

Master of Science in Economics and Business Administration

Management of Innovation & Business Development

(cand.merc.mib)

Engaging with the Startup Ecosystem to Enable Disruptive Innovation

An Empirical Study of Corporate Startup Programs

Master Thesis

Authors: Guillermo Filitz (105989) and Lotta Lichtenberger (106403)

Supervisor: Associate Prof. Sudhanshu Rai

Number of characters: 214,418

Number of pages: 99 Date: May 15th, 2018

Abstract

Purpose: The purpose of this research is to explore the phenomenon of corporate-startup engagement in relation to disruptive innovation. Corporations are commonly threatened by new entrants that might push them out of the market. We investigate how the interaction with startups enables corporations to be on the side of the disrupter instead of being disrupted. By doing so, we aim to extend the existing literature around disruptive innovation and startup engagement. Further, we aim to provide guidance to corporations that want to engage with startups to enable disruptive innovations.

Design/methodology/approach: Due to the exploratory nature of the research we investigate the corporate-startup engagement through multiple-case studies. We employ Grounded Theory to build an empirically grounded model of our findings.

Findings: The findings indicate that the engagement between corporations and the startup ecosystem evolves in three chronological timeframes. In the endeavor to enable disruptive innovation, corporations are inhibited by legacies which lead to a focus on the core business, current customers and short-term objectives. Through corporate startup programs corporations are exposed to new ideas, technologies and ways of working. This results in learnings that shift the focus to new growth opportunities that can potentially develop into disruptive innovations in the future.

Research limitations/implications: Disruptive innovation is a phenomenon that cannot be grasped within the limited time available during this research. A longitudinal study spanning several years is needed to evaluate the long-term outcomes of the interaction between corporations and the startup ecosystem.

Originality/Value: This study builds a novel empirical framework which elaborates on how the engagement between corporations and the startup ecosystem evolves through corporate startup programs. We further elaborate on inhibitors as well as enablers of creating disruptive innovation through the startup ecosystem, a research area that has not been addressed previously.

Keywords: disruptive innovation, corporate-startup engagement, corporate startup program, corporate accelerator, open innovation, external idea sourcing, learning processes, startups

Acknowledgements

We would like to express our gratitude to the people who were instrumental in the realization of this thesis.

First of all, we would like to thank our research participants for taking the time to provide us with valuable information about their corporation and their interaction with the startup ecosystem. In particular, we would like to thank Harry Barraza from Arla Foods, Peter Halling from E.ON, Michael Juhler from Tryg Insurance, Christoffer Rasmussen from E.ON, Oliver Repenning from Accelerace and Lars van Hauen from E.ON.

Secondly, we would like to thank our supervisor and mentor Sudhanshu Rai, who over the last seven months guided us through our research and thesis writing process. His support, not only on an academic but also on a personal level, is greatly appreciated.

Lastly, we would like to thank our family and friends for the support we received during our studies at Copenhagen Business School.

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1. Thesis Foundation

1.1. Introduction

In recent years numerous established industries have been dramatically changed, if not revolutionized, mainly by smaller entrants and new technologies. Nearly all the companies our grandparents admired have disappeared: "Of the top 25 companies on the Fortune 500 in 1961, only six remain today." (Leslie, 2017). Consider the recent examples of Kodak and Blackberry, that held sacred positions in their respective markets before their demise. Both had pioneered technologies but failed to adjust in the face of a changing industry (Lucas & Goh, 2009). When things are going well, most organizations fail to take significant risks. Even as the environment around them shifts, organizations tend to hold on to what they know and what has worked before instead of innovating to fit customers' new expectations (Leslie, 2017). Traditionally run markets with dominant market players are threatened by young firms that initially offer customer-oriented products to the least attractive segments of a market. By improving their offerings, they ultimately appeal to the most attractive segments. The major corporations in the market underestimate their new competitors and are often insufficiently cautious, proactive and innovative. Due to their size and structure they recognize new trends and associated threats too late and are too inflexible to adjust to the new competitors and market standards on time. Christensen, Raynor and McDonald (2015) refer to this process as disruptive innovation and suggest big companies to launch their own disruptive innovations if they want to achieve growth in a fast-changing world. Analysts estimate that half of today's S&P 500 firms will be replaced over the next ten years as "we enter a period of heightened volatility for leading companies across a range of industries, with the next ten years shaping up to be the most potentially turbulent in modern history" (Anthony, Vigueri, & Waldeck, 2016).

In their endeavor to adapt to changing environments companies recognize that major innovations no longer arise solely within the company boundaries. Opening up the innovation process and involving external sources of knowledge enhances the likelihood of innovation (Chesbrough, 2003). Specifically, the collaboration with startups is an increasingly important external source for

developing innovations (Weiblen & Chesbrough, 2015). By collaborating with startups companies aim to avoid plateau and decay, hoping for long-term success. One possibility of creating engagement with startups are structured startup programs such as corporate accelerators, which emerged in recent years (Kohler, 2016). They attract startups by leveraging corporate resources and offering support, funding, expertise, customers, mentorship, as well as sharing business knowledge and a unique opportunity to test products (Accelerace, 2018; E.ON Denmark, 2018a; The Camp, 2018). Corporations often promote these structured programs highlighting the benefits for startups:

Figure 1: #accelerateCPH

What you get



Fundina

We offer seed funding of €15,000 to cover your expenses. And since there's no equity demand, you fully own your startup



Customers

Our network offers you a pathway to the market, with access to 33 million customers.



Expertise

You'll get support from energy experts, with valuable industry insights, to help you grow your business.



Mentorshi

All #accelerateCPH mentors have experience from building successful startups and are there to guide you along the way.

Source: E.ON Denmark (2018a)

However, we challenge the notion that corporations engage in these collaborations with the altruistic aim of helping startups. Instead, we reckon that corporations in a changing environment are aware of the threat of disruption by new entrants. Forward-looking corporations prefer being on the same side as the potential disrupters and create innovations together, rather than being disrupted.

1.2. Research Question

Based on the observation that corporations need to adapt to a fast-changing environment our research focuses on the role of the startup ecosystem in this adaptation process. Specifically, we

are interested in how corporations enable disruptive innovation to achieve new levels of growth and extend their horizon, which leads us to the following research question:

How do corporations engage with the startup ecosystem to enable disruptive innovation?

1.3. Purpose of the Thesis

Given that startups are the driving force behind major innovations that replace incumbent technologies and business models, we aim to enhance the understanding of how corporations collaborate with startups to enable disruptive innovation. Specifically, we explore how traditionally run markets with dominant market players engage with startups to proactively maintain their leadership position and avoid being pushed out of their own markets. We investigate the benefits corporations receive when engaging with the startup ecosystem, specifically the learning process that follows from engaging with a very different type of organization that is much smaller, faster, and provides different perspectives. We also investigate the purpose of their engagements and specifically consider accelerator programs and a co-working space. Since the structured interaction between corporations and the startup ecosystem is a relatively new phenomena, we hope to extend theoretical developments and impact further studies within this field.

In addition to enhancing theoretical knowledge and developing empirical knowledge about how corporations engage with the startup ecosystem to enable disruptive innovation, we provide important practical recommendations for academia and corporate managers that seek to enable disruptive innovations within their firms.

