have a fully digital platform, which indicates that the value constellation has been given a new meaning.

4.3.2 The scaling process

In 2018, Social Trust Pension registered its first 10,000 customers,[2] and they have now grown to 50,000 members and an AUM (a measure of the member contributions) of 1 million. Their scaling ambition is to grow to 100,000 members and reach an AUM of 5 million by the end of 2021. The scaling process aims to reach as many informal employees as possible to improve their financial future. However, scaling their retirement savings product for informal workers has an impact across Africa.[3] In Africa, one of the pillars of social security for informal workers is the family system, which entails a high degree of vulnerability. Therefore, scaling the pension product aims to tackle a widely supported vulnerable social problem within the African economy, which indicates deep scaling. Due to financial constraints in Africa, individuals are sceptical about entrusting their money to organisations. To scale the platform, a core principle is, therefore, to work on customer trust. To build trust, the organisation visits customers on a monthly basis to build relationships. Such physical interaction only takes place with the formal sector audience and is not feasible for the informal sector, despite this group representing the largest group of customers (80%). The Data analyst comments on this, 'how do you engage with 45,000 people when you have there maybe about 30 sales agents?' As there is a limit to the number of people one can talk to in a given day, forming partnerships is one of the methods by which they aim to scale member engagement. Partners, such as telecom companies, can help reach more people at the same time. Social Trust Pension also seeks to gain insights into customer experiences by investing in its data systems. They subsequently use this data to run test campaigns. The validated data help substantiate the assumptions made in advance in the test campaigns that are based on studies and practical experience.

[1] https://www.drkfoundation.org/organization/peoples-pension-trust/
[2] https://www.drkfoundation.org/organization/peoples-pension-trust/
[3] https://www.drkfoundation.org/organization/peoples-pension-trust/

By first running test campaigns on a small scale, the organisation receives feedback and learns lessons before running them on a larger scale. The test campaigns enable less time and money and fewer resources to be wasted and validating the test campaigns allows the organisation to build better engagement with members. This is important, as the organisation have found that members no longer feel they can trust the organisation if they wait too long to contact them. Customer engagement encourages members to remain active, which results in a higher AUM that allows them to scale further.

The scaling process has also shown that digitisation is a crucial part of scaling. Not all Ghanaians are familiar with mobile transactions, which is why the organisation offers an option for both cash and digital transactions. Cash transactions are collected by a sales agent; however, here, capacity appears to be a challenge. As the Chief Operations Officer stated, 'let's face it, if you have a sales agent to go into people, there's a certain limitation'. This was confirmed during the Covid-19 pandemic, when cash transactions stalled. During the pandemic, the organisation was able to transition faster to digital transaction – from 30% to 50% – because transacting in cash was not possible. An important lesson learned from this was, according to the Business Development Manager, to immediately offer users digital in future: 'and also ensuring that those that we sign on subsequently we take them through the digital channel straight up rather than taking them through cash and also trying to convert them again which is a waste of time'. Hence, a challenge for the Social Trust Pension in the scaling process is to switch from high touch to high tech.[4] The scaling process has shown that the current interpretation of the value constellation – both digital and cash transactions – may hinder the scaling process. The Social Trust Pension recognises that transitioning to digital transactions is crucial for scaling.

4.3.3 Lean startup principles in the scaling process

In the scaling process of Social Trust Pension, it has been identified that the three lean startup principles work from a series of untested assumptions, and listening to customers and iterative experimentation were applied. Table 5 shows several quotes that represent this. The most important part of the scaling process has involved building relationships with customers to encourage them to continue to contribute actively, as when the number of members increases but contributions remain limited, the social impact is limited. Building relationships is characterised by the core of lean startup: experimentation. Social Trust Pension validates assumptions about customer experiences by setting up test campaigns and learning from them. Through established KPIs per campaign and data mining, Social Trust Pension was able to reveal and refine the customer experiences. Also, applying the principles has had a positive effect on reducing resource wastage and stimulating member contributions. However, the Social Trust Pension case shows that this is not the crux of scaling. Practice shows that tuning the way in which the product is delivered (i.e., offering digital transactions, as suggested by the business development manager) is important for scaling. Hence, the scaling process shows that the interpretation of the product (i.e., value constellation) requires a different interpretation to counter bottlenecks in the scaling process.

[4] https://lhoft.com/en/insights/the-catapulters-a-conversation-with-samuel-bediako-waterberg-ceo-of-peoples-pension-trust/

Table 5. Representative Quotes Social Trust Pension.

Lean startup principles	Representative quotes	Interviewee
A serie of untested assumptions	*'So, we always try to pilot or test some of these assumptions before we ruled them out on a larger basis.'*	Head of Communications
	'You know, test all the assumptions you need to ensure that you're taking them off you know as expected. If not, then of course before you roll it out and mass, then you know what to think, what to take out, what to add and all of that.'	Head of Communications
Listening to the customers	*'We also visit the companies at least once every month to know what they require from us. Their complaints and other things just to make sure that we resolve it as quickly as possible.'*	Business Development Manager Formal Sector
	'If you want to increase contributions we have to keep client engaged.'	Data Analyst
	'But we still needed to you know, engage with our members because one of the things about our informal sector members is that if the time lapse between engaging with them is too long, suddenly they become very uncomfortable if I should say.'	Head of communications
Iterative experimentation	*'I think that for everything you know we're testing. We have a customer profile or persona, even though we have a standard one once you go out into the field, you realize that it… there's a lot of dynamism.'*	Head of Communications
	'So, you can have a control through the experiments before whatever kind of engagements that we're doing to see how you know they respond, and then informs you.'	Head of Communications

4.4 Case study Agridex

4.4.1 Towards a validated business model

In 2018, Agridexbuilt a web platform that enables African agribusinesses to raise funds from the public in exchange for a share of their profits. The organisation aims to solve the problem of flexible and cheap financing for agribusinesses in Ghana because agribusinesses in Ghana have difficulty accessing any form of capital. To arrive at a validated business model, the organisation created a minimally viable product and tested it for a year.[5] This resulted in feedback from investors and agribusinesses seeking to finance projects. Agridex's CEO emphasised that the testing period has not been so much about creating a platform (as such platforms already exists) but instead about validating who uses the platform and identifying problems and solutions. Feedback is used to further solve problems on the platform. Hence, to arrive at a validated business model, Agridex validated its value proposition and value constellation in practice through a minimally viable product.

