Speeding Up Social Entrepreneurship

Improving the sustainability of the accelerator program

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by

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Abstract

In the past decade, a new entrepreneurial phenomenon aimed at seeding start-up companies has emerged across the globe: the social enterprise (SE) accelerator program. These accelerators focus on scaling social entrepreneurs by accelerating their journey to the market. Different actors like business reporters, entrepreneurs, and angel investors have expressed skepticism around the viability of the accelerator model. To research this sustainability, this thesis studied the revenue models of SE accelerators. Four semi-structured interviews were conducted with experts working at SE accelerators in Stockholm. These four identified getting revenue from partnerships, government institutions, and philanthropy and donations. Consulting contracts, equity shares and fees were not used by these four but were discussed as potential revenue streams. All respondents emphasized the importance of revenue model diversification and were currently working on strategies to act on this. Diversifying the revenue models of SE accelerators will increase the sustainability of their revenue models. This might be the first step from the focus of monetary gain towards a society where business is created to do good.

Keywords

Accelerator programs, Revenue Models, Social Entrepreneurship, Revenue Diversification

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An additional appendix (Appendix IV) containing the interview transcriptions is provided separately with this thesis.

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Acknowledgements

1 Introduction

In the past decade, a new entrepreneurial phenomenon aimed at seeding start-up companies has emerged across the globe: the accelerator program (Cohen & Hochberg, 2014). This kind of program, also known as just 'accelerator', 'seed accelerator', or 'start-up accelerator', can be defined as "a fixed-term, cohort-based program, including mentorship and educational components, that culminates in a public pitch event or demo-day" (Cohen & Hochberg, 2014, p. 4). The limited duration of the program is what most clearly differentiates the accelerator from other seed-stage institutions such as incubators, angel investors, and venture capitalists (Fehder & Hochberg, 2014). The first accelerator, Y Combinator, was founded in the US in 2005 (Hathaway, 2016). After that, the number of accelerators increased from four in 2007 to almost a hundred in 2011 (Kim & Wachman, 2014). The first accelerator in Europe was Seedcamp, founded in 2007 in London (Makarov and Ugnich, 2015). In 2016, around 580 accelerator programs existed globally (Gust, 2017).

At first, most accelerator programs accepted any type of promising start-ups. Today, many accelerators focus on a specific industry (e.g. IT or healthcare), community (e.g. women or university-affiliated), or explicit company-related products (e.g. Nike or Ericsson) (Cohen & Hochberg, 2014). One of these specified accelerators is the category of 'social enterprise accelerators'. Rally, for example, is a social enterprise accelerator that "helps founders create positive social change and build self-sustainable ventures" (Rally, 2017). Scholars have discussed the same concept under different terms. Pandey et al. (2017) name 'social accelerators', which have the purpose of stimulating the growth and scaling up of social ventures. 'Impact accelerators', as identified by Lall, Bowles and Baird (2013), focus on entrepreneurs that want to achieve social impact. 'Non-investment accelerators' (NIA) are accelerators that "seek an impact that is measured in terms beyond a start-up's direct pecuniary gains" (Bernthal, 2015, p. 152). These different terms all come down to the same concept, named in this thesis as 'Social Enterprise (SE) accelerators': accelerators that focus on scaling social entrepreneurs by accelerating their journey to the market.

With the advent of the accelerator program, scholars have started researching the phenomenon as well. Hochberg (2016) states that accelerator research occurs roughly in two categories: conceptual description of the accelerator model and empirical accelerator assessments. An example of the former category is the study by Bernthal (2016). He documented and explained the legal and extra-legal dimensions of investment accelerator systems. Empirical accelerator assessments entail studies on the *impact* of accelerators. For example, Bliemel et al. (2016) researched the added value of Australian incubators and accelerators to the start-ups they support, as well as their innovation ecosystems. Cohen and Hochberg (2013) combine both of Hochberg's categories. They researched the accelerator phenomenon - how it can be defined; what the differences are between accelerators, incubators, angel investors and co-working environments; and the impact of accelerators on their environment. Regardless of these studies, scientific literature on accelerators leaves some important issues unanswered (Hausberg & Korreck, 2018). One of these issues has been addressed by the media: business reporters, entrepreneurs, and angel investors have expressed skepticism around the viability of the accelerator model (Grof, 2017; Rose, 2016; Kauffman, 2015). This mostly regarded the presence of a sustainable revenue model. A common revenue model for accelerators is taking equity in a large volume of projects and hoping one out of ten gets a 'big exit' (Pauwels et al., 2016). However, this is not always the (only) revenue model used. According to Chakraberty (2017), more than one-third of the accelerators in the Asia-Pacific region surveyed in 2016

took no equity from their start-ups. Furthermore, the accelerators that did take equity had other forms of revenue streams.

To provide answers for the questioned sustainability of the accelerator model, this paper researches the revenue models used by accelerators. No research has been conducted on this topic specifically. Therefore, the aim of this paper is to inventorize the revenue models used by accelerators. This is the first step in researching which revenue models are sustainable, and how unviable revenue models can be improved. Lall, Bowles and Baird (2013) state that SE accelerators seem more focused on developing different revenue streams than traditional accelerators. This suggests SE accelerators are developing a wider range of revenue models than traditional accelerators. Furthermore, social entrepreneurship is an important development in current society. Governmental and philanthropic initiatives to solve social problems have not been sufficient, and social entrepreneurs have been identified as necessary actors to develop new models to contribute to a new society (Dees, 1998). Institutions such as SE accelerators contribute to development of social enterprises. By researching the revenue models of SE accelerators, this study will contribute to the impact of accelerators towards a new, improved society. Therefore, this paper emphasizes on the revenue models of SE accelerators. The following research question is composed to guide this research:

1. *What revenue models are used by social enterprise accelerators?*

The answers of this research will help gaining insight into which revenue models are used by social enterprise accelerators. This study not only inventorizes the revenue models, but also researches the reasons *why* the accelerators have chosen for certain types of revenue models. Furthermore, changes of revenue models are addressed. The following secondary research questions help address these issues.

1. *Why are certain revenue models used by social enterprise accelerators?*
2. *Is there a shift in revenue models used by social enterprise accelerators, and if yes, why?*

When these research questions are answered, insight will be gained into which revenue models are used by SE accelerators, and the reasoning behind them. This is the first step in improving the viability of SE accelerators. Research has shown that accelerators have a positive effect on the ability of entrepreneurs to reach key milestones (Fehder & Hochberg, 2015). Therefore, more viable accelerators contribute to a more successful entrepreneurial ecosystem. These effects will eventually lead to industrial and economic growth and their management (Carree & Thurik, 2003).

Delimitations
The delimitations of this study are used to provide clear boundaries to the research, which lead to a better understanding of the discussed topics. This research focuses on the *revenue models* of *social enterprise accelerators* within *Sweden.* The author of this study specifies on revenue models, instead of looking at the total business model. The business model describes the creation, delivery and capture of value, whereas the revenue model only describes the latter of the three. Captured value includes economic profit, and interest (Bowman and Ambrosini, 2000. Since this study researches the *economic viability* of accelerators, researching their revenue models will be sufficient. Aside from focusing on revenue models, this research studies *social enterprise* accelerators. As mentioned in the previous section, Lall, Bowles and Baird (2013) suggest SE accelerators use a broader range of revenue models than

traditional accelerators, and the stimulation of SE accelerators will lead to a more successful entrepreneurial ecosystem. Lastly, this study delimits itself to SE accelerators within the Sweden. The Nordic countries, including Sweden, have been experiencing challenges regarding the maintenance and development of social welfare (Norden, 2015). To address these issues, the Swedish government together with the community has created a social innovation hub (ibid). Accelerators are only an emerging trend within Sweden, even though they offer a very positive future prospect (Nordic Innovation, 2016). This suggests Swedish accelerators shaping and adjusting to a changing entrepreneurial environment, which makes them an interesting research case. Furthermore, the proximity of the researcher to the Swedish accelerators provides an optimal research environment.

2 Literature review

In this chapter, the relevant theory on social entrepreneurship accelerators and revenue models will be combined into one framework.

2.1 Accelerators

In the past decade, nascent literature regarding the accelerator phenomenon and its regional effects has come into existence (Yu, 2016). This has led to different definitions and comparisons to other seed institutions, which are discussed here.

2.1.1 Definition

It is not always clear how an accelerator program is defined (Cohen & Hochberg, 2014). This confuses not only the media and the marketplace but complicates research into accelerators as well. For example, some programs name themselves accelerators, whereas in fact they fit more into the category of incubators. The exact variation between these different seed-initiatives is discussed in the next section, but first the term 'accelerator' needs to be defined. Bliemel et al. (2016) summarize one of the most widely accepted 'strict' definitions, proposed by Miller & Bound (2011), repeated by BADIR (2013), and extended by NESTA (2014) and Heinemann (2015). According to them, accelerators are defined by five business model features that are partially independent:

Cohort: Accelerators invest simultaneously in a cohort or 'batch' of start-ups (Bliemel et al., 2016). Due to these cohorts, entrepreneurs experience operational efficiency for portfolio management and peer learning. Since resources are used in batch-form, economies of scale are used. At the end of the accelerator program, there is a cohort-based 'graduation', sometimes called "demo day". Here, ventures pitch to an audience, often consisting of qualified investors (Cohen & Hochberg, 2014).