1.4. Delimitation and Relevance of the Topic

Our research is limited to the fields of disruptive innovation in connection with external idea sourcing from startups. There is no empirical evidence connecting these fields, making it an exciting opportunity for research. It is suggested that startups can be a new source of growth for established companies in the face of changing industries. Therefore, our research focuses on the

perspective of the company, not the startup. Specifically, we study structured startup programs facilitated by corporations, as these bridge the gap between corporations and startups. Our study is thus based on corporate accelerators and a co-working space located in the corporate headquarter. We choose to focus on traditional industries that are currently facing changes as these allow us to study the phenomenon of disruptive innovation. Further, we decide to consider companies based in Denmark, as we observe a high interest of companies in Denmark to work with startups. We acknowledge that the conditions of our research are specific to the above-mentioned areas and cannot be generalized to other industries, countries, or models of interaction between corporations and startups.

1.5. Key Terms and Definitions

In this section we give a short overview of the key terms used throughout our thesis. For many of the key terms a variety of definitions exist. It is not our purpose to discuss these, but to give the reader an understanding of how we define and interpret the key terms.

Incumbent: A firm with a strong position in the industry, for example possessing a large market share.

Corporation: A large company that acts as a legal entity which is separate and distinct from its owners.

Innovation: We make use of Roberts (2007, p. 36) definition: "Innovation = Invention + Exploitation", meaning that inventions only become an innovation when they are put to use in a way that creates economic and / or societal value (Norn, 2016).

Disruptive innovation: For our research we draw on Christensen et al.'s (2015, p. 46) definition of disruptive innovation. Disruptive innovation is defined as a "process whereby a smaller company with fewer resources is able to successfully challenge established incumbent businesses. Specifically, as incumbents focus on improving their products and services for their most demanding (and usually most profitable) customers, they exceed the needs of some segments and ignore the needs of others. Entrants that prove disruptive begin by successfully targeting those overlooked segments, gaining a foothold by delivering more-suitable functionality—frequently at

a lower price. Incumbents, chasing higher profitability in more-demanding segments, tend not to respond vigorously. Entrants then move upmarket, delivering the performance that incumbents' mainstream customers require, while preserving the advantages that drove their early success. When mainstream customers start adopting the entrants' offerings in volume, disruption has occurred."

Open innovation: Open innovation is defined as "the use of purposive inflows and outflows of knowledge to accelerate internal innovation, and expand the markets for external use of innovation, respectively. Open innovation is a paradigm that assumes that firms can and should use external ideas as well as internal ideas, and internal and external paths to market." (Chesbrough, Vanhaverbeke, & West, 2006, p. 2).

Startup: We consider a startup a business or undertaking that has recently begun operations and has the ability to grow and scale fast. There are no hard rules about revenues, profits, and employment numbers since these shift drastically between companies and industries (Robehmed, 2013). We consider startups as being "core to the process of creative destruction and drivers of improvements in productivity and prosperity" (Dee, Gill, Weinberg, & McTavish, 2015, p.4).

Startup program: A startup program is a structured interaction between companies and startups. For our research purposes, a startup program refers to both accelerators and coworking spaces.

Corporate accelerators: Company-supported programs with a fixed duration that support cohorts of startups during the new venture process via mentoring, education, and company-specific resources, often in exchange for equity (Kohler, 2016; Mocker, Bielli, & Haley, 2015).

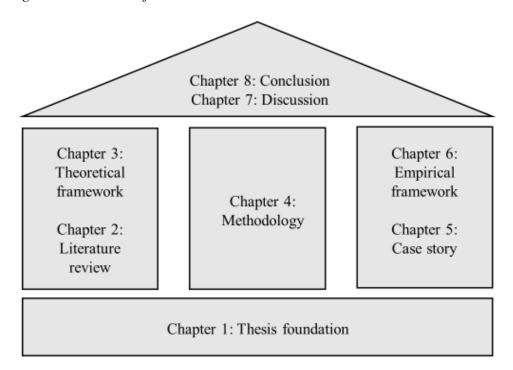
Coworking space: "Membership-based workspaces where diverse groups of freelancers, remote workers, and other independent professionals work together in a shared, communal setting" (Spreitzer, Bacevice, & Garrett, 2015, p.2).

Ecosystem: "Ecosystems are dynamic and co-evolving communities of diverse actors who create and capture new value through both collaboration and competition" (Deloitte, 2015, p. 4).

1.6. Outline of the Thesis

In order to approach the research question in a structured manner, we divide our thesis into eight main parts. After the thesis foundation, we provide a review of the existing literature in the relevant fields of disruptive innovation, external idea sourcing, and learning processes. The literature review results in a theoretical framework. In the following chapter, we provide details about our methodological approach. The case story describes the findings from our empirical data, which are used to build the empirical framework. The discussion part addresses our research question, main findings as well as limitations and implications of the study. Finally, we provide conclusions of our research. The structure of the study is depicted in Figure 2.

Figure 2: Structure of the Thesis



Source: Authors' own illustration

2. Literature Review

The following chapter represents a detailed review of the literature considered relevant in order to answer the research question. We identify the literature through general online and scientific database searches based on relevant keywords and authors. In addition, we use the backward search, also called ancestry approach, to identify prior research by examining the references of prominent articles about the subject in question (Cooper, 1998). The chapter starts by reviewing the literature on disruptive innovation. Afterwards, we examine the literature on external idea sourcing and conclude by reviewing the literature on learning processes. Due to the scope of our work, the literature review is not able to provide a full assessment of all available literature on disruptive innovation, external idea sourcing and learning processes. Nevertheless, we cover all the necessary literature that allows us to answer the research question. Apart from establishing a foundation for the analysis of engaging with startups and disruptive innovation, the literature review helps us derive potential discussion points for the interviews to be conducted.

2.1. Disruptive Innovation

Conceptualizing disruptive innovation

The concept of disruptive innovation, introduced by Christensen in 1997, has proven to be a powerful way of thinking about innovation-driven growth. Christensen, Raynor & McDonald (2015, p.46) define disruption as a "process whereby a small company with few resources successfully challenges an established incumbent company. As the incumbent focuses on improving its products and services for its most demanding (and usually most profitable) customers, it exceeds the needs of some segments and ignores the needs of others". The disruptive entrant begins by successfully targeting those low-end or unserved customer segments, gaining a foothold by delivering more-suitable functionality, frequently at a lower price. The disruptor then moves upmarket, delivering the performance that the incumbents' mainstream customers require, while preserving the advantages that drove their early success. Disruption takes place when mainstream customers adopt the entrants' offerings in volume. Over time, Christensen, Raynor & McDonald (2015) refined the theory, recognizing that new entrants can come from the low-end of a market, but also from new-market footholds. Disruptive innovation started as describing solely

disruptive technologies, but the concept evolved into an understanding where also business models can be described as disruptive innovations. The authors argue that the core concepts have been misunderstood and its principles misapplied, which leads managers to use the wrong tools in the wrong situations. The authors believe that incumbents should respond to disruption if it is occurring. Incumbents should keep investments in sustaining innovations to strengthen relationships with core customers, but also create a separate division supported by senior leadership to explore and exploit new growth opportunities that arise from disruptive models. This means that incumbents find themselves managing two very different operations for some time, which may even lead to cannibalization.