4.4.2 The scaling process

Agridex has provided funding of more than $500,000 on 80 projects over the last two years, with a 90% success rate. This means that 80 Ghanaian farms have received $500,000 in funding from the public, and 90% of these projects have been successful.[6] Agridex aims to support as many agribusinesses as possible that lack access to affordable financing options for their agricultural activities. Their scaling ambition is to ensure that access to finance is no longer a limiting factor. This means that the organisation's scaling process aims to address a broader social problem in Africa. The scaling process can thus be considered as deep scaling, as it aims to address financial constraints in Africa. In their scaling process, Agridex's approach is to test their ideas. Agridex's CEO indicated that the organisation avoids writing business plans, as they are often too long and take significant time. When coming up with new ideas, they briefly write them down and test them in practice as soon as possible. As the organisation's CEO described, 'what we do is come up with a number of different strategies and then

[5] http://africabusiness2020.com/2019/08/07/Agridex-ghanas-profitable-crowdfunding-platform-for-farmers/
[6] https://allagricgh.com/agriculture-crowd-funding-platforms/

test, test, test'. Testing is mainly concerned with improving features of the platform. Depending on their role, employees set goals to improve the platform (e.g. brand awareness) and related ideas are written out and tested. Depending on the purpose and idea, these tests vary in time and execution. The tests enable Agridex to gather information about what does and does not work, which saves both time and financial resources and allows the organisation to focus on appropriate developments for the platform. However, one challenge that has emerged in Agridex's scaling process is payment traffic on the platform. Africa is separated, and each country in Africa has its own regulatory framework. To address this complexity, Agridex has sought an easy way to receive and return payments, which is why Agridex is looking at integrating cryptocurrency into the platform without the users realizing this. In addition, the CEO of Agridex also highlighted the importance of creating a credit score model. In Africa, many transactions are conducted with cash and are, therefore, more difficult to trace. Responding to issues surrounding payment systems in Africa could allow Agridex to expand geographically and, therefore, support more agribusinesses. Hence, for Agridex, the payment system is a key challenge in the scaling process, which Agridex aims to address in the short term by integrating an entirely new offering – cryptocurrency – into the platform. Therefore, for Agridex, the value constellation requires a new interpretation to further scale the platform geographically in Africa.

4.4.3 Lean startup principles in the scaling process

Agridex applies the lean startup principles of listening to customers and iterative experimentation in its scaling process. Agridex's scaling process is characterised by repeated experimentation, and the organisation rejects pure analysis and long-term planning in favour of generating factual data to learn from (see Table 6). This has enabled Agridex to further refine their platform to better meet users' needs. For example, contributors to the platform are interested in the performance of agribusinesses. Practice has shown that demonstrating the performance factors of a project raises more finds, as it provides greater transparency to potential investors. This has enabled Agridex to support investors and create a real impact for agricultural businesses. Analysis of this case study did not confirm whether the principle a series of untested assumptions was applied. Nevertheless, Agridex first write down their ideas, and final decisions are made based on data. This means that, during testing, assumptions are made, though the organisation does not know whether they are true. For this reason, it can be assumed that the organisation applies the principle of working from untested assumptions. Applying lean startup principles has helped save time and further develop the platform to support more agribusinesses. Further, the Agridex case shows that issues surrounding payment traffic in Africa have emerged in the scaling process and that these issues are crucial for scaling. To address these issues, the organisation must change how the product is offered. This means that, to scale geographically, the value constellation in the current business model requires a new interpretation, as the current interpretation means that various parts of Africa and areas outside Africa cannot be reached.

Table 6. Representative Quotes Agridex.

Lean startup principles	Representative quotes	Interviewee
A serie of untested assumptions	*'So, we typically use business model Canvas or any other canvas that could just put out the idea and then we quickly test it.'*	CEO
Listening to the customers	*'But you see, if a platform like ours, it's not new, so there's a basic thing of creating the platform. OK basically of validating whether who would use your platform OK, and then from there you build on it with their feedback.'*	CEO
	'You know, they'll just basic things that we do. And we try to figure out as and when problems come and how to resolve.'	CEO
Iterative experimentation	*'What we do is come up with a number of different strategies and then test, test, test what we decided to do at our, at our end was try with a very small project.'*	CEO
	'So, we just quickly put down the stuff you need to do or we think we should do and then test it.	CEO

4.5 Cross case analysis

Comparing the scale processes of the four cases generated various insights. The first insight is that the scaling processes of all case organisations broadly aim to reach as many stakeholders as possible to increase the social impact. However, in addition to reaching as many stakeholders as possible, the African organisations specifically focused on tackling social problems in the African economy. Africa is less developed compared with the Netherlands, and the African organisations sought to tackle issues that have a significant impact on society. This distinction is accompanied by an important difference in the scaling process between the Dutch and African organisations. The Dutch organisations mainly focused on making the properties of their product more attractive, while the African organisations focused more on marketing and how customers experience products, as they aim to help vulnerable people.