Co-location: The cohort-based investment of accelerators often leads to the requirement of full-time co-location of the participating start-ups (Bliemel et al., 2016). This co-location facilitates the peer learning accelerators encourage.

Program: The cohort-format of accelerators results in the offering of standardized guidance format within the accelerator program, especially when the participants first start (Bliemel et al., 2016). After the beginning, the program becomes increasingly unstructured and tailored to the participants. Programs typically run 3 to 6 months with stretches of time in between allowing for transitioning and recruiting (Bliemel et al., 2016). The limited-duration program is one of the key-defining characteristics of accelerator programs, especially compared to the continuous nature of incubators and angel investments (Cohen & Hochberg, 2014).

Mentoring: Most accelerators employ very few people and tap into the enthusiasm of entrepreneurs who want to give back to the next generation (Bliemel et al., 2016). Often, mentors help out as volunteers with the possibility of angel investing in their preferred start-ups in the cohort (Bliemel et al., 2016).

Seed funding: According to Bliemel et al. (2016), accelerators often offer start-ups seed funding in exchange for a small portion of equity. Not all accelerators offer this service, however. Cohen and Hochberg (2014) mention that accelerator programs "may be for-profit

or non-profit, and may vary in the amount of stipend and the size of the equity stake taken" (p. 4-5).

The lynch-pin of accelerators is arguably the cohort model (Bliemel et al., 2016; see also Van Huijgevoort, 2012; Dempwolf et al., 2014; Shane, 2015). This model results in the competitive intake process, peer-to-peer learning as well as peer pressure (Cohen & Hochberg, 2014). Aside from these common characteristics of accelerators, it is important to recognize variations across accelerators as well. Not all accelerators take equity funding or provide seed funding. Furthermore, accelerator programs vary in length of the mentorship and educational program, the availability of co-working space and in-industry vertical focus (Cohen and Hochberg, 2014). Therefore, Cohen and Hochberg (2014) summarize the above-mentioned characteristics in the following definition of the accelerator: "a *fixed-term*, *cohort-based* program, including *mentorship and educational components,* that culminates in a public pitch event or *demo-day*." (p. 4).

2.1.2 Difference between accelerators, incubators, VCs and angel investors

Media, researchers and policy makers often confuse accelerators with existing alternative institutions such as incubators, angel investors, or venture capitalists (Cohen & Hochberg, 2014). These different institutions are all designed to support entrepreneurs, but they do differ from each other. Cohen (2013) has researched the differences between accelerators, incubators, and angel investors. Bernthal (2016) additionally studied the difference between accelerators and venture capitalists as well. Table 1 summarizes these differences.

Table 1. Summary of the Differences between Accelerators, Incubators, and Angel Investors (Cohen & Hochberg, 2014) and Venture Capitalists (Bernthal, 2016).

	Accelerators	**Incubators**	**Angel Investors**	**Venture Capitalists**
Duration	~3-6 months	1-5 years	Ongoing	Ongoing
Cohorts	Yes	No	No	No
Selection frequency	Competitive, cyclical	Non-competitive	Competitive, ongoing	Competitive, ongoing
Venture stage	Early	Early, or late	Early	Early
Education offered	Seminars	Ad hoc, hr/legal	None	Upon request
Venture location	Usually on-site	On-site	Off-site	Off-site
Mentorship	Intense, by self and others	Minimal, tactical	As needed, by investor	As needed, by venture capitalist
Revenue model[1]	Investment; non-profit	Rent; non-profit	Investment	Investment

The following sections describe the differences between the seed institutions per category.

Duration

As shown in table 1, the duration of accelerators is much shorter than the other seed institutions. According to Cohen and Hochberg (2014) it is the characteristic that mostly defines the accelerator program. Participants often work around the clock, seven days a week, for the duration of the program. This leads to either quicker growth or quicker failure of the entrepreneur's business (Cohen & Hochberg, 2014).

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[1] More detailed information regarding the revenue models of accelerators is discussed on page 8-9.

Cohorts
Accelerators, compared to the other seed institutions, are the only model that uses cohorts or batches. Entrepreneurs arrive and leave the program at the same time (Bernthal, 2016), often finishing with a 'demo day'.

Selection frequency
As mentioned, accelerator programs run cyclical, a certain amount of times per year. To get accepted into the program, entrepreneurs need to apply. This application is highly competitive, and only small amounts of businesses get accepted. Incubators, angel investors and VCs all take in new applicants continuously, however, the application process for incubators is less competitive than the other seed institutions.

Venture stage
All the different seed initiatives accept early-stage ventures. Again, incubators differ from the rest in accepting late-stage enterprises as well.

Education offered
Intensive education is one of the main reasons why entrepreneurs participate in an accelerator program (Cohen & Hochberg, 2014). As opposed to incubators who offer fee-based professional services (e.g. lawyers and accountants), accelerators can participate in a wide range of entrepreneurial seminars (Hackett & Dilts, 2004; Cohen & Hochberg, 2014). This takes place in groups or one-on-one.

Venture location
Part of the business model of incubators is providing on-site location of the ventures (Cohen & Hochberg, 2014). Accelerators usually require on-site presence as well, however, this is not always the case (Cohen & Hochberg, 2014). This is opposed to VCs and angel investors, who typically do not provide any venture location for the entrepreneurs (ibid).

Mentorship
Even though the amount of mentorship varies across programs (Cohen & Hochberg, 2014), accelerators in general provide intense mentorship - especially compared with other seed institutions (Yu, 2015). This does not mean that incubators, VCs, and angel investors do not provide mentorship at all. The difference lies in the amount, and the role entrepreneurs have: the participants in the program have the responsibility to request mentorship themselves, as opposed to within accelerators, which often provide more guidance in the mentorship process.

Revenue model
A common business model of accelerators is taking equity in exchange for the seed funding of their participants (Bliemel et al., 2016). This resembles the business model of angel investors and VCs, as opposed to incubators which usually charge rent (Cohen & Hochberg, 2014; Bliemel et al., 2016). Even though accelerators share this trait with angel investors and VCs, their investment process is often much more standardized. This is because of the batch applications to the program and the ad-hoc approach of angel investors (Bliemel et al., 2016).

2.2 Social Enterprise Accelerators

This thesis focuses its research on SE accelerators. To create a clear definition on SE accelerators, the concept of 'social entrepreneurship' needs to be discussed.

2.2.1 Social Entrepreneurship

To understand social entrepreneurship, first the term 'entrepreneurship' needs to be defined. The emergence of entrepreneurship research gained popularity with Schumpeter, who in 1934 linked the entrepreneurial initiatives of individuals to economic development (Schumpeter, 1934). Since then, a growing consensus has emerged on the definition of entrepreneurship: it can be defined as the process through which new economic activities and organizations come into existence (Davidsson, 2003; Gartner, 1988; McMullen and Dimov, 2013; Shane & Venkataraman, 2000; Wiklund et al., 2011). A few decades ago, social entrepreneurship branched off 'traditional' entrepreneurship research as a singular field of study (Mair & Marti, 2006). As opposed to entrepreneurship in general, no consensus on the definition of social enterprise has emerged, and it remains an essentially contested concept (Choi & Majumbar, 2014). This is because of the definition of *social*: according to Mair and Marti (2006), defining the boundaries of what is meant by social is the greatest challenge in understanding social entrepreneurship.

Searching for a definition is a thesis in itself and a question without a perfect answer. Therefore, this thesis uses the definition proposed by Mair and Marti (2006), from one of the most-cited papers on social entrepreneurship. After extensive literature research into the different definitions of social entrepreneurship, enterprises, and entrepreneurs, they view social entrepreneurship as *"a process that catalyzes social change and/or addresses important social needs in a way that is not dominated by direct financial benefits for entrepreneurs"* (Mair & Marti, 2006). The writers emphasize that the difference between social and traditional entrepreneurship lies with how much priority is given to promote social value and development, as opposed to capturing economic value (ibid). This definition is in line with the definition used by social enterprise accelerators.

2.1.2 SE Accelerators

As mentioned in the introduction, social enterprise accelerators exist under many names. Table 2 summarizes the different terms of SE accelerators used by other scholars.

Table 2. Terms and definitions for SE accelerators as used in scientific literature.