It is central to the theory of disruption that disruptive innovations improve in fundamental ways so that they eventually appeal to the mainstream market. We agree that disruptive innovations emerge because new entrants address needs, in terms of quality or price, that incumbents overlook. We argue that disruptive innovations originating in the low end of a market offer a good enough product or service that is cheaper and of lower quality than existing offerings, for the less demanding customers. We argue that disruptive innovations originating in a new-market foothold turn non-consumers into consumers, offering better performance on dimensions that current customers do not value. We believe that incumbents frequently overlook disruptors because disruption is a process that takes time. Another reason disruptors are overlooked is because they build business models that are very different from those of incumbents. Because disruptive innovations change the entire nature of an industry and drive incumbents out of markets, it is essential that companies create and embrace disruptive innovation as a normal part of doing business. We believe that creating a separate division that works on growth opportunities focusing on disruption seems like a viable and logical response. However, the specific challenges that arise from being an incumbent and a disruptive entrant simultaneously are still unclear.

In summary, we agree that a disruptive trajectory is defined by fundamental changes in the cost or performance of an initial offering, allowing that offering which originally appealed to marginal segments eventually appeal to mainstream segments. We support the notion that disruption theory should help managers make a strategic choice between taking a sustaining path or taking a

disruptive one. A sustaining path would be to improve existing products, enabling firms to sell more products to their most profitable customers, while a disruptive path would be to focus on the low-end of a market or new-market footholds. Therefore, understanding and applying the theory correctly is essential to realizing its benefits. Sustaining innovations are a trap of strategic planning since they do little to attract new customers or to block entrepreneurially oriented competitors (Gilbert, 2003). Bureaucratic inertia and a settled corporate culture can make it too tempting for managers to ignore the latest ideas (Slater & Mohr, 2006). Therefore, we agree that disruption is a lengthy process that should be tackled creating a separate division to explore and exploit disruptive ideas (Christensen & Raynor, 2003).

Causes of "The Innovator's Dilemma"

"The Innovator's Dilemma" is a famous book and concept by Christensen (1997) that aims to explain why established companies commonly face difficulties when encountering disruptive innovation. Disruptive innovations are innovations that are financially unattractive to incumbents, as they focus on the low-end or new markets. As these innovations are improved, they become attractive to the mass market and push incumbents to the higher ends of the market. Christensen (1997) explains that incumbents fail to address disruptive innovation because managers listen to their best and most profitable customers, not to low-end or new markets. Henderson (2006) builds on his work of "The Innovator's Dilemma" and mentions that a common interpretation of Christensen (1997) is that top management is irrational in not investing in promising disruptive innovations. She argues that this view is incomplete. In her opinion, embedded organizational competences lead incumbents to maintain investing in current customers. Managers build organizational competence through experience with the current target market and technology, but it is problematic for them to evaluate disruptive technologies that fall outside the organizational competence. Established routines of incumbents make it difficult to consider new markets or consumer demands. Responding to disruptive innovation requires understanding shifts in consumer behavior and building new competences around unanticipated consumer demands, which is extremely difficult.

Henderson (2006) makes a very valuable addition to "The Innovator's Dilemma". In our opinion, the competence-based perspective that she takes allows companies to better cope with the dilemma than claiming irrationality of top management. Nevertheless, we argue that her work could go further and that she could discuss the implications of this perspective. We agree with her view that organizational competence is built through past and current experience and that having great knowledge of the current customer group can restrict managers. We find that the next step is to consider how to address this concern. We suggest that bringing in external managers, who are not bound by the past and current experience of the company with customers, might contribute valuable competences. Further, we argue that organizational competence can be built through collaboration with external partners because partners have different previous experiences and competences. However, to be able to build new competences the company has to acknowledge that it is missing relevant competences for dealing with disruptive innovation — which is one of the biggest difficulties.

We support the author's view that embedded market-oriented competences are the reason why companies fail to respond to disruptive innovation. Christensen (2006) praises Henderson (2006) for her addition to his theory. He mentions that the lead-users for disruptive innovations are different from lead-users for sustaining innovations. Lead users for new market innovations might not yet be users, hence it is difficult for managers to study their needs. Further, several authors suggest that incumbents commonly fail at disruptive innovation because they are missing shifts in consumer needs and marketing competence, meaning that it is hard for them to build relationships with consumers they are not serving yet (Bass & Christensen, 2002; Danneels, 2004). We suggest that Henderson (2006) builds a good groundwork for future research on how new competences can be built to address this issue. One relevant field of study are collaborations, as these are shown to enable firms to acquire new competences (Hagedoorn, 1993; Hamel, 1991; Rothaermel, 2001). However, it is necessary for incumbents to admit that they can learn from a partner in a collaboration.

Working with disruptive innovation

The number of companies that have been able to introduce disruptive innovations that either create entirely new markets or business models is limited. Christensen, Johnson & Rigby (2002) provide a blueprint to help managers understand if conditions are right for disruption. Their research indicates that if senior managers launch new businesses when their core units are strong, they will be able to maintain the company's growth in a continuous way. The authors argue that these small new businesses need to be managed as independent business units. They need to be given time to establish new markets, grow to a substantial size and make a profit. In other words, they need nourishment to survive in the corporate environment. Senior managers must determine which corporate resources, processes and values to leverage in order help the new business succeed. Christensen et. al (2002) argue that the creation of disruptive businesses should be part of the corporate processes. Senior management should create a corporate team that is responsible for collecting disruptive ideas and developing a robust, repeatable process for creating and nurturing these ideas.

We agree with the authors that managers should launch new businesses when their core units are strong, since those core units will become vulnerable in the future. We also agree that the new businesses should be managed as independent business units. Mainstream processes, such as strategic planning and product development, that work well in the core units typically do not work well in emergent businesses. We argue that the criteria for setting priorities and making decisions that allow a new enterprise to succeed often have to be very different from those that are useful in the core units. The importance of recognizing which corporate resources to leverage is eminent. We argue that having access to necessary is critical and that separate business units need executive support in order to secure those. We also believe that corporations should have teams that are responsible for collecting disruptive ideas and developing repeatable processes for nurturing these ideas. If there are no specific teams, managers focus more on their day-to-day activities and on their growing business unit, ignoring new opportunities.

We support Christensen et. al's (2002) main argument that disruptive enterprises often need to be created and managed as independent business units while the core units are strong. The key to

their growth is senior management's ability to recognize when to leverage the parent's corporation resources, processes and values and when to create new ones. Rao (2013) provides various examples of big companies like Tata Motors or General Electric that have developed disruptive innovations by creating independent business teams. These teams are independent organizations by either a company or an entrepreneur that promote a structure and culture that are different from the parent company and are conductive to disruptive innovations. Immelt, Govindarajan & Trimble (2009) point out that one of the key aspects that allowed General Electric to disrupt itself is the decentralized and local market focus. Employees dedicated to innovations are managed in the local markets with their own profit and loss responsibility and power to decide which products to develop. Most importantly, they keep access to the global resources and report to someone high in the organization to ensure executive support, without losing their autonomy.

