Key Business Services within Open Innovation Collaboration between Startups and large established Firms

A multiple case study of the value offering of Swedish corporate accelerators and incubators from a startup perspective

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Centrala Affärsutvecklingstjänster inom Öppen Innovations-samarbeten mellan Startupföretag och stora väletablerade Företag

En multipel fallstudie av värdeerbjudandet av företagsdrivna acceleratorer och inkubatorer inom den svenska marknaden från ett startup-perspektiv

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Exemarsarbete TRITA-ITM-EX 2019:343
KTH Industriell teknik och management
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SE-100 44 STOCKHOLM
Abstract

Open innovation is a term that has become popularised over the years, due to changes in how business is done as a result of globalisation and digital transformation. Efforts are being made by incumbent companies to collaborate with external parties to a greater extent, and at the same time, the startup landscape has contributed with new technologies and innovations that in some cases have disrupted markets. A collaboration between large companies and startups can bring about positive synergies since these two types of organisations are different and have the possibility to complement each other. This master thesis looks into the outside-in model of open innovation, specifically examining corporate accelerator programs and incubation hubs from a startup perspective. The following research explores what key services that are offered within these corporate programs and how they can be improved according to startups that have previously partaken in them.

This research is a qualitative study with an abductive approach. As part of the research, 10 semi-structured, in-depth interviews were held with representatives from a variety of startups. The major services desired by the interviewees to be included in corporate-run startup programs range from access to internal and external networks to putting more focus on a variety of funding alternatives. Early-stage startups expressed the desire of receiving help with understanding their market and customers. The key improvement areas brought up by the startup companies included the presence of internal champions that can help speed up certain processes and act as a facilitator for important meetings. Many startups point to the importance of having the influence to customize their program experience. In addition, accelerator and incubator employees with previous entrepreneurial experience are considered very helpful by the startups since they can grasp the struggles of the startup in a better way. Furthermore, to have more financing opportunities is desirable.

**Keywords:** Open innovation, startup, outside-in model, corporate accelerator, accelerator program, corporate incubator, incubation hub
Sammanfattning

Genom åren har öppen innovation blivit alltmer populariserad, på grund av förändringar i hur affärer görs till följd av globalisering och digital transformation. Stora företag satsar i större utsträckning på att samarbeta med externa parter, och samtidigt har startup ekosystemet bidragit till ny och radikal teknologi och innovationer som har rubbat vissa marknader. Ett öppen innovation-samarbete mellan ett stort företag och en startup kan bidra positiva synergier eftersom dessa två typer av organisationer är olika och har möjlighet att komplettera varandra. Detta examensarbete undersöker den så kallade outside-in modell för öppen innovation, mer specifikt undersöks företagsacceleratorer och företagsinkubatorer från ett startup-perspektiv. Följande forskning undersöker vilka nyckeltjänster som erbjuds inom dessa företagsprogram och hur de kan förbättras enligt startups som tidigare har deltagit i dem.


Nyckelord: Öppen innovation, startups, outside-in model, företagsaccelerator, acceleratorprogram, företagsinkubator, inkubationsnav
Acknowledgements

As a final part of our higher education at the School of Industrial Engineering and Management, at the Royal Institute of Technology, we have conducted our master thesis research. Along the journey, there have been people who have offered their support, knowledge and guidance to us that we would like to show our gratitude for.

First of all, we want to thank the interviewees who chose to participate in our case studies. Without these participants, our work would not have been able to be carried out, the interviewees have shared with us their insight and expertise which has helped us in the research a great deal. Furthermore, we wish to extend a special thanks to our supervisor at KTH, Terrence Brown, who has guided us along the way of writing our thesis paper and offered us valuable feedback that has made our work that much better.

Finally, we wish to share our deepest gratitude for our families that have been the best support system for us.

Stockholm, May 2019

Houda Abu Zeid & Tanya Syed
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<th>Description</th>
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<tbody>
<tr>
<td>3D</td>
<td>3 dimensional</td>
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<tr>
<td>AR</td>
<td>Augmented reality</td>
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<td>B2B</td>
<td>Business to business</td>
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<tr>
<td>B2C</td>
<td>Business to customer</td>
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<tr>
<td>BI</td>
<td>Business incubator</td>
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<td>CEO</td>
<td>Chief executive officer</td>
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<td>COO</td>
<td>Chief operating officer</td>
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<td>CSO</td>
<td>Chief strategy officer</td>
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<td>CSR</td>
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<td>Chief technology officer</td>
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<td>CVC</td>
<td>Corporate venture capital</td>
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<td>ICT</td>
<td>Information and communication technology</td>
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<td>IoT</td>
<td>Internet of Things</td>
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<td>IP</td>
<td>Intellectual property</td>
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<tr>
<td>M&amp;A</td>
<td>Mergers and acquisitions</td>
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<td>MVP</td>
<td>Minimum viable product</td>
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<td>NDA</td>
<td>Non-disclosure agreement</td>
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<td>OI</td>
<td>Open Innovation</td>
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<td>R&amp;D</td>
<td>Research and development</td>
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<td>SDG</td>
<td>Sustainable development goals</td>
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<tr>
<td>UX</td>
<td>User experience</td>
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<tr>
<td>VC</td>
<td>Venture capitalist</td>
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<tr>
<td>VR</td>
<td>Virtual reality</td>
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1. Introduction

1.1 Research Background

During the past century, the average lifespan of large enterprises has fallen from approximately 60 to 15 years (Foster & Kaplan, 2011). Currently, the primary goal of companies is to create both sustainable and competitive advantage (Kuratko, 2011). Heavy et al. (2009) claim that corporations are better positioned to adapt to changes in a complex environment when they choose to be more flexible and innovative.

Technology, science and innovation are the driving forces behind the enormous change that the world is undergoing. The world is experiencing the shift of an era and not an era of change because of the rate of transformation is so remarkable (Muñoz-Gutierrez, 2014). The economist Lester Thurow (1996) advocated for innovation to be based on knowledge because he suggested that this could increase firms’ competitiveness and productivity. Further, Brem et al. (2016) claim that if the process of innovation is handled correctly, however complicated, can benefit firms in terms of competitive advantage.

Until recently, closed innovation strategies have permeated the research and development (R&D) departments within companies for several years (Chesbrough, 2003; Pinoargote, 2014; Portilla, 2016). However, during the latest years, the way innovation is handled and achieved has changed remarkably. In response to increased global competition, enterprises are starting to move in the direction of an open model of innovation (Bigliardi & Galati, 2018). Megatrends such as globalisation, digitalisation, sustainability and cooperation drive organisations to use more collaborative approaches (De Backer & Cervantes, 2008). The confidence for closed innovation has been questioned by the increased adoption of the approach of open innovation (OI) (Brem et al., 2016).

OI has been one of the most discussed topics among researchers and has also been analysed in different context and businesses (Dahlander & Gann, 2010; Brunswicker & Van de Vrande, 2014; Corvello et al., 2017). By taking advantage of internal knowledge sources beyond the boundaries of the organisation, and external knowledge flows internally within the firm boundaries, while simultaneously having external collaborations with different stakeholders OI makes it possible for companies to share both risks and costs of exploring innovation. Openness also gives way for efforts of co-creation with different stakeholders on the market in order to gain more knowledge (Chesbrough et al., 2006). Some studies have shown that practising OI is a way for companies to increase sales and revenues (Lazzarotti et al., 2010) and reduce the time and costs of launching new products or services on the market (Kolk & Püümann, 2008).
1.2 Previous Research

The field of OI has been examined many times before during the past decade and the contributions are several (Chesbrough, 2006; Lazzarotti et al., 2010; Chesbrough & Brunswicker, 2013; Bigliardi & Galati, 2018). Previous researchers have used multiple approaches and investigated the field from different perspectives (Chesbrough & Weiblen, 2015; Cohen, 2013; Dahlander & Gann, 2010; Durach et al., 2017; Portilla, 2016). According to Henry Chesbrough (2004), OI is a phenomenon that will remain important in the future and is not a fad that will become obsolete.

By comparing differences and similarities among previous studies, the researchers of this thesis have been able to form four clusters in order to give an overview of different research fields within the OI landscape:

- **Open innovation processes & phenomena:**
  Different researchers have tried to develop frameworks in order to explore and categorize the processes of OI (Lazzaroti & Manzini, 2009; Schroll & Mild, 2011; Van Der Meer, 2007). According to the researchers Chesbrough, Enkel and Gassman (2009), there are three different processes of open innovation: outside-in process (inbound innovation), inside-out process (outbound innovation) and coupled process.

The first process mentioned, requires companies to establish relationships with external parties such as customers, suppliers and external sources of knowledge in order to access their technological skills (Enkel et al., 2009; Laursen & Salter, 2006; Piller & Walcher, 2006; Lettl et al., 2006).

The second process mentioned refers to a company’s ability to exploit internal knowledge with the help of external people (Gassmann & Enkel, 2004; Lichtenthaler & Ernst, 2007).

The last process is a combination of the outside-in and inside-out process which means that a company can gain external knowledge and then introduce new ideas to the market (Enkel et al., 2009). Studies also show that by using both internal and external knowledge, firms can accelerate and drive their internal innovation strategy (Chesbrough, 2006; Van Der Meer, 2007; Enkel et al., 2009; Gassmann et al., 2010).

Furthermore, several studies have been conducted to distinguishing between the inside-out and outside-in processes of open innovation (Enkel et al., 2009; Chesbrough, 2003a, 2003b; Chesbrough, 2006; Gassmann et al., 2010; Lazzaroti & Manzini, 2009). These two processes illustrate how firms can use different strategies for both technology exploration through outside-in processes and technology exploitation through inside-out processes (Ying et al., 2008). Research has shown that it is more common for companies to use outside-in processes when using open innovation strategies (i.e. exploration activities) (Ferrary, 2011; Mortara et al., 2011; Chesbrough, 2006; Enkel et al., 2009). Keupp and Gassmann (2009) have also found that technology exploration can help firms overcome innovation barriers. In
regard to technology exploitation, both technological and market knowledge is of importance (Chesbrough & Crowther, 2006; Enkel et al., 2009; Lichtenthaler, 2009b). Moreover, it is usual for companies to establish functions or teams with the purpose of pursuing inside-out processes (Rivette & Kline, 2000).

- **Adoption of open innovation:**

Existing literature studies exemplify how different companies adopt OI processes. The adoption methods can vary based on factors such as; the size of the company, the type of enterprise, the country that the company is established in and the type of products and services that the company is offering, to mention a few (Van der Meer, 2007; Lichtenthaler, 2008; Campbell-Smith, 2008; Faems et al., 2010; Lazzarotti et al. 2010; Chesbrough & Brunswicker 2013).

Other studies have explored how and where OI can add value within a firm (Elmqquist et al 2009; Enkel, et al, 2009). According to Chesbrough & Crowther (2006) enterprises have the opportunity to influence both the implementation of OI and the processes through different approaches, types of collaborations and timelines. When implementing OI, companies needs to consider a cross-functional process due to the fact that the implementation process will consist of different departments working together, such as R&D, marketing and sales, finance, logistics, etc. (Laursen & Salter, 2006; Lazzaroti & Manzini, 2009; Schroll & Mild, 2011). Grassman & Enkel (2004) point out that the department leading the process of implementation will depend on the company culture.

- **Open innovation within large-scale companies and startups:**

Available research indicates that in order for startups to survive, one main priority is to collaborate with external parties (Heavy et al., 2009; Teece, 2010; Pangarkar & Wu, 2012; Kask & Linton, 2013; Brem et al., 2016). Wymer & Regan, (2005) claim that startups often suffer from a structural lack, meaning that they often have a shortage of tangible and intangible resources due to their smallness. The development of new innovation and strategies to adopt innovation processes is often hampered by the fact that startups lack both human and financial resources (Bogers, 2011).

Chesbrough and Brunswicker (2013) examined how large-scale companies adopt OI processes and challenges that they face during the adoption. The results showed that 82% of the surveyed firms were adopting OI, in one way or another, compared to three years ago. Among these companies, inbound open innovation practices were more common to use in comparison to outbound practices.

- **Impact of incubators & accelerator programs:**

In the existing literature about accelerators and incubators, researcher such as Barbero et al. (2014) discuss the new varieties of incubation mechanisms and their introduction to the market over the past decades. In order to support the creation of innovative entrepreneurial companies the introduction of incubators and accelerator programs have been supported financially by private investors, corporates, research institutes and universities, among many
other actors (Barbero et al., 2014). Both incubation and accelerator models have changed throughout the years which has given rise to a new generation of incubation models (Bruneel et al., 2012; Miller and Bound, 2011).

1.3 Research Gap

Even though there are many contributions to the field of open innovation (Chesbrough, 2006; Dahlander & Gann, 2010; Lazzarotti et al., 2010; Chesbrough & Brunswicker, 2013; Cohen, 2013; Chesbrough & Weiblen, 2015; Portilla, 2016; Durach et al., 2017; Bigliardi & Galati, 2018), there is still a gap in the research field. OI has frequently been investigated from a large firm’s perspective, where researchers investigate how large firm use open innovation strategies through different forms of collaborations with startups to gain knowledge and competitiveness (Keupp & Gaussmann, 2009; Lee et al., 2009; Chesbrough & Brunswicker, 2013). Furthermore, some of these studies only examine the importance of these collaborations for large firms and do not take into account the configuration of the collaboration, in regard to value-creating activities that benefit startups (Chesbrough & Crowther, 2006; Chesbrough & Brunswicker, 2013; Chesbrough & Weiblen, 2015; De Backer et al., 2008). Thus, there is still research missing when it comes to understanding open innovation activities from the startup perspective.

In a study done by Minshall & Montara (2010), challenges of asymmetric partnerships were examined; partnerships between technology-based startups and large firms. Several challenges were identified both from large companies’ perspective and startups’ point of view. One great challenge that some startup companies face, is that both parties have different opinions on how to solve problems that startup companies encounter. Large firms know little about how startup companies operate, which is why it can be difficult for larger companies to acknowledge the activities that could benefit the startups that they are collaborating with (Van de Vrande et al., 2009; Vanhaverbeke et al., 2012).

Despite the study of Minshall and Montara (2010) having identified several challenges with an asymmetric partnership, the researchers find it necessary to investigate what kind of value-creating activities startup firms would like to include within a corporate program in order to avoid the above-mentioned challenges.

1.4 Purpose & Research Questions

The basis of the research of this master thesis stems from the field of open innovation and collaborations between large firms and startup companies. The purpose is to examine the format of the outside-in model, focusing on corporate accelerator and incubator programs and the value offering of large firms toward startup companies from the perspective of startups. Therefore, an investigation into the activities and services offered by large firms will be conducted. Based on the literature review and the intended contribution of the thesis paper, the research questions are:

1 The researchers have chosen to only study corporate incubators and accelerators (outside in model).
• RQ1: According to startups, what are some of the key services that corporate accelerators and incubators offer startups to aid their development?
• RQ2: From the perspective of startups, how can corporate programs improve their offering?

1.5 Delimitations

Since the field of open innovation is broad the scope of this research will be focused on one specific format of collaboration between large firms and startups; the outside-in model. By reviewing the literature regarding the subject of OI collaborations a gap was identified indicating the need for further research into open innovation from the perspective of startups companies which led to the choice of focusing on the outside-in model, and more specifically corporate accelerators and incubators.

Furthermore, the investigation of the research question will be done by examining the open innovation landscape in Sweden by conducting interviews with Swedish startups that have participated in corporate accelerator programs or incubation hubs. Moreover, since Sweden is a country where the startup community has a strong presence and is often compared to Silicon Valley there exists a likelihood of applying the conclusions of this master thesis to a broader open innovation ecosystem (Ingram et al., 2015; Sanandaji, 2015).

1.6 Expected Contribution

Chesbrough and Brunswicker (2013) carried out a study with the aim of finding correlations between a company’s success rate and the implementation of OI. They also examined different types of OI strategies such as establishing new partnerships, exploring new technological trends, identifying new business opportunities through collaborations, mitigating risks of innovation projects, etc. (Chesbrough & Brunswicker, 2013).

The research conducted within this master thesis will be a contribution to two of the clusters defined in section 1.3; Open innovation within large-scale companies and startups and Impact of incubators and accelerators program. The study of Chesbrough and Brunswicker (2013) was limited to describing different types of OI strategies. However, this paper will focus on Chesbrough and Brunswickers (2013) strategy; to identify new business opportunities through collaborations, in order to explore what value-creating activities are desired in an accelerator or incubator program managed by corporations and how the offering can be improved upon according to startups who have participated in corporate accelerators or incubators.

The research will show possible benefits and demerits of using open innovation strategies for startups and established large firms. The outcome of the research will illustrate the type of activities and services startup companies request during an accelerator program or incubation hub, run by
large enterprises. The potential findings will also give suggestions as to how corporate programs can become better from the startups’ point of view.
1.7 Thesis outline

Chapter 1 – Introduction: The first chapter presents the chosen topic, its relevance and previous studies made within the field of OI. This chapter also includes the research questions that will be the foundation of this thesis together with the delimitations. Lastly, an explanation is given of the identified research gap and the expected contributions.

Chapter 2 – Literature Review: In this chapter, the relevant research that has been used for this thesis is presented. A theoretical framework is included in the literature study which was later used for analysing and presenting the empirical results.

Chapter 3 – Methodology: Both the chosen research design together with the research process for this study is discussed and presented in this section. This chapter includes a step-by-step description of the research process and it also includes a summary of the interviews. Additionally, the method used for analysing the results is explained together with an evaluation of the validity and reliability of the study.

Chapter 4 – Results: In this chapter, the results from the conducted interviews are presented in the form of text and tables.

Chapter 5 – Discussion: The results from chapter 4 are discussed and analysed in the following section with the support of the literature study.

Chapter 6 – Conclusions: This last chapter presents the conclusions that are drawn based on the results, discussions and analysis. Lastly, recommendations for future research are also presented.
2. Literature Review

The following chapter is the literature review of this thesis where the researchers have presented previous research conducted within the field of open innovation. Firstly, the importance of innovation is showcased and the researchers also bring attention to the paradigm shift from closed to open innovation. Furthermore, since this research is focused on open innovation collaboration between startups and large firms an overview is given on both parties’ perspectives on open innovation. The literature review also includes a presentation on different formats of open innovation, and an even more detailed explanation of the outside-in model is given.

2.1 The Importance of Innovation

Innovation and entrepreneurship are two of the most discussed concepts by Schumpeter and can be seen as his greatest distinctive contributions to economics (Hanush & Pyka, 2007; Slédzik, K., 2013). Innovation can be seen as the source of imbalance in the marketplace, which is critical for the economy. Schumpeter (1934) recognized that innovation can be divided into five categories which he also regarded as factors for initiating development processes:

1. Launch of a new product or a new version of an existing product
2. Application of new techniques of production mechanisms
3. Introduction of a new market
4. Acquisition of new raw materials or semi-finished goods
5. New industry structure

OECD (2011) described and distinguished in their Oslo Manual different types of innovation of product, process, organization and marketing. Similarly, to Schumpeter’s definitions, OECD (2011) defined product innovation as “the introduction of a good or service that is new or significantly improved with respect to its characteristics or intended use”. Process innovation is “the implementation of a new or significantly improved production or delivery method”. Organizational innovation was described as “the implementation of a new organizational method in the firm’s business practices, workplace organization or external relations”. Marketing innovation is “the implementation of a new marketing method involving significant changes in product design or packaging, product placement, product promotion or pricing”.