Used term	Definition	Source
Impact Accelerator (or social accelerator)	Impact accelerators accept social entrepreneurs that use innovation to create new markets with the goal to solve or improve social and environmental challenges. Impact accelerators focus on social issues, ranging from job creation to income and productivity to sustainability to community development. They focus on ventures that focus equally on their social or environmental impact and its financial outcomes.	King et al., 2015)
Impact-focused Accelerators	Impact-focused accelerators are programs that focus on entrepreneurs who try to find market-based solutions to social or environmental problems.	Lall, Bowles, and Baird (2013)

(Table continues next page)

Accelerators for Social Entrepreneurs	Accelerators for Social Entrepreneurs are accelerators that accept "organizations pursuing social or environmental goals by means of trading – and that invest a large proportion of their profits in the enterprise and/or the pursuit of these goals" (p.3). However, to avoid an unnecessarily narrow definition, the author does not restrict to firms that have participatory structures of governance.	Levinsohn (2014)
A.T. Kearney Social Enterprise Accelerator Model	A.T. Kearney identifies social enterprise accelerators as accelerator programs "that can help social businesses grow and replicate their social and environmental impact".	A.T. Kearny (2015)
Social Enterprise Accelerator	An example of a social enterprise accelerator is the Pittsburgh Social Enterprise Accelerator, which "supports the development of emerging non-profit ventures in the Pittsburgh area at no cost to the non-profit" (p. 255)	Kerlin (2006)
Social Accelerators	Social accelerator programs are programs that "support the scaling process of organizations that mainly target social challenges through innovative and market-oriented solutions" (p. 180)	Casasnonvas and Bruno, (2013)
Social Accelerators	Social accelerators can be defined as a program that "supports innovative social entrepreneurs through training, mentoring and other means" (p. 88).	Pandey et al., (2017)

This thesis has combined the previously stated definition of accelerators with a definition of social entrepreneurship, which is in line with the descriptions of social enterprise accelerators from table 2. This has led to the following definition of SE accelerators:

"A social enterprise accelerator program is a
fixed-term, cohort-based program,
including *mentorship* and *educational components*
that culminates in *a public pitch event or demo-day*

in which the participating entrepreneurs
use *innovation to create new markets*
while they focus on
social or environmental impact
as well as *financial* outcomes."

2.3 Revenue Models
The use of the word 'revenue model' has confused researchers, media, and institutions in the past. This section clarifies the term.

2.3.1 Business Model
One of the concepts that relates to revenue models is the business model. Osterwalder and Pigneur (2010, p. 9) provide the following definition: *"A business model describes the rationale of how an organization creates, delivers, and captures value"*. Consistent failure of a company to find its right business model causes a firm to generate less value from its products or services than they might otherwise (Rosenbloom and Spencer, 1996). The business model is therefore a major contributing factor to the viability of a company - in this case, accelerator programs. Osterwalder and Pigneur (2010) believe a business model can be described best through nine 'building blocks': customer segments, value propositions, channels, customer relationships, key resources, key activities, key partnerships, costs

structure, and revenue streams. Revenue streams are thus only a part of the business model. Teece (2010) confirms this: he states that the revenue model is just one components of the business model.

2.3.2 Definition: what is a revenue model?

Even though a revenue model is only one of the *components* of the business model (DaSilva & Trkman, 2014), both terms are often confused with each other (George and Block, 2011). While the business model describes a company's creation, delivery, and capture of value, the revenue model only deals with value appropriation (Rosca et al., 2017). The revenue model describes the way a firm produces revenue, which should equal or exceed its costs. If this is not the case, the business is not viable (Richardson, 2008). DaSilva and Trkman (2014) mention that a revenue model does not define the value creation of a firm, but only describes how revenue is generated through selling its goods or services.

Revenue models can be differentiated according to two dimensions: the *directness* of the revenue stream and the *source* of the revenue stream. Direct revenues are generated by direct between the end-customer and the supplier, whereas indirect revenues flow through an intermediary before ending at the end-customer (Wirtz & Lihotzky, 2003). Revenue can either come from a private or a public source, where public is governmental and private can be individuals or organizations.

2.3.3 Revenue models of Social Enterprise accelerators

Scientific literature on social enterprise accelerators, though scarce, mentions a few different revenue models used by the programs. This section lists the different revenue models and provides a short explanation of the revenue model in general.

Philanthropy

Philanthropy has been identified as one of the major revenue models of accelerators (Lall, Bowles & Baird, 2013; Kerlin, 2006; King, 2015). In recent years, philanthropy has been developing as a model for social entrepreneurs in general (Scarlata & Alemany, 2009). Related to SE accelerators, philanthropy means that the programs rely on grants to support (a portion of) their operations (Lall, Bowles & Baird, 2013). Approximately 75 percent of SE accelerators rely in some extent on philanthropic investment to survive (Lall, Bowles & Baird, 2013; King, 2015). Literature has identified the use of philanthropy under different names as well: donations, foundations and non-governmental grants have been used to describe the philanthropic revenue model (Lall, Bowles & Baird, 2013).

Fiscal sponsorship

King (2015) identified fiscal sponsorship as a revenue model used by accelerator programs. Fiscal sponsorships entail the act of charitable corporations giving unincorporated groups with aligned missions a tax-exempt home (Spack, 2005). In this case, the accelerators would not be completely independent since they are legally part of the sponsor organization. However, the program remains autonomous and often has independent advisory boards who make their own strategic decisions (ibid.). The accelerator program would still be responsible for their own funding. With fiscal sponsorship, accelerators can first seek philanthropic capital in the early stages when testing ideas, and later operate as a private entity when they seek investment (King, 2015).

Government funding
Depending on the country, accelerator programs can be funded directly or indirectly by government funding (Kerlin, 2006; Levinsohn, 2014). In 2015, about 40 percent of accelerators in Europe received public funding (Gust, 2016). Government funding can come from local, national or international governmental institutions, and comes in all shapes and sizes. By targeting local, community-based investment and economic activity, governments try to increase enterprise and economic development (Austin, Harris & Coleman, 2014).

Returns on equity
As mentioned in the introduction, accelerators often take some equity in the participating firms (Lall, Bowles & Baird, 2013). In 2012, US accelerators took between 5 and 8 percent equity stakes in return for stipend and mentorship, with an average of 6 percent (Cohen & Hochberg, 2014). The revenue model requires a long-time horizon, which emphasizes the importance of using hybrid revenue streams (King, 2015).

Success fees from investment
Related to investment, another way to create revenue for accelerators is to charge a 'success fee' when enterprises find investors through the accelerator program. According to Lall, Bowles and Baird (2013) about ninety-eight percent of accelerators promote access to accelerators as a valuable service, and many use success fees as a form of revenue stream as a result. However, according to the authors, only about 7.5 percent of all accelerator budgets are funded by success fees (Lall, Bowles & Baird, 2013).

Fees
Some accelerator charge participants for taking part in the program. This revenue model is similar to the model often used by incubators, as discussed previously. Lall, Baird and Bowles (2013) found fees ranging from $120-$5000, with an average of $1300 in their sample. King (2015) states that many accelerators recognize this is not a sustainable revenue model.

Revenue-sharing agreement
Instead of paying a fee upfront to take part in the accelerator program, some accelerators create a deal with the participants which lets them attend for free. However, after graduation, the enterprise pays a percentage of their gross revenue for a certain amount of years, if the company remains in existence (King, 2015).

Consulting contracts
Since accelerators have access to a high volume of expertise, they have a unique position to monetize on this. This can happen in two ways (Lall, Bowles & Baird, 2013). Firstly, because of an accelerator's knowledge and insight gained from enterprise exposure, it can create fee-for-service contracts, workshops, training, consulting, and event management (King, 2015). Secondly, instead of the accelerator employees, the (graduated) entrepreneurs could assist in business development (Lall, Bowles & Baird, 2013).

Partnerships
Accelerator programs often partner with corporations, universities, investors, foundations and governments (King, 2015). In this case, the partner provides funding for the accelerator or the participants respectively. Partner activities could also consist of recommending enterprises to the program, attend or organize demo-days, or serve as mentors (ibid). An example of partnerships is the IBM Alpha Zone. Alpha Zone, co-founded by IBM and Sunrise Israel Tech, is an accelerator program which supports enterprises with the help of IBM channels and

expertise (Sunrise Israel, no date). The Melbourne Accelerator Program (MAP) is an example of a university partnerships: together with the University of Melbourne, the accelerator grows ten start-ups a year – of which at least one founder per enterprise needs to be a student, staff or alumni of the University of Melbourne (MAP, 2015). Combinations are possible as well: Techstars teamed up with Amazon and the University of Washington to accelerate start-ups who could contribute to the Alexa technology (Soper, 2016).

2.4 Theoretical framework

The previously listed revenue models can be combined with the dimensions of revenue models, source and directness. When doing so, the following table emerged:

Table 3. Theoretical Framework categorizing different revenue models of SE accelerators according to two dimensions: source and directness. (Created by the author)

		Source	
		Public	*Private*
Directness	*Direct*	Partnerships*	Returns on investment Success fee from investment Fees Consulting contracts Partnerships*
	Indirect	Government funding	Philanthropy Donation Revenue sharing agreement Fiscal Sponsorship

*Partnerships are either private or public, depending the source of the partner.

This framework provides a clear overview of the differences between certain revenue models used by SE accelerators, which will be used when discussing the models in the results.