2.2. External Idea Sourcing

Adapting open innovation

Companies realize that not all the smart people work inside their organization, and that not all good ideas come from inside the company. This led to a rise in popularity of the concept of open innovation in the past years. While most of the previous work around open innovation focused on high technology industries (Chesbrough, 2003), Chesbrough and Crowther (2006) explore whether other industries are also using open innovation and for what reasons. The authors conducted indepth interviews with twelve large mature enterprises in the USA that employed open innovation. Their findings confirm that open innovation is not only used by high-tech firms. The single most important reason for firms to employ open innovation is creating profitable growth through utilizing technology from outside the firm. Chesbrough and Crowther (2006) identify two different growth objectives. First, growth objectives related to the current business focus on bringing offerings to the market faster and to capture commercial value. These are external technologies that are used when the market need is already defined, to improve the product in the development process or to allow for fast monetarization. Secondly, growth objectives related to potential new business identify emerging and breakout technologies that create new markets. As these are usually higher risk, companies place a series of small bets on early stage technology where commercial viability is unclear. Some of the firms interviewed regarded open innovation as a possibility to

monitor potentially disruptive innovations. The authors note that Christensen (1997; 2003) does not mention utilizing external technologies as a response to disruptive innovation. Chesbrough and Crowther (2006) state that it is outside the scope of their research to evaluate if open innovation is an effective response to disruptive innovation.

In our opinion, it is important to confirm that open innovation is also useful for firms which are operating outside of high-tech industries. Chesbrough and Crowther (2006) identify that open innovation is driven by two different growth objectives. We argue that this is a very relevant finding because the growth objective shapes how firms approach open innovation. Creating solutions for the current core business needs to employ different open innovation concepts than identifying new businesses in emerging technologies. Further, we think it is very interesting that several interviewees utilized open innovation to monitor and respond to potentially disruptive innovations. We argue that it makes sense to use open innovation as a response to disruptive innovation because external players have different insights about non-core customers or business opportunities. These external insights can allow for a better understanding of technological developments outside a firm's core business.

We conclude that Chesbrough and Crowther (2006) make an important addition to the research around open innovation. Open innovation can also be highly beneficial for companies focusing on other industries than the high-tech sector (Huston & Sakkab, 2006; Inauen & Schenker-Wicki, 2012; Ind & Coates, 2013). Further, we suggest that open innovation can be a good response to disruptive innovation. This suggestion is confirmed by other authors, who propose that collaboration between incumbents and startups might be an enabler of disruptive innovation, but that the topic needs further research (Yu & Hang, 2010).

Search behavior

In the search for new ideas firms can rely on existing knowledge or explore new knowledge. Katila and Ahuja (2002) investigate how firms search, or solve problems, to create new products. They argue that the common differentiation of exploitation vs. exploration (March, 1991) is not sufficient to explain search behavior. Instead, firm's search varies on two distinct dimensions: search depth

and search scope. Search depth describes the degree of re-using existing knowledge. Search scope describes the degree of exploring new knowledge. The authors study 124 industrial robotics companies across Europe, Japan, and North America. Their findings suggest a reverse U-shaped relationship between search depth and new product introduction. This can be explained by the fact that repeated use of knowledge makes the results more predictable and increases deep understanding of the underlying concepts. However, excessive depth has negative consequences as there are limits to improvements when re-combing existing knowledge. Katila and Ahuja (2002) further find a linear relationship between search scope and new product introduction. Search scope increases product innovation because it enriches the knowledge pool by adding new knowledge and allows for new combinations with existing knowledge. Moreover, search depth and search scope leverage each other. Here absorptive capacity plays an important role, as it effects how firms can use existing knowledge to integrate new knowledge.

We find that Katila and Ahuja's (2002) research makes an important addition to the search literature. In our opinion, it is important to realize that there is no single continuum from exploitation to exploration because this realization enriches the possibilities for firms to engage in different forms and degrees of search. For example, firms can combine a high degree of search depth with a high degree of search scope. We also find it relevant to notice that search depth has a reverse U-shaped relationship with new product introduction. We argue that this suggests that once firms reached the maximum useful level of working with existing knowledge, it becomes very relevant to explore new knowledge. It is also worth mentioning that there is a linear relationship between search scope and new product innovation, because this demonstrates that incorporating new knowledge into the firm's existing pool of knowledge is very important for innovation activities. The new knowledge can come from a variety of external sources. We see startup programs as an excellent opportunity for firms to simultaneously leverage search depth while also engaging in search scope, bringing in new ideas.

We support Katila and Ahuja's (2002) concept of examining firm's search through search depth as well as search scope. Regarding search scope, various authors agree that external knowledge is important for the innovation process (Chesbrough, 2003; Teece, 1992). Franke, Poetz, and Schreier

(2014) add that problem solvers from analogous markets can come up with more novel solutions that problem solvers from the target market. Nambisan and Sawhney (2007) develop an external sourcing continuum that describes external search options from raw ideas to market-ready products. A plurality of external search possibilities exists, and firms need to adapt their search scope to their capabilities and objectives. Startup programs allow for a combination of search depth and search scope as they leverage existing knowledge while allowing for the exploration of new knowledge (Kohler, 2016).

Cooperation as adaption to change

In times of radical technological change incumbents need to find ways to maintain their market position and adapt to new circumstances. Rothaermel (2001) analyses how incumbents adapt to radical technological change by cooperating with new entrants. He argues that even when incumbents do not invent the new technology they can still benefit from it by having the necessary complementary assets. The author analyzed 32 large pharmaceuticals which entered 889 strategic alliances with providers of the new biotechnology between the mid-1970s to 1997. The alliances are classified in technology-oriented alliances that focus on drug discovery and development and in market-oriented alliances that focus on clinical trials, marketing, and sales. He finds that as a response to radical technological change, market-oriented alliances have a greater impact than technology-oriented alliances on the new product development of incumbents. Rothaermel (2001) suggests that technology-oriented alliances are riskier than market-oriented alliances because they specifically focus on creating products that are new to both the incumbent and the entrant. In market-oriented alliances on the other hand, both the incumbent and the entrant can leverage existing competences to introduce the new product together. Therefore, it is a better strategic response to radical technological change to focus on market-oriented alliances driven by mutually complementary assets. The author concludes that incumbents use strategic alliances with new entrants as a response to radical technological change, leading to improved new product development and superior performance.

We consider Rothaermel's (2001) research a very relevant contribution to the analysis of strategic alliances between incumbents and new entrants. However, we find that there are two aspects in his

research that require careful considerations. First, Rothaermel's (2001) findings have to be regarded with caution, as product development and commercialization in the pharmaceutical industry require much higher resources than in many other industries. The long time-span and high costs lead to a dependency on incumbents for commercialization. We argue that in other industries new entrants have better possibilities to commercialize new products themselves. Therefore, we claim that the findings from Rothaermel's (2001) research cannot easily be applied to other industries. Secondly, we agree that in light of radical technological change partnering with an entrant in market-oriented alliances is a faster response than developing the technological skills inhouse. This gives the incumbent the opportunity to quickly benefit from the new technology. Nevertheless, we challenge the notion that the incumbent only uses these market-oriented alliances to leverage existing competences in commercialization. Instead, we argue that the long-term goal is acquiring the technological skills themselves. With radical technological change, incumbents need to be able to adapt their core competences to stay competitive. If incumbents only focus on the commercialization part of the alliance, they might become obsolete once the entrant gained sufficient resources and reputation to commercialize the product themselves. Therefore, we suggest that for an incumbent to remain competitive in the long term, it is not sufficient to leverage existing competences, they also need to acquire the technological skills. Rothaermel (2001) disregards the skill acquisition and long-term objective in market-oriented alliances.