Second, the use of the lean startup principles was identifed in the case organisations Medides, Social Trust Pension, and Agridex. Table 7 illustrates the lean startup principles for each case. Although the principle listening to customers emerged in all cases, there was no further identification of lean startup in the case of The Social Gifter. Nevertheless, the principle listing to customers provided an interesting insight. Even though all cases similarly operated based on customer needs, there was a difference in the rationale of African and Dutch organisations. For Medides and The Social Gifter the principle listening to the customer enables a more attractive product to a larger group, which enables customer numbers to be scaled. Listening to customers was important for Agridexand the Social Trust Pension due to higher levels of vulnerability in Africa. A degree of confidence is required of end-users to scale their social impact. Listening to customers helps form a relationship of trust and allows active users to be scaled. Iterative experimentation was also employed by Medides, the Social Trust Pension and Agridex. For each organisation, iterative experiments were conducted differently: at Medides, iterative experimentation was conducted in each phase of a new product, at Social Trust Pension through test campaigns aimed at customer experiences and at Agridexin several small projects to test their ideas. Despite these different applications, iterative experimentation helped the organisations validate their own suggestions as well as those of their customers. This means that suggestions were not blindly implemented but were first validated through testing. This helped prevent the organisations from making poor investments, thereby saving time and resources. Meanwhile, the data showed that the principle of working from a series of untested assumptions was the least likely to be employed and was only clearly identified in the Social Trust Pension, as their test campaigns were used to test assumptions based on research and practical experience. In addition, for Medides and Agridex, a link was found between the principles of iterative experimentation and working from a series of untested assumptions. Iterative experimentation was used by these organisations to make decisions based on factual data, thus, it can be stated that experimenting for these organisations was based on untested assumptions, as they aimed to validate their assumptions in practice.

In accordance with the literature, the scaling process holds that there is a feasible business model, and a product-market-fit has already been achieved. Incidentally, in practice, the product-market-fit appears highly dynamic for two reasons. The first has to do with the fact that the market does not stand still but is consistently moving; for example, the Covid-19 pandemic demanded flexibility from all case organisations. The second is that bottlenecks and success factors for scaling only come to light when a product or service is rolled out on a large scale. This means that the scenario where a product meets the needs of the customers (i.e. product-market fit) is a continuous process, as the environment may reveal new needs. The dynamic product-market fit therefore required a way of acting that allows the organisations to adapt to the environment, as they otherwise will fail in their objective of solving social problems. This way of acting has manifested itself at Medides, Social Trust Pension, and Agridex in a form of experimentation to verify customer feedback through untested assumptions. Despite this ties in with the core of lean startup, the case organisations appeared to unconsciously adopt the principles in the scaling process. Nevertheless, the principles enabled the organisations to optimise their products and services and thereby reach more beneficiaries. Therefore, it can be stated that applying the principles seems to have a positive impact on achieving wide scaling. Incidentally, despite the scaling process of the African organisations was assessed as deep scaling (i.e. addressing multiple aspects of a social problem), the impact was not immediately apparent. This can be explained by the fact that the outcome

of deep scaling is not included in the social profit equation of the business model of the African organisations.

Table 7. Lean startup principles within the cases.

Case	Untested assumptions	Customer feedback	Iterative experimentation	Impact of the lean startup principles in the scaling process
Medides	Verifying unproven customer needs	Increasing expertise	Testing in every product development stage	Above average successful products Savings on time and money
The Social Gifter	-	Implementing customer suggestions in the platform	-	Reaching more interested employers
Social Trust Pension	Verifying assumptions based on research and own experiences	Building a relationship of trust	Setting up test campaigns	Preventing waste of resources Encouraging the contributions of the members
Agridex	Testing from unproven assumptions	Refining the experiences of the users	Setting up narrow projects	Supporting the investors in supporting projects Savings on time

Lastly, the analysis of the scaling processes of The Social Gifter, Social Trust Pension and Agridex showed that certain elements of the organisations' existing business model may not be sufficiently scalable. As has been shown, bottlenecks to scale often only come to light when seeking to deliver value on a large scale. These bottlenecks appeared to be more challenging for the African organisations, as they were due to demographic factors and entailed a higher degree of uncertainty. When seeking to address bottlenecks, it is important to continuously seek to identify the main bottlenecks that hinder the scaling of the business model and overcome these limitations. Breaking through such limitations could lead to changes to elements of the organisations' existing business models. In the case of Medides, adapting their value constellation in the business model seemed crucial to successfully scale their business model, as it enabled them to deliver the value created to buyers. For the other case organisations, changes to the business model could be required to scale further, such as through business model innovation, as the crux of the scaling process is to continuously look for good combinations of value propositions and value constellation.

5. Discussion

This research has examined how lean startup principles can support social enterprises in responding to uncertainties in their scaling process. The following research question was formulated to investigate this subject: 'How do lean startup principes affect the social business model scaling process?' As research on this subject has not been conducted before, and as the research was exploratory in nature, a multiple case study in which the scaling process of multiple social enterprises was studied was conducted to analyse their differences and similarities.