3 Methodology

This chapter describes the method used to conduct this study.

3.1 Research Design

This thesis uses an interpretivist research design. Interpretivist methods "seek to describe, translate, and otherwise come to terms with meaning, not the frequency of certain more or less naturally occurring phenomena in the social world" (Van Maanen, 1983, p. 9, cited in Collis & Hussey, 2013, p. 45). Since the goal of this research is not only to inventorize which revenue models used by SE accelerators, but also the strategic choices behind these revenue models, the interpretivist approach is a fitting research design for this study. The thesis uses a qualitative research method to gain insight into the revenue models. This means that interviews were conducted: an established way of collecting data that is rich in detail and nuance (Collin & Hussey, 2013). Additionally, desktop research is performed to compare the results from the interviews to the use of revenue models within traditional accelerators and other social enterprises. Addressing these topics will lead to insight into the use of a revenue model within the entrepreneurial ecosystem and whether the revenue model could be sustainable. The desktop research is based on grey and scientific literature. Grey literature refers to non-scientific studies, e.g. unpublished reports, dissertations, policy documents, reports to funding agencies, non-English language articles, and technical reports (Conn et al., 2003). Even though some critics have questioned the validity of the data of grey literature, Benzies et al. (2006, p. 59) find that grey literature "might create an opportunity to take into account the important contextual information, without losing the level of rigor required for a systematic review". Researching grey literature fits the interpretivist approach of this thesis, and therefore is included in this study.

3.2 Sample

To give a variety of insights into which revenue models are used by SE accelerators and its underlying reasons, purposive sampling was used as the sampling method. Eleven organizations offering accelerator programs within the Nordics were approached, of which five were focused on social impact. The interviewees were chosen based on their expertise and involvement in accelerators in Sweden. After a discussion with the commissioner of this thesis, the following parties have been chosen to interview:

Table 4. Interview participants of the thesis.

Organization	Accelerator program	Function of the interviewee
SE Forum	SE Outreach Accelerator	Executive Director
Stockholm School of Entrepreneurship	SSES Affinity Accelerator	Head of SSES Ventures
Reach for Change	Reach for Change	Central Partnership Manager
Center för Socialt Entreprenörskap Stockholm	CSES	CEO and Founder

Some background information about the cases is provided here.

SE Forum, or Social Entrepreneurship Forum, was the commissioner of this thesis. The organization is non-profit, Sweden-based, and promotes, inspires, and empowers global

entrepreneurs to use business to do good. Since 2013, it offers a six-month accelerator program called Outreach for social entrepreneurs running businesses that address social and environmental challenges facing low- and middle-income countries (SE Forum, 2018).

Stockholm School of Entrepreneurship (SSES) is a global platform for interdisciplinarity, providing free of charge courses, experiences, and incubation for students and alumni of Stockholm's top five universities: The Royal Institute of Technology (KTH), Stockholm University (SU), Stockholm School of Economics (SSE), University College of Arts, Crafts and Design (Konstfack), and Karolinska Institutet (KI) (SSES, 2018). Affinity is their accelerator program and focuses both on services and products with a positive social impact and/or a solid business potential. Even though this thesis focuses on SE accelerators, since SSES includes about 50 percent social impact enterprises it still is a valid case for this research.

Reach for Change is a non-profit founded by Kinnevik Group and Sara Damber with the goal to find and develop local social entrepreneurs with innovations that solve pressing issues facing children (Reach for Change, 2018). Reach for Change started as an incubator, but later added an accelerator program to their organization.

Centre for Social Entrepreneurship Stockholm (CSES) was founded about 8 years ago to support entrepreneurs who not only wanted to find an economically sustainable model but also have a positive impact on societal and environmental challenges (Interview 4, additional Appendix IV). This was before the importance and potentials of social entrepreneurship were recognized by Swedish governments, institutions, and businesses. Therefore, it struggled to gain enough revenue, and the founders decided a few years ago to pursue other interests. Even though CSES was more of an incubator than an accelerator program, from a revenue model perspective it is an interesting case to explore why their revenue model has failed.

3.3 Interview design
The conducted interviews were designed to be semi-structured. This provided a chance for the interviewees to elaborate on which revenue models they used, why, and how. Furthermore, it gave the interviewer the opportunity to ask follow-up questions. This way, responses could be clarified, and more detailed and nuanced data could be acquired. The skeleton of the interview design, however, remained the same for all interviewees. Firstly, the participants were asked about their focus on social impact within their organization and accelerator program. Secondly, detailed questions regarding the overall revenue model of the organization as well as the accelerator program specifically were asked. An overview of the interview questions can be found in Appendix I.

3.4 Data collection
Interviewees have all been contacted via email with an introduction and some explanation regarding the research subject. The interviews have been conducted face-to-face at the location of the respondents' organizations. The interviews have been recorded and transcribed. The transcriptions can be viewed in additional Appendix IV.

After the interview data collection, a list of used revenue models identified by the interviewees emerged. Desktop research was used to study how these identified revenue models are used by traditional accelerators and other social enterprises. This was done by adding keywords, derived from the interviews, into search engines. For example, when the interviewees mention a partnership revenue model specifically, the keyword to find additional

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literature will be [partnership + "revenue model" + "social entrepreneurship"]. Table 5 shows an example of the used keywords, and the full table can be found in Appendix II.

Table 5. Search terms and engines for desktop research, example.

Search term	Search Engine
partnerships + "revenue model"	Google, Google Scholar
partnerships + "revenue model" + accelerator	Google, Google Scholar
partnerships + "revenue model" + "social entrepreneurship"	Google, Google Scholar
...	…

3.5 Data analysis
The NVivo program has been used to analyze the interviews. NVivo is a program designed for analyzing qualitative studies, commonly used by educational researchers (Leech and Onwuegbuzie, 2011). Per interview, statements regarding revenue models have been categorized. Each statement about different revenue models, social and environmental impact, and statements regarding viability, risks and opportunities has been identified. If suitable, the statements were categorized according to the different revenue models identified in the theoretical framework. If the statements did not fit the framework, additional categories were created. A full overview of the statements and their categorization can be found in the coding book in Appendix III.

By doing this analysis, two insights were created: first, which revenue models are used by (SE) accelerators; and second, how do the accelerators view different kinds of revenue models. When this analysis was carried out, the findings were compared to the findings of the desktop research. Comparisons were drawn between which revenue models were used by social impact accelerators, traditional accelerators and social enterprises, and why.

3.6 Research quality
The quality of a research consists of two dimensions: reliability and validity (Bryman, 2012). Both dimensions entail an internal as well as an external aspect. Internal reliability concerns the consistency of the study throughout the research (Bryman, 2012). In this study, internal reliability is ensured since the study is carried out by a single researcher. Therefore, consistency is high. External reliability entails the degree to which a research can be replicated (Bryman, 2012). This research provides a detailed description of the used methodology, which contributes to the replicability of the research. Internal validity entails how the researcher derives conclusions are from the results (Bryman, 2012). Since the results were processed in a concise way and textual context was considered, this study ensures internal validity. As to external validity, the amount findings can be generalized into wider society (Bryman, 2012), a qualitative study such as this one cannot achieve great external validity. However, since this research takes multiple views into perspective, this impediment is limited.

3.7 Ethics and sustainability
This thesis has used an ethical code in the study of revenue models of SE accelerators. This code is based on Collis and Hussey (2013), who proposed a 'checklist' for ethical research. This section discusses each subject in relation to the thesis.

1. *Informed consent:* The participants have been asked for explicit consent before becoming part of this research. They have been informed via email what the research what the study is about, knew that the results would be published, who the thesis commissioner is, and that the results would be send to all participants. No coercion has been used by the author to persuade people to participate.
2. *Anonymity and confidentiality:* Data about the participants has been stored according to the consent of the participants. Participants had the option to become anonymous, however, none of the participants felt the need. In one case, one participant told the author something 'off the record' - this information has been redacted from the transcript and is not used in this thesis.
3. *Dignity:* The author ensured the participants were treated with respect and dignity. Through asking feedback at the end of the interviews, the author checked if the participant felt treated accordingly.
4. *Publication and Research Design:* The author has not falsified or exaggerated the results in any way and follows an accepted research practice when analyzing the data and drawing conclusions. Furthermore, the author adheres to the community standards of conduct.

The relation between this thesis and sustainability is two-tiered. Firstly, the research design is focused on minimizing its carbon footprint as much as possible: most interviews have been conducted near the author, and when the need for travel was there, public transport was used. Furthermore, aside from conducting the interviews, the study was a desktop-research. This means that this study has required a low amount of resources. Secondly, the research itself contributes to a more environmentally and social sustainable economic environment. This is because the research will provide insight into SE accelerators, institutions that help grow and develop enterprises focused on sustainability.

4 Results

This chapter presents the results based on the interviews combined with desktop research. First, the revenue models used by the interviewees are presented, then each revenue model is discussed individually. Lastly, the most important overall findings are discussed.