We agree with Rothaermel's (2001) main finding that incumbents can use strategic alliances with entrants to adapt to radical technological change. We also consider market-oriented alliances as a useful response as it quickly allows incumbents to benefit from the new technology because it is faster than developing the skills in-house (Kohler, 2016; Schilling, 2013b). Leveraging existing competences has a reverse U-shaped relationship with new product introduction, meaning that up to a certain point it has a positive effect on new product introduction (Katila & Ahuja, 2002). However, we argue that Rothaermel's (2001) research is missing a long-term perspective. We take the position that even in market-oriented alliances, the long-term objective for incumbents to remain competitive needs to be the technological skill acquisition. Hamel (1991) agrees that strategic alliances usually also have a competitive component to internalize the other partner's skills, making the alliance obsolete.

Corporate accelerators

Accelerators are programs which support startups to frame their business model and scale their operations. In the beginning they were mostly independent from specific companies, but recently more and more corporate accelerators are appearing to get access to the startup ecosystem (Weiblen & Chesbrough, 2015). Kohler (2016) considers how corporate accelerators are built and defines their design considerations. He conducted 40 semi-structured interviews with managers of corporate accelerators and startup teams participating in accelerators. The author finds that in the design of corporate accelerators four dimensions need to be considered. First, the proposition defines what the program offers and how the relationship between the corporation and the startup will be. Communicating the proposition clearly is important to align strategic goals of the corporation and expectations of the startups. Kohler (2016) points out that the strategic intent of the corporation is often to close an innovation gap, using an accelerator to discover areas of business that fall outside the scope of existing business units. Other objectives might be to solve a specific business problem, to expand to new markets, to rejuvenate corporate culture, or to attract talent. The second design dimension is concerned with the process of the accelerator, defining the time-span and involvement of the corporation in the activities of startups. The author highlights that it is relevant to shield startups from bureaucracy and corporate complexity. The third design dimension addresses the people involved in the accelerator. The managers of the accelerator are the linkage between the startup and the corporate, so they need to be able to provide startups with relevant corporate knowledge while making sure that the external knowledge is used internally. Further, Kohler (2016) points out that it is relevant to get top management and the CEO involved in the accelerator to make sure that the corporation recognizes the importance of the program and the external knowledge. Lastly, Kohler (2016) states that the physical location of the accelerator needs to be considered. An advantage of accelerators that are physically located in the corporation is that they can be well aligned with the corporation, on the other hand it might create a risk of being too stringent. External accelerators are more flexible but have the disadvantage that it is more difficult for corporates to stay involved. He concludes that experts suggest locating the accelerator close to the headquarter but not in the same facility.

We find that Kohler (2016) builds a good groundwork for corporations and managers creating an accelerator. His four design dimensions (proposition, process, people, and presence) can guide managers in their thought process and are the first theoretical and empirical consideration around the design of corporate accelerators. We argue that the proposition is the most important aspect of the design dimensions, because we think that managers need to be very clear in their objectives when building an accelerator. The strategic intent strongly influences how much and in what way the corporation needs to be engaged with the startups. It is also related to the process of choosing which startups participate in the accelerator program. We further argue that the objective of closing the innovation gap is most important because corporates are commonly good at focusing on their existing businesses. Accelerators have a high potential of creating insights and opportunities in non-core areas or less explored markets. We also agree to Kohler (2016) in the relevance of key people engaging with the accelerator. In our opinion, accelerators are most valuable when the corporation is able to learn from the startups and this knowledge exchange needs to be facilitated by key managers.

Studies support Kohler's (2016) argument that it is necessary for companies to carefully design their innovation activities to match strategic intent (Kuratko, Covin, & Hornsby, 2014). We argue that closing the innovation gap can be a very powerful objective of accelerators as they can focus on new growth opportunities. Disruptive innovation theory describes that corporates commonly focus on their existing, profitable business and miss out on new growth initiatives in other markets (Christensen & Raynor, 2003; Gilbert, 2003). Accelerators could present an opportunity to overcome this issue. Further, we support Kohler's (2016) notion that key people need to be involved in accelerators to facilitate knowledge exchange. Involving top managers and the CEO shows a commitment to learning from the startups (Hamel, 1991). Further, corporates need to be able to assimilate and integrate the external knowledge and make good use of it (Cohen & Levinthal, 1990; Schilling, 2013a).

2.3. Learning Processes

Dominant logic

Many organizations find it hard to change and others are unable to act, even though they recognize that the environment in which they operate is changing. Bettis & Prahalad's (1995) dominant logic concept can be useful in developing an understanding of these issues. The authors initially viewed the dominant logic as the way in which managers conceptualize the business and make critical resource allocation decisions. They believed that the dominant logic was stored via shared schemas or structures, and cognitive maps which are determined by the manager's previous experiences. The concept evolved and is now viewed as an information filter, determining which data is relevant for the organization. This data is then incorporated into the strategy, systems, values, expectations and behavior of the organization. The authors argue that the dominant logic puts constraints on the learning ability of an organization and that it is therefore a primary determinant of organizational intelligence (ability of the organization to learn). Bettis & Prahalad (1995) argue that in order to change, the old logic must be unlearned first, for example by changing the organizational structure or systems. However, the longer a dominant logic has been in place, the more difficult it is to unlearn it. This need to unlearn may suggest why new competitors often displace experienced incumbents when structural change occurs in an industry. New entrants start with a "clean sheet of paper" and do not have to unlearn first and then learn again.

It is clear that many organizations face problems responding to the constantly changing environment of today's business world. We agree with Bettis & Prahalad (1995) argument that the dominant logic puts constraints on the learning ability of an organization because it determines which information is regarded as relevant and which information is ignored. Only relevant data is then incorporated into the organization's strategy, systems, values, expectations and behaviors. We agree that the longer a dominant logic has been in place the more difficult it is to unlearn it because it becomes harder to change the behavior of the organization's individuals. In our opinion it makes sense that new entrants often displace experienced incumbents because they do not have to run down an unlearning curve first in order to be able to run up a new learning curve after. We argue that some organizations may find it impossible to unlearn at all and fail to develop a new dominant logic. This is because they are not able to make significant changes to their structure and systems,

which are tightly coupled to the dominant logic. In other words, we believe that these organizations are not able to adapt to the current environmental circumstances.

We support Bettis & Prahalad's (1995) main argument that the dominant logic acts as an information filter, constraining the learning ability of an organization. This would explain why some organizations may ignore developments and trends outside their domain (Miles, Snow, Meyer, & Coleman, 1978). Organizations find it hard to unlearn a dominant logic because employees from the core organization are grounded in work processes and decision-making patterns (Gilbert & Bower, 2002). The longer a dominant logic has been in place the more difficult it is to change it. Further, the concept of bounded rationality describes that humans are limited in their decision-making, as there are boundaries to the thinking capacity, the ability to process information, and the time to make decisions (Simon, 1982). This influences the information that is filtered into the organization. New processes and new routines might be required and the culture, incentives and structure need to change (Govindarajan & Kopalle, 2006).