The four cases presented in the study showed that to analyse the scaling process of social enterprises, it is important to consider the demographic context, as this has a strong impact on the purpose of the scaling process (i.e., wide or deep scaling). The two African cases indicated more complex social problems. As Africa is less developed, addressing a social problem has a direct impact on national social systems. The demographic context was also found to affect the choice of approach to the scaling process. Dutch enterprises tended to improve the functionality of their products or services, while African enterprises focused on improving customer experiences because they deal with more vulnerable people. This implies that the demographic context should be taken into account when scaling social business models because the purpose of and approach to scaling differs. Furthermore, it was found that the case organisations Medides, Social Trust Pension and Agridex employed the lean startup

principles in their scaling process to eliminate uncertainty regarding their products or services at scale. The principles of working from a series of untested assumptions, listening to customers and iterative experimentation helped the social organisations to rule out in advance the possibility that a product or service might not match their customer group and led to less wastage of resources. The effect of the lean startup principles in those cases seemed to be positive in terms of achieving more beneficiaries (i.e., achieving wide scaling), as it enabled product-market fit to be continuously adjusted to meet the needs of the target group. However, it is important to acknowledge that the impact on deep scaling (i.e., addressing multiple aspects of a social problem) was not identified because there was a lack of operationalisation of deep scaling in the African cases. Nevertheless, it seems logical to conclude that reaching more beneficiaries is a positive step towards solving the social problems with which social organisations are concerned.

In line with the literature, it was found that social enterprises operate under uncertain circumstances where unexpected events can occur, many of which are only discovered when scaling is already in progress (Mulgan, 2006). Successfully navigating these challenges can mean that validated social business models must be revised prior to scaling. This finding builds on research by Evans et al. (2017) and Yunus et al. (2010), who showed that new combinations in business models can be discovered through learning, and business model innovation can occur. In line with the research by Yunus et al. (2010), discovering new combinations mainly relates to identifying new combinations of value propositions and value constellation. The present research showed that social enterprises aim to reach as many beneficiaries as possible with their value proposition. Revisions to business models, therefore, appear to mainly relate to how the value proposition is delivered to the target group. Any change to a business model entails a new set of assumptions (Nobel, 2011). Problems can arise when untested new or modified services are launched, and an organisation is not set up to deal with uncertainty (Bieraugel, 2015). The scaling process, therefore, requires a focus on active learning from knowledge acquired in the scaling process. Consistent with the results of Dobson et al. (2018) and Yunus et al. (2010), viewing experimentation and learning as an opportunity to address challenges associated with business models is desirable, as it enables the business model to be refined based on validated feedback. Since lean startup principles can help manage the uncertainty associated with implementing an innovation (Bieraugel, 2015), the study claims that lean startup can support the scaling process and shorten the innovation process of adapted or new services by quickly ascertaining whether an adaptation is viable.

Most studies on scaling social organisations are dominated by the affiliation, dissemination and branching scaling mechanisms developed by Dees et al. (2004). These mechanisms imply that replication of a business model by other cooperatives is necessary to spread the business model at scale (Weber et al., 2012). Given that social organisations cannot afford high costs and that their strong commitment to their social mission makes them inclined to make knowledge public, replication is often deemed appropriate in the literature (see, for example, Waitzer & Paul, 2011). However, the tipping point is the quality assurance of the product or service because part of the control is given away to another enterprise. This study is one of the few to discuss an approach that allows social enterprises to scale their initial business model efficiently. By demonstrating that the scaling process may require adjustments to the business model, this study shows that an approach that allows a social enterprise to respond to changes (i.e., an emergent approach) is appropriate. However, little attention has been paid to how social enterprises can apply an emergent approach in the scaling process. The emergent lean startup approach is mainly discussed in the context of startups. A recent study by Chesbrough and Tucci (2020) questioned whether the lean startup principles can be applied in established organisations. This research shows that lean startup might be a useful empirical lens for scaling social business models. Taking into account the challenges of the scaling process, the study emphasises the utility of the lean startup for unfolding new combinations of the business model, addressing challenges in a timely manner and thus continuing to have a social impact. With this, the study demonstrates that the lean startup principles indeed might be useful for existing organisations to deal with uncertain circumstances.

The present study makes two main contributions. First, it adds to the literature on social enterprises and associated scaling strategies. The planned approach in the literature on social scaling (Perrini et al., 2010; Weber et al., 2012) has been further challenged with this research. The present study builds on research by Dobson et al. (2018), as it has shown that scaling social enterprises requires a focus on experimentation. The additional empirical work conducted with an extensive sample and in-

depth study fills a gap in the research on the social scaling process from an emergent approach. The present research has shown that it is desirable to approach the scaling process in a dynamic environment as a process in which fine-tuning the business model through experimentation is fundamental. In addition, to the knowledge of the researcher, the scaling process of social enterprises has not been investigated from the lean startup approach. Here, the research makes an important empirical contribution by providing a starting point for future scientific studies, as it has shown that lean startup principles can be used to quickly address changes in business models to facilitate further scaling. Second, the findings also contribute by providing practical implications for practitioners. There is a practical interest in increasing the impact of social enterprises that aim to address critical social issues. Tackling these social issues on a large scale carries various challenges. The present findings can help hybrid companies make informed decisions and consider implement lean startup principles. The practical application of lean startup principles can increase hybrid companies' chance of success by enabling them to adopt an approach that is in step with their dynamic environment. More specifically, gathering knowledge through experimentation provides companies with the information needed to efficiently introduce new adaptations. Companies stand to benefit from applying such an approach because risks are minimised. However, lean startup principles also change the way new ideas are implemented and affect decision-making, which is why implementing these principles is expected to require a degree of culture change. In any case, social enterprises will need to create a culture that supports exploration.