4.1 Revenue models identified

The following graphs describe the percentages of revenue models identified by the interviewees. These percentages are true for the year 2017.
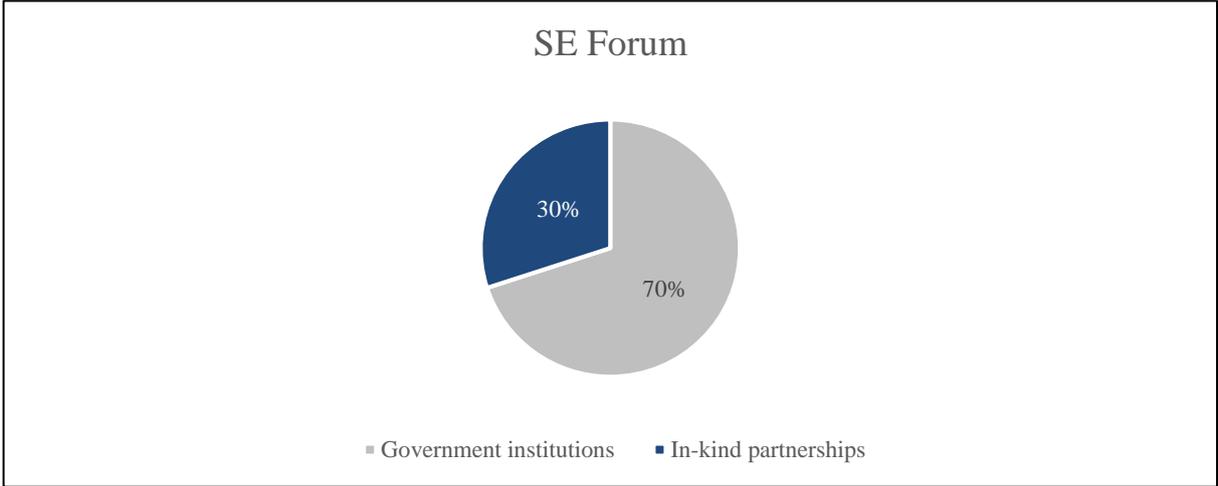
Figure 1. Revenue sources of SE Forum. Derived from interview 1, source in additional Appendix IV.

Participant 1 from SE Forum identified 70 percent revenue coming from the governmental institution SIDA in 2017. The other 30 percent came from in-kind sources, mainly from companies.
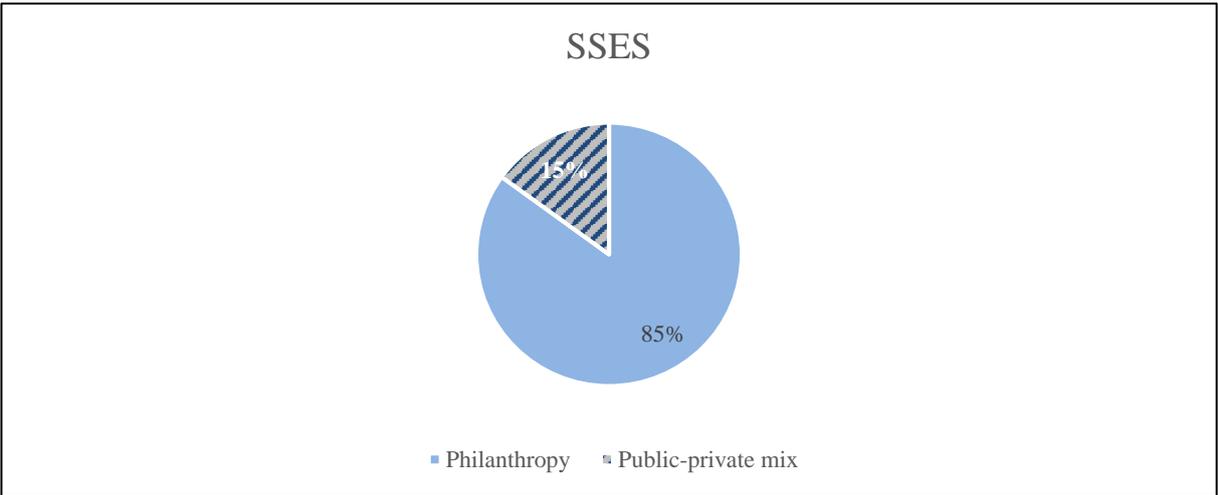

Figure 2. Revenue sources of SSES. Derived from interview 2, source in additional Appendix IV.

Participant 2 from SSES estimated to have 80-90 percent revenue from philanthropic sources, and the rest from a mix of public and private revenue. This mix consists of government funding as well as corporate partnerships and in-kind partnerships.
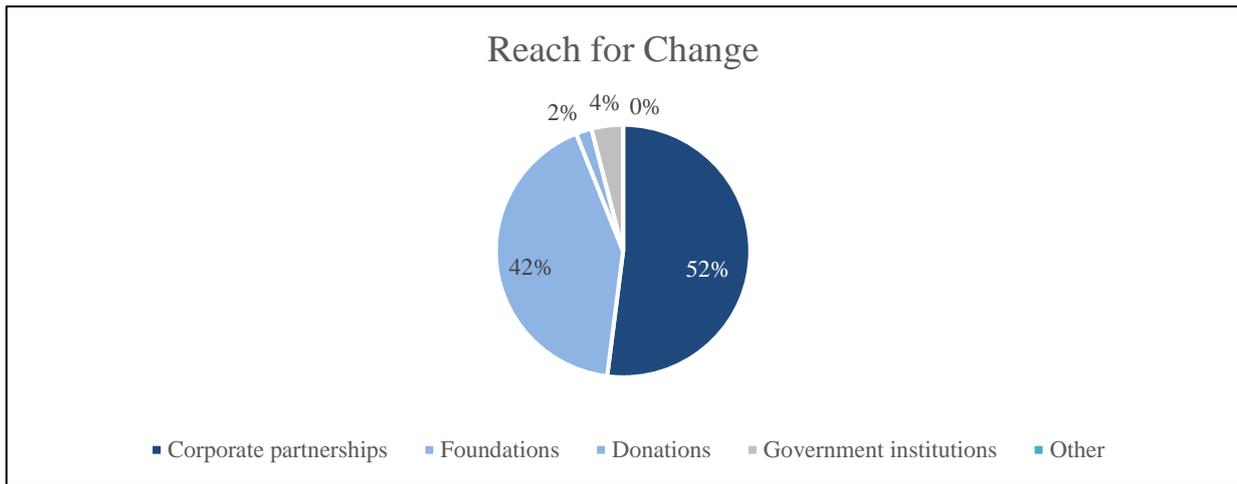
Figure 3. Revenue sources of Reach for Change. Derived from interview 3, source in additional Appendix IV.

Reach for Change provided the author with the most detailed percentages per revenue stream. Most funding came from corporate partnerships. Foundations were the second largest category. Donations were a small percentage and consisted mostly of Christmas gifts and donations in that sense. In this thesis, foundations and donations fall under the umbrella of philanthropy. Government institutions were a small part of the revenue of 2017 as well. Since other revenue streams were identified as 0 percent, these are not discussed in this thesis. However, the participant did mention the use of 'consulting contracts' as a small part of their organization. This is assumed to be part of the 0 percent and will be discussed qualitatively.
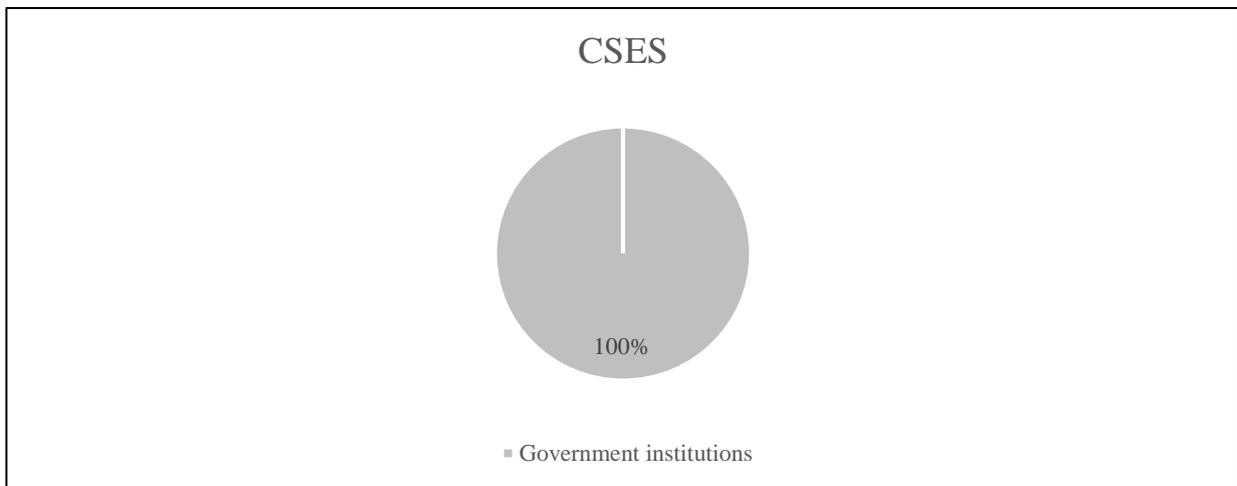
Figure 4. Revenue sources of CSES. Derived from interview 4, source in additional Appendix IV.