Skill acquisition

In order to remain competitive, firms commonly need to adapt to new environments and acquire new skills. Hamel (1991) explores the process of inter-partner skill acquisition in strategic alliances between Japanese and European firms in a case study. The author argues that competitiveness between firms is created through the acquisition of skills and core competences. The aim of the research is therefore to analyze how skills and competences between partners are re-distributed in a collaborative process. In his findings, the author describes a blending of collaborative and competitive goals in alliances. Oftentimes, the main objective of a collaboration is to internalize the partner's skills. This internalization goes beyond a mere access to skills, such as licensing. Instead, it means a full adoption of partner's skills, meaning that after successful internalization the partnership might become obsolete. Former partners might even turn into competitors. The ability to learn also increases a firm's bargaining power as the acquired skills are no longer a reason to maintain the partnership. Hamel (1991) further suggests determinants for the inter-partner learning. First, he argues that inter-partner learning does not take place by default, instead it needs to be a clearly communicated intent to acquire the partner's competences. He observed that a

position of industry leadership makes it more difficult for a firm to clearly communicate an intent of learning from a smaller partner. In these cases, less learning takes place on the side of the industry leader. Secondly, transparency was identified as a determinant of learning, as for example in the structure of joint tasks, the protectiveness of individuals, or even the language the partners communicate in. Lastly, receptivity was also identified as a determinant of learning. A clear interest in learning from top-management led to higher skill acquisition.

With his theory-building research Hamel (1991) addresses an interesting aspect of collaboration, which is the internalization of partner's skills. With the internalization of skills, the collaborative and competitive objectives of the partnership blend. Collaborations often have deeper intentions than merely the ones defined in the partnership agreement. Often, collaborations develop when partners are lacking relevant skills, so they look for a partner with those skills. It seems obvious that the long-term goal is to acquire these relevant skills themselves. Therefore, we argue that it is important for corporations to be able to protect their core competences in a collaboration. Further, Hamel (1991) notes that in his case study it was more difficult for successful firms to clearly state an intent of learning from a smaller partner. While the rise of open innovation suggests that incumbents are aware that there are valuable skills outside of their organization, they do not clearly state an intent of learning from startups.

We promote Hamel's (1991) argument of using strategic alliances to create inter-firm learning and to acquire necessary skills for competitive advantage. Firms commonly form strategic partnerships with firms that have complementary skills and assets (Chesbrough & Schwartz, 2007; Rothaermel, 2001). However, it is necessary for firms to be able to protect their core competences in collaborations. Therefore, firms need to be able to control knowledge flows to profit from innovation (Hurmelinna-Laukkanen, 2011). Moreover, we argue that the internalization intent related to a firm's success needs to be further evaluated. Studies promote open innovation and its relevance even for successful firms (Huston & Sakkab, 2006; Nambisan & Sawhney, 2007). However, current studies mostly focus on bringing external ideas and innovations in and developing them further in-house. Little is mentioned about the internalization intent in open innovation.

Absorptive capacity

It is often believed that outside sources of knowledge are critical to the innovation process of a firm. Cohen & Levinthal (1990) argue that the ability of a firm to recognize the value of new, external information, to assimilate it, and to apply it to commercial ends is indeed critical to its innovation capabilities. They label this capability a firm's absorptive capacity and suggest that it is largely a function of the firm's level of prior related knowledge. The authors argue that the development of innovative performance is domain-specific and history- or path-dependent. A lack of early investment in absorptive capacity makes it costlier to develop it at a later point in time. New opportunities may not be recognized and firms risk being "locked out" since they might not be able to assimilate and exploit new information, regardless of its value. Using cross-sectional survey data in the American manufacturing sector, the authors find that the more a firm invests in its own R&D activities, the more it will be able to exploit externally available information. Absorptive capacity is created as a byproduct of a firm's R&D activities. Cohen & Levinthal (1990) also find that a firm's absorptive capacity is not the sum of the individual absorptive capacity of all employees. Instead, it depends on the individuals who stand at the interface of either the firm and the external environment or between subunits within the firm. These individuals share the same language as everyone else in the organization, but also tap into diverse and external knowledge sources.

We agree with the premise that prior related knowledge is needed to assimilate and use new external knowledge. We argue that accumulated prior knowledge increases the ability to put new knowledge into memory, as well as the ability to recall and use it. It is easier for a firm to develop and invest in its absorptive capacity on a constant basis instead of sporadically. This is because efforts to develop absorptive capacity in one period will make it easier to accumulate it in the next one. When a firm wishes to acquire and use knowledge unrelated to its ongoing activity, most of the times it cannot simply apply external knowledge because the information is firm-specific. Firms need to invest internally in developing their absorptive capacity in order to effectively exploit it. We believe that firms with higher investments in R&D and thus higher levels of absorptive capacity will be able to exploit more opportunities because they are able to draw on their previously accumulated knowledge. We argue that diverse teams with individuals from different backgrounds

working together and exposing themselves to other ways of looking at things will be able to assimilate external information more easily.

We support Cohen & Levinthal's (1990) main argument that absorptive capacity is critical to a firm's innovative capabilities and that it is largely a function of the firm's level of prior related knowledge. Olsen, Sofka, and Grimpe (2017) use the concept of absorptive capacity in a model of collaborative search and find that the problem-solving potential increases with the diversity of existing knowledge of the partners. Raisch et. al (2009) argue that a firm's ability to integrate external knowledge relies on a combination of access to external sources and internal absorptive capacity. The authors also argue that even though internal knowledge processing and external knowledge acquisition are both necessary, excessive dominance by one or the other will be dysfunctional. The authors support the notion that firms need to pay attention to exploitation and exploration in a continuous way and not sporadically. In other words, they agree that a firm's absorptive capacity in one period will make it easier to accumulate it in the next one. Perello-Marin et. al (2013) agree that once a particular course of action has been chosen, it becomes increasingly difficult over time to reverse that course.

3. Theoretical Framework

The aim of this chapter is to extract previously gained insights and dynamics from the body of existing literature around disruptive innovation, external idea sourcing, and learning processes. With these insights we build a theoretical framework that examines how the existing literature addresses our research question. This builds a foundation for the comparison to our empirical findings. The theoretical framework is depicted in a theoretical model (Figure 3) that visually presents the dynamics between our main areas of literature.

To recapitulate, our research question is: *How do corporations engage with the startup ecosystem to enable disruptive innovation?* The existing literature suggests that incumbents are often driven out of the market by disruptive innovation because of their sole experience with the core business and current customers, missing out on new developments. External idea sourcing is generally regarded as a valuable source to generate insights into recent developments, especially when

working with startups. Further, learning processes can help organizations change their dominant logic and absorb external information. The existing literature addresses our research question by suggesting that there might be a relation between engaging with startups and creating disruptive innovation. However, it is noted that this relation is not empirically confirmed yet (Chesbrough & Crowther, 2006; Yu & Hang, 2010).