The term innovation can be used to describe both a process and an activity (Crossan & Apaydin, 2010; Maital & Seshadri, 2012; Tidd & Bessant, 2014). Tidd and Bessant (2014) described innovation as the realisation and value capturing of an idea. The value capturing process is achieved through four stages: search, select, implement and capture value (Tidd & Bessant, 2014). The process of innovation involves an array of actors’ contribution to the process through different activities (Portilla, 2016). The research of Hidalgo and Albors (2008) explained that the different phases of the innovation process correlate to various practices and activities. By classifying and labelling these activities as tools and mechanisms used to achieve innovation on a regular basis they can become practices within an organization (Hidalgo & Albors, 2008).
2.2 Sustainability & Innovation

Researchers also point out the importance of innovation for sustainability. Since there is more focus in today’s society on sustainable development, there is a need for business changes to take place in order to meet certain milestones, such as the UN sustainable development goals (SDG). There is an increasing demand for new enabling technology solutions to meet an all-more demanding market expecting of certain resources, goods and services (Bessant et al., 2012; Philips, 2018). Furthermore, initiatives such as SDGs have led to an array of changes in regulation and legislation, as well as introduced reporting guidelines, standards and metrics for tracking the progress of organisations, which is called corporate social responsibility (CSR) (Schaltegger et al., 2011; Bessant et al., 2012, Gobble, 2012). At the same time, interest in green investments has increased. Thus, business’ sustainability work, as well as sustainability strategies and performance, has become more an important aspect for investors (Bessant et al., 2012). Gobble (2012), makes the case that firms that are considered to be sustainable, outperform their incumbent competitors due to having a corporate culture which is correlated to innovation, and a drive for implementing and managing change on a large scale. Moreover, Philips (2018), argues that technological transformations that lead to innovation often arise from new ventures and large firms often engage with these startups to share risks that the startups cannot face alone. Therefore, the researcher points out that in order to work toward a sustainable future, risks should be accepted as a necessary part for achieving sustainability.

2.3 The Closed Innovation Paradigm

Before the era of open innovation, the process of innovation usually took place in closed environments, commonly referred to as closed innovation. The fundamental idea of closed innovation is that “successful innovation requires control” (Chesbrough, 2003a). This assumption is based on the lack of guarantee that other firms’ technologies and ideas are sufficiently qualified to satisfy customers. By controlling the innovation process, companies can to a greater extent gain control of profit sources. By controlling the innovation process companies can secure competitiveness and control access to intellectual property (IP), which are two of the main reasons companies want to keep innovation efforts in-house (Chesbrough, 2003b).

According to Gassmann (2006), some industries like the military and the nuclear sector are better suited to use closed innovation concepts because the protection of technology and IP within these industries are highly important.

Value creation and value capturing are two key factors for firms to remain competitive on the market (Chesbrough, 2003a; Appleyard, 2007). One drawback of closed innovation is that it overlooks the importance of value creation and value capturing and underestimates the open innovation environment (Gassmann, 2006). Since open innovation is gaining traction, more and more firms are developing open strategies which can stabilise closed innovation (Elmqquist et al., 2009; Gassmann et al., 2010). Another drawback of having closed innovation environment is that newer ideas and technologies are sometimes not explored because of inward focusing, meaning new
ideas cannot be detected if the company is not willing to go outside the barriers (Herzog, 2011). Concerns about how to handle IP management and insecurities about how to apply and manage new findings and opportunities can be reasons for companies not wanting to open up to innovation (Wolpert, 2002).

Chesbrough (2003a) pointed out six main principles to better understand what closed innovation is, countering them with the six principles of open innovation (Chesbrough, 2003a; 2003b).

<table>
<thead>
<tr>
<th>Closed innovation</th>
<th>Open innovation</th>
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<tbody>
<tr>
<td>1. A company should only focus on hiring the most qualified people.</td>
<td>1. Not all of the smart and qualified people work within the same specific company.</td>
</tr>
<tr>
<td>2. In order for a company to make a profit from R&amp;D, the firm should handle all</td>
<td>2. Value creation can be done through external R&amp;D. The value can be grasped through internal R&amp;D.</td>
</tr>
<tr>
<td>the searching, developing and marketing by itself.</td>
<td>3. Involvement in basic research will benefit the firm but the discovery does not have to originate from within the firm.</td>
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<tr>
<td>3. The research discoveries should originate from within the firm in order for</td>
<td>4. A well-built business model should be the focus and not getting to the market first.</td>
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<td>the company to be first on the market with a service or a product.</td>
<td>5. Using both external and internal ideas and combine knowledge will lead the company to win.</td>
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<td>4. Being first to the market will lead the firm to beat the rivals.</td>
<td>6. Whenever it is more efficient and effective, the firm should allow the use of the company’s IP and also buy other IP whenever it advances the business model.</td>
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<td>5. Leading the R&amp;D development can result in many great ideas which can help the</td>
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<td>company to win.</td>
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<td>6. Restrictive IP management will help the firm to protect the technologies and</td>
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<td>ideas.</td>
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Table 1. The six principles of closed and open innovation

2.4 The Importance of Open Innovation

According to Chesbrough (2003), it is notable that openness and co-creation are taking shape in the 21st century. The primary reason for cooperation between startups and incumbent firms is to create and enhance value and their ability to create new products. The process of cooperation is therefore termed as open innovation as noted by Laursen and Salter (2006). Open innovation has the ability to enable collaboration between a variety of stakeholders such as venture capitalists, large firms, universities, startups and incubators (Usama & Vanhaverbeke, 2017). For large corporations, there are several ways in which these firms can work together with startups, for example in taking on the
role of corporate VC, internal incubator or making the collaboration into a joint venture or a strategic alliance (Spender et al., 2017; Usama & Vanhaverbeke, 2017). With the growing presence of startups and new viable, possibly disruptive solutions entering the market, large corporations are finding it a pressing matter to engage more with the startup community (Corvello et al., 2016).

As shown in figure 1, open innovation can be seen as the opposite of the concept of closed innovation. By using closed innovation strategies, all R&D activities and product development, including distribution of the products, are managed internally within the firm (Chesbrough, 2003a). The open innovation approach, on the other hand, entails that all R&D activities are managed in an open system (Chesbrough & Crowther, 2006). The benefit of using an open innovation approach is that ideas can arise both internally and outside the firm boundaries (Chesbrough, 2003a).

2.4.1 Open Innovation from a Startup Perspective

Despite an increasing number of studies about open innovation, there are only a few studies on open innovation from the startup’s perspective (Usman & Vanhaverbeke, 2017; Battistella, De Toni & Pessot, 2015; Kohler, 2016). It is known that startups rely on external partners. However, mechanisms used to organize and handle OI collaborations are yet to be studied from the startup’s point of view (Ceci & Iubatti, 2012; Henton & Held, 2013).

As previously mentioned, studies show that large firms have different purposes when exploring and organizing open innovation, compared to small scale companies. Thus, the same open innovation strategies used by large firms cannot be applied to small scale companies (Van de Vrande et al., 2009; Vanhaverbeke et al., 2012).

One of the challenges startup companies face is the disadvantage of newness and lack of resources. These are also the factors that trigger startups to enter collaborations with larger companies, especially if the startups are in their early-stages (Bougrain and Haudeville, 2002; Edwards et al., 2005; Dahlander and Gann, 2010; Lee et al., 2010; Rahman and Ramos, 2010). According to
Grassmann et al. (2010), open innovation is a key factor for startups to overcome the lack of resources. Startups can adopt open innovation strategies in an easier way than larger firms due to much simpler organizational processes and higher flexibility to change the business landscape (Parida et al., 2012).

Competitive business environments and funding restrictions are two other big reasons that lead startups to seek external collaborations (Criscuolo et al., 2012). Through a collaborative process, the larger company usually shares expertise and other resources which can determine the success factor of a startup company (Zu Knyphausen-Aufsess, 2005).

According to Usman and Vanhaverbeke (2017), collaborations with larger firms can be a difficult task because of the structural complexity of larger companies; the decision-making process is longer, and it is difficult for startups to access corporate resources. The startup manager, therefore, plays a crucial role when it comes to the survival of the startup company (Usman & Vanhaverbeke, 2017). A startup manager who has previously worked at a larger company can better understand the needs and requirements of the bigger firm since the manager has insights and experience of the processes. This experience can be beneficial to startups in negotiations of terms and conditions of collaborations with larger firms (Battistella et al., 2015). Some researchers point out that prior managerial experience can be the most important factor in determining the success of startup companies and it becomes further vital in an open innovation environment where processes depend mostly on collaborating with large firms (Stinchcombe, 1965; Helfat & Lieberman, 2002; Peng, 2011).

According to Chesbrough (2003), there are two main branches of open innovation – inbound and outbound. Given the limited R&D resources within a startup firm, using the inbound method of open innovation can benefit the business (Freeman & Engel, 2007). Using the inbound method helps the startup company to gain new ideas or technologies through the engagement with several external companies (Baum et al., 2000; Lee et al., 2010).

In an outbound open innovation process, internal ideas or technology is used by an external firm that might be better positioned to further develop it (Chesbrough, 2003). Usually, the startup firm provides a larger firm with new technology, thus they become a meaningful source of innovation to the larger firm (Audretsch, 1995).

A report made by Usman & Vanhaverbeke (2017) shows how the growth of startups and large companies in G20 countries can be correlated to collaboration and innovation. According to this report, 9 per cent of a large company’s total revenue comes from the collaboration process between the company and startups and this number is expected to grow up to 20 per cent within the next five years. Both the large companies and the entrepreneurs who took part in the survey of this report, stated the necessity of the other partner for the firm’s growth and innovation aspect (Dahlander & Gann, 2010; Lee et al., 2010; Accenture, 2015a; Mocker et al., 2015; Usman & Vanhaverbeke, 2017).
Many startup firms face funding constraints which clarify that importance of the role of venture capitalists (Hellmann & Puri, 2002; Criscuolo et al., 2012). As earlier mentioned, startup managers also play a vital role in funding efforts. Venture capitalists are more willing to financially support the startup if the startup manager has had previous experience of dealing with larger firms (Colombo & Grilli, 2009).

2.4.2 Open Innovation from a Large Firm Perspective

Even though OI is a term that was popularized by Chesbrough (2003a), a lot of researchers have studied OI from a large firm perspective (Chesbrough, 2003a; De Backer et al. 2008; Dahlander & Gann 2010; Chesbrough & Brunswicker, 2013; González-Benito et al. 2016).

In a study conducted by Chesbrough and Brunswicker (2014) they examined how large companies work with open innovation strategies. A total of 125 companies, in both Europe and the USA, participated in the survey. The result of the study showed that open innovation is a relatively new tool and that the majority of the large companies implementing it are still learning how to utilise it. This report among other studies also revealed that inbound open innovation is more likely to be used by the companies than outbound open innovation (Baum et al., 2000; Chesbrough, 2006; Enkel et al., 2009; Lee et al., 2010; Ferrary, 2011; Mortara et al., 2011; Chesbrough & Brunswicker, 2014).

One of the results of the study showed that the companies mostly used informal networking, university grants and customer co-creation among the inbound open innovation practices. Outbound open innovation practices involved the usage of joint ventures and standardization by the larger firms. Similar to other studies, another result of the survey showed that the large companies usually establish an open innovation strategy when they wanted to identify new business opportunities, explore technology trends and start new collaborations and partnerships (Keupp & Gaussmann, 2009; Lee et al., 2009; Chesbrough & Brunswicker, 2014).

During a collaboration between large companies and startups, startup companies get offered economies of scale and business experience. Larger companies open up their working network to startups, which includes customers and established suppliers (Mercandetti et al., 2017). These factors help startup companies to test their product or service for the market fit and they also have the opportunity to gain knowledge about the customer needs and the market (Mocker et al., 2015).

Collaboration between large corporates and startups fits under the field of open innovation and it has a progressive effect on the performance of both established firms and startup companies (Dahlander and Gann, 2010; Lee et al., 2010; Minshall & Mortara, 2010; Accenture, 2015a; Mocker et al., 2015). Through a collaborative process with startup companies, large companies can deepen their knowledge and grasp new opportunities much faster. Collaborations with a startup can also lead to strategic renewal and successful innovation at large established firms. This creates a win-win situation both for startups and large established firms which can be referred to as a successful collaboration (Ketchen et al., 2007).
Even though open innovation practices have many benefits, one of the greatest challenges with implementing open innovation within large firms is to make the shift from closed to open innovation (Chesbrough & Brunswicker, 2014).

2.5 Factors of Failure and Success of Open Innovation

In a survey conducted by Accenture (2015b) where over 200 companies in markets such as India, US and China participated, a majority of the incumbent firms expressed that utilising open innovation strategies to collaborate with smaller rivals will provide access to new technologies and help them flourish in a technology-driven environment. In another study conducted by Chesbrough (2006), he mentioned the concept of technology exploration which is when a firm engages in activities that enable the company to gain new knowledge and technology from outside sources. This term can also be referred to as the outside-in model, which will be explained in the coming section. Technology exploration practices can be divided into five different categories but this research will only take into account one of these groups, which is external participation (Chesbrough, 2006). Similar to Accenture’s study (2015b), external participation can be seen as when a large firm collaborates with a startup in order to improve innovations which were originally looking unpromising. Through this type of collaboration, companies can access new knowledge and technologies and, in such a way, find potential opportunities for new businesses (Chesbrough, 2006; van de Vrande and others, 2006).

According to research, open innovation collaboration between large companies and small high-tech firms often fail as a result of cultural, strategic and operational gaps between the involved parties (Accenture, 2015b, Battistella et al., 2017). These gaps are further explained to be caused by factors such as the incumbent’s unwillingness to acknowledge disruptive innovation caused by a change in technology, the smaller firm not being able to convince the large incumbent of the benefit and importance of their offering or the large incumbent not being able to incorporate new technologies into its operations. The success of an Open Innovation ecosystem is determined by the efforts of both parties, the incumbent as well as the smaller firm (Accenture, 2015b).

Mercandetti et al. (2017) mentioned that hierarchical structures and heavy processes at the larger company were one of the main reasons for insufficient collaborations between the large firm and the startup company. This often led to extended and time-consuming processes when it came to decision making.

According to Weiblen and Chesbrough (2015), large corporations offer characteristics such as scale, brand reputation and established organisational routines as well as having access to useful resources and assets, while startups are known for having organisational agility and from traits such as being driven by fast-paced growth and a greater willingness to take risks. As a result of these complementary attributes, both parties stand to gain a lot from mutual exchange.

When large corporations engage in a collaboration with startups there is a set of challenges that they face. Since the startup ecosystem is growing and flourishing in a lot of places across the world, firms
nowadays need to screen, select, cooperate and monitor more startups. Furthermore, corporations need to clearly have identified the unique value that they can offer to startups that would make collaborating with them a more alluring option than working with independent incubators or VCs for example. Lastly, there need to be apparent goals set of what should come out of the collaboration. The goals should include terms and conditions that are necessary for both parties to fulfil before entering the collaboration (Weiblen & Chesbrough, 2015).

In a survey by Mercandetti et al. (2017), both large firms and startup companies mentioned mutuality, trust, loyalty and commitment as the mutual conditions necessary between the two parts in order to succeed with a collaboration.

2.6 Formats of Open Innovation

This section will describe the different formats of open innovation collaborations. Here, an explanation will be given regarding the benefits and drawbacks of the various formats.

Weiblen and Chesbrough (2015) examined four models that enterprises can apply in order to develop successful collaborations with startups. They named two more established models; corporate venture capital (CVC) and corporate incubation (inside-out model), and two more recent models: startup programs (outside-in model) and platform startup programs (Weiblen & Chesbrough, 2015). In the following section, a more detailed description of corporate incubation (inside-out model) and startup programs (outside-in model) will be given.

2.6.1 Inside-out Model - Corporate Incubation

Some entrepreneurial ideas emerge internally within a corporation but cannot flourish within the corporate environment due to the idea not being aligned with the core business or business model (Ford et al, 2010; Weiblen & Chesbrough, 2015). Several authors explain that this phenomenon has been the cause of the rise of corporate incubators. This inside-out knowledge source can be introduced to the market as a new venture that in the future might become a new business unit, or remain an entirely independent spin-off (Hansen et al, 2000; Wolcott & Lippitz, 2007; Weiblen & Chesbrough, 2015; Kohler, 2016). Corporate incubators are similar to external incubators in the way that they are designed to offer a hospitable environment that encourages radical innovation and where funding, resources, know-how, business coaching and networking possibilities can be provided (Hansen et al, 2000).

One negative aspect of corporate incubation has to do with the risk of overprotection and the risks of failure that might increase due to it. Corporate incubators run the risk of limiting the startups’ possibilities of collaborating with competitors of their corporate backer. Furthermore, the startup is also limited in the regard that they should not develop products that could disrupt the parent company. Even though corporate incubators have their downsides and benefits it has become an entrenched method for commercialising corporate innovation (Weiblen & Chesbrough, 2015).
2.6.2 Outside-in Model - Startup Programs

Apart from taking advantage of ideas that arise in-house, there exist outside-in models that make it possible to pursue outside-in knowledge flows and in doing so generating exploratory innovations (Ford et al., 2010; Dee et al., 2011; Miller & Bound, 2011; Cohen & Hochberg, 2014; Weiblen & Chesbrough, 2015). The basis of the outside-in model is to allow several startups to clarify and deliver their ideas which makes it possible for the corporate backing party to take part of new products and technologies that startups have to offer. This way of capturing external sources of innovation allows for companies to gain a competitive edge by entering into trending areas of business. An example of the outside-in model is accelerator programs that are time-limited programs aimed at helping startups to develop their ideas (Weiblen & Chesbrough, 2015).

2.6.2.1 Accelerator Programs

Startups can also seek help from accelerators when in need of resources, mentoring, networking opportunities and in some cases even smaller amounts of seed capital, usually offered in exchange for equity (Cohen, 2013; Miller & Bound, 2011). Since one common way of rounding-off an accelerator program is by having a so-called demo day, startups also need to acquire the proper tools during the course of the program in order to successfully pitch their idea and potentially land investors. The way that accelerator programs differ from incubators is that it is a time-limited program, often over a three to six-month period, as opposed to the support of incubators which is more continuous for a longer period of time, usually lasting up to five years (Cohen, 2013; Kohler, 2016). This very characteristic of accelerators requires intense interactions and is crucial in order to early on expose startups to the selection mechanism that rules the market and to put emphasis on the importance of the startup’s independence (Cohen, 2013). Furthermore, since accelerators are cohort-based programs this has a substantial impact on the dynamics between the startups of each batch (Cohen & Hochberg, 2014; Miller & Bound, 2011).