CSES is not an active organization anymore. However, the respondent stated that most years CSES received solely governmental funding. Some years the organization received up to 30 percent funding from foundations, however, the respondent stated that the most recent relevant year (2014), the revenue came from government institutions alone.

Derived from these data, the following mix of revenue models is used:

Table 5. Revenue stream percentages of the participating organizations.

Revenue Model	Percentage of total revenue	Used by
Partnerships	30% (in-kind)	SE Forum
	~7.5% (in-kind and corporate)	SSES
	52% (corporate)	Reach for Change
	0%	CSES
Governmental institutions	70%	SE Forum
	~7.5%	SSES
	4%	Reach for Change
	100%	CSES
Philanthropy	0%	SE Forum
	85%	SSES
	44%	Reach for Change
	0%	CSES

Some of the data used here are estimates. Therefore, no statements can be made regarding the quantity of the revenue models used by SE accelerators. However, these data do confirm which revenue models are used by the accelerators in this study. The next section will describe the views of the participants on the used revenue models as well as discuss desired revenue models.

4.1 Partnerships

Three out of four participants mentioned partnerships as a source of income. These can be different kinds of partners: corporates, governmental bodies, or singular investors. Respondent 3 identified corporate partnerships as their main source income. Respondent 1 mentioned that about 30 percent of their revenue came from in-kind driven partnerships. These kinds of partnerships were used by the other interviewees as well, albeit in different degrees. Respondent 1 also mentioned working on a revenue stream where governmental bodies, such as embassies, act as sponsors for entrepreneurs. In this case, governmental institutions work as partners.

Even though all the respondents used some form of partnerships, the views on these partnerships diverted. Participant 1 elaborated on the importance of the 'right' partner. According to him, partners of SE accelerators should share values and expertise, as well as mutual respect. This is especially the case for long-term partners. Good partners lead to high-quality programs. Participant 3, who works at an organization in which partnership is part of the core funding, mentions this as well. Partnerships not only function as a source of income, but also contribute with their expertise and knowledge to the quality of the program. Participant 4, founder of an organization that is not active anymore, stated that even though he did not use partnerships much in his revenue model, he would have added corporate partnerships if he could have changed anything. Not only because of the financial revenue, but also the expertise and knowledge of partners contributes to the program. Participant 2 acknowledged this as well. According to him, partnering with 'good' companies is a self-reinforcing cycle: when an accelerator partners with a Google or an Amazon, other companies are more inclined to become a partner as well. Despite this, participant 2 did not think the

partnership revenue model is a sustainable one. This is because the revenue stream relies on third parties, something participant 2 wanted to avoid. Participant 3 agreed with this. However, her solution to improve this, is adding more partnerships to the revenue model: then, when one partner falls out, other partners can fill the gap. Participant 1, on the other hand, think partnerships are part of a long term viable revenue stream – as long as the relationships are custom-built, based on shared value, and provide value for both partner, accelerator, and participant.

These results are in line with traditional accelerators, where partnerships are common as well. For example, Amsterdam-based accelerator program Rockstart experiences increasing levels of interest from firms who want to partner up with the program and its entrepreneurs (Van der Blonk, 2017). According to an article by Calcalist, Zack Weisfield, the creator of Microsoft's start-up accelerator program, thinks that corporate accelerators have a 'bad' business model (Stoler, 2018). Regardless of this, there are "very good reasons" to do an accelerator program, when speaking strategically (ibid). Therefore, according to Weisfield, corporates should partner with start-ups as an investment in the future. When specifically looking at social entrepreneurs, partnerships are very important as well. Mair and Marti (2004) state that social entrepreneurship is defined by certain researchers as "the socially responsible practice of commercial business engaged in cross-sector partnerships" (Mair and Marti, 2004, p. 3). As a revenue model, partnerships have been identified as a source of income for social entrepreneurs. Entrepreneur Magazine (2017) identifies revenue-sharing partnerships, in which social entrepreneurs identify a partner who can bring economic value to both parties. According to them, this revenue model is a 'win-win' situation for both parties. OneLeap, a global community for (social) entrepreneurs, published a report in which 5 out of 16 successful social entrepreneurs specifically state the value of incorporating partnership in their revenue model (OneLeap, 2012). For example, Selene Biffi of Plain Ink states that 'value partnerships' should be considered when donations and grants are not available. Moreover, these partnerships not only offer both parties financial returns, visibility, but also "a chance to truly leverage each other's assets for a greater impact" (OneLeap, 2012, p.19).

4.2 Government funding

All participants mentioned government funding as a source of income, albeit in different amounts. Participant 1 mentioned that up until recently, the organization was heavily government funded. However, this fund has recently ceased to exist. Participant 2 mentioned that the accelerator is about 50 percent funded by public money. The total amount of government funding seems to increase each year for them, however, compared to the total revenue, the percentage stays the same. Participant 3's organization depends for a small section of their revenue stream on governmental institutions. Participant 4 relied heavily on EU funding in the past. All participants expressed the obligation of rigorous reporting when government funding was used. According to participant 2, this was challenging and time-consuming. Due to this, government funding is viewed as 'expensive money'. Furthermore, public funding is dependent on governmental changes. Participant 2 stated that this is the reason he views governmental funding as least reliable. The positive aspect of government funding, however, is the quality stamp it provides. Participant 2 stated that the extensive recording can function as proof the accelerator has impact - if it did not, the government would not back the program. According to participant 2, government funding thus might lead to other revenue models. Participant 3 mentioned another opportunity: with government institutions (as opposed to corporate partners), multi-year and multi-market agreements can be made – the opposite of the statements of participant 2. This is why her organization aims for more of these kinds of revenue streams, especially because more government funding in

Sweden is coming in. Participant 4 confirmed this. He stated that the landscape of governmental funding has changed in the last couple of years. More and more governmental institutions are focusing on and recognizing the importance of social innovation and social entrepreneurship. Therefore, according to participant 4, as long as not too many conditions are tied to the funding, the government plays a role in supporting social innovation and SE accelerators.

When looking comparing these results to traditional accelerators, similarities exist. UnLtd India (2014) researched accelerators globally and found that government funding is one of the major sources of income for commercial accelerators - especially IT-focused accelerators. Chandra and Silva (2012) confirm this: many accelerators use a non-profit business model and are set in a context of a thin or non-existent capital market. Therefore, government funding and support is important in accelerator and entrepreneurial support (Chandra & Silva, 2012). In the context of social entrepreneurship, government funding is viewed as convenient source of income without losing any equity. However, the rigorous reporting and bureaucracy are seen as downsides (Miller & Bound, 2011). This is in line with participant 2's views on the revenue model. Furthermore, the private sector significantly supplementing government funding is seen as a way of increase substantial growth (Alexander, 2016).

4.3 Philanthropy and donations

Philanthropy was mentioned as a revenue model for participant 2. His organization receives a large majority of their income from mostly a single philanthropist. According to the participant, this revenue source is complex: the philanthropist requires a detailed measurement of the impact of the organization. According to participant 2, the risk with this revenue model is that when the philanthropist loses interest, the majority of funding is lost. The opportunity, however, is similar to the cycle described when discussing the partnerships revenue model: when interest remains high, the organization might attract other philanthropists with similar goals. Participant 2 describes this revenue stream as 'cause-based revenue'. In his view, this revenue stream is not very sustainable since it relies on other parties. Participant 3 does not seem to share this view. Even though her organization only relies for a small percentage on grants, these type of fund managers tend to be more long term in their commitment. It is worth mentioning that her organization works globally, since she mentioned that even though some strong foundations in Sweden exist, the global foundations are larger - especially in the US. This is perhaps why she has a different view regarding donation funds.

Traditional accelerators use philanthropy as a revenue model as well, although not as much. Lall, Bowles and Baird (2013) found that over 50 percent of the budget of accelerators consists of philanthropic grants. Philanthropy has some positive effects on entrepreneur support organizations: when done right, it allows accelerators to put the entrepreneur first (Baird, 2016). However, it seems that when accelerators mature, they shift from the philanthropy revenue model towards more market-based services and revenue stream diversification (UnLtd India, 2014). When looking at social entrepreneurship, it seems that even though philanthropy is not the preferred revenue model (Müller, 2012), it can be quite attractive (Entrepreneur Europe, 2017). Now, philanthropy is called impact investing by some scholars, where philanthropists invest in enterprises with measurable social or environmental impact as well as financial benefit (Entrepreneur Europe, 2017). However, not everyone agrees with this. Yunus et al. (2010) state that investing in a social business is not the same as philanthropy: as opposed to the former case, in the latter case the person does not get their

money back. Furthermore, as opposed to the case of participant 2, a philanthropist not always focused on performance and (financial) reporting (Yunus et al., 2010).