The results of the present study carry certain limitations and should be expanded on in future research. The first limitation is that only Blank's (2013) main principles of the lean startup approach were used as a guideline. This made it possible to identify the lean startup approach in all case organisations. Given the scope of this research and its focus on a lean startup approach to the scaling process, not all elements of lean startup were discussed in detail. In future, it would be enriching to explore these principles more deeply, as doing so would lead to a broader perspective on lean startup in the social scaling process. To obtain a complete picture of lean startup in the social scaling process, the operationalisation of Harms and Schwery (2020) could be further investigated. Harms and Schwery (2020) divided lean startup into five principles and operationalised them based on different dimensions. Further, the case organisations did not specifically state that they had adopted lean startup principles in their scaling process. Based on the collected knowledge during the research, the lean startup principles were linked to the interviews. In future research, it would be interesting to interview organisations that have consciously adopted lean startup principles to determine how these principles played out in practice and whether the results are in line with the underlying assumption that lean startup principles support social enterprises in overcoming challenges. A further limitation is that only a limited number of interviews were conducted for Indes and Kwidex. Scheduling the interviews was difficult because the Covid-19 pandemic meant that all contact was online, and the companies were difficult to reach. The other cases, The Social Handshake and People Pension Trust, showed that conducting multiple interviews per case enriches the results because, although the participants were in general agreement, each interview offered new and insightful perspectives. Lastly, due to access facilitates by the researcher and supervisor, two African and two Dutch organisations were involved in the study. Although the number of African and Dutch cases is the same, it was discovered that the scaling process is more challenging for African organisations, in future, it would be interesting to further investigate whether demographic factors in less well-developed countries play a decisive role in the number of challenges encountered in the scaling process.

References

Alter, K. (2007). Social enterprise typology. *Virtue ventures LLC*, *12*(1), 1-124. Retrieved from: https://canvas.brown.edu/courses/1073328/files/61028038

Amit, R., & Zott, C. (2012). Creating value through business model innovation. *Management Review, 53, 41-49.* Retrieved from: http://aproaingenieria.com/intranet/uploads/creating-value-through-business-model-innovation.pdf

Awuzie, B., & McDermott, P. (2017). *An abductive approach to qualitative built environment research. Qualitative Research Journal, 17(4), 356–372.* doi:10.1108/qrj-08-2016-0048

Bacq, S., & Eddleston, K. A. (2016). A Resource-Based View of Social Entrepreneurship: How Stewardship Culture Benefits Scale of Social Impact. *Journal of Business Ethics.* doi:10.1007/s10551-016-3317-1

Bieraugel, M. (2015). *Managing library innovation using the lean startup method. Library Management, 36(4/5), 351–361.* doi:10.1108/lm-10-2014-0131

Blank, S. (2013), "Why the lean start-up changes everything", *Harvard Business Review, May, pp. 63-72.* Retrieved from: https://hbr.org/2013/05/why-the-lean-start-up-changes-everything

Bloom, P. N., & Chatterji, A. K. (2009). Scaling Social Entrepreneurial Impact. *California Management Review, 51(3), 114–133.* doi:10.2307/41166496

Bloom, P. N., & Smith, B. R. (2010). Identifying the Drivers of Social Entrepreneurial Impact: Theoretical Development and an Exploratory Empirical Test of SCALERS. *Journal of Social Entrepreneurship, 1(1), 126–145.* doi:10.1080/19420670903458042

Bocken, N. M. P., Fil, A., & Prabhu, J. (2016). Scaling up social businesses in developing markets. *Journal of Cleaner Production, 139, 295–308.* doi:10.1016/j.jclepro.2016.08.045

Bocken, N. M. P., Short, S. W., Rana, P., & Evans, S. (2014). A literature and practice review to develop sustainable business model archetypes. *Journal of Cleaner Production, 65, 42–56.* doi:10.1016/j.jclepro.2013.11.039

Bocken, N., & Snihur, Y. (2019). Lean startup and the business model: Experimenting for novelty and impact. *Long Range Planning*, 101953. doi:10.1016/j.lrp.2019.101953

Boons, F., Montalvo, C., Quist, J., & Wagner, M. (2013). Sustainable innovation, business models and economic performance: an overview. *Journal of Cleaner Production, 45, 1–8.* doi:10.1016/j.jclepro.2012.08.013

Bortolini, R. F., Cortimiglia, M. N., Danilevicz, A. D. M. F., & Ghezzi, A. (2018). Lean Startup: a comprehensive historical review. *Management Decision*. doi:10.1108/md-07-2017-0663

Burkett, I. (2013). Using the business model canvas for social enterprise design. Retrieved from: http://knode. com. au/wp-content/uploads/Knode_BusModCanv4SocEntDesign_E1LR_30p. pdf.

Casasnovas, G., & Bruno, A. V. (2013). Scaling Social Ventures: An Exploratory Study of Social Incubators and Accelerators. *Journal of Management for Global Sustainability*, *1*(2). doi: 10.13185/JM2013.01211

Chesbrough, H. (2010). Business model innovation: opportunities and barriers. *Long range planning*, *43*(2-3), 354-363. doi:10.1016/j.lrp.2009.07.010

Chesbrough, H. & Rosenbloom, R. S. (2002). The role of the business model in capturing value from innovation: evidence from Xerox Corporation's technology spin-off companies. *Industrial and Corporate Change, 11(3), 529–555.* doi:10.1093/icc/11.3.529

Chesbrough, H., & Tucci, C. L. (2020). The Interplay between Open Innovation and Lean Startup, or, Why Large Companies are not Large Versions of Startups. *Strategic Management Review, 1(2), 277-303.* doi: 10.1561/111.00000013

Ćwiklicki, M., & Pilch, K. (2020). Multiple case study design: the example of place marketing research. *Place Branding and Public Diplomacy.* doi:10.1057/s41254-020-00159-2