2.7 Value Proposition of Outside-in Model

As mentioned in the previous section, 2.3 Formats of Open Innovation, collaborations between large firms and startup companies can take shape in different forms. This section will give greater insight into the plethora of possible services that aid startups in their development within the outside-in model, which can include business/corporate incubators and accelerator programs but is not limited to those formats exclusively. This chapter will go through a couple of activities and services that business incubators (also known as corporate incubators, however not to be confused with the inside-out model that Chesbrough and Weiblen (2015) describe in their research) can provide.
2.7.1 The Evolution of Business Incubators

Throughout the years, the help that incubators can provide has evolved. Bruneel et al. (2012) focused on examining this evolution in their research. Since the beginning of the development of business incubators in the USA during the 1950s, this first generation of incubators commonly offered infrastructural help in the form of office space, shared resources (meeting rooms, parking spaces and clerical services) and in some cases even production facilities, laboratories or specialised equipment (Bruneel et al., 2012; Mrkajic, 2017; Kuryan, 2018). Kuryan et al. (2018) also point out that a recent exception to this value proposition of business incubators is virtual incubators.

The second generation of business incubators, BI:s, to arise during the 1980s offered business support services, such as mentoring and training with the aim of expediting the learning curve of incubatees. The coaching occurs on a one-to-one basis where the incubatees receive the mentoring free of charge or for an exchange of a small fee, usually contained within the format of a seminar or workshop (Bruneel et al., 2012; Kuryan, 2018). Business services can offer insight into an array of areas such as business planning, product development, marketing and PR and help with understanding buyer preferences (Kuryan, 2018). Other services can also be provided to help with other types of managerial issues such as accounting, financial management, risk management, legal issues (IP protection) and human resource management (Bruneel et al., 2012; Scillitoe, 2010).

The most recent generation of BI:s, that developed during the 1990s, has been designed to offer networking opportunities as part of the value proposition (Bruneel et al., 2012). This evolution made it possible to gain access to networks where incubatees could meet potential professional partners, investors, suppliers and customers. External resources, capabilities and know-how are more readily available, which in turn means that the legitimacy of incubatees can be more easily acquired (Bruneel et al., 2012; Mrkajic, 2017; Kuryan, 2018).

In clarification, the term corporate incubator is used synonymously to the business incubator (outside-in model). When the term corporate incubator is used in the remainder of the thesis it should not be confused with the inside-out model, also called corporate incubation.

2.7.2 The Development of Corporate Accelerators

Corporate accelerators origin from business incubators (Hansen et al., 2000). Y Combinator which is an American accelerator program was one of the first to invest money in startup companies in exchange for a small number of shares. The startup firms participated in a three-month-long program which included networking and coaching from experienced entrepreneurs.

Large established firms today usually adopt this type of accelerator model, which means partnering with startups in order to foster corporate innovation (Kohler, 2016). Corporate accelerators are a way for large established firms to harness entrepreneurial power and explore new innovative ideas (Horn, 2014; Mocker et al., 2015). The benefit of an effective corporate accelerator program is that it puts together the best of two worlds; the larger companies contribute with scale and scope, which is
beneficial for startup companies, while the smaller firms bring more of an entrepreneurial and innovative spirit to the larger firms (Kohler, 2016).

In order to benefit and take advantage of the possibilities offered by corporate accelerators, it is necessary for managers to understand how to design these programs. An effective program can add value to the startup company and at the same time benefit the larger firm by generating innovation to the company. Furthermore, letting people with previous experience of entrepreneurship work within these programs can benefit both startups and larger firms (Kohler, 2016) According to Bannerjee et al. (2016) it can be valuable for both the incumbent firms and the startups to access a so-called internal champion. An internal champion is a person within a corporate program that can ensure that the startup is getting the help and support they need (Mocker et. al 2015). It is a person who understands the needs of both parties and has enough authority to pull all the necessary strings in order to simplify different processes for the startups within the program (Kohler, 2016). The chances to succeed with a collaboration between startups and large firms increases if the startups receive the right offerings and as a result, they can deliver a solution at a faster pace (Bannerjee et al., 2016).

Furthermore, it is important to have aligned expectations and objectives between startups and the program (Kohler, 2016). Both parties should have clear objectives and expectations already from the beginning of the collaboration in order to have successful outcomes (Bannerjee et al., 2016; de la Tour et al., 2017).

Corporate accelerators are time-limited and company-supported programs that support startup companies. The startup companies usually get help through mentoring, different types of education, workshops, seminars and also company-specific resources. Corporate accelerator programs usually share the following characteristics (Cohen, 2014; Trotter, 2013):

- They have an open application process where the programs accept batches of startups each application time;
- They offer time-limited support including mentoring and company interactions; and
- They don’t focus on individual entrepreneurs but rather on small teams;

Collaboration between startups and large firms through corporate accelerator programs can be cost-effective and efficient for both parties. The outcome of the accelerator program can generate a range of different types of corporate-startup collaborations (Trotter, 2013):

The large firm supports startup pilot projects: Large firms are usually known for having slow and heavy processes that make the company inflexible. These characteristics make it difficult for the company to explore new ideas that are not a part of the core business. By instead supporting and funding innovative solutions of startups, the larger firm has the chance to discover innovation at a lower cost and with lesser risks. Through this type of collaboration, it is possible for larger firms to explore new market opportunities and gain competitive advantages. There are also prospects for the firms to develop new solutions or products together with startups or seize the opportunity to solve business challenges via technology or talent offered by the startups. As for the startups, they benefit from
both scale and scope by collaborating with larger firms and higher credibility (Trotter, 2013; Kohler, 2016).

The large firm becomes a customers of the startup: Large companies can have multiple challenges with their business and by cooperating with the participating firms in the accelerator program, they might find different solutions for their challenges. Gaining a large firm as a high-profile customer can be beneficial for the startup and the company in itself: it can strengthen the image of the startup and flourish their business, and at the same time it can help the larger firm to find more innovative solutions. From a startup’s perspective, this type of collaboration can be necessary and a way for them to test their product-market fit and also scale-up their business.

The large firm becomes the startup company’s distribution partners: Collaboration through channel partnerships can provide joint solutions for both the startup and the large company. Instead of building own distribution networks, which can be both time-consuming and expensive for a small firm, startup firms can offer their solutions through the larger companies.

The large firm invests in the startup: Investing in startups can help the larger companies to open up to innovation, access new markets, gain competences at a lower cost and is in some respects less time-consuming compared to internal R&D. These investments also benefit the startups compared to traditional venture capitalists.

The large firm acquires startup: Acquiring startups can be a quick and easy way for larger companies to discover new markets and solve certain business problems (Harrison et al., 2001). A corporate accelerator program allows companies to explore startups that could be a promising target for acquisitions in a rapid way. From the perspective of a startup, a potential acquisition might be seen as an attractive exit strategy.

2.7.3 Business Services
The success factor of an accelerator or incubator can be dependent on the offerings provided by these programs. Based on the type of program, business services can vary. Table 2 describes a range of business services provided in different forms of the corporate-startup engagement program.

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<tr>
<th>Business Services</th>
<th>Definition</th>
<th>Type of Engagement</th>
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<tbody>
<tr>
<td>Custom-built product development</td>
<td>Support with product development; in-depth process knowledge; product feedback and advice (Bauer et al., 2016; Bannerjee et al., 2016; Kohler, 2016; Miller &amp; Bound, 2011; Trotter 2013).</td>
<td>- Corporate accelerators</td>
</tr>
<tr>
<td>Custom-built business development</td>
<td>Support with developing startups business and the overall business model; assistance with defining or improving the business-</td>
<td>- Corporate accelerators</td>
</tr>
<tr>
<td>Networking</td>
<td>The large company offers the startups access to both internal and external networks. It involves networking with the company’s customers, business partners, contractors, potential investors, graduates networks, communities etc. (Becker &amp; Gassmann, 2006b; Bruneel et al., 2012; Chesbrough &amp; Weiblen, 2015; Kohler, 2016; Kupp et al., 2017; Mocker et al., 2015).</td>
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<td>Corporate accelerators</td>
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<td>Corporate incubators</td>
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<tr>
<td>Workspace environment</td>
<td>Startups get offered office space; co-working space; company’s facilities (Becker &amp; Gassmann, 2006b; Bruneel et al., 2012; Chesbrough &amp; Weiblen, 2015; Kohler, 2016; Kupp et al., 2017; Mocker et al., 2015).</td>
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<td>Corporate incubators</td>
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<tr>
<td>Gaining access to the market</td>
<td>The large firm offers startups market access either through becoming startups’ customer or giving them access to distribution channels (Becker &amp; Gassmann, 2006b; Kohler, 2016; Mocker et al., 2015).</td>
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<tr>
<td>Corporate accelerators</td>
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<tr>
<td>Facilitating technology access</td>
<td>Large firms enable startups to gain access to certain technologies and products (Bauer et al., 2016; Mocker et al., 2015).</td>
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<td>Corporate incubators</td>
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<tr>
<td>Monetary aid</td>
<td>The large company normally offers startup capital at the beginning of the program in the form of seed-investment. Startups can also get support to find potential investors in order to raise funding. Financial support is usually an attractive offering for startups in growth phases (Bauer et al., 2016; Becker &amp; Gassmann, 2006b; Chesbrough &amp; Weiblen, 2015; Miller &amp; Bound, 2011; Mocker et al., 2015; Kohler 2016; Kupp et al., 2016).</td>
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</table>
Coaching & Mentoring

Coaching and mentoring both from internal and external employees can be offered by the large firm. Internal mentors provide with company-specific knowledge and skills. External mentors can be useful since they can share their own experiences and wisdom on entrepreneurship to the startups. The external mentors can also provide with networks they have established throughout their career. During mentoring sessions, startups get help to access expertise to develop the startup’s business (Bauer et al., 2016; Kohler, 2016; Miller & Bound, 2011; Mocker et al., 2015; Pauwels et al., 2016).

Support functions custom-designed for startups

The operating costs can be reduced both for the large firm and the startup by having shared support services. Support services can refer to basic administrative support; marketing assistance; technology guidance; finance & legal advice on IP right for example (Becker & Gassmann, 2006b; Lehman, 2015; Mocker et al., 2015; Trotter 2013).

Generic activities and training

Activities offered to startups that are not customised but are a part of the program. It involves seminars, workshops, investor- or demo days. During a demo- or an investor day, the startups have the opportunity to pitch their idea to potential investors or customers (Bauer et al., 2016; Kohler, 2016; Mocker et al., 2015; Pauwels et al., 2016).

| Coaching & Mentoring | Coaching and mentoring both from internal and external employees can be offered by the large firm. Internal mentors provide with company-specific knowledge and skills. External mentors can be useful since they can share their own experiences and wisdom on entrepreneurship to the startups. The external mentors can also provide with networks they have established throughout their carrier. During mentoring sessions, startups get help to access expertise to develop the startup’s business (Bauer et al., 2016; Kohler, 2016; Miller & Bound, 2011; Mocker et al., 2015; Pauwels et al., 2016). | - Corporate accelerators |
| Support functions custom-designed for startups | The operating costs can be reduced both for the large firm and the startup by having shared support services. Support services can refer to basic administrative support; marketing assistance; technology guidance; finance & legal advice on IP right for example (Becker & Gassmann, 2006b; Lehman, 2015; Mocker et al., 2015; Trotter 2013). | - Corporate accelerators - Corporate incubators |
| Generic activities and training | Activities offered to startups that are not customised but are a part of the program. It involves seminars, workshops, investor- or demo days. During a demo- or an investor day, the startups have the opportunity to pitch their idea to potential investors or customers (Bauer et al., 2016; Kohler, 2016; Mocker et al., 2015; Pauwels et al., 2016). | - Corporate accelerators - Corporate incubators |

Table 2. Defining business services offered by corporate-run startup programs
3. Methodology

In the following section, the methodology used for this research is explained. Firstly, an overview of the possible research methods that can be used is given and later on the research strategy is motivated. Furthermore, a description of the method used for data collection and analysis are presented. The last two parts of this section describe and discuss the work process and the trustworthiness of this research.

3.1 Research Design

When pursuing academic research with the aim of gap filling, it is vital to understand what kind of approach to use. Two of the most common methods to use is a qualitative and quantitative approach (Höst et al., 2006). It is necessary to understand which one of the two approaches to use and why the chosen one is more appropriate for this master thesis.

3.1.1 Exploratory Research Approach

According to Höst et al. (2006), research can either have an exploratory, explanatory, descriptive or problem-solving approach. The type of approach used is dependent on the objective and the characteristics of the study (Höst et al., 2006).

The aim of this research is to investigate and discover the field of open innovation and the phenomena of corporate programs. According to researchers, this type of objective of a study fits under the category of exploratory research (Höst et al., 2006; Robson, 2002; Rosengren & Arvidsson, 2002). One main characteristic of an exploratory research approach is that the researcher, in the early phase of the research process, tries to deeply understand and explore the chosen topic. Exploring the subject in-depth can be useful when researchers try to understand existing issues and develop new problem formulations (Höst et al., 2006). The exploration of this research topic was done through an extensive literature review through which the gap was identified. The gap and issues identified by the researchers of this study were related to corporate accelerators and incubators and the offerings provided by these programs to support the development of startups. This topic was then decided to be the main focus of this research.

3.1.2 Qualitative Method

The qualitative and quantitative methods can be examined in detail. However, only an overview of the differences between these approaches will be given in this thesis. The qualitative research method can be used when the researcher wants to clarify the importance of a phenomenon. Whereas the quantitative method is used to determine how often a certain phenomenon occurs (Greener, 2009). Quantifiable matters require a quantitative approach (Höst et al., 2006).

A large part of the qualitative research method comprises of exploratory research. The qualitative method is often used to understand opinions, motivations and underlying reasons. By using this
approach, the researcher can gain a better understanding of the problem area and as a result, formulate new ideas or hypotheses for future quantitative research. Moreover, the qualitative approach is better suited to use if the goal is to identify trends and discover ideas. Furthermore, it can be used to gain deeper insight into the problem (Greener, 2009).

The methodology for this master thesis will be based on a qualitative research approach. The qualitative research method is used to examine corporate accelerators and incubators in Sweden and how their offerings can aid the development of startups, thus contributing to the identified gap within the field of OI.

Furthermore, since an exploratory approach is used when doing qualitative research, the research design is flexible. Thus, the design cultivates throughout the research process as well as the focus of the research (Höst et al., 2006; Robson, 2002; Hennink et al., 2011).

### 3.1.3 Abductive Approach

Research can be based on deductive, inductive or abductive reasoning approach. The deductive approach entails researchers building hypotheses grounded in theory. Afterwards, the results based on the aggregated data, help the researcher to verify or reject the hypotheses (Bryman & Bell, 2005).

The inductive approach, on the other hand, is when the researcher generates new theory as a result of the study (Bryman & Bell, 2005). Using an approach containing characteristics from both aforementioned approaches is classified as an abductive approach. The abductive approach is more flexible and is used to build hypotheses based on theory but also to generate new theory. The results from the collected data, as well as the patterns discovered in the current literature, are later used for making conclusions (Starrin & Svensson, 1994; Wallén, 1993).

According to Starrin and Svensson (1994), an abductive approach is recommended to use when the purpose of the research is to explore and examine a field, which is the reason behind using this approach for this study. Empirical data was collected, and the findings were later compared to the existing literature in order to both build and extend current theory. Current theory was also used as a guideline when conducting the interviews with the startups.

### 3.1.4 Case Study

A case study was chosen to be the most suitable method for this research since it is of an exploratory nature. Researchers can use a case study method to collect and analyse data in order to gain a deep understanding of the studied phenomenon (Baxter & Jack, 2008). In using a case study as a research method, the researcher has the opportunity to use several data collection procedures. Further, the method also simplifies the data collection of different kind of perspectives from interviewees (Merriam, 1998). A case study, according to Yin (2003), is a research of an on-going phenomenon within the context of real life. Thus, the case study method is a suitable choice since the aim is to examine the experiences of startups in corporate-run accelerators and incubators.
The appropriate method for this thesis is a multiple-case study since it allows the researcher to investigate several cases concurrently. A multiple-case study enables the researcher to compare the investigated cases in order to find similarities and differences (Baxter & Jack, 2008; Gustafsson, 2017). Moreover, a multiple-case study is used for this research to examine the startups’ perspectives on corporate programs and the corporate’s engagement within these programs.

3.1.5 Interview Format

In-depth, semi-structured interviews were conducted with representatives startups, corporate accelerator and incubation hub. Hennink et al. (2011), present in-depth interviews as dialogues with a purpose, which is relevant for this research since the interviewee’s experience and stories related to the topic can be captured through this method.

Semi-structured interviews can be viewed as a combination of both structured and unstructured interviews. Unstructured interviews are interviews that have more of a flexible character because all of the questions asked do not have to be predetermined. When conducting semi-structured interviews, it is important to ask open-ended questions which enables and simplifies a two-way communication (Hatry et al., 2014). During the interviews, notes were taken and the interviews were recorded in order for the researchers to be able to produce a transcript that would help in the data analysis.

3.2 Data Collection

The data that form the basis of this research was collected through in-depth, semi-structured interviews with startup companies and to a lesser extent also with large firms running corporate accelerators or incubators.

Since the process of determining the research questions was one that developed along the way, the first batch of interviews was held with startups that are or have been linked to independent incubators such as STING or Minc, or that are a part of the university accelerator KTH Innovation. These interviews were held for exploratory purposes in order to gain a better understanding of the startup ecosystem and the different formats of OI collaborations between startups and other external parties. Moreover, these interviews along with the literature review helped the researches scope what kind of research was to be conducted and helped define clear research questions.

Secondly, further contact was established with large companies on the Swedish market that are running their own accelerator program or incubation hub. The insight gained from these interviews was intended to give the researchers more background information on the current existing corporate accelerators and incubators.

Later on, interviews were held with selected startup companies that have participated in a corporate-run accelerator program or incubation hubs. These interviews were of an exploratory
nature since the research questions are formulated in order to showcase the key services of corporate accelerator programs from the startups’ point of view.

As previously mentioned, in-depth, semi-structured interviews were held in order to collect data using a three-step process. The first step entailed creating interview guides (found in Appendix 1) which would give the interviews structure and cohesive content and data. By including mostly open-ended questions in the interview guide the interviewees were given room to speak more freely around the topic and probes were used for getting a detailed explanation of certain matters (Hennink et al., 2011). The interview guide was formed after the design proposed by Hennink et al. (2011) and thus included an introduction part were the researchers do a brief presentation of the research and discuss sensitive matters such as voice recording and anonymity. Further, the interview guide also consisted of opening questions, designed to gain access to background information regarding the startups that were not readily available online or from other sources, as well as key and closing questions closely linked to the research field. Secondly, the researchers looked for and selected interview objects, this step is discussed to a greater extent in 3.2.1 Sampling interviewees. The last step involved conducting the interviews which were done over the span of a couple of weeks.

3.2.1 Sampling Interviewees

Hennink et al. (2011) put emphasis on that the research questions should determine which participants should be selected in order to conduct research projects. At the same time, the participants need to have a multitude of experiences that are of relevance to the research. Therefore, interviewees were selected based on these criteria.