4.4 Consulting contracts
Participant 1 stated the importance of diversifying their revenue model. One of the ways they are planning to do so, is working through consulting contracts. In this case, the accelerator would function as a designer for an accelerator program, which could be run by the company that hired them. This way, non-earmarked revenue is generated. In this sense, the accelerator takes on the role as consultant. Participant 3 uses a form of consulting contracts already. For example, in Bulgaria her organization trains teachers on entrepreneurship. However, this is only a minor part of their revenue model. Currently they are discussing realizing similar ways of making revenue, however, participant 3 does not think this would happen. Participant 4 stated that using the expertise of the participating entrepreneurs would have been a good revenue stream for his organization. According to him, however, the environment was not focused on the expertise of social entrepreneurs back then, and therefore he never used that revenue model.

Within traditional accelerators, consulting and research are used as one of the most significant sources of revenue (India Ltd, 2014). Radhakrishna and Goud (2017) confirm this as well. Especially accelerators with dedicated staff and sector-specific expertise are interesting for companies to use as consulting partners and trainers. Not only contribute these consulting contracts to financial rewards, but also to the accelerators' networks and improvement of the sectoral knowledge (India Ltd, 2014).

4.5 Return on equity
None of the respondents did not use return on equity as a revenue model. However, when participant 1 stated consciously not using this source of income, participant 2 described the return on equity as his ideal revenue model - even though they do not currently use this. The reason for this, he stated, is that revenue is not as much dependent on third parties compared to partnerships and donations. Furthermore, when the accelerator is very successful in what it does, the exit of the entrepreneurs would result in high returns. This could be invested in more and better education, which would lead to more education. As a result, even more and better companies can be created. Participant 2 mentioned this 'loop' as a very interesting revenue model.

Return on equity is a common revenue model among traditional accelerators. When entrepreneurs enter these programs, the traditional accelerator invests between $10k and $50k (Pauwels et al., 2014). They exchange this for 5-10 percent equity (ibid). A few years ago, this revenue model seemed the most used one, however, accelerators seem to shift their business models (Chakraberty, 2017). The reason for this is that the equity revenue model is not able to sustain the accelerator's operations (ibid). It is therefore 32.7 percent of accelerators in 2016 predict to generate revenue from exist in the future, as opposed to more than 50 percent in 2015 (Grof, 2017).

The return on equity revenue model is not only used by accelerators, but other social entrepreneurs as well. One example is crowdfunding: in exchange for money, the funder gets a slice of the company pie (Shaening Pokrasso, 2016). However, it is not often that simple. Nichollis (2008) states the issues of distributing equity to shareholder: when shares, and with that organizational wealth, are assigned to investors this is often contradictory to the goals of

the social enterprise. With this redistribution of ownership and control, the mission might drift from the social aim to raising share capital. This is a risk few social entrepreneurs are unwilling to take (Nichollis, 2008).

4.6 Fees
Both respondent 3 and 4 have looked at the possibility of charging a fee for their services. Both respondents were not positive regarding this revenue model. First, charging a fee would not cover the total organizational costs, according to respondent 4. Second, Respondent 4 stated that he did not believe much in charging fees for entrepreneurs, except perhaps charging rent for an incubator. The reason for this was that he thought there was value in offering services for free and being an open organization: respondent 3 preferred meeting many entrepreneurs, instead of betting on a few. Respondent 3 shared his views. According to her, charging a fee would limit the organization's search and selection. Only taking in the ones that can pay could lead to excluding the entrepreneurs that could generate the most impact, which is not in line with the organization's goals.

Traditional accelerators sometimes, but not often, charge fees. Good Food Accelerator charges annual fees as opposed to taking equity (Good Food Accelerator, 2018). The fee is based on a small percentage of sales increase after the enterprise has taken part in the accelerator. Good Food Accelerator is not the only one: according to Forbes, since 2015 traditional accelerators have started to diversify their revenue models from taking equity shares to other forms of revenue streams – among them charging fees for mentorship and housing (Say, 2016). Brozek (2009) investigated the use of fees by non-profit organizations and found that about 54 percent of the revenue of US-based non-profits (excluding healthcare and universities) was generated from fees. In her study, fees included government payments for services but were not grants. Brozek found that social enterprises specifically used the revenue model as well but were not integral to their operational model. Instead, fees functioned as supplements to other, more substantial funding sources (Brozek, 2009).

4.7 Sustainability and importance of diversification
None of the respondent viewed their current revenue model as sustainable. Respondent 4 emphasized that it is hard to find enough revenue from the participants of accelerators, since entrepreneurs often do not have much to spend. Interestingly, respondent 2 is aiming for revenue from the entrepreneurs as opposed to partnerships, donations, and government funding. According to him, sustainability will increase when the revenue is not dependent on third parties. However, when describing his ideal revenue model, it includes both the existing revenue streams as well as a return from the ventures they have created and incubated. This is an example of how the interviewees are looking for ways to diversify their revenue models: all the organizations feel the fear of losing a significant amount of their core funding. In the case of respondent 1, this actually happened. It seems that the participants have the goal of increasing the revenue streams that are currently happening in smaller percentages. For example, respondent 3 stated her intent to focus more on governmental institutions as a revenue stream. Not only did she want this because of the diversification of the revenue model, but also because of the different opportunities another kind of revenue stream offers. In this case, governmental institutions offer more long-term, multi-market revenue. Respondent 1, which previously was mostly funded by government institutions, is focusing on corporate partnerships more to increase sustainability. As previously mentioned, respondent 4 would have focused more on corporate partnerships as well, as opposed to their core governmental funding.

This trend seems to occur with traditional accelerators as well. Most of these have used the equity model but are now diversifying their revenue model. Partnerships seem to be the preferred revenue stream, but others are used as well. Social enterprises use a broad range of revenue models, some of them in line with the revenue models of SE accelerators and others not. Partnerships are seen as a positive source of income by the social entrepreneurial community.

5 Discussion

This study researched which revenue models are used by social enterprise accelerators and why. In the literature review, theory regarding the used revenue models of accelerators was summarized in a theoretical framework. In the results chapter, revenue models identified by the interviewees were discussed. Not only were the revenue models used by the organizations of the participants addressed, but revenue models that could provide the organizations to diversify as well. Table 6 represents the theoretical framework, in which the discussed revenue models are emphasized.

Table 6. Theoretical framework with emphasis on discussed revenue models.

| | | Source | |
		Public	Private
Directness	Direct	**Partnerships**	*Returns on equity* Success fee from investment *Fees* *Consulting contracts* **Partnerships**
	Indirect	**Government funding**	**Philanthropy and donations** Revenue sharing agreement Fiscal Sponsorship

Partnerships, government funding, philanthropy and donations (identified in bold in table 6) were all identified as revenue models currently used. The former three of these seem to take up the largest share in the used revenue models. Consulting contracts (identified in italics in table 6) were used by one participant, however, only as a minor part of the organization's revenue mode. Returns of equity and fees (identified in italics in table 6) were not currently used by the participants but have been discussed as revenue models. The other revenue models from the framework have not been mentioned. This does not mean that these revenue models are never used by SE accelerators. However, it does suggest that these revenue models are less commonly used.

During the interviews, it became clear that one aspect of the theoretical framework needed to be specified: partnerships. Multiple respondents discussed the difference between different kinds of partnerships. *Corporate* partnerships, mentioned by all respondents, entail partnerships the accelerators have with commercial companies. Within these partnerships, the accelerators have access to company funds, as well as the knowledge and competence of corporate employees. *In-kind* partnerships, mentioned by all the respondents as well, contain pro-bono support such as law services, PR, and business development. Corporate partnerships are used by a wide range of organizations as a source of revenue, in particular non-profit organizations (Lefroy & Sarenko, 2013). The reason for this is that non-profit organizations often do not have the ability and means to provide the revenue and resources they need themselves (Selsky & Parker, 2005). Furthermore, corporate partnerships function as a source of knowledge and expertise. Porter and Kramer (2002) confirms that corporate involvement in non-profits can lead to competitive advantage for both parties. In-kind partnerships are used by many non-profits as well, since they do not always possess the dedicated personnel or resources for certain organizational components (Berger et al., 2004). Since these different

partnerships result in different revenue streams, the variance of partnerships should be considered when analyzing the revenue streams of SE accelerators.

The reasons *why* certain revenue models were used by the different SE accelerators varied. The results suggest that the revenue streams are dependent on how the organization came into existence. The accelerator of participant 1 came into existence when a governmental institution funded the program. Participant 2 emphasized that the accelerator has been backed up by a specific philanthropist from the very beginning. The organization of participant 3 was founded together with corporate partners, still the majority of their funding. Respondent 4 funded their organization with EU funding, which ceased to exist when other revenue streams could not be established.