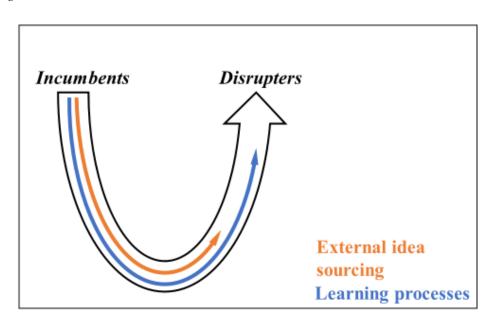
Disruptive innovation describes a phenomenon where new entrants initially target marginal segments, such as low-end consumers or non-consumers. Because they focus on marginal markets, they are not regarded as a threat by the incumbent. Gradually the new entrants improve their offerings until they become attractive to the mainstream market, where they push the incumbent to higher ends of the market and finally out of the market. Incumbents' managers have experience and competences in their core market which makes it difficult for them to evaluate disruptive innovations. They need to build new competences to consider the needs of low-end or nonconsumers to avoid being disrupted. One possibility to remain competitive and acquire new competences is the use of strategic alliances. Several authors confirmed that external idea sourcing is a valuable way to acquire insights into new markets and that incumbents can adapt to radical technological change by partnering with new entrants. Startups programs are one possibility to engage with startups and enable firms to close their innovation gap, meaning that they can focus on new opportunities that fall outside the firm's core business. To be able to learn from external partner's competences, firms need to first recognize the value of external knowledge, assimilate it and finally integrate it to their existing knowledge. Having prior related knowledge is necessary for the learning process, therefore it is crucial to develop and build internal capabilities to benefit from external knowledge. However, it is not easy for big corporations to adapt their structures, processes, and routines to a changing environment. The dominant logic constrains firms in their ability to absorb new information, acting as an information filter. This explains why some firms may ignore developments and trends outside their domains.

3.1. Theoretical Model

Our theoretical model (Figure 3) visually depicts the dynamics described. Incumbents would like to become disrupters themselves, instead of being driven out of the market by new entrants. The

existing literature suggests that external idea sourcing can be used as a tool to acquire new insights and gain new competences. Engaging with startups, for example through accelerator programs, allows companies to discover opportunities outside of their core business that might help them in their endeavor towards creating disruptive innovation. However, to be able to leverage those collaborations and external insights firms need to be able to follow learning processes. They have to challenge their dominant logic, acquire new competences and adapt their structures, processes and routines to create new opportunities. The literature suggests that incumbents can become disrupters by engaging with startups and following learning processes. However, there is no clear evidence for the relation between engaging with startups and creating disruptive innovation.

Figure 3: Theoretical Model



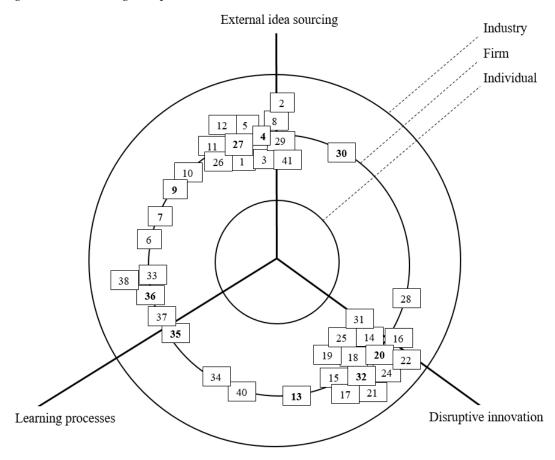
Source: Authors' own illustration

What we find most intriguing is the transition from potentially being disrupted to being the disrupter. Disruptive innovation is often linked to new entrants, driving incumbents out of the market. We find it very exciting to investigate how incumbents themselves can change their way of doing business and disrupt themselves and the market around them. The existing literature indicates that collaboration with startups might help firms to become disruptive, but this relation has not been investigated yet. Our research is extending the existing theory by empirically investigating how the engagement with startups can enable disruptive innovation.

3.2. Knowledge Gap

In Figure 4 we visually depict our literature review and identify a knowledge gap. The three axes represent our focus areas, namely disruptive innovation, external idea sourcing and learning processes. The three circles represent the level of analysis, namely industry level, firm level, and individual level. To narrow our focus, we only regard firm-level literature. We deem this appropriate because our research question addresses firm-level matters. When placing our readings in the figure, it becomes clear that there is a great amount of literature in all three of our focus areas. Please see Appendix A for a list of the reviewed literature in each area. Further, there is a variety of readings that cover the link between external idea sourcing and learning processes as well as between disruptive innovation and learning processes. However, we could only identify two readings that touch upon a link between disruptive innovation and external idea sourcing. Both of those readings only suggest that external idea sourcing might be relevant to address disruptive innovation, but they do not find empirical evidence (Chesbrough & Crowther, 2006; Yu & Hang, 2010). Therefore, by focusing on the connection between external idea sourcing and disruptive innovation, our research fills an important gap in the existing literature.

Figure 4: Knowledge Gap



Source: Authors' own illustration

4. Methodology

The following chapter outlines our research design, philosophy, approach to theory development, methodological choice, research strategies, time horizon as well as selected research techniques. Our procedures are described in detail and include the data collection process. We also provide a short introduction to the case companies and explain how we conduct interviews as well as how we analyze the data.

4.1. Research Design

The research design is a general plan on how the research question is approached and answered (Saunders, Lewis, & Thornhill, 2016). To explain our research design, we follow the research

"onion", as suggested by Saunders et. al (2016), where peeling away each layer of the "onion" describes one step in the methodology. The research "onion" consists of six layers, namely philosophy, approach to theory development, methodological choice, strategy, time horizon, and techniques and procedures. Figure 5 illustrates the research "onion" as well as our chosen approach marked with circles.

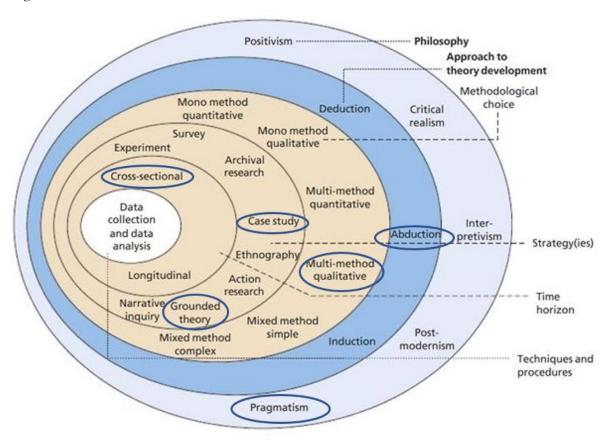


Figure 5: The Research "Onion"

Source: Adapted from Saunders et al. (2016)

4.2. Philosophy

The knowledge creation in the research process is based on the researcher's philosophical belief. It is important to understand underlying assumptions about the word and the research process in developing new knowledge, as it influences how data is interpreted and the research question is answered. We adopt the pragmatist philosophy and utilize Grounded Theory as developed by

Corbin and Strauss (2015). Pragmatism is based on the notion that concepts are only relevant where they support action. Research should start with a problem and aim to create practical solutions that support action. Pragmatism accepts that there are many different ways of interpreting the word, so no single perception can give the entire picture. It allows the researcher to reconcile both objectivism and subjectivism, as well as facts and values (Saunders et al., 2016). Regarding epistemology, which explains what constitutes acceptable knowledge, pragmatism focuses on problem-solving and argues that knowledge which enables successful action is valid. The values in pragmatism, also called axiology, influence the research as they drive how the researcher interprets the data. Adapting a pragmatist philosophy is in line with our research since we explore the potential of innovation in the engagement with the startup ecosystem and discover practical insights through qualitative data analysis.