Interviewees were chosen based on their knowledge and relevance, i.e. how close of a tie they had to the startup and the company running the accelerator programs or incubation hub. Therefore, a lot of effort was put into finding and getting a hold of CEOs and founders or co-founders of different startups. The researchers chose to interview people within these positions since they believed that these people could offer the best insight into the startup, their operations and the experience of collaborating with larger companies in accelerator programs or incubation hubs. Startups were found on websites of corporate accelerators and incubation hubs, and contact was mainly established over email. Moreover, a representative from SSES (Stockholm School of Entrepreneurship) was contacted and asked to facilitate introductions to some startup entrepreneurs that they were in contact with. Initial contact with all the interviewees was established through an introductory email sent to startups in the target group. At the same time, for the exploratory interviews, it was important for the researchers to conduct interviews with the managers of corporate accelerator programs and incubation hubs. The researchers believe that these are the people who can offer the most insight of how the design of the program works, how it has developed throughout the years and how it will probably change in the years to come.
<table>
<thead>
<tr>
<th>Startup</th>
<th>Interview participant</th>
<th>Corporate accelerator/incubator</th>
</tr>
</thead>
<tbody>
<tr>
<td>Startup A</td>
<td>CEO &amp; co-founder (1 pers.)</td>
<td>Ericsson Garage</td>
</tr>
<tr>
<td>Startup B</td>
<td>CEO &amp; co-founder (1 pers.)</td>
<td>Agile</td>
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<tr>
<td>Startup C</td>
<td>CEO &amp; co-founder (1 pers.)</td>
<td>Agile</td>
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<tr>
<td>Startup D</td>
<td>Head of Sales (1 pers.)</td>
<td>Agile</td>
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<td>Startup E</td>
<td>Head of Engineering (1 pers.)</td>
<td>Synerleap</td>
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<td>Startup F</td>
<td>Co-founder (1 pers.)</td>
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<td>Startup G</td>
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<td>Startup H</td>
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<td>Startup I</td>
<td>Co-founder (1 pers.)</td>
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<td>Startup J</td>
<td>Co-founder (1 pers.)</td>
<td>IKEA Bootcamp</td>
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Table 3. Overview of interviewees

For the sake of answering the research questions, the researchers have mainly conducted phone interviews with the interviewees, except for the interview with startup A which was done in person in Stockholm. The conducted interviews lasted on average an hour and 10 interviews were held in total with startup companies and two more interviews were held with managers of the Agile accelerator program as well as IKEA Bootcamp. Furthermore, the included startups have participated in accelerator programs such as Agile (E.on), Ericsson Garage (Ericsson) and IKEA Bootcamp (IKEA) or incubation hubs such as Synerleap (ABB). A lot of effort from the researchers was put into interviewing startups that had participated in the same accelerator program or incubation hub since that would offer a variety of perspectives on a similar experience.

The number of interviews conducted was limited by time constraints. Researchers such as Magnusson and Marecek (2015) emphasise that the number of interviews held needs to rely on the scope of the research questions, the interviews and the analysis of the interview material. Since in-depth interviews have been conducted and the level of analysis is comprehensive, there is not as great of a need for having many interview objects as part of the research.
3.3 Data analysis

The researchers have analysed the conducted interviews using Gibson’s (2003) five-step process as described below:

1. **Organizing the data**
   - According to Gibson (2003), the researcher needs to go back to the data that was collected during the interviews. This process involves listening to the recorded interviews, reading through answers to the interview questions, etc. Organising and displaying the data in this manner helps the researcher to analyse each topic and question individually. By doing so, the researcher can pick out concepts and themes in a much easier way.

2. **Finding and organizing ideas and concepts**
   - This phase involves analysing attitudes and behaviours. The researcher should look for words or expressions that are used repeatedly by the interviewees. Once phrases and words, as well as ideas, are identified they are coded or categorised.

3. **Building overarching themes in the data**
   - This step entails identifying coinciding themes from different interviews that offer greater context to the entire dataset.

4. **Ensuring reliability and validity in the data analysis and in the findings**
   - Since themes and patterns can be found in the data, it is important to go through the original data and search for instances that affect the pattern negatively. Miles and Huberman (1994) called these “outliners” and they convey the fact that it can be easy to discard this type of data since it doesn’t fit into any patterns that have been identified. However, these deviations need to be examined in an equally meticulous way as the patterns, and possible explanations for them need to be included.
   - Testing the validity of the data can be done in different ways. In this research, the validity of the data will be tested by letting two different researchers analyse the same data.

5. **Finding a possible and plausible explanation of the findings**
   - The last phase involves comparing the data to the literature study. It can also be helpful to analyse if any unexpected outcomes emerge in the findings.

The first step involved listening back to the recorded audiotapes and filling in missing information on the notes that had been taken while the interview was conducted. The researchers analysed the interview material on a continuous basis. The interview material was then transcribed and this task was divided up amongst the researchers. Moreover, it is also worth mentioning that since several interviewees asked to remain anonymous the researchers made the decision to have all the
interviews be kept anonymous to assure that the interviewees felt that they could discuss the research topics and questions more openly and honestly.

After transcription, the data needed to be indexed which was done using categories that were derived from findings in the literature review. The categorisation was done individually and iteratively by both researchers to assure that biases are minimised when going through the interview material. The researchers have analysed each interview individually to, later on, discuss their findings with one another. Afterwards, overlapping categories were formed into themes that had been identified from the different interviews. These themes examined patterns, similarities and differences of the categories and later become the headlines for the results section of this thesis.

The final step involved going back to the literature review and linking the results that had been drawn from the dataset with existing theories. Moreover, this also entailed stating which theory the research of this paper has contributed to.

3.3.1 Validity
In order to provide answers and describe the research area, both the purpose and the problem formulation of this study have been supported by theory and literature. Therefore, this research should have high validity.

To achieve a high validity for this research, the participants of the interviews were chosen cautiously. The researchers interviewed participants with leading roles within their respective startup. As a result, the interviewees all had great insights and understanding of the open innovation landscape and corporate-startup collaborations, which gave great results in the interviews. Moreover, at the beginning of the research project, some trial interviews were held with early-stage startups in order to increase validity. These early-stage startup interviews helped the researchers evaluate and finalise the interview questions, and also decide what type of startups should participate in the research.

Moreover, the researchers continuously reviewed the alignment between the research questions and the purpose of the study since divergent opinions were a part of the research process. Consequently, constantly reviewing the research can ensure greater validity.

3.3.2 Reliability
According to Blomkvist and Hallin (2015), the reliability of a study is dependent on how repeatable the research is. Meaning, if other researchers would conduct the same study, would they achieve the same results?

The reliability of data decreases when the data is qualitative and gathered through semi-structured interviews (Collings & Hussey, 2014). Since the findings in this thesis are only based on the results of the in-depth, semi-structured interviews, the researchers found it difficult to preserve strong reliability. Thus, the majority of the interviews conducted was with startups that participated in the
same accelerator or incubator program. In this way, the researchers managed to achieve a large sample of participants with opinions of the same program.

The literature review was then connected to the results from the interviews, particularly the findings regarding E.on’s and ABB’s programs, which increased the reliability for these two programs significantly. The reliability of the interviews conducted with startups that participated in Ericsson’s and IKEA’s program can be considered lower since the sample of interviewees is smaller. However, even though the sample size is smaller the researchers were still able to connect the literature review with the findings from these interviews. For future research within this field, the researchers recommend including more interviewees from the same program in order to build a stronger theory.

3.3.3 Ethical Considerations
Ethical considerations should be taken into account when conducting research to ensure integrity and quality. Bryman and Bell (2015) mention three ethical considerations; avoid harming participants, ensure consent and protect the interviewee’s right of privacy, which are all factors that have been taken into account in this thesis.

_Avoid harm to participants_
Since some of the information disclosed during the interviews is of a sensitive nature, the identity of the interviewees is kept anonymous in this study. Thus, the interviewees cannot be negatively compromised because of the information revealed.

_Informed consent_
Information regarding the topic and the research process were handed out to the interviewees beforehand. Furthermore, the interview questions were also disclosed before the interviews were conducted. The researchers were rigorous with asking for permission to record the interviews, which all interviewees agreed upon.

_Protect the interviewee’s right to privacy_
In order to respect the privacy of interviewees, the researchers avoided questioning the interviewees beyond the necessary depth agreed upon for the research.

3.4 Case Study
In order to answer the research questions, interviews have been conducted with startups that have participated in Swedish corporate-run accelerator programs and incubation hubs. The following parts of this section give an overview of the startups and the accelerator programs and incubation hubs.
3.4.1 Corporate Accelerator & Incubator Case Study

As mentioned in the previous parts of the methodology section, interviews of an exploratory nature were conducted with large companies in Sweden that run their own accelerator programs or incubation hubs. The researchers were not able to interview all the corporate accelerators and the incubator that the startups have participated in, only Agile and IKEA Bootcamp. Through using online resources and information disclosed by startups, the researchers were able to give a presentation of the remaining accelerator and incubator program.

3.4.1.1 Ericsson Garage

Ericsson Garage was an accelerator program but is currently not in operation. The six-month program was held for the first time in 2017, with the first batch consisting of five startups. All types of startups could apply for Ericsson’s accelerator program regardless of the development phase of the startup. Ericsson Garage helped startups through various kind of services and support such as finding customers, building and evolving startups technology, or support with scaling up ideas.

Ericsson Garage offered a tailored coaching program where the startups had the opportunity to attend different seminars and workshops. The program also offers deep insights into technology, such as 5G and IoT to its participants. Within the accelerator program, Ericsson connects the startups to an ecosystem of investors, industries and other startups which Ericsson believes will encourage different parties to work together and thus help the startups to find a market fit (Ericsson, 2017).

3.4.1.2 Synerleap

Synerleap started in 2017 and is an innovation growth hub that is run by ABB in order to help startups develop and expand. The aim of Synerleap is to help startups win customers, scale-up and grow. ABB supports Synerleap in running the innovation hub through funding. As a result, Synerleap keeps track of the startup ecosystem on behalf of ABB. Synerleap has its own staff and separate office space, located in Västerås in Sweden, from ABB.

Startups that operate within industries such as industrial automation, robotics, building and transportation, smart cities etc. are a great fit for Synerleap’s growth hub. Within the hub, startups get offered mentorships, investments and access to ABB’s networks.

When Synerleap started, only Swedish startup companies were accepted to the program but recently startup companies from around the world have been permitted into the innovation hub. The startups that join the incubation hub need to pay a fee in order to participate. As a new member to Synerleap, the startup company begins their journey in the hub by testing their idea, concept and technology. This initial stage of the hub is called the hunting phase and within this phase, Synerleap help startups find a useful fit for their offering within ABB. Furthermore, during the membership, Synerleap supports the startup in finding potential collaboration projects that they could conduct together with ABB. The startups also have access to experts from ABB’s R&D department and
laboratories at ABB Corporate Research. Within the program, each startup has individual meetings as well as regular presentations to present their current situation and status, allowing the startups to connect with each other.

Synerleap organises workshops together with ABB that the startups have the opportunity to attend. Through Synerleap, ABB holds mingle events and pitch competitions which are golden opportunities for startups to market themselves inside ABB and meet with external parties. Moreover, the pitch competition is a way for the startups to get funding from ABB Technology Ventures. Furthermore, Synerleap invites other large established companies to their office and creates a networking environment for the startups participating in their incubation hub. Through these networks, startups have the chance to find potential collaboration partners and customers (Synerleap, 2019).

3.4.1.3 Agile
The following presentation of Agile is given based on an interview with the manager of Agile and information disclosed by startups that have been a part of the accelerator.

E.on has been running a corporate accelerator program based in Västerås since 2016 called Agile. So far there have been a total of five batches, each one being six months long, within the program, with three to six startups within each batch. The accelerator program takes place twice a year.

2019 has been a year were a lot of changes have been made to the accelerator program, Agile. Changes that have taken place have affected the selection and application processes, which used to be lengthy and might have deterred startups from applying according to Agile’s manager. Now, the application process is two minutes long and startups are asked to briefly present their idea, explain the problem they are solving and in what way it is connected to the energy sector. In order for startups to get the most out of the program, there needs to be some sort of connection between their solution and the operations of E.on. Another change that has taken place within Agile, is that the focus has shifted to external startups only. Previously, internal personnel could apply for the program and develop their ideas while still being an E.on employee. As part of the accelerator, the startups gain access to coaches and mentors who works for Agile or are rented in. Each startup team within the batches receives a mentor

E.on started this initiative because they realised that the energy market is changing at a rapid pace, and therefore they need to assess what role they want to take in the changing landscape. As a result, E.on came to the conclusion that they need to work closer to the customer and the market to continuously test more ideas. In the present moment, E.on like many large industrial firms is characterised by lengthy processes and tedious routines which they have deemed not sustainable in the long-run for their innovativeness and thus competitiveness. Therefore, they started exploring new ways of capturing new methods, testing concepts and introducing ideas to E.on, that is how Agile came to be. Now more than ever before E.on has become more open to change and it is noticeable in the way employees engage with the accelerator startups.
For startups that choose to enter the corporate accelerator, they are offered 300,000 SEK in exchange for E.on receiving purchasing right for a certain percentage of the startup and help when it comes to product validation and development, customer identification, budgeting for testing and much more. As time has passed, the accelerator program has become more and more customisable toward the desires of the startups. A great effort from E.on has been put on creating long-term collaborations with these external startups and exploring synergies that benefit both parties. Therefore, there is a demo day held at the end of the five-month long program where all the startups get to pitch their idea to E.on in order to receive further investments.

3.4.1.4 IKEA Bootcamp

IKEA Bootcamp started off as an accelerator program in Älmhult, in 2017 and has since changed its direction. Currently, it is a pilot focused program and has been since 2018. The organiser of IKEA Bootcamp is an external company called Rainmaking. It is an organisation that works with startups and the development of such companies.

In 2017, IKEA coached 10 startup companies together with Rainmaking. The accelerator program was three-month long and the startups that participated were from different countries and in the early-stages of their development. Each startup received € 20,000 during the program and IKEA did not demand anything in return for this investment. The accelerator program was a customisable program where the startups received mentors from IKEA and Rainmaking. Through the first weeks of the program, all the startup companies participated in “IKEA School” where they learned about IKEA as a company, i.e. how the company is structured and what goals and values IKEA has. During this week, IKEA also focused on NDAs (non-disclosure agreements), hence what the startups are allowed to talk about publicly. The startups also got an insight into how IKEA works with sustainability. During the rest of the program, the mentors focused on helping the startups by applying lean canvas, product development, procurement, finance, regulations, and pitch to potential investors. The aim of IKEA’s accelerator program was for IKEA to learn how they could collaborate with startups by supporting them in their early phases.

In 2018, the program changed direction and IKEA started to focus more on their own business needs. The idea with the pilot program is to solve IKEA’s needs through collaborating with startups and developing solutions together with them. The solutions should be useful for the customers of both IKEA and the startups. No funding is offered within IKEA’s pilot program, unlike the earlier accelerator program they ran.

As of right now, IKEA is more interested in collaborating with startups that are in the mid and growth stage of the development. Currently, there are a total of 16 startup companies participating in 2019’s IKEA Bootcamp program. Three different criteria are used to select startups for the program. The first criterion is that the startup’s idea must be unique. The second criterion is that the startup’s idea must fit with IKEA’s visions and priorities. Last but not least, the startup team must contain people that can cooperate together and are driven and ambitious. Thus, the startup’s culture must align with IKEA’s corporate culture.
3.4.2 Startup Case Study

The following section gives a presentation of the startups included in the interview study. Each startup is presented with some background information about when the startup was formed, how it came to be and what visions the startup has for the future, as well as a specification of which corporate accelerator program or incubation hub it has participated in.

3.4.2.1 Startup A

The following interview has been conducted with the CEO and founder of startup A.

Startup A was formed in 2016 and is the result of a research project. The aim of this startup is to bring more girls, within the ages 12 to 16, into the field of technology. For the founder of startup A, this was a social mission of wanting to encourage more girls to enter the tech world and a way for using design for a social change.

In close collaboration with teenage girls, the founder of the startup explored how girls wanted to learn to code. The results from this exchange showed that there was a demand for learning to code using mobile devices, in a social and tangible way. Today startup A has come up with a prototype in the form of hardware which the user is able to make design changes to through coding. There are workshop solutions available on the market already, but the founder of startup A wanted to take a different approach. Therefore, a product that is a scalable solution was created in order to bring girls into coding. Initially, there was no idea of commercialising the solution, then over time, it grew to become a business rather than a project.

As of right now, startup A has created an MVP where a lot of the main components and software have been installed. Some small-scale early sales and MVP sales have already been made but no large orders have been placed yet. However, plans have been made to go from MVP to manufacturing. Revenues to help with manufacturing have been collected through running coding workshops. The main goal is to launch and finance the product through a pre-seed financing round. The true value of startup A lies in the software, learning to code and creating a digital community where the hardware is the enabler. Therefore, the first product that will be launched will be as simple as possible and there exist ideas of collaboration that in the future might allow for more complex products.

With the main focus on creating a digital community of girls to shape the future of technology, the target is to reach 10,000 girls within two years, 100,000 in five years and a million within ten years. Startup A has a strong desire to stay true to the first generation in order to grow with them, therefore possibilities to develop other ideas that would cater to those needs will also be looked into. Ideally, the startup would like to stay with the girls through their journey and take them to the next level until they have graduated and started their own careers.

Startup A has previously participated in Ericsson’s accelerator program, Ericsson Garage. Five external startups were taken in to participate in the six-month program. The application process was
a formalised process, with an online application, an online selection round with pitching and then a final live pitch explains the founder of startup A.

3.4.2.2 Startup B
The interview of startup B has been conducted with the CEO and co-founder of the startup.

Startup B was founded in November 2016 and is a software company that originates from a 7-year long research project on machine learning for IoT and connected things such as machines and vehicles. Due to the extensive research project that the startup is based on, startup B’s product was mature right from the start. On behalf of a Swedish university, the team behind startup B looked at the commercialisation of research. They conducted research on how to reduce the load on the grid when several IoT machines are connected via sensors. Today, the startup team consists of 14 people with a majority working on technology development and data science. There are also other basic functions such as sales and business development.

The product of startup B works within most industries. However, within certain sectors, the startup has better traction, such as industrial automation, automotive and smart buildings. Currently, the startup has come up with a version 2.1 of the product which is a market-ready product. In 2017, Alfa Laval became their first customer. Today, startup B has 8 major, multinational companies as customers. So far, the startup has done two rounds of funding.

Up until recently, the focus has been on the Swedish market since there are many large, global production companies located in Sweden, thus many potential customers. The plan of startup B going forward is to explore more of the European market, especially Germany where large industrial companies are located, as well as enter other markets where there are more production companies hence the choice of France, UK and the USA. The future ambition is to become the de facto standard for making smart, connected things.

Startup B has been part of E.on:s accelerator program, Agile, since fall 2018 for a duration of six months. Startup B’s stay was extended after seeing the positive results and delivered value from the collaboration.