Interestingly, awareness of the sustainability of the revenue models exists in all organizations. All respondents stated the importance of diversifying their revenue model and were often looking at revenue streams *different* from their core funding. This suggests a shift in which revenue models are used by SE accelerators. Carroll and Stater (2008) researched the effect of revenue diversification on non-profits, and their findings suggest that a diversified revenue portfolio encourages more stable revenues and consequently could improve the sustainability of the organization. This implies that the shift in revenue models could contribute to a more sustainable revenue model of SE accelerator programs.

The results of this study form the basis of research into the revenue models of not only SE accelerators, but traditional accelerators as well. Revenue models have only been discussed as side-notes in other studies on accelerators, and leave important issues unanswered (Hausberg & Korreck, 2018). This study, including the created theoretical framework, has formed a basis for the study into the revenue models of accelerators, and therefore contributed to the existing body of literature regarding accelerators in general as well. Furthermore, it provides initial answers to the questions proposed by the media regarding the viability and sustainability of the accelerator model.

This thesis has not only resulted in implications regarding accelerators and the existing body of literature, but to the larger context of industrial management as well. Accelerators have a positive effect on the ability of entrepreneurs to reach key milestones (Fehder & Hochberg, 2015). When accelerator programs become more sustainable, they increase their output of successful entrepreneurs. This not only affects individual leaders and the management of value-creating functions and processes within the companies but leads to a more successful entrepreneurial ecosystem as well. This results in an industry-wide impact when start-ups contribute to the transformation in national and global markets. Since the results have industry-wide implications, some suggestions for policy-makers are required. As participant 4 stated, his organization failed to create a sustainable revenue model. This was because both corporates and governmental institutes did not see the relevance of social entrepreneurship. Even though this awareness has changed, policy makers should facilitate litigation to ensure the positive aspects for all partners within partnerships with social entrepreneurs and their seed-institutions.

Some limitations on this study need to be addressed. In this study, only 4 participants were interviewed about the revenue models their organizations use. This number might be considered low. However, this study uses a qualitative research paradigm. This means that the revenue models not mentioned by the respondents are not necessarily non-existent, but the revenue models addressed did in fact exist. Furthermore, the 4 respondents were experts in the

field, and therefore their insights into the revenue models of accelerators were sufficient for this research. Another limitation of this study was the focus on Stockholm accelerators. As Cohen (2018) states, different cities have different attitudes towards start-ups, which result in different conducts of regional stakeholders. Consequently, this affects the entrepreneurial ecosystem, and therefore (social enterprise) accelerators. Perhaps a different geographical scope would have led to different results. However, the theoretical framework created in the literature review is based on worldwide theory. Future research could use this as a basis for research into accelerators within a different scope.

This thesis provides some suggestions for future research. The results identified revenue models by SE accelerators. Future research should study these revenue models, in particular partnerships, government funding, and philanthropy, in more detail in the context of (SE) accelerators. Insight into how and why these revenue models are used by accelerators will contribute to a deeper understanding of the concepts. Furthermore, the results of this thesis should be compared to revenue models used by accelerators in the US, where the entrepreneurial ecosystem is more developed. Especially when focus on social entrepreneurship is maintained, business to do good might become the new standard.

6 Conclusion

This thesis provided an answer to the following research question: *What revenue models are used by social enterprise accelerators?* The study not only inventorized the revenue models, but also researched the reasons *why* the accelerators have chosen for certain types of revenue models. Furthermore, changes of revenue models are addressed. The following secondary research questions help address these issues: *Why are certain revenue models used by social enterprise accelerators? Is there a shift in revenue models used by social enterprise accelerators, and if yes, why?* To answer these research questions, a conceptual framework was introduced. The framework identified the existing revenue models used by accelerators. During interviews with members of different social enterprise accelerators, it became clear which revenue models were used by different SE accelerators, and why.

Partnerships, government institutions, philanthropy and donations, and consulting contracts were identified as the revenue models used by SE accelerators. Furthermore, fees and equity shares were discussed as potential sources of revenue, even though they are not currently used by any of the respondents. The reason for the choice of revenue models seems to originate from how the accelerator program came into existence: until this year, all the respondents have used the same funds that were used to create the accelerator program as their core revenue stream. However, all the respondents feel the pressure to diversify their revenue streams and have discussions regarding this within their organizations. Interestingly, the respondents tended to look at revenue sources outside of their core revenue model in order to diversify. This suggests a shift in the revenue models used by social enterprise is happening, but this shift has different directions for each respondent.

All in all, to increase the sustainability and viability of the revenue models of SE accelerators, the revenue streams have to be diversified. This thesis provides a basis for future research on how this sustainability can best be increased. When high-performance accelerators keep existing, their impact of creating more successful social entrepreneurs increases. This increase in social entrepreneurs might be the first step from the focus of monetary gain towards a society where business is created to do good.

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Appendix I – Interview questions

The following question formed the basis for the interviews executed in this study. Since the interviews were semi-structured, follow-up questions sometimes diverted between interviews.

Welcome to this interview. My name is Marte de Vries, currently studying Entrepreneurship and Innovation Management at KTH. I am doing this thesis at [company]. I would like to ask you a couple of questions regarding the revenue models of (social impact) accelerators in Sweden. You are free to elaborate on every subject. There are no wrong answers. The results of this research can be processed anonymously. Would you prefer this? Is it okay if I record this conversation?

About [company]
1. Why does [company] focus on social impact?
2. The accelerator program has been running since [date]. Why did you decide to create the accelerator program?

About [company / accelerator program] revenue model
1. How would you describe the revenue model of [company]?
2. [Accelerator] is part of [company]. Do you have separate revenue streams assigned to the accelerator program, or just [company] as a whole?
3. Could you describe the different revenue streams of [company]?
    a. Where does funding come from? E.g. partnerships, (government) funding, etc.?
    b. Can you explain a little bit about each funding source? E.g.,
        i. How much percent of your total comes from each source;
        ii. what is the time frame on each source;
        iii. what do you have to do in return?
4. Can you tell me why you have chosen this/these revenue stream(s)?
5. Was it a conscious choice? or was it because this came across your path?
6. Who is/was responsible for [company}'s revenue model/funding choices?
7. Can you tell me about revenue models of the accelerator in the past?
    a. If something has changed, what, when and why?
8. Do you struggle with finding enough revenue?
    a. If yes, why?
9. Have you ever struggled with finding enough revenue in the past?
    a. If yes, have you solved this, and how?
10. Can you tell me about revenue models in the future?
11. Are there plans on changing the revenue model?
    a. If yes, why?
        i. Can you explain a little bit about each revenue model idea?
        ii. What are the risks/opportunities for each model?
12. What would your ideal revenue model be?
    a. What are the barriers to applying this revenue model?
13. Do you think your revenue model is economically sustainable/viable?
    a. If yes, why? If no, why not?

Appendix II – Search terms

In this appendix, the search terms and search engines used to execute the desktop research are stated.

Table 7. Search terms and engines for desktop research, complete.

Search terms	Search Engine
"revenue model" + partnerships + accelerator	Google, Google Scholar
"revenue model" + partnerships + "social entrepreneurship"	Google, Google Scholar
"revenue model" + "government funding" + accelerator	Google, Google Scholar
"revenue model" + "government funding" + "social entrepreneurship"	Google, Google Scholar
"revenue model" + equity + accelerator	Google, Google Scholar
"revenue model" + equity + "social entrepreneurship"	Google, Google Scholar
"revenue model" + philanthropy + accelerator	Google, Google Scholar
"revenue model" + philanthropy + "social entrepreneurship"	Google, Google Scholar
"revenue model" + donation + accelerator	Google, Google Scholar
"revenue model" + donation + "social entrepreneurship"	Google, Google Scholar
"revenue model" + consulting + accelerator	Google, Google Scholar
"revenue model" + consulting + "social entrepreneurship"	Google, Google Scholar
"revenue model" + fees + accelerator	Google, Google Scholar
"revenue model" + fees + "social entrepreneurship"	Google, Google Scholar

Appendix III – Coding Book

This appendix states the codes used when analysing the interview transcripts with Nvivo.

Table 8. Coding Book used with Nvivo analysis.

Search terms	Search Engine
Development of revenue models	Statements about change and development of revenue models, in the past and future
Other revenue streams mentioned	General statements about revenue models which are not used by the interviewee
Consulting contracts	All general statements regarding consulting contracts
Cons	All statements regarding the negative aspects of consulting contracts
Pros	All statements regarding the positive aspects of consulting contracts
Equity revenue model	All general statements regarding equity revenue model
Cons	All statements regarding the negative aspects of equity revenue models
Pros	All statements regarding the positive aspects of equity revenue models
Fees	All general statements regarding fees
Cons	All statements regarding the negative aspects of fees
Pros	All statements regarding the positive aspects of fees
Investors	All general statements regarding investors
Cons	All statements regarding the negative aspects of investors
Pros	All statements regarding the positive aspects of equity investors
Social impact	Statements about the social impact of the accelerator program and total organization
Sustainability of revenue model	Statements about the sustainability of their revenue model and other revenue models mentioned