Dacin, M. T., Dacin, P. A., & Tracey, P. (2011). Social Entrepreneurship: A Critique and Future Directions. *Enterprise Science, 22(5), 1203–1213.* doi:10.1287/orsc.1100.0620

Dees, J. G., Anderson, B. B., & Wei-Skillern, J. (2004). Scaling social impact. *Stanford social innovation review*, *1*(4), 24-32. Retrieved from: https://wiki.sheatufim.org.il/w/upload/sheatufim/7/73/Scaling_Social_Impact_Strategies_for_spreading_social_innovations.pdf

Desa, G., & Koch, J. L. (2014). Scaling Social Impact: Building Sustainable Social Ventures at the Base-of-the-Pyramid. *Journal of Social Entrepreneurship, 5(2), 146–174.* doi:10.1080/19420676.2013.871325

Dobson, K., Boone, S., Andries, P., & Daou, A. (2018). Successfully creating and scaling a sustainable social enterprise model under uncertainty: The case of ViaVia Travellers Cafés. *Journal of Cleaner Production, 172, 4555–4564.* doi:10.1016/j.jclepro.2017.09.010

Eisenhardt, K. M. (1989). Building Theories from Case Study Research. Academy of Management Review, 14(4), 532–550. doi:10.5465/amr.1989.4308385

Eisenhardt, K. M., & Graebner, M. E. (2007). Theory building from cases: Opportunities and challenges. *The Academy of Management Journal, 50(1), 25-32.* doi: 10.2307/2015983

Eisenmann, T. R., Ries, E., & Dillard, S. (2012). Hypothesis-driven entrepreneurship: The lean startup. *Harvard Business School Entrepreneurial Management Case*, (812-095). Retrieved from: https://edisciplinas.usp.br/pluginfile.php/5048746/mod_resource/content/1/hde.pdf

Etikan, I., Musa, S. A., & Alkassim, R. S. (2016). Comparison of convenience sampling and purposive sampling. *American journal of theoretical and applied statistics*, *5*(1), 1-4.

Evans, S., Vladimirova, D., Holgado, M., Van Fossen, K., Yang, M., Silva, E. A., & Barlow, C. Y. (2017). Business Model Innovation for Sustainability: Towards a Unified Perspective for Creation of Sustainable Business Models. *Business Strategy and the Environment, 26(5), 597–608.* doi:10.1002/bse.1939

Fixson, S. K., & Rao, J. (2014). Learning Emergent Strategies Through Design Thinking. *Design Management Review, 25(1), 46–53.* doi:10.1111/drev.10271

Foss, N. J., & Saebi, T. (2016). Fifteen years of research on business model innovation: How far have we come, and where should we go?. *Journal of Management*, *43*(1), 200-227. doi: 10.1177/0149206316675927

Frederiksen, D. L., & Brem, A. (2016). *How do entrepreneurs think they create value? A scientific reflection of Eric Ries' Lean Startup approach. International Entrepreneurship and Management Journal, 13(1), 169–189.* doi:10.1007/s11365-016-0411-x

Geissdoerfer, M., Bocken, N. M. P., & Hultink, E. J. (2016). Design thinking to enhance the sustainable business modelling process – A workshop based on a value mapping process. *Journal of Cleaner Production, 135, 1218–1232.* doi:10.1016/j.jclepro.2016.07.020

Geissdoerfer, M., Vladimirova, D., & Evans, S. (2018). Sustainable business model innovation: A review. *Journal of Cleaner Production, 198, 401–416.* doi:10.1016/j.jclepro.2018.06.240

Gill, P., Stewart, K., Treasure, E., & Chadwick, B. (2008). *Methods of data collection in qualitative research: interviews and focus groups. British Dental Journal, 204(6), 291–295.* doi:10.1038/bdj.2008.192

Golafshani, N. (2003). Understanding reliability and validity in qualitative research. *The qualitative report*, *8*(4), 597-607. https://dx.doi.org/10.4135/9781412985659

Guo, H., Zhao, J., & Tang, J. (2013). The role of top managers' human and social capital in business model innovation. *Chinese Management Studies, 7(3), 447–469.* doi:10.1108/cms-03-2013-0050

Gustafsson, J. (2017). Single case studies vs. multiple case studies: A comparative study. Retrieved from: https://www.diva-portal.org/smash/get/diva2:1064378/FULLTEXT01.pdf

Gutbrod, M., & Münch, J. (2018). Teaching Lean Startup principles: An empirical study on assumption prioritization. *In SiBW (pp. 245-253).* Retrieved from:

https://www.researchgate.net/publication/328163087_Teaching_Lean_Startup_Principles_An_Empirical_Study_on_Assumption_Prioritization

Harms, R., & Schwery, M. (2020). Lean startup: Operationalizing lean startup capability and testing its performance implications. *Journal of small business management*, *58*(1), 200-223. Retrieved from: https://sci-hub.se/10.1080/00472778.2019.1659677

Hart, S., Sharma, S., & Halme, M. (2016). Poverty, Business Strategy, and Sustainable Development. *Enterprise & Environment, 29(4), 401–415.* doi:10.1177/1086026616677170

Heinecke, A., & Mayer, J. (2012). Strategies for Scaling in Social Entrepreneurship. *Social Entrepreneurship and Social Business, 191–209.* doi:10.1007/978-3-8349-7093-0_10

Hillebrand, B., Kok, R. A. W., & Biemans, W. G. (2001). Theory-Testing Using Case Studies. Industrial *Marketing Management, 30(8), 651–657.* doi:10.1016/s0019-8501(00)00115-2