3.4.2.3 Startup C
The interview of startup C has been conducted with the startup’s CEO and co-founder.

Startup C was founded in 2016 and is a startup that enables remote control of electric heating, water heaters and cooling systems in homes. The founder of startup C has for a long time worked within the energy sector and in projects where there were similar solutions available but assessed that there was still a gap in that market. The founder had ideas of developing a similar product but had not considered starting a business before being encouraged to join E.on:s accelerator program, which came to be the beginning of startup C’s formation. The team of startup C now consists of four co-founders and two hourly employees.
Startup C’s solution is designed for private customers, such as end-users that have electric-heated holiday homes or homeowners that have electrically heated homes. Holiday homeowners are interested in remotely controlling their heating so that they can switch on the heating before they have reached their destination. For a homeowner, the interest lies in controlling their heating in order to be able to save energy and thus decrease their utility bill. Startup C currently has customers who have bought a first early version of their solution. In the years to come, startup C has the goal of becoming the market leader in the Nordic region for smart solutions for holiday homes and control 10% of the market for older electrically heated villas.

Between February to May 2016, startup C was a part of Agile. That year was the first time the program was held and a total of five startups were invited to join the first batch.

3.4.2.4 Startup D

The interview with startup D has been conducted with the Head of Sales of the startup.

Startup D was founded in February 2018 by three founders. The startup deploys electrical vehicle pools for cars, bicycles and scooters. The main customer segment is aimed at metropolitans living in apartment buildings. End-users rent the vehicles when they need transportation, making it possible for shared use of vehicles. With the use of an app, end-users can book, unlock and lock the vehicles. The app is also used for payments, where the end-user can choose to pay on an hourly basis or rent the vehicle for an entire day or weekend.

The idea arose when one of the founders came to the realisation that there is room for a player to enter the market and challenge the position of the company Sunfleet, which is a Volvo-owned company that offers diesel-powered vehicle pools. The founders of startup D assessed that there is a need for a market player that is more focused on sustainable transportation options.

The startup has developed at a quick pace - growing from one to six employees since the beginning of 2018 until now. Startup D currently offers services in Malmö and Stockholm, with large construction companies such as Skanska and Peab as two of their main customers. The vision of startup D is to scale up and expand to other cities in Sweden and enter the global market.

The team applied to join E.on’s accelerator Agile and was a part of the program for six months starting from February 2018. According to the Head of Sales, the startup was in a very early-stage of their development when they took part in the program.

3.4.2.5 Startup E

The interview with startup E has been held with the Head of Engineering.

The startup was founded in 2014 and specialises in computer vision and machine learning. Startup E has developed a software product that contains a collection of algorithms that can be used for localisation, creation of maps and 3D re-creation of the world. Based on the software, startup E also offers a number of services to help companies solve problems using machine learning. These
services can be offered in two different ways; either by licensing the software product or acting as consultants in projects in order to help companies to develop algorithms.

The idea behind startup E’s offering began as an offshoot. Initially, startup E started out by focusing on VR and AR and during this time they received many inquiries from large industrial companies interested in the same type of technology. When Google and Apple launched their AR tool and ARkit, the startup realised it is better to start working directly with industries instead of concentrating on the end-user market.

Currently, startup E has around 30 employees and the interviewee was one of the first employees. The role of the interviewee is to have overall control of the code they write and use, and ensure delivery of high-quality solutions. Most employees within the startup are engineers or researchers within computer vision and machine learning. Startup E also has a CEO, a COO and a CSO who focuses on strategic issues and business development.

As for the future vision, the startup company has quite recently started to fixate on the development of smart cities. The interviewee explains that startup E has ongoing dialogues with community planners, city officials and companies that are interested in smart city solutions. Startup E believes that the smart city development sector will grow even larger in the near future, therefore the goal is to cooperate with several large industrial actors.

During fall 2018, the startup joined ABB’s incubation hub Synerleap.

3.4.2.6 Startup F

The interview with startup F has been held with the co-founder of the startup. The interviewee’s role as a co-founder is to investigate the market and to understand the demands of the customers.

The startup was founded in 2017 and has developed a patented technical innovation for sensor technology. Startup F develops intelligence in cameras, which is tested on human hands in order to digitise finger and hand movements. The idea is to develop a hardware that can be used for VR, AR and other areas where it might be important to digitize the hands, gestures etc. The founder of the company who is also the innovator came up with this idea while studying the development of a virtual keyboard. According to the interviewee, a virtual keyboard can be of great interest to the gaming industry.

Currently, there are five people working at the startup, with two of them on standby. Thus, there are only three of them working on developing and launching a technical demo. The aim is to use the sensors and cameras to translate the movements and gestures of a physical human hand to a robotic hand.

Startup F intends to sell its product to both end-users (B2C) and companies (B2B). In regard to private customers, the plan is to bundle the product together with a game. In order to be able to achieve this, startup F would need to collaborate with large players in the market and together with them develop unique consoles that can be used for VR. As of right now, the company is only based
in Sweden. However, the startup wants to expand the company and sell their products globally. The startup plan to sell their products via Amazon and influence networks. Currently, startup F is in dialogue with a Chinese gaming company to assess if they can establish a collaboration together.

The startup company is currently facing some difficulties due to the fact that the product they are developing is completely technology-based, where the technology is not mature yet, and they are creating a brand new innovation; cameras with built-in intelligence to capture the movements of hands and fingers.

During fall 2018, startup F joined the Synerleap network.

3.4.2.7 Startup G

The interview with startup G has been conducted with the co-founder of the startup.

The startup was founded in 2018. The idea behind startup G arose from a desire to simplify electricity trading. Since the two co-founders of startup G were employed at E.on, they decided to apply for E.on's accelerator program in order to be able to explore the chance of starting their own business. During the time that startup G was a part of the accelerator program, both co-founders, who were still E.on employees, were paid salary for working on their startup idea. The two co-founders decided to start an electricity trading company that is currently investigating how to offer transparent electricity trading with clear terms, at a low price and without binding time.

Startup G is still in the process of developing their offering and have for one year conducted a pilot where they have measured customer satisfaction and cost-to-serve in order to determine how to market themselves in the industry. After this work is done, they will need to assess whether there is a market for what the startup has planned to offer. From that perspective, the team of startup G has to some extent started the development of their startup from the wrong end because they have developed an idea to then see if there is a demand for it on the market. Afterwards, the startup plans to take in another investment round and work on packaging and marketing their offering. The startup currently consists of two co-founders and a CEO from E.on.

3.4.2.8 Startup H

The interview with startup H has been conducted with the co-founder of the startup.

Startup H is a spin-off from a university that develops a patented sensor platform. This platform makes it possible to make various measurements on, for example, gases and liquids. As of right now, the sensor platform is generally designed and the startup is working on finding their niche. Today, startup H offers products aimed at researchers in academia, the pharmaceutical industry and materials science. While still pursuing a larger market within two segments. One segment is battery manufacturing where startup H wants to be able to offer their product to help optimise batteries. The other area that the startup focuses on is the measurement of air quality and gas concentrations.

Startup H is a technology-driven startup and was founded by two doctoral students and a professor who did research on sensor technology. The result of the doctoral dissertation was a compact
nano-sensor that has a number of different application areas. Today the team behind startup H consists of 9 employees and the startup has been listed since three years back.

At present, the startup has some products out on the market but has yet to find their niche. During the year the team of startup H hopes to be able to launch a more market-specific product that will be designed to measure air quality. The focus is currently to find a suitable niche since it is very easy for startup H to scale up their product.

The long-term plan for startup H is to continue to grow as a company by taking in more employees and continuing to be very technology-oriented through working closely with academia and the business sector. Startup H joined spring 2018.

3.4.2.9 Startup I

The interview with startup I has been conducted with the co-founder of the startup.

The startup company was founded in 2018 by four founders. Startup I works with software management of electricity by introducing new technologies to the energy sector. As of right now, the team behind startup I are developing their first product which is a solid-state switch. They are also working on introducing new features to their switch. This technology will enable the balancing of demand-side management.

The founders constantly focus on exploring markets where they can introduce disruptive innovations that will have a great impact on the environment. They also concentrate on areas that are underdeveloped, which is the reason for their current operations within software management of electricity. Startup I has the potential to operate in a variety of markets and the due to the demand for high-tech solutions within several sectors.

All of the four founders have an entrepreneurial background and have all worked with startup companies before the development of startup I. The members of the team have previously worked with high-tech solutions and products. Three of the founders have experience from larger firms and the fourth founder is a serial entrepreneur.

The business model of startup I will be entirely based on licensing. One main reason for this is that the startup company itself does not want to build a factory and compete with the major players such as ABB and Siemens. Through licensing, they will have a faster impact and a faster spread of their solutions.

The startup company has its first prototype ready. Furthermore, they have also developed a software development kit for customers that are interested in startup I’s solutions. This kit is designed for larger companies and universities that have access to their own lab environments and it will allow the user to control the electricity through the software.
Even though the startup company has only existed for one year, they have come far in their progress. During the time that startup I has been operational, energy has been put into developing their solutions and simultaneously establishing collaborations.

The ambitions of startup I is to come up with a variety of innovations that will lead to an evolution of a whole industry. Looking forward, startup I plans to expand globally and explore more business opportunities as their solution gains traction.

Startup I joined SynerLeap in spring 2019.

3.4.2.10 Startup J

The interview was conducted with one of the co-founders of startup J.

The startup was founded by two founders in 2012 and currently has over 50 employees. Startup J works with circular economy and offers large companies a multitude of recycling services. Some of their customers include insurance companies, logistics companies and e-commerce companies. Startup J operates in markets where there is a need to convert more waste into new products. The layout of startup J’s working process is dependent on which industry they work within and thus varies.

Startup J was recruited by IKEA Bootcamp to join the program.
4. Results

This report chapter presents the results from the conducted interviews with the startups mentioned in the methodology section. Topics that are discussed in this part of the report are the challenges that led the startups to apply to corporate accelerator programs or corporate incubation hubs. Furthermore, the services offered within the corporate programs are presented and comparisons are made of the startups’ views of the value offering of corporate-run programs. Another topic that is brought up in this section is the startups’ perception of the motives of the large firms for engaging in open innovation collaborations through running accelerators and incubators. Moreover, an overview of the startups’ positive and negative experiences in participating in these programs and hubs is given. To summarise the findings of the interview study, some suggestions that were brought to the researchers’ attention during the interview sessions will also be presented to give an indication of how corporate-run accelerator programs and incubation hubs can be improved upon from startups’ point of view.

4.1 Challenges - The Startup’s Motives Behind Seeking Help

The startups that have been interviewed were facing some challenges that led them to seek help from corporate accelerator programs or incubation hubs. The challenges differed from startup to startup depending on the size, the development phase and the market that startups operate in. At the end of this part, a summary will be given.

The reason startup A sought out help by participating in Ericsson Garage was because the startup happened to be in a very early-stage of their development and had limited knowledge of running a business. At the time when the new batch began, startup A was just being developed and it was crucial for them to gain access to lab environments and receive capital that would make it possible to purchase hardware components. Since Ericsson is a firm that has a strong brand, the interviewee pointed out that the collaboration was alluring because it would mean that the startup would gain validity.

In the case of startup B, they wanted to come in contact with people at E.on through participating in their accelerator program since startup B had a finished product that they were ready to sell to the firm. Therefore, there was a great focus on the commercial aspects of the program to increase sales and the rollout of startup B’s product. Startup B has since the start focused on targeting large industrial companies. The team behind startup B was not looking to join the accelerator in order to learn about entrepreneurship as much as gaining credibility and contacts within the large firm that could help sell their product to E.on. Many people in startup B have previous experience of running their own business. At the time that they entered the program, they had already received financing and fully developed their product.

When startup C joined E.on’s program they were still in the idea phase and had they not participated in the program the startup could have never been created, explains the co-founder of startup C. The main challenges were that they needed to receive capital and coaching on how to run a business. Furthermore, the co-founder expresses that participating in Agile did give validity to the startup and exposure that they otherwise would have to work hard to achieve.
One of the biggest reasons startup D applied to Agile was because they had financial challenges. They had no initial capital to begin with and needed funding in order to invest full-time in the startup. The team looked at many different accelerator programs, but they felt that E.on’s accelerator program was the most suitable. Startup D realised that there could be tremendous synergies between them and E.on. Both the startup and E.on are operating in the energy sector and with startup D offering sustainable transportation services using electrified vehicles and charging infrastructure, startup D’s hopes were that E.on would be able to support them in the development of their business and brand, especially with a large rollout of the solution.

Startup E had a couple of reasons for seeking help from Synerleap. One big challenge, according to the interviewee, was that it was hard for a small business like startup E to find and talk to people who have enough technological knowledge. It was difficult for the startup to get the attention from relevant and important people within other large companies because startup E was considered a small player. Participating in Synerleap increased the validity of the startup and made it easier to gain trust from external parties. Furthermore, financing was another big problem for the startup. Startup E faced difficulties in getting a hold of contacts that would be willing to offer capital, and having access to liquidity was detrimental for them.

In regard to startup F, challenges that they faced due to their early-stage were related to funding and finding personnel with suitable technical skills. The startup's financial situation made it difficult to find an office space that was large enough and within budget. According to the co-founder, it is usually necessary for startups to have a legitimate workplace in order to conduct professional business together with other players on the market. Moreover, startup F also viewed Synerleap as an entrance to get in touch with ABB, which was one of the main reasons for being a part of Synerleap. Further, the startup saw a connection to ABB which was their common efforts within the field of robotics. Another attraction to Synerleap was the ability to access their lab. Furthermore, the visions and hopes startup F had was to have ABB invest in their company so that when the startup in the future looks for other funding opportunities and partnerships, ABB’s support will help startup F gain credibility.

Since the founders of startup G were employees of E.on at the time they applied for Agile, they received compensation in form of salary, even while participating in the accelerator program full-time, and funding like other startups participating in Agile. As a result, they were more inclined to fully invest time in their startup idea and in Agile, unlike other external startups, they knew that they had the full support, trust and validity of E.on behind them. Thus, startup G did not face the same type of challenges as other startup companies that led them to seek external help.

Startup H applied for Synerleap because of a lack of understanding of the market, available sales channels, and what end-users are looking for. The startup also had financial constraints. At the same time, startup H also wanted to gain access to the network because they knew that they would be able to get the right kind of help from Synerleap, specifically when it comes to reaching a larger market.
Over the last year, startup I has had many different collaborations with large players. One of the greatest reasons for seeking collaborations with other parties is for building a broader network and meeting people with deep technological knowledge that could be beneficial for the startup. What drew startup I to Synerleap was the fact that it is a network. One of the ambitions of startup I is to start collaborating with ABB within a mutually interesting area, where Synerleap will facilitate this collaboration. In the future, startup I hopes to be able to licence their solutions to ABB. The goal is to have large manufacturing companies like ABB, manufacture new products that include startups I’s solution, therefore landing ABB as a customer would be a huge stamp of validation for the startup and would attract more firms to want to work with them.

Startup J was the only company within IKEA Bootcamp who did not apply for the program and instead was asked to participate. The motivation for joining the program for startup J was to grow their network, gain credibility and scale up their solution. Startup J has come a long way in their development and the interviewee does not consider their company a typical startup. Startup J was the only startup company in the program who had employees and made a profit, unlike the other participants.

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<thead>
<tr>
<th>Challenge - The motives behind seeking help</th>
<th>Summary of the findings</th>
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<tr>
<td>Funding</td>
<td>Seven of out of ten interviewees mentioned that their startup faced challenges with funding and raising capital, which was one of the main reasons for these startups to seek help (A, C, D, E, F, G, H). Four of these startups were considered to be at an early-stage of their startup’s development (A, C, D, F)</td>
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<tr>
<td>Lab</td>
<td>Two of the startups sought help in order to gain access to a lab area, among other aspects. Since both of these startups were in the early development of their company, they lacked a lab space that could help them experiment and build their solutions with the help of experts. (A, F)</td>
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<tr>
<td>Commercialise &amp; Scale-up</td>
<td>Five of the interviewed startups were looking for support with commercialising the startup’s products or support with the scale-up process (B, D, 1 H, I, J). Four of these startups have come quite a long way in their development. (B, H, I, J)</td>
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<tr>
<td>Network &amp; Credibility</td>
<td>One of the motives behind being a part of a</td>
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</table>
corporate program mentioned by all the interviewees was the opportunity to network and increase the startup’s credibility. All the startups expressed a need for expanding their networks and creating a brand of their own.

Running a business and understanding the market needs

Three startups mentioned that they wanted coaching and mentoring on how to run a business. None of these three startups has had previous experience of running their own company. (A, C, H)

Finding the right skills

Two of the interviewed startups faced difficulties finding people with the right technical skills. Both of these startups offer high-tech solutions and were in their early phase when they participated in the corporate program. (E, F)

Table 4. Summary of findings from the subject challenges - the startup’s motives behind seeking help

<table>
<thead>
<tr>
<th>Corporate Program</th>
<th>Interviewed Startups</th>
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<tbody>
<tr>
<td>Corporate Program</td>
<td>Three startups</td>
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<td>Running a business</td>
<td>Three startups</td>
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<td>Understanding</td>
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<td>Market Needs</td>
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<td>Finding the right</td>
<td>Two startups</td>
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<tr>
<td>Skills</td>
<td>Two startups</td>
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4.2 Offered Services

This section goes through the value offering of corporate accelerator programs and incubation hubs. At the end of the heading, a summary of the most common offerings received by the startups is given.

Ericsson Garage offered startup A office space and access to the labs, in order to develop the hardware further, among other services. Startup A also received help from engineers working in different departments at Ericsson and a limited budget which was crucial for purchasing necessary hardware. After the program was completed they continued to work with Ericsson and had their first pilot with them. Both parties are currently exploring how they can become B2B partners. Startup A explains that the accelerator program that they participated in offered monthly seminars about a wide array of topics such as fundraising, investing, marketing, business model management or more technically oriented topics. The founder of startup A also tells the researchers about a specific workshop where investors were brought in to teach the incubatees about fundraising. As part of the program, the startups also received a coach, called a driver, who checks in on the team and assesses what help they needed. This personal driver has deep insight into the operations of the large firm and could pinpoint all the helpful tools and resources at the large firm that could be of use for the startup. Each team within the batch was also offered a mentor that helped the teams create a six-month plan, with clear milestones. For startups A this process contributed to their startup having better structure since they entered the program at a very early-stage. The founder of startup A
mentions that the tough part of big companies is that it is hard to know exactly where certain resources are located and therefore it was very helpful to have a driver.

The co-founder of startup B mentions that an upside of Agile is that there are representatives from various divisions working within E.on’s accelerator initiative and they acted as coaches for startup B. These representatives are constantly scouting for the right startup to introduce to people working within the firm. Since startup B had no domain knowledge of what E.on is working with, the representatives helped them understand what problems and challenges the large firm is facing. By participating in the accelerator program, startup B was able to find the right people, working with business development or product ownership, who would help to sell their product and they understood where their product could be applied to help E.on solve some of their challenges. Being able to reach people who possess technical knowledge was also important because they verified that the solution is compatible with the large firm’s environment and helped validate the design of the product. All these people that startup B was exposed to at E.on were good facilitators for getting E.on to become one of their customers. E.on is currently one of startup B’s established customers. Moreover, as part of the value offering of Agile, startup B received office space. Another upside to Agile is the large lab capacity where very expensive and advanced technology can be accessed. However, startup B does not engage in hardware development and thus laboratories were not used. In addition, Agile arranges a lot of activities, conferences and seminars for the startups. Even though, the accelerator program did not offer any funding that specific year, it was still possible to gain capital for pilot projects.

As part of E.on’s accelerator program, startup C was offered access to business coaches who taught the startups how to run their businesses and of agile startup methods; to interview customers, test their solution early on, etc. This was very appreciated by the startups. The business coaches were hired from external parties and were taken in with the purpose of helping the accelerator startups. By participating in E.on’s accelerator program startup C got to be part of a network with other startups and was offered office space. The participants each received funding of 300,000 SEK which for startup C was crucial for hiring software developers for a couple of months and building the foundation for the solution that exists today. As participants in Agile, startup C found it easier to recruit people to the team, including software developers and web developers. Furthermore, as part of the program, there were events organised to help the startups find suitable contacts and potential customers. In discussions with employees of the accelerator program, the startups could express what resources were needed and come up with plans to evolve the business.

At the beginning of E.on’s program, startup D had started their first business with Skanska and Riksbyggen, among other big customers. At the end of the program, E.on had a dialogue with startup D and proposed additional investments and forming an official partnership. In September 2018, E.on stepped in as co-owner and today own 30% of startup D. Currently, the partnership is still ongoing and both parties today have daily communication. There were other various key persons involved in E.on’s program and they held different lectures and educational sessions. Both internal and external parties have been involved in Agile. About half the people involved worked at E.on and the other half came from external organisations. Assistance in business development of various formats was offered to startup D within E.on’s accelerator program and they also received
funding. Startup D was introduced to a business development coach who worked at E.on and took on the roles of a mentor and sales coach. The business development coach has a lot of experience from many different startups and has been involved in developing various products and solutions. Startup D thought that the coach had a very good hands-on approach during coaching and helped the startup figure out how to go about selling their products. Another person within the accelerator program who has been significant for startup D’s development was the manager in charge of Agile. The manager of E.on’s accelerator program facilitated crucial meetings between startup D and E.on employees that helped the startup to develop Furthermore, the startup also got a workspace during the course of the program and had the opportunity to receive legal advice and had access to the lab.

Startup E joined ABB’s incubation hub after they participated and won a pitch contest held by Synerleap. During the contest, they had the chance to pitch their idea and the startups with the most promising ideas received a spot in the hub. Not only did they compete for a spot in the hub but also for a contract with the promise of capital. The capital amount gained depends on how promising the idea is, and in startup E’s case, they won the maximum amount. After winning the pitch contest, startup E signed a contract together with Synerleap, who in return excepts that the startup implements a security system for the protection of ABB’s IP. Furthermore, startup E was given the opportunity to influence the layout of the program. Synerleap listened to their needs and supported them with the right kind of assistance. Synerleap facilitated meetings between the startups and employees working in different departments within ABB. These meetings enabled the startup to understand their own strengths and weaknesses and at the same time get a grip on the needs of ABB. Startup E also had access to a lab and received different kinds of support from the employees at Synerleap.

Much like startup E, startup F also had the opportunity to participate in a pitch contest where they presented a proposal regarding how a potential collaboration could be established between ABB and the startup firm. However, startup F did not make it to the competition. Instead, startup F had to pay for their office space at Synerleap. It was through one of Synerleap’s networking events that startup F was introduced to ABB. In meetings set up after the event startup F and ABB discussed possible future collaboration opportunities. Startup F was also offered to access the lab, which was crucial for the startup’s development.

In 2016, startup G entered E.on’s accelerator program where they received help through coaching from entrepreneurs and people who are knowledgeable in startup activities. Each startup in the program was offered start capital of 300,000 SEK. Throughout the program, startup G had a main coach, and every other week they met with coaches who had specialist skills in different areas, such as user-experience and upscaling. The co-founder tells the researchers that there was a broad competence available within E.on, which the startup had access to. In addition, startup G was provided with internal training in agile working methods and relationship building with customers. Education and work methodology were very crucial, as there are differences in how to run a startup in comparison with working within a larger company. A valuable insight gained from the program was to test hypotheses quickly in order to get fast results. After the end of the program, startup G was given the opportunity to test its product packaging for another 6 months in a collaboration with E.on, who then offered startup G’s product as part of their value offering. Thus, startup G received
support to sell their solution. During the accelerator program, the founders own the idea that they developed. However, E.on has an alternative to invest in the startup would they be interested. When startup G had to make a choice between running their startup independently or together with E.on, it was decided to continue to develop the business together with the large company.

Startup H has been a part of Synerleap since fall 2018. Recently, startup H won a pitch contest where the prize was a 6-month, 300,000 SEK pilot project together with ABB. For startup H this is a valuable opportunity to create something concrete of the ideas they have been working on within Synerleap. At the same time, they view it as a chance to actively explore the common interests that exist between the two parties.

One of the perks of being a part of Synerleap for startup I is that they gain access to ABB’s lab. The startup has also been given the opportunity to meet people from ABB, which has helped both parties understand each other strengths and weaknesses. Further, this dialogue has helped startup I understand how ABB works and how their expertise can be put to use during a future collaboration.

According to startup J, IKEA offers knowledgeable personnel within design and products development, and above all their test lab where the startup firms actually get the opportunity to test their products. Within the program, the startups receive a mentor both from IKEA and Rainmaking. These mentors help through coaching. Startup J has received help regarding the scale-up of their business and they are in constant dialogue about how the startup can expand its operations to more markets.

<table>
<thead>
<tr>
<th>Offered Services</th>
<th>Summary of the findings</th>
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<tbody>
<tr>
<td>Funding</td>
<td>Four of the startups received funding from two of the programs (A, C, D, G). According to three of these startup companies, the funding was very crucial for the startup’s survival (A, C, D). Startup E had the chance to gain capital by participating in Synerleap’s pitch contest.</td>
</tr>
<tr>
<td>Lab</td>
<td>Lab space was offered to all of the startups within all four programs. Three of the startups found it necessary for their development while the rest of the startups did not have the same need to utilise the lab area (A, F, I).</td>
</tr>
<tr>
<td>Office Space</td>
<td>All the startups had the possibility to use the corporate’s office space. Three of the programs offered office space without any extra costs, while Synerleap required a monthly fee.</td>
</tr>
<tr>
<td>Coaching &amp; Mentoring</td>
<td>Business coaches and mentorships were offered to all of the startups within all four programs. Three of the interviewees mentioned that mentorship and coaching were crucial for their</td>
</tr>
</tbody>
</table>
companies since they did not have previous experience of running businesses (A, C, D).

**Seminars & Workshops**

Six of the ten startups were offered seminars and workshops. Synerleap was the only program that did not offer this type of education, hence the four companies that were a part of Synerleap did not receive these offerings. (A, B, C, D, G, J)

**Pitch Contests & Events**

Participation in a pitch contest was offered to three of the startups within Synerleap. Two of these three startups won the contest that included a capital amount (E, H). The third startup did not make it to the final competition (F).

**Sales Channels**

Three of the startups received support with sales strategy (B, D, G). One of these startups also managed to gain E.on as their largest customer. (B)

**Network (Internal Employees)**

All of the participating startups had the chance to network with employees within the programs. They met with different employees within different divisions of the company.

**Network (External Business Relations)**

All of the startups had the chance to meet valuable persons from external organisations. Ericsson Garage invited investors to teach the startup about fundraising, while the startups that participated in Agile and Synerleap were introduced to external organisations.

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<th>Table 5. Summary of findings from the subject offered services</th>
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### 4.3 The Larger Firms Collaboration Motives

*Ericsson's motive according to the startup*

Since Ericsson Garage was a formal and predefined program, the founder of startup A explains that it was clearly stated at the beginning of the application what help that the startups would receive. Further, the founder tells the researchers that there were no expectations set up at the beginning of the collaboration, therefore both parties waited to see how things would unfold. Reflecting on open innovation collaborations between startups and large firms, the founder of startup A explains that startups can find themselves in a difficult position if the large company that they are collaborating with has a lot to gain from the collaboration. However, the founder goes on to demonstrate that since the solution of startup A is not core business for Ericsson, they had an easier time collaborating with the firm. Neither party was focusing on what each party was getting out of the
interaction, which helped a lot in determining the dynamic between the two sides. Moreover, since startup A is mainly pursuing B2C sales and looking into having the large firm as one of their customers, the relationship with the large firm can remain friendly because the startup is not limited to only selling to their collaboration partner. Depending heavily on one customer solely opens up for the risk of becoming that party’s consultant and only making a product for them without building your own business, the founder explains.

E.on’s motives according to the startups
With an increase of transformative technological shifts and emergence of new innovations such as AR, VR, Blockchain, IoT and AI, large companies must cooperate more closely with startups according to startup B, C, D and G. Large companies cannot themselves have expertise in all these new areas, therefore it becomes more important to look toward outside knowledge sources. The co-founder of startup B explains that this has led more companies to experiment with different collaborative formats in order to be able to work with the startup scene. Regarding the terms of the collaboration, there was no room for negotiations. However, startup B’s co-founder says that there were things that both parties needed to discuss more such as the co-development and the result of the product. Both startup C and D mentioned that since E.on is a large organisation, it can be difficult to focus on innovation that is not a part of the company’s core business. Therefore, these startups believe that Agile is a way for E.on to stay relevant in the market by opening up to new innovations. The co-founder of startup C explains that the large firm’s motive with running the accelerator program was to capture new innovations, particularly in the energy sector. With the potential of the startups in the accelerator possibly providing services or products that could be included in E.on’s assortment. For the startup that chose to be a part of the program, there was the possibility of creating a commercial collaboration with E.on, where the startup’s solution would be sold with the large firm as a reseller or directly to the large firm.

ABB’s motives according to the startups
According to the co-founder of startup I, research shows that in the future large companies will find it difficult to remain competitive in the market if they do not cooperate with smaller, fast-growing and innovative companies. It is therefore in the interest of larger companies to cooperate with smaller players on the market. Startup E and F believe that in ABB’s case, they are in favour of collaborating with smaller players since the risk of inventing and discovering new technologies and markets on their own is too high. The co-founder of startup H mentioned that it is difficult for a large company to take steps towards innovation because of slow and heavy processes. By collaborating with smaller companies, larger companies can cut lead times and develop new innovative solutions, thus continue to remain competitive according to startup H.

IKEA’s motives according to the startup
Similar to the motives mentioned by the other startups, startup J also believes that IKEA developed a program to get in touch with startups that would help the company spread to other markets. In startup J’s case, IKEA Bootcamp became interested in the startup due to them working with circular economy - an area that IKEA is interested to invest in due to the company’s efforts in sustainability.
4.4 Collaboration Advantages & Drawbacks

This section presents the advantages and drawbacks of the programs from the startups’ perspectives. In the final part of this section, a summary is given on the common aspects mentioned by the interviewees.

4.4.1 Advantages

The startup founder points out that startup A was the only startup in the batch that utilised the office space that was offered as part of the program, which would later turn to their advantage. Due to the team of startup A spending more time at the office they were able to get more out of the collaboration by having more resources readily available since they were able to develop personal connections to employees at Ericsson. Through conversations with employees, topics would come up and someone would point out that they can help out or know someone who could offer help to further develop the solution of startup A. Even though, the official time frame for the accelerator program was six months, startup A stayed longer at Ericsson, completely free of charge, due to the personal relationships that they had formed. To this day the team behind startup A still has access to the office space and use the lab for testing electronics.

According to startup A’s founder, the collaboration that they had with Ericsson in partaking in their accelerator program was a huge stamp of validation since at the time that the program began, no official business had been set up by startup A. Therefore, the program was a huge push and helped legitimise the startup. The outside validation of their business plan was very helpful, explained the founder. The founder of startup A says that participating in the collaboration was a positive thing that was very useful in giving their startup structure and since the partnership is continuing it will be interesting to see where it goes. When asked whether their startup would have able to develop without participating in Ericsson Garage, the founder explained that the program helped the startup develop at a faster pace since they got help getting hold of hardware components and testing facilities. At the same time, it was a big push for startup A to get things done in order to utilise the time they had in the program, so in that regard, they gained a lot of momentum in joining the program. According to startup A, the help received from the accelerator program is undeniable however since the collaboration began so early on it is difficult to say exactly how it would have been different if startup A had chosen not to partake in the program. Most likely things would probably have taken longer but it was a big push and a validation.

The co-founder of startup B explains that being a part of E.on’s program has been a great guide for establishing contact and accessing business networks. The co-founder of startup B explains that the accelerator program had a well-developed onboarding process. Startup B had the chance to present themselves and highlight the challenges that they have needed help with. Due to Agile being run by 8 people, startup B was able to establish a personal relationship with each one of them. Another strong advantage of E.on’s accelerator is that it is clearly linked to the rest of the enterprise. Some of the employees of the program work there full-time, while the rest work part-time at another division of the firm as well. Therefore, E.on has successfully incorporated the remainder of the organisation to the accelerator, which has also meant that no us vs. them mentality has arisen, according to
startup B. Had startup B not participated in Agile, they would not have focused as much effort on making E.on into a customer. Therefore, the co-founder of startup B expresses that it was very valuable to have the large firm’s support and by being associated with them and having them as customers, the validity of startup B has increased.

One of the major advantages of being part of Agile according to startup C has been the financial support the startup has received. The funding made it possible for the startup to hire software developers and build a strong foundation for their product. The funding helped the startup with the overall business and product development. Another benefit of being a part of E.on’s program has been the network that startup C got introduced to. This helped them to find potential customers which has been one of the most important parts for the startup.

Early on, both startup D and E.on began to market each other’s services. E.on marketed startup D’s services to various BRFs. At the same time, startup D used their participation in Agile and the collaboration with E.on as an example in meetings with customers and made sure to point out that E.on would help install charging poles. In this way, both parties found a strong connection in marketing each other’s services. According to the interviewee, the biggest advantage has undoubtedly been that collaboration with E.on has incredibly legitimised the startup toward customers and other companies. The participation in Agile and the partnership with E.on has validated startup D, which has granted the startup access to multi-million SEK projects. Moreover, the customers tend to feel more secure knowing that startup D is corporate-backed by a large and mature firm. The interviewee mentions that it would have been very tough for startup D had they not participated in Agile since they were facing financial problems. Startup D, would for example not have been able to sign long-term contracts with customers without the help they received from E.on. The capital also made it easier to work full-time and get the business up-and-running. Furthermore, the co-founder explains that it was very valuable to have the coach’s verification that the group was moving in the right direction and had an appropriate sales strategy. This verification strengthened the startup’s self-esteem and the interviewee mentioned that the confirmation the team received could be very crucial when running a small company in general.

Startup D considers the cooperation to have worked out really well. E.on was transparent from the beginning with the fact that they, at the time, had not entered into partnerships with any startups before. Furthermore, E.on were forthcoming with their trust in the judgement of startup D. The interviewee expresses that this type of cooperation can only succeed when both the parties are transparent and trusting of each other. Until recently, startup D sold its product independently and E.on is now offering the product of the startup jointly. The first sales have just begun and the interest in the concept is high among customers. Startup D was also very pleased with the coaches and the mentorship that was offered to the startup.

One of the biggest advantages for startup E was that they had the opportunity to get in touch with relevant people from ABB and through these meetings got an understanding of the kind of solutions that ABB is interested in. Relevant employees within Synerleap sometimes acted like coaches, which helped startup E get a better overview of the market and made it easier for them to talk to other potential partners. Another thing that has been very rewarding from this program has been the
access to the different networks. Further, startup E had several opportunities to pitch their ideas and solutions to significant people and thus gain a better understanding of customer and market needs.

Startup F found Synerleap’s network as one of the main benefits. Synerleap facilitated meetings between startup F and ABB, which have resulted in valuable connections within ABB. Another great advantage of being a part of Synerleap was that startup F had the opportunity to rent office space at minimum cost and access lab to develop their product.

Startup G found the mentors and coaches working in Agile very valuable for the startup. These coaches helped the startup understand the customer and market needs. All the education sessions were also valuable for the team. It helped the startup with the crucial aspects of running a business. Another great benefit of being part of Agile was that the startup got the offer to run their startup together with E.on, which means that E.on will on an everyday basis support startup G. This partnership also legitimise startup G as a company among other customers.

For startup H, being a part of Synerleap’s network has been crucial for getting a hold of people who have helped the startup with for instance market research issues and product development. Furthermore, winning the pitch contest has also contributed to improved self-esteem among the members of startup H. The pitch contest startup H won also includes a pilot project together with ABB which the startup believes was one of the greatest advantages. The capital that the startup won has also come in handy and has been used to further develop their business.

One great aspect of being a part of Synerleap, according to startup I, is that Synerleap has not demanded anything in return from the startups for their participation. Usually, corporate programs demand equity in exchange for a being a part of the program, which the interviewee considers to be a wrong approach. The co-founder believes that young entrepreneurs, with less business experience, are more prone to apply for these types of programs. Overall, startup I is very pleased to be engaged in Synerleap and the fact that they had the opportunity to access the lab was a huge plus. However, the startup has spread its risks and opportunities, which means that had they not been given the chance to be a part of Synerleap there were other networks available for them to join. In addition, since startup I works closely with large international companies their plans and goals would not have overturned if Synerleap had rejected them.

A big advantage of being a part of IKEA Bootcamp is the credibility it gives to startups, making it easier to establish new partnerships in the future, which can further strengthen the credibility among customers. For startup J, participating in IKEA Bootcamp helped them increase its market value by being able to market itself in a stronger way. The co-founder explains that startup J’s participation in the program has been a good experience so far, but believes that it is too early to assess if it is time well-spent. Furthermore, the interviewee believes that the startup would still have survived without being part of IKEA Bootcamp since startup J is not in as an early phase as other startups. The benefits so far according to the co-founder of startup J, have been that the startup has got an entrance to IKEA and valuable contacts that might come to use after this program. Another advantage of this program is that those of the participant companies who work a lot with product
development have the opportunity to use a large part of IKEA’s resources in Älmhult, especially their lab environment.