Hysa, X., Zerba, E., Calabrese, M., & Bassano, C. (2018). Social business as a sustainable business model: making capitalism anti-fragile. Sustainability Science. doi:10.1007/s11625-018-0566-1

Langley, A. (1999). *Strategies for Theorizing from Process Data. The Academy of Management Review, 24(4), 691.* doi:10.2307/259349

Lindgardt, Z., Reeves, M., Stalk, G., & Deimler, M. S. (2009). Business model innovation. When the Game Gets Tough, Change the Game, *The Boston Consulting Group, Boston, MA*. Retrieved from: https://sci-hub.se/10.1002/9781119204084.ch40

Mansoori, Y. (2017). Enacting the lean startup methodology. *International Journal of Entrepreneurial Behavior & Research, 23(5), 812–838.* doi:10.1108/ijebr-06-2016-0195

Massa, L., & Tucci, C. L. (2013). Business model innovation. *The Oxford handbook of innovation management*, *20*(18), 420-441. Retrieved from: https://books.google.nl/books?hl=en&lr=&id=ZBJwAgAAQBAJ&oi=fnd&pg=PA420&dq=Massa,+L.,+%26+Tucci,+C.+L.+(2013).+Business+model+innovation.&ots=Duub8GZmva&sig=xmbCxgN308fdT19E5q1hDFlHqSE#v=onepage&q&f=false

Massa, L., Tucci, C. L., & Afuah, A. (2017). A critical assessment of business model research. *Academy of Management Annals*, *11*(1), 73-104. doi: 110.5465/annals.2014.0072

Michelini, L., & Fiorentino, D. (2012). New business models for creating shared value. *Social Responsibility Journal, 8(4), 561–577.* doi:10.1108/17471111211272129

Mulgan, G. (2006). The Process of Social Innovation. *Innovations, 1(2), 145–162.* Retrieved from: https://www.mitpressjournals.org/doi/pdf/10.1162/itgg.2006.1.2.145

Müller, S. (2012). Business Models in Social Entrepreneurship. *Social Entrepreneurship and Social Business, 105–131.* doi:10.1007/978-3-8349-7093-0_6

Neugebauer, F., Figge, F., & Hahn, T. (2015). Planned or Emergent Strategy Making? Exploring the Formation of Corporate Sustainability Strategies. *Business Strategy and the Environment, 25(5), 323–336.* doi:10.1002/bse.1875

Nobel, C. (2011). Teaching a Lean Startup Strategy. *HBS Working Knowledge*, 1-2. Retrieved from: https://d1wqtxts1xzle7.cloudfront.net/38971773/teachLeanStrategy.pdf?1443763204=&response-content

Perrini, F., Vurro, C., & Costanzo, L. A. (2010). A process-based view of social entrepreneurship: From opportunity identification to scaling-up social change in the case of San Patrignano. *Entrepreneurship & Regional Development, 22(6), 515–534.* doi:10.1080/08985626.2010.488402

Rosca, E., Arnold, M., & Bendul, J. C. (2017). Business models for sustainable innovation – an empirical analysis of frugal products and services. *Journal of Cleaner Production, 162, S133–S145.* doi:10.1016/j.jclepro.2016.02.050

Rowley, J. (2002). Using case studies in research. *Management Research News, 25(1), 16–27.* doi:10.1108/01409170210782990

Schaltegger, S., Freund, F. L., & Hansen, E. G. (2012). Business cases for sustainability: the role of business model innovation for corporate sustainability. *International Journal of Innovation and Sustainable Development, 6(2), 95.* doi:10.1504/ijisd.2012.046944

Schaltegger, S., Hansen, E. G., & Lüdeke-Freund, F. (2016). Business Models for Sustainability. *Enterprise & Environment, 29(1), 3–10.* doi:10.1177/1086026615599806

Schneider, S., & Spieth, P. (2013). Business model innovation: Towards an integrated future research agenda. *International Journal of Innovation Management*, *17*(01), 1340001. doi:10.1142/s136391961340001x

Short, J. C., Moss, T. W., & Lumpkin, G. T. (2009). Research in social entrepreneurship: past contributions and future opportunities. *Strategic Entrepreneurship Journal, 3(2), 161–194.* doi:10.1002/sej.69

Siggelkow, N. (2007). Persuasion With Case Studies. *Academy of Management Journal, 50(1), 20–24.* doi:10.5465/amj.2007.24160882

Smith, A. D. (2002). *From Process Data to Publication. Journal of Management Inquiry, 11(4), 383–406.* doi:10.1177/1056492602238847

Smith, B. R., Kistruck, G. M., & Cannatelli, B. (2014). The Impact of Moral Intensity and Desire for Control on Scaling Decisions in Social Entrepreneurship. *Journal of Business Ethics, 133(4), 677–689.* doi:10.1007/s10551-014-2447-6

Sosna, M., Trevinyo-Rodríguez, R. N., & Velamuri, S. R. (2010). Business Model Innovation through Trial-and-Error Learning. *Long Range Planning, 43(2-3), 383–407.* doi:10.1016/j.lrp.2010.02.003

Spieth, P., Schneider, S., Clauß, T., & Eichenberg, D. (2018). Value drivers of social businesses: A business model perspective. *Long Range Planning*, *52*(3), 427-444. doi:10.1016/j.lrp.2018.04.004

Starman, A. B. (2013). The case study as a type of qualitative research. *Journal of Contemporary Educational Studies/Sodobna Pedagogika*, *64*(1). Retrieved from: https://d1wqtxts1xzle7.cloudfront.net/55511162/CaseStudy.pdf?1515683908=&response-content-disposition=inline%3B+filename%3D28_JOURNAL_OF_CONTEMPORARY_EDUCATIONAL_S.