<table>
<thead>
<tr>
<th>Advantages of the program</th>
<th>Summary of the findings</th>
</tr>
</thead>
<tbody>
<tr>
<td>Financial support</td>
<td>According to three of the startups, the funding was one of the greatest advantages of being a part of these programs. (C, D, H)</td>
</tr>
<tr>
<td>Office space</td>
<td>Two of the startups found the office space as a crucial part of their company’s needs, hence this offering was one of the greatest advantages for these startups. (A, F)</td>
</tr>
<tr>
<td>Network</td>
<td>All the startups mentioned networking as one of the greatest benefits. For some of the startups, networking was one of the most important aspects since it helped them connect with future partners and customers. (B, C, E, J)</td>
</tr>
<tr>
<td>Lab</td>
<td>Accessing the lab was very appreciated by four of the startups. (A, F, I)</td>
</tr>
<tr>
<td>Mentorship</td>
<td>According to four of the startups, they found the mentorship offered by the programs as one of the most valuable aspects. The coaching helped the team improve their confidence and it also helped two of the startups get a better understanding of how to run a business. (A, D, E, G)</td>
</tr>
<tr>
<td>Validation &amp; Credibility</td>
<td>Half of the interviewees mentioned that participation within these corporate programs has increased the startups’ credibility (A, B, D, G, J). According to three of these startups, the programs have legitimised their startups among customers. (D, G, J)</td>
</tr>
<tr>
<td>Partnership</td>
<td>Five of the startups’ participation ended with different types of partnership together with the larger firm. The startups see this as a great advantage since this increases startups’ credibility. (A, B, D, G, H)</td>
</tr>
<tr>
<td>Business &amp; product development</td>
<td>The majority of the startups were offered business and product development to some extent. However, only four of these startups mentioned it as one of the advantages. (A, C, G, H).</td>
</tr>
<tr>
<td>Understanding of the customer and market needs</td>
<td>Three of the interviewees mentioned that one great advantage has been that E.on and Synerleap have helped the startups understand both customer and market needs. This has helped the startups to further develop their product. (E, G, H)</td>
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</table>

**Table 6. Summary of findings from the subject advantages**

### 4.4.2 Drawbacks

The founder of startup A points out that larger firms are often characterised by bureaucracy, a lot of processes and the need for approvals from people which make things move very slow. Therefore, it is important to acknowledge how large firms work and how startup work, since they use different work methods expresses the founder. Furthermore, the founder expresses that as a startup, you have so little leverage over a big company, therefore a collaboration can be extremely tough. However, it is difficult to stay agile, flexible and fast-moving while working closely together with a large firm. The founder of startup A points out that the realisation that large firms have their way of doing things and the startup needs to follow what is the best protocol for them is important. The founder explains that there needs to be a plan in place that does not include the large firm. Further, the startup needs to be more realistic about what they want to help with and each party needs to be clearly aware of how they can contribute to the collaboration in order for it to be sustainable in the long run. Startup A’s founder also shines a light on the fact that managers in big companies seldom know how startups work and in what ways synergies between the two parties can be created. Another negative aspect that was brought up during the interview with startup A was the speed at which things were moving, often it was necessary for the startup to make a conscious effort to speed things up.

One drawback with Agile according to startup B is that if there is no one who feels ownership of helping the startups continue to develop their products, there is a tendency of lacking help and devoted resources. Startup B also expresses that large firms are usually unfamiliar with startups and how they operate. Startup B mentions that, if both the startups and the employees of the accelerator program work closer together to develop ideas, the ownership and commitment will be greater from both sides.

Since 2016 was the first year in which Agile was held, the co-founder of startup C explains that there were uncertainties regarding IP rights that had to be settled in negotiations because there was no formal agreement on it. According to the co-founder, the biggest shortcoming was the lack of formalities regarding IP rights and financing. Startup C also mentions long lead times as a negative aspect of the program.

According to startup D, one of the biggest differences between a small firm and a large firm is that a startup is a small and agile firm, that can make things happen very quickly. A startup can easily be
perceived as impatient by larger firms when things take a long time. E.on, on the other hand, is more of a slow-moving organization - there are a lot of time-demanding processes and routines. Therefore, one aspect that startup D has comprised on is time, they realised and accepted that getting things done can take up more time. However, the upside of working in this manner is that things can happen in parallel at the same time.

A disadvantage that startup E brought up is that startup E is a small and resource-intensive firm which can be challenging when having limited resources. At the same time, startups firm have a tendency to be more flexible because of the smallness of the company. Startup E mentions that one downside of large companies that affects the startups within the program negatively is that the large firms have very slow and heavy processes.

There are no seed investment opportunities within Synerleap, and thus no investments were made in startup F because they were considered to be in a very early-stage of their development. However, other investment opportunities are available within the hub and depend on the phase of the startup. Synerleap only invests in products that are ready to be released on the market. Moreover, the startups generally do not get any help from Synerleap in finding alternative investors which startup F mentions as a negative aspect. So far, startup F has not been able to find an area in which they could collaborate with ABB. Therefore, the interviewee believes that startup F and ABB might not be suited for each other. From startup F's point of view, efforts have been made to find a person within ABB who can see their offering as a solution that ABB could benefit from. These efforts have yet to show any positive results.

At the time when startup G was in Agile, E.on's accelerator program was driven by a motivation to capture ideas both internally from employees but also from external parties. Since startup G entered the program when it was still not very formalised, they had to endure long lead times. Startup G became the first startup that E.on decided to invest in and since it was the first time E.on had done something similar, it was a lengthy process to go through the conditions for the partnership. It became a learning process for E.on on how to handle those situations.

Much like startup F, startup H also had a hard time finding synergies between them and ABB in the beginning, before they won the pilot project through the pitch contest. Therefore, the interviewee highlights the importance of finding a person within Synerleap who feels a certain degree of responsibility to help the startups out.

The co-founder of startup I mentioned that the startup does not have the time to be a part of a typical accelerator program since these programs usually have a predetermined schedule and design that can be very time-consuming. According to the co-founder of startup I, the average age among employees within high-tech companies is quite high. Likewise, the employees of high-tech startups are usually quite experienced people, thus making it hard for large companies to mentor and coach these types of startups. The interviewee thinks that large companies often have a misconception of high-tech startups being run by young entrepreneurs and therefore not being able to cater to their needs. One disadvantage of Synerleap has been that the company has had to pay for places (office space) within the program that they do not use.
For startup J, they have assessed that since their time in IKEA Bootcamp has been very limited, they feel like they have not encountered any drawbacks of the program so far.

<table>
<thead>
<tr>
<th>Drawbacks of the program</th>
<th>Summary of the findings</th>
</tr>
</thead>
<tbody>
<tr>
<td>The large firm has little knowledge of how startups operate</td>
<td>Three of the startups mentioned that large firms are usually unfamiliar with startups. These larger firms often lack the understanding of how startup firms work and operate (A, B, I). One of these startups also felt that there was a lack of commitment from the large firm because they did not understand how startup’s business works. (B)</td>
</tr>
<tr>
<td>Long and heavy processes within large firms</td>
<td>Almost all the startup mentioned long and heavy processes as a big drawback. This resulted in slow decision-making processes and long lead times which was not appreciated by the startups.</td>
</tr>
<tr>
<td>Lack of formalities regarding IP rights and financing</td>
<td>One of the interviewees mentioned that there were uncertainties regarding IP rights within Agile since it was the first time the program was running. (C)</td>
</tr>
<tr>
<td>Lack of synergy between the startup and the large firm</td>
<td>Two of the startups mentioned that they haven’t found the right synergies yet within Synerleap. (F, H)</td>
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</tbody>
</table>

*Table 7. Summary of findings from the subject drawbacks*

4.5 Suggested Future Changes

Reflecting on startup A’s participation in Ericsson Garage, the founder explains that large companies often possess resources and expertise, and employ people with amazing skill sets. Consequently, large firms need to become better at exposing their employees to their accelerator startups in order for them both to have useful exchanges and dialogue that can help the startup and allow the employee to use their knowledge and individual skills to a greater extent. This would also allow the programs to be more suited for the needs of the startups. Furthermore, the interviewee also mentions that it would have been useful to have received more guidance on what other types of financial support there is available. Another vital part of a program is to have communication and trust according to startup A.
From the perspective of startup B, it would have been desirable to have more sales-driven managers at their disposal that could offer expertise in solving specific problems. Moreover, there is a desire to have a greater influence on the design of the program in order to receive more customised offerings. Startup B also points out that there should be more financing opportunities available. Furthermore, startup B thinks that it would have been easier to explore potential synergies with E.on had there been a dedicated person, a so-called internal champion, responsible for passing their cause further along. Therefore, it is important for a large firm to encourage a close relationship between firm employees and accelerator startups.

Startup C entered an incubator for one year after being a part Agile because they were still in need of incubation activities. Within this incubator, they had a business coach that they would meet once a week and that would challenge them and offer coaching in developing a clear action plan and strategy for the startup. The biggest difference between this incubator and E.on’s program was that startup C got help with identifying various financing opportunities within the incubator. The co-founder of startup C also explains that the type of program that suits each startup depends on the current circumstances and how far along in the development of the startup one has come. Currently, startup C is involved in a second incubation program, which is very similar to the first one. This second incubator is low-intensity and a long-term 2-year program, that mainly offers help with strategic planning and opportunities for networking. In addition, the co-founder of startup C expresses that it is unhealthy to put so much focus was having E.on invest in the startup at the end of the program. The co-founder means that it would have been better to explore other funding opportunities. A potential improvement area is to create pilot projects together with the large firm, instead of focusing so much of the investment in the startup. The co-founder also mentioned that this option should be dependent on the phase of the startups since pilot projects might not be relevant for startups that are in their early phase. Therefore, startup C also argues for having the option to customize the program to a larger extent. However, the program had very generous terms that gave the startups paid wages and sponsorship. According to the co-founder, the accelerator program was very intensive, with a lot of scheduled time with business coaches.

Startup D describes that in their batch there were a total of five startups that participated in the program and they all had very different ideas and were at different stages of their development. The interviewee thinks that this was the greatest challenge for the accelerator program - to find and design a program that suited and could help all the participating startups. Therefore, startup D strongly believes in large companies working more toward the customization of these programs. Startup D also mentions the importance of having different types of coaches with various expertise available. One such example is coaches within sales.

According to startup E, most aspects of Synerleap have generally worked well. However, within certain projects, ABB had somewhat unrealistic expectations from the startup, which the Head of Engineer believes is due to ABB not fully understanding the technology behind the solutions provided by the startup. One of the examples that the interviewee mentions is that the startup had developed algorithms that ABB did not understand the complexity of. This issue was later solved by communication and understanding of each other’s weaknesses. Startup E thinks that both startups and large firms should focus a lot on communication in order to understand each other’s businesses.
The co-founder of startup F thinks that in order to run a successful accelerator program, the people working within the program should have previous experience from entrepreneurship. They should also be able to challenge a startup's ideas and push toward innovative thinking. Moreover, the mentors involved in the program should be able to guide the startup firms by offering new perspectives. There should also be more funding alternatives within these programs whether the startup is in need of capital or not, according to the co-founder.

Even though the cooperation with ABB has yet to give any tangible results, startup H is hopeful that the upcoming project that they will have with ABB will facilitate the commercialisation of their solution. In addition, the interviewee points out that it is important for technically driven startups to put energy on developing solutions that there is a demand for on the market. As a startup, it is important to find an internal champion in these programs that help drive the business forward, otherwise, there is a risk of getting stuck in the big company’s bureaucratic processes. Startup H believes that it is important for all type of programs to have an internal champion for each startup. The interviewee explains that the synergy between the startup and ABB could have been greater if ABB had encouraged its employees to engage more with the Synerleap startups.

Startup I’s co-founder believes that a corporate accelerator program should be designed based on the needs of the company in charge of the program. If the company is looking to collaborate with high-tech, innovative startups, it is important that employees within the large company have expertise and experience of such collaborations and are sufficiently open to cooperation. The co-founder also believes that there should be an internal champion for each of the startups. According to the interviewee, large firms always equal long lead times. Therefore, it is important to find a so-called champion within the organization that has a fairly high position with enough authority to speed up certain processes. In forming an ideal program for startups, the co-founder of startup I would have a couple of organisations, that have common interests but are not rivals, be in charge of designing the program. The program would have a project team consisting of employees from the different companies. The project team would design individual plans and agendas based on the needs of each startup in the program. The co-founder believes that an individual plan would allow both the startup and the larger firm to discuss each other’s strengths and weaknesses as well as visions and goals for a common agenda. Furthermore, the co-founder mentions the importance of engaging the employees of the programs with the startups. Moreover, the interviewee mentions that developing a generic program that is suitable for all startups involved would be highly unlikely. Therefore, the interviewee believes that in the future process-oriented accelerator programs and incubators will disappear.

In the case of startup J, the interviewee wishes that they would have received monetary compensation for their participation in the program. The co-founder expresses that there is an alternative cost for being a part of IKEA Bootcamp, instead of pursuing other collaborations, that startup J needs to consider. The co-founder of startup J also points out that it is important to be clear on how time is to be spent since corporate programs can be very time consuming and time is a scarce resource for many startups. The startup also mentions that in order for a corporate program
to succeed, the design of the program should be customised to every startup. All the participants should also have an individual coach like startup J has within IKEA Bootcamp.

<table>
<thead>
<tr>
<th>Suggested changes</th>
<th>Summary of the findings</th>
</tr>
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<tbody>
<tr>
<td>Large firms need to better expose their employees to the incubatees</td>
<td>According to four of the startups, the large firm was bad at exposing the company’s employees to the participating startups. These startups would recommend large firms to focus more on introducing relevant expertise to the startups. (A, B, H, I)</td>
</tr>
</tbody>
</table>
| More sales-driven managers within the program                   | Two of the startups pointed out that these types of corporate programs should include more sales education and have more sales focused coaches. (B, D)                                                                 |}
| More financing opportunities                                   | Five out of ten startups wanted funding options. The programs should involve more investors according to the startups. (A, B, C, F, J)                                                                                       |
| More coaches with experience to help develop strategies and plans | Almost half of the interviewees suggested having more experienced coaches available within corporate programs. These coaches should have previous experience of entrepreneurship and running businesses. (F, I) |
| More focus on creating pilot projects together                  | One startup wanted the large firm to focus on collaboration opportunities through pilot projects in the future. (C) However, several more startups pointed out that there is a need to have closer collaborations. |
| More communication and trust                                   | Some of the interviewees mentioned that there should be more communication and trust in order to avoid misunderstanding. Better communication could also lead to better understanding each other’s strengths and weaknesses. Having trust was also mentioned to be an important factor. (A, E) |
| Internal Champion                                               | Three startups had so-called internal champions within their programs. These internal champions facilitated all the meetings and contact between the startup and the large firm. Therefore, the startups believe that all types of corporate programs should include internal champions since they can have a great impact on startups’ development. (B, H, I) |
| Customise the offerings within the programs | Some of the startups believed that a corporate program should be customised for every participating startups. (A, B, C, D, I, J) |

*Table 8. Summary of findings from the subject suggested future changes*
5. Discussion

This chapter is focused on analysing and discussing the findings of the case studies. The researchers compare the findings with existing literature and discuss how the findings are connected to open innovation. Furthermore, the research questions of which key services are offered to the startups are discussed.

5.1 Startups & Open Innovation

The findings of this research support the literature review and previous arguments made by researchers. The results show that the startups’ lack of resources and the liability of newness motivate them to use open innovation processes, in this case, participate in accelerator or incubator programs. Some of the interviewed startups participated in a corporate program in order to overcome their smallness and access fundamental resources. Since these were some of the motives used by the startups to survive, our findings support Grassmann et al. (2010) argument regarding open innovation being a key factor for startups to overcome the lack of resources and liability of newness. While some of the startups have survival motives to use open innovation practices others use it for business motives. The business motives are usually connected to the commercializing aspects of the product offered by the startups. The findings also imply that the majority of the startups participated in a corporate program to access expertise and resources, gain legitimacy and to demonstrate their technology in order to get access into a specific market and a customer segment. According to Zu Knyphausen-Aufsess (2005), sharing expertise and resources can determine a startup company’s success.

Many researchers argue that it is difficult for startups to establish their business in the early phases of the startup’s development. These challenges usually trigger startups to open up to innovation. By using an open innovation approach, the startup can further develop their technology and with the help of the larger firm, commercialise their product and find a suitable market (Edwards et al., 2005; Dahlander and Gann, 2010; Rahman and Ramos, 2010). This research shows that using an open innovation approach by participating in a corporate program can help startups in several ways. These programs can facilitate new business opportunities for startups together with larger firms. It can also help the startups to understand their own strengths and weaknesses and at the same time other industry problems.

5.1.1 Startups Survival Motives

The hopes to access resources and networks in order to gain visibility and credibility turns out to be the typical reasons for interviewed startups to join corporate programs. Thus, the findings show that open innovation in the form of corporate programs is typically used to open up new opportunities. The findings of this thesis also strengthen Criscuolo et al. (2012) regarding startups seeking external help because of funding restrictions and competitive business environments. The data shows that more than half of the interviewed startups turned to a corporate program to receive funding or other types of capital investments.
The result from the data collected shows that startups in their early phase use corporate programs as an open innovation approach to managing the liabilities of smallness and newness to survive the scarcity of resources and survive on the market.

According to the findings, some of the most common reasons for participating in programs were due to networking opportunities, the chance of gaining knowledge about the market and accessing expertise.

5.1.2 Startups Business Motives

This thesis shows how the long-term goals for the startups that are not in their early-stage, are mostly connected with commercialization, scale-up and to further innovate their product or solution. Some startups, on the other hand, participate in a corporate program simply to see where it leads them without any clear vision of the outcome of the program.

Several researchers have pointed out that open innovation is a tool used by companies to come up with innovative solutions (Chesbrough, 2003; Spender et al., 2017; Laursen & Salter, 2006; Usama & Vanhaverbeke, 2017). Laursen & Salter (2006) explain that the main reason for collaboration between startups and incumbent firms is to create new products and solutions or enhance the value of existing products. Similar to Laursen & Salter (2006), Van de Vrande et al. (2009) explain that startups use an open innovation approach by collaborating with incumbent firms to deal with difficulties connected to commercialising their solution. In line with Van de Vrande et al.’s (2009) arguments, the result shows that many of the startups received help with the commercializing of their solution or their scale-up process.

5.1.3 Outside-In Open Innovation

The findings also resulted in understanding why startups use outside-in open innovation. The data shows that the real challenge for startups is not to develop new technology but rather to commercialise it. Some of the startups found it difficult to convert their technology to a product worth selling, and access the market. Difficulties with commercialisation occurred because of the startup’s smallness and scarcity of resources. According to the literature, inbound practices, in this case, a corporate program can help startups to convert their innovations into salable products or services (Dahlander & Gann, 2010).

Furthermore, the findings show that the majority of the startups that opened up their technology to the incumbent firms of the corporate programs gained increased credibility, which improved the startup’s legitimacy. This also helped some of the startups to gain big customers. In one of the cases, the incumbent firm running the corporate program became a customer of the startup, which also contributed to strengthening the startup’s brand. According to Gassmann & Enkel (2004), collaborating with a large firm can be a way for startups to faster access the market.
5.2 The Challenges of Collaboration

Even though none of the startups mentioned their participation as a total failure, some of the startups were not happy with certain aspects of the programs. Minshall and Montara (2010) explain that many collaborations between startups and large firms fail because of the large firm not understanding how startups operate. Thus, it can be difficult for larger companies to offer the right type of services that are needed for the startups to develop (Van de Vrande et al., 2009; Vanhaverbeke et al., 2012). This was one of the problems mentioned by several startups. The startups pointed out that larger firms are sometimes unfamiliar with startups and how they operate. For one of the startups, the commitment was very low since the incumbent firm did not understand how startups run their business.

According to Kohler (2016), the success of a corporate program can be determined by the people working within these programs. For instance, the startups that received coaches with previous experience of running their own business really appreciated the mentoring and educational sessions since they shared their own experiences and wisdom of their entrepreneurial endeavours with the startups.

In the literature, Mercandetti et al. (2017), point out that hierarchical structures and heavy processes at the larger company are one of the main reasons for insufficient collaborations between the large firm and the startup company. This often leads to extended and time-consuming processes with regard to decision-making. The findings of this thesis have similar results. Almost all of the startups mentioned heavy processes at the larger company as a great drawback. The heavy processes of the larger firm resulted in long lead-times and slow decision-making processes. As a result of time-consuming processes, the development of the startup can be slowed down. Hence, it is critical for large firms to understand how the program can deliver offerings in a faster way to the startups, as to not hinder their development or drag out the timeline. In order to do that, it is crucial for incumbent firms to understand how startups operate.

When E.on was running their program, Agile, for the first time, two of the startups that the researchers interviewed suffered due to long lead-times. Since it was the first time the program was held, there were uncertainties regarding IP rights. Another startup faced lengthy processes due to E.on not having formalised terms and conditions for their partnership. According to these startups, this became a learning process for E.on. Weiblen and Chesbrough (2015) argue that apparent goals should be set of what should come out of the collaboration by the large firm before entering any form of collaboration with startups. The predetermined goals help the larger firm to understand the future processes necessary for a successful collaboration. In this case, corporate programs should have pre-defined terms and conditions in order to avoid unnecessary, time-consuming processes that affect startups negatively.
5.3 Coordinating Expectations & Objectives

In order to have successful outcomes from a corporate program, it is important for startups and the incumbent firms to align both expectations and intentions from the beginning (Bannerjee et al., 2016; de la Tour et al., 2017; Kohler, 2016). The findings of the research support these arguments. The startup that attended the very first batch of Agile was a bit unsatisfied since there were not any clear intentions from E.on. Two other startups joined Synerleap without any clear objectives, which resulted in the startups not finding any particular synergies with ABB. The findings show that non-aligned objectives and intentions can result in dissatisfaction among startups.

5.4 Customise Offerings

The literature points out that in order for collaborations between startups and large firms to be successful, real value needs to be delivered to startups during such engagements (Mocker et al., 2015). The theory also states that during collaborations between large companies and startups, startup companies need to be offered economies of scale and business experience. Hence, larger companies can offer real value by opening up their business network to startups, which includes customers and established suppliers (Mercandetti et al., 2017). Furthermore, a corporate program should also benefit the large firm by introducing the incumbent firm to new business opportunities and technologies (Ketchen et al., 2007).

Since startups and large firms operate in different ways, it can be difficult to create a win-win situation during corporate programs. Thus, corporates need to spend more time on screening and selecting relevant startups and at the same time focusing on designing offers that can help both startups and incumbent firms to face their challenges (Weiblen and Chesbrough, 2015). The findings of this research indicate that the startups that received some form of customised support were the most satisfied with the coaches and the layout of the program. The customised offerings helped some of the startups with their sales strategy, business development, product development etc. These startups were offered customised support and as a result, the collaboration between the startups and the incumbent firms is still on-going. After the end of the programs, some of the startups participating in E.on and Ericsson found projects to continue collaborating on.

5.4.1 Internal Champion

Along with the customised offerings, three of the startups received a coach who acted as a go-to-person for both the startup and the large firm. Two of the startups referred to this person as an internal champion, and the third startup called this person a driver. It was recommended from all three of these startups to have such a person in order to succeed with a corporate program. Startup I also emphasized the importance of having an internal champion with a relatively high position within the firm. According to startup I, a higher position equals higher leverage, which in this case is beneficial for startups participating in a corporate program. Not only does the internal champion
have greater influence because of a higher position but this also results in the champion having a larger network, which is very crucial for some of the startups.

In startup D’s case, the manager of Agile acted as an internal champion for startup D. Since the manager was in charge of the whole program, the manager had enough authority to speed up processes and facilitate meetings between the startup and relevant employees at E.on. Thus, the internal champion does not necessarily have to be a mentor or a coach but rather an employee with sufficient authority. However, the researchers of this thesis believe that having a personal coach, as an internal champion would benefit the startups even more. It is more likely for the startups to develop a stronger relationship with a mentor/coach they get to meet on a regular basis and not only a manager who is in charge of the program and who might not be that well versed in the startup’s operations and their needs. In startup A’s case, they were from the beginning of Ericsson’s program appointed with a driver, a so-called internal champion. This driver was at the same time their personal coach and had deep insight into the operations of the large firm and could, therefore, pinpoint all the helpful tools and resources that could be of use for the startup.

These findings strengthen the arguments made by Bannerjee et al. (2016). It is emphasised in the literature that internal champions are necessary both from the startup’s point of view and the incumbent firm’s perspective. By offering the startup an internal champion, the startups have a higher chance to get the support that they need faster. Furthermore, by offering the startups the necessary resources, sooner rather than later, the startups have the opportunity to clarify and deliver their solutions at a faster pace, which makes it possible for the corporate backing party to take part in new products and technologies that startups have to offer (Weiblen & Chesbrough, 2015). Thus, the chance for the collaboration to succeed increases (Bannerjee et al. (2016)).

5.4.2 Funding Options

Seven of the startups had challenges with funding before their participation within the corporate programs. Four of these startups were considered to be in an early stage of their development when they were a part of the programs. Hence, they were not ready to sell their product or solution since they were still in the process of developing it. Some of these startups received a small amount of funding. As a future recommendation, other startups would like to include more investment opportunities. According to some of these startups, the program should involve more networking events with investors.

The literature highlights that one of the biggest challenges startup companies face in their early-stage is related to funding (Bougrain and Haudeville, 2002; Edwards et al., 2005; Dahlander and Gann, 2010; Lee et al., 2010; Rahman and Ramos, 2010). Procurement of resources can be hampered by a limited source of capital. Open innovation, in the form of corporate programs, can hence be a way for startups to overcome the lack of resources (Grassmann et al., 2010).
5.4.3 Collaboration Forms

In the literature, it is explained that the outcome of a corporate program can result in different types of corporate-startup engagements. Collaborations, regardless of form, between startups and corporates can be both cost-effective and efficient. An example of a collaboration between the two previously mentioned parties can be a pilot project in which the incumbent firm supports the startup (Trotter, 2013). This is a way for the larger firm to explore new markets at a lower cost and with lesser risks. The startups benefit from both scale and scope in these sorts of collaborations. Further, startups gain higher credibility (Kohler, 2016; Trotter, 2013).

The findings show that the startups’ experiences and views are aligned with existing theory. When the interviewees were asked to share recommendations for future services offered by corporate programs, one of the startups wanted the large firm to focus on collaboration opportunities through pilot projects. By investing in a pilot project, the large firm would have had the chance to solve a potential business challenge with the help of a startup’s solution. While startup C suggested including pilot projects as one of the offerings of a corporate program, other startups mentioned the need for having a closer collaboration. Even though these startups did not mention what type of closer collaboration they would like to have it can be assumed that there are several forms of collaboration after such a program that could be relevant for some of these interviewed startups.

The literature describes another example of how these two parties can collaborate; the large firm becomes a customer of the startup. For a startup firm, this form of collaboration can be necessary and a way for them to test their product-market fit and to scale-up their business (Trotter, 2013). This was the case for startup B. At the end of Agile, the collaboration between startup B and E.on was extended since E.on became startup B’s largest customer. E.on managed to find innovative solutions for their business challenges by becoming startup B’s customer, while for startup B it was a great advantage for their business and image to gain a high-profile company as their customer. With this finding, it can be suggested that corporate programs in the future should consider this type of collaboration as a part of their value offering. Although, this obviously depends on what phase the startup companies are in since it is not possible for the incumbent firm to act as a customer if the solution that the startup offers is not market-ready. It can still be useful for companies to know that this type of collaboration is appreciated and sought after by startups.

5.4.4 The Quality of The Coaches

Almost all of the startups were offered a coach; expect the startups that were a part of Synerleap. According to some of the interviewees, coaching and mentorship were crucial parts of the program that helped the startups with their development. It was noticed that depending on the needs of each startup, the startups preferred different types of coaches. The early-stage startups mostly needed coaches who could teach them how to run a business and the basics of business development. For some of these startups, having a coach who supported them with their decisions helped them increase their self-esteem.
Even though some of the startups believed that coaching was a vital part of the program, many of the startups suggested including coaches with previous experience of entrepreneurship. The startup recommended having coaches with experience to help develop strategies, plans and understand the startups from their point of view. Other startups wanted corporate programs to include more sales focused coaches and other wanted coaches with previous experience of upscaling.

According to theory, coaching is usually offered within corporate accelerators and not within incubators, which is according to the findings of this thesis. Coaches are also important since they provide company-specific knowledge and skills. Furthermore, having experienced coaches is essential since they can share their own experiences and wisdom on entrepreneurship to the startups (Kohler, 2016; Miller & Bound, 2011; Mocker et al., 2015).

5.5 For Future Corporate Programs

The findings of this study indicate that the startups that have had customised program were the most satisfied. Both Ericsson and E.on offered individual schemes to some of the startups. Neither Ericsson nor E.on had any specific requirements that the startups needed to meet before entering their programs. The only requirement E.on had was that the startup’s business should in some way be related to energy in order to fit in Agile. Aside from this requirement, all the participants of Agile were very diverse and in different stages.

Some of the startups within E.on mentioned that they would like to have more customised offerings and that the offerings should be adjusted to their specific needs. The literature shows that customised offerings are crucial since every startup is different and face distinctive challenges (Kohler, 2016; Mocker et al. 2015). During the interview with Startup I, the co-founder mentioned that one of the biggest challenges for corporate programs is to adjust the offerings according to the participants’ needs. According to the co-founder, this could be extra challenging if the program accepts startups that are in various stages.

A recommendation could, therefore, be for future corporate programs to choose startups that are in similar phases of their development. IKEA Bootcamp is a program that operates in this way. IKEA Bootcamp started out as an accelerator program because the purpose of the program was to help startups accelerate and to learn about the startup ecosystem. The startups that were a part of that program were all in an early stage. Hence, education and workshops regarding basic business development and knowledge about how to go from an idea to a product were appreciated by the startups. Whereas, IKEA Bootcamp now has become more interested in collaborating with startups through pilot projects. Thus, the startups that are a part of the program today is more mature startups like startup J.

If we compare this to the E.on’s program, Agile, all the startups within each batch were in different stages. Hence, they all received distinctive offerings since they all had different ideas and solutions and needed different types of support. As a result, some of these startups wished for more funding opportunities or sales education for example.
The offerings within Synerleap were not as structured as the other programs. This can be understandable since it is an incubation hub that is not time-limited and without any specific goals and boundaries. All the startups within Synerleap had different goals and the main focus was to somehow find synergies between the startups and ABB in order to pursue suitable projects.

According to the findings, our recommendations for the future would be for corporate programs to look for startups that are incomparable phases. These startups would probably need help with similar things, and it would be easier for the programs to coordinate and offer them similar but customized support. The results show that the startups that are in their early-stages often want help with funding, mentoring and coaching on running a business. While startups that are more mature more often want help with the sales of their product, scale-up and expansion.

5.6 Limitations

As most qualitative research, this research also has its limitations. Due to time constraints, the researchers did not have the chance of including more startup companies in the case studies, which would have helped strengthen the findings of this research. Furthermore, including startups that have been a part of the same corporate accelerator program or incubation hub would have increased the sample size and therefore also the validity of the answers of each startup since the researchers would have more comparable data points.

Had there been more time, the researchers would have wished to include more exploratory interviews with corporate-run accelerator programs and incubation hubs. More interviews could have been conducted with employees of the accelerators and incubators to back the information given by the managers and offer new angles.

Furthermore, the researchers would have wanted to hold interviews with independent accelerators and incubators, such as STING and Minc, among others to have a reference sample that could be used to compare them with their corporate-run counterparts.

Even though a lot of effort was put into minimising biases through having individual and iterative data analysing processes, there is no way of avoiding them completely and so that poses a limitation for this research.

Another way of improving the case studies would be to have interview object that has been a part of the same corporate program during the same period. This would make the data more cohesive and it would be easier to compare the feedback given on the programs by the startups since their experiences would be more comparable. Thus this research does not study a specific timeframe that the startups have engaged in corporate programs.

Lastly, one should consider that this research is very much based on the opinions of single interviewees for each case. To minimize biases, an improvement could have been made by
interviewing several people that work with the startup to see if their experiences and views are congruent. This would have been done if the researchers were not limited due to the timeframe.
6. Conclusions

Within this part of the paper, the conclusions are presented. Here the key takeaways from case studies are summarized in order to answer the research questions. In addition suggestions of possible future studies are given.

As shown in the discussion chapter, there can be different reasons that lead startups to participate in corporate accelerator programs and incubation hubs. Startups can engage in these types of engagements in order to gain certain resources that they are lacking, to increase their knowledge, to help create a brand of their own and credibility in business networks. Other motives to seek these sorts of collaborations are to get help with scale-up and commercialisation aspects of the startup business.

6.1 Answering the Research Questions

The findings of the case studies conducted do to a large extent correlate to the theory as showcased in the discussion chapter.

- **RQ1**: What are some of the key services that corporate accelerators and incubators offer startups to aid their development?

In answering the first research question, the researchers found that the key services offered within corporate programs do align with the literature. The case studies show that the value offering that is most sought after within corporate accelerators and incubators includes access to networks within the large firm running the corporate program as well as access to external networks where it is possible to find other investment or collaboration opportunities. Furthermore, the startups consider it important for corporate programs to include funding alternatives. Looking at the accelerator programs examined within this thesis capital investments were always included. However, in regard to the incubation hub, there are no capital investments offered upfront, but startups have the possibility to win pitch contests in which they can gain funding for pilot projects. Considering the early-stage startups, there is an important aspect of getting help with market research, i.e. understanding customer preferences and market needs, and mentorship.

- **RQ2**: From the perspective of startups, how can corporate programs improve their offering?

According to the interviewees of the case studies, internal champions were brought up as an important aspect. This role is crucial for facilitating meetings and introductions, reducing lead-times and speed-up decision-making processes, as well as the overall progress and development of startups during their time in the corporate program. Internal champions also have the potential to introduce relevant expertise to the startups by being more aware of their situation and circumstances. Furthermore, startups expressed a desire to have more influence on the design of the programs, thus customisation is a priority for some of the interviewees. This desire is expressed to a greater extent
by startups that have come further along in their development. Moreover, having employees with previous entrepreneurial experience and knowledge working in corporate accelerators and incubators is conveyed to be essential in order for the large firm to comprehend the needs and desires of the startups in a better way. Having collaborations where the startups are more satisfied could lead to better synergies and benefits for both parties. In addition, some startups explained that they would have liked for more financing opportunities to have been presented.

6.2 Contribution

This study contributes to the field of open innovation and outside-in model from a startup’s point of view. The findings of the research contribute to the literature and existing research gap in understanding collaborations between startups and large firms through corporate programs (Keupp & Gaussmann, 2009; Lee et al., 2009; Chesbrough & Brunswicker 2013). The results also contribute to the study done by Minshall and Montara (2010) discussing an asymmetric partnership between startups and large firms. The findings of the case studies give suggestions on how to deal with certain challenges that arise during asymmetric partnerships.

This research shows that startups have different motives for engaging in corporate programs and that it is important for incumbent firms to understand these motives from the beginning in order to understand the needs of the startups.

Furthermore the study presents several findings that could be of interest for corporate program managers designing future programs. The findings suggest that offerings provided by a corporate program, related to funding, network and business development are the most appreciated by startups. The study also gives an indication of what offerings startups believe should be included.

6.3 Future Research

In regard to possibilities for future research, it would be interesting to explore more of the connection of outside-in innovation related to the corporate innovation strategy to see how the everyday operations of companies affect the way that they are willing to collaborate with external parties. Some of the startups that have been interviewed mentioned the importance of having an internal champion within the corporate program and so it would be fascinating to study that phenomenon and explore the importance of internal champions, how these roles arise and potentially what could be done to encourage more internal champions.

Furthermore, as mentioned in 5.6 Limitations there is an opportunity for comparing what experiences startups that have participated in independent accelerators or incubators have, to the experiences of startups that have taken part in corporate-run accelerators or incubators. Moreover, a future study can be conducted to systematically analyse the outcomes of these startups and assess how success factors differ between corporate versus independent programs. Another take on that
angle would be to study startups that have participated in both independent and corporate-run programs and explore their views on how they differ or resemble each other.

Moreover, future research can examine several batches of the same corporate program in order to study the development of the program from the perspective of the startups.
7. References

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8. Appendix

8.1 Appendix 1: Interview questions for interviews with startups

**Background questions**
1. What is your solution (product or service)?
2. How did you come up with your idea?
   a. How did you assess the need for your solution and find that there is a demand for it on the market?
3. What is your role within the team?
   a. How large is the team and what positions do you all have?
4. What is your market?
5. Who is the target group (segment)?
6. How far have you come in your startup’s development (what stage)?
7. What vision do you have for your solution?

**Main questions**
1. What were the challenges that made you seek help?
2. What are some things that you have received help with from the company?
   a. What kind of offerings (ex. infrastructure, business services, networks) have been offered to you?
   b. How are these offerings helping you to overcome your challenges?
   c. To what extent have you been involved in deciding what help you receive?
3. How did you manage to find this help?
4. When was the collaboration established and how long did it last?
   a. What does the format of the collaboration look like?
5. Before the collaboration started, how did you make sure to agree on the terms of the collaboration?
   a. Was this a mutual effort from both parties?
6. Were there aspects (ex. IP, resources, time, etc.) you needed to compromise on during the collaboration?
   a. What were you not willing to compromise on and how did you reason?
7. Looking back at the collaboration, what are your major takeaways from it?
   a. What are some of the major benefits and drawbacks?
   b. Have the outcomes met your expectations of the collaboration?
   c. If not, how was this addressed (if at all)?
8. How do you think it would have affected your work if you wouldn’t have received any help?
   - Could you have managed to solve your issues without any external help?
9. If you would have had the possibility to change certain aspects of the collaboration, what would you change and why?
   a. What offerings would you have wanted to be included in the collaboration?
8.2 Appendix 2: Interview questions for interviews with large firms

1. With what kind of startups do the company collaborate with?
   a. Was it early-stage startups or “mature” startups?
   b. Was the collaborations process held through a corporate incubator?
   c. How did the company manage to find the startups?

2. What were the reasons behind the collaborations?
   a. From the company's perspective?
   b. From the startups perspective?

3. What are some things the company helped them with?
   a. What kind of offerings (ex. infrastructure, business services, networks) did these collaborations offer to the startups?
   b. Did these offerings help them overcome their challenges?
   c. Did these offerings help the company to overcome challenges?
   d. To what extent were the startups companies involved in deciding what help they’re receiving?

4. When was the collaboration established and how long did it last? Is it still on-going?
   a. What does the format of the collaboration look like? (similar to question 1b)

5. Before the collaboration started, how did the company make sure to agree on the terms of the collaboration?
   a. Was this a mutual effort from both parties?

6. Were there aspects (ex. IP, resources, time, etc.) the startups needed to compromise on during the collaboration?

7. Looking back at the collaborations, what was the major takeaways from it?
   a. What are some of the major benefits and drawbacks from the company's perspective?
   b. Have the outcomes the company's expectations of the collaboration?
   c. Do you know if it met the startups expectations?

8. Were there any aspects of the collaborations the company wanted to change after the collaborations?
   a. Were there offerings that the company wished were included in the collaboration?

9. Did the startup companies get any opportunity to review the collaborations?
   a. What were some of the things the startup was really satisfied about?
   b. Were there aspects they were not that satisfied about?