Teece, D. J. (2010). Business models, business strategy and innovation. *Long range planning*, *43*(2-3), 172-194 doi:10.1016/j.lrp.2009.07.003

Tykkyläinen, S. (2019). Why social enterprises pursue growth? Analysis of threats and opportunities. *Social Enterprise Journal*. 15(13), 376-396. 10.1108/SEJ-04-2018-0033

Tykkyläinen, S., & Ritala, P. (2020). *Business model innovation in social enterprises: An activity system perspective. Journal of Business Research.* doi:10.1016/j.jbusres.2020.01.045

Waitzer, J. M., & Paul, R. (2011). Scaling social impact: when everybody contributes, everybody wins. *Innovations: Technology, Governance, Globalization*, *6*(2), 143-155. Retrieved from: https://www.mitpressjournals.org/doi/pdfplus/10.1162/INOV_a_00074

Weber, C., Kröger, A., & Lambrich, K. (2012). Scaling Social Enterprises-A Theoretically Grounded Framework. *Frontiers of Entrepreneurship Research*. Vol. 32: Iss. 19, Article 3. doi: 10.5465/AMBPP.2012.15804

Williams, M., & Moser, T. (2019). The art of coding and thematic exploration in qualitative research. *International Management Review*, *15*(1), 45-55. Retrieved from: http://www.imrjournal.org/uploads/1/4/2/8/14286482/imr-v15n1art4.pdf

Wilson, F., & Post, J. E. (2011). Business models for people, planet (& profits): exploring the phenomena of social business, a market-based approach to social value creation. *Small Business Economics, 40(3), 715–737.* doi:10.1007/s11187-011-9401-0

Yilmaz, K. (2013). Comparison of Quantitative and Qualitative Research Traditions: epistemological, theoretical, and methodological differences. *European Journal of Education, 48(2), 311–325.* doi:10.1111/ejed.12014

Yunus, M. (2006). Social businesses entrepreneurs are the solution. *In Skoll World Forum on Social Entrepreneurs. Said School of Business, University of Oxford, UK.* Retrieved from:

https://samhallsentreprenor.glokala.net/2018-2019/wp-content/uploads/2018/09/Social-Business-Entrepreneurs-Are-the-Solution-Yunus.pdf

Yunus, M., Moingeon, B., & Lehmann-Ortega, L. (2010). Building Social Business Models: Lessons from the Grameen Experience. *Long Range Planning, 43(2-3), 308–325.* doi:10.1016/j.lrp.2009.12.005

Zott, C., Amit, R., & Massa, L. (2011). The business model: recent developments and future research. *Journal of management*, *37*(4), 1019-1042. doi:10.1177/014920631140626

Zott, C., & Amit, R. (2010). Business model design: an activity system perspective. *Long range planning*, *43*(2-3), 216-226. doi: 10.1016/j.lrp.2009.07.004

Appendixes

Appendix A: Overview of the participants

Case	Role	Date
Agridex	Partner	February 2021
Agridex	CEO/Founder	March 2021
Social Trust Pension	Business Development Manager Formal Sector	March 2021
Social Trust Pension	Chief Operations Officer	March 2021
Social Trust Pension	Data Analyst	March 2021
Social Trust Pension	Business Development Manager Informal Sector	March 2021
Social Trust Pension	Head of Communications	March 2021
Medides	CEO/Founder	March 2021
Medides	Manager Business Development	March 2021
The Social Gifter	CEO/Founder	March 2021
The Social Gifter	Manager Customer Success	March 2021
The Social Gifter	Manager Legal & Operations	March 2021
The Social Gifter	Head of Engagement	March 2021

Appendix B: Interview protocol

Area of investigation	Guided interview questions
Introduction	• Introduction of myself • Explanation of the purpose and the topics • Permission to record the interview
Personal background	• Can you tell something about ‘company’ as an organisation? • What are your responsibilities / activities at ‘company’? • What motivates you to work at ‘company’?
Social Business model	• What was the reason for the creation of ‘company’? • What is the driver behind ‘company’? • How does ‘company’ ’s business model work? • How does ‘company’ business model differ from other social organisations? • Who are ‘company’ main partners?
Social Impact	• What impact does ‘company’ want to create and for whom? • How does ‘company’ measure this impact and how is it tracked? • What successes in creating impact has ‘company’ been able to achieve so far?
Scaling	• Can you describe the growth of ‘company’ so far? • Can you indicate how ‘company’ achieved this?
Scenario 1: Emmerend	• Can you describe in more detail what this process looked like in practice? • How did you follow the progress of the experiments? • Have you used certain tools / methods that supported in this? • Did you set any conditions for the experiments to evaluate the result? • Have you formulated expectations in advance? (And how?)
Scenario 2: Planned	• Has ‘company’ used a fixed plan for this? • Can you describe what this plan looked like? • Could ‘company’ stick to the plan in practice? (When no, how did they deal with that?) • How has ‘company’ tracked the plan's progress?
General	• What results has this approach yielded? • What benefits do you get from this approach? • What drawbacks has ‘company’ encountered? • Were there any notable points in applying this approach?
Ambition	• What is the scale ambition of ‘company’? • How does ‘company’ want to realize this ambition? • What are the challenges for scaling ‘company’ ’s business model?
End of the interview	• Do you have something you would like to contribute yourself? • Thanking the participant for the time taken and closing.

Appendix C: Coding schemes

Access to this appendix upon request

Appendix D: Interview transcripts

Access to this appendix upon request