4.3. Approach to Theory Development

The three main approaches to theory development are deduction, induction, and abduction. The objective of deduction is to test a theory that was developed based on theoretical propositions. The data in deduction is used to falsify or verify the hypothesis related to an existing theory. Induction, on the other hand, is used to explore a topic and to develop a theoretical explanation as the data is collected and analyzed (Saunders et al., 2016). As we are using Grounded Theory, which aims to build a new theory from the data, it makes sense to take an inductive approach. Nevertheless, Corbin and Strauss (2015) argue that it is a misunderstanding to relate Grounded Theory solely to induction. They emphasize that researchers are influenced by their previous knowledge as they interpret new data; concepts and meanings are connected to existing theories. In this way, there are also deductive elements in Grounded Theory. Abduction is a third approach, which uses data to explore a phenomenon. Based on the data, themes or patterns are identified, which constitute a theory which in turn is tested again (Saunders et al., 2016). Reichertz (2009) argues that Grounded Theory contains an abductive research logic as well as qualitative reasoning. In his view, the conceptualization of data in Grounded Theory gives the data meaning that is based on the researchers' previous knowledge, otherwise it would just be a re-formulating of statements. To conclude, we acknowledge the importance of all three approaches of deduction, induction, and abduction. We apply an abductive approach, which combines elements of deduction and induction.

4.4. Methodological Choice

Due to the nature of our research, which is to explore an area that so far has little empirical findings, we choose to adopt qualitative research methods. This means that we restrict ourselves to non-numerical data and make use of qualitative data analysis procedures. A qualitative research design is especially suitable for studies that aim to build theory or to develop a richer understanding of existing theory (Saunders et al., 2016). A qualitative research design is non-standardized, which means that it allows the researchers to adapt their questions and data collection methods during the research process. We adopt a multi-method qualitative design, as it allows the use of several qualitative data collection techniques and analysis procedures to answer our research question. We make use of semi-structured interviews and memos to collect data and analyze it by employing Grounded Theory as well as case study methods. The use of multiple sources of data-collection methods is also called triangulation and helps to evaluate that findings from one method corroborate findings from the other method (Saunders et al., 2016).

4.5. Strategies

In the following paragraphs we describe the purpose of the research design as well as the research strategies: case study and Grounded Theory. The research strategy can be described as a plan of action to answer the research question (Saunders et al., 2016).

The purpose of our study can be classified as exploratory, as this kind of study focuses on gaining insights about a topic and is particularly useful when the goal of the research is to understand an issue, problem, or phenomenon (Saunders et al., 2016). An exploratory purpose fits our research, as we explore the phenomenon of engaging with startup ecosystems in relation to disruptive innovation. Further, it is important to note that exploratory research is flexible and adaptable to change, meaning that the data collected influences the direction of the research (Saunders et al., 2016). This is in line with our research strategies of conducting case studies and Grounded Theory. However, we note that our research also has explanatory elements, meaning that we study the relationships between variables. Corbin and Strauss (2015) mention that Grounded Theory offers theoretical explanations to the area of research.

Grounded Theory

Grounded Theory is a well-proven strategy to develop theory from data. The procedures in Grounded Theory go beyond describing a situation to building a theoretical explanation of why things happen (Corbin & Strauss, 2015; Saunders et al., 2016). Grounded Theory is suitable for qualitative research, as it provides a systematic approach to collect and analyze qualitative data (Saunders et al., 2016). During the process of data collection, the data is already analyzed and analytical codes are developed to categorize the data. This is underpinned by constant comparison, meaning that the elements of data are continuously compared to other elements to achieve an analytical understanding of the data and promote consistency when coding data (Saunders et al., 2016). In the process of initial coding and categorizing the researcher applies inductive thinking, as relationships emerge between specific codes. When this relationship is tested in the following stage of collecting and analyzing new data, the researcher is using deductive thinking. In combining inductive and deductive reasoning our approach can be described as abductive (Reichertz, 2009; Saunders et al., 2016). When making use of Grounded Theory it is important to maintain theoretical sensitivity, meaning that the interpretation of data should be independent from existing theoretical concepts (Corbin & Strauss, 2015; Saunders et al., 2016). Therefore, existing theory should not influence the process of coding the data, deciding on cases, and analyzing the data. Rather, the data collected should guide the concepts that emerge. Nevertheless, understanding published theory before and during the research is necessary to guide the researchers towards a field of study, to formulate research questions, and to derive questions that can be valuable in the fieldwork. Further, the findings from the research can be compared to existing concepts and literature (Corbin & Strauss, 2015; Saunders et al., 2016). Corbin and Strauss (2015) note that existing literature should be used to enhance the research, not to restrain it.

Case study

We select the case study strategy as an appropriate method given the pragmatist philosophy and exploratory nature of our research. Yin (2009) defines a case study as an empirical investigation of a contemporary phenomenon within its real-life context, drawing from multiple sources of evidence. Further, the case study strategy provides a structured way to collect rich data, analyze it, and in turn allows to display the results in order to develop an in-depth understanding of the

phenomenon at hand (Saunders et al., 2016). We consider the multiple-case study as most suitable since it enables the examination of several cases to create theory, permitting replication and extension among individual cases. We chose a holistic multiple-case study design based on Yin (2009) given that multiple cases allow for cross-case analysis. This in turn provides a strong foundation for the theory building process (Eisenhardt, 1989).

4.6. Time Horizon

We chose a cross-sectional study because of two reasons. Firstly, because we are interested in the current interaction between corporations and startups. Secondly, because we are constrained by the available time to complete our research. This means that our study represents the phenomenon at a current point of time, allowing us to build a theoretical framework of the situation at hand. A different approach would be a longitudinal study, which covers a longer time period and allows to account for change and development (Saunders et al., 2016).

4.7. Research Techniques and Procedures

In the following subchapter we provide an overview of the chosen research techniques and procedures to collect and analyze qualitative data. We start by outlining the selection of case companies and provide a short introduction to the environment in which they operate. We then elaborate on our data collection and analysis procedures.

Selection of case companies

Since we work with a small number of samples, as is usual in case study research, we use purposive sampling. This means that we use our judgement to select information-rich cases that best enable us to answer our research question. We use a particular form of purposive sampling, called theoretical sampling, given that it is associated with adopting Grounded Theory (Saunders et al., 2016). In theoretical sampling it is concepts and not people that are being sampled (Corbin & Strauss, 2015), which explains why we go to places, people, and situations that will provide information about disruptive innovation in a corporate environment setting. Theoretical sampling is especially important when studying new or uncharted areas because it allows us to explore issues and problems from many different angles. In our initial data collection, we let participants talk

freely and observe in general ways. Corbin & Strauss (2015) compare this approach to fishing, hoping that something important will come out of the data. We continue with theoretical sampling until "theoretical saturation" (Saunders et al., p. 509, 2016) is reached. This occurs when data collection ceases to reveal new information that is relevant to a specific topic.

We select interviews and contact the companies through three channels, namely personal contacts acquired through conferences relevant to our topic, referrals by people within our own network, and online correspondence, specifically e-mail, LinkedIn, and Facebook. We send a research description before each interview to give the interviewee a broad scope of the subject to be discussed.

Case companies

Our chosen case companies are E.ON Denmark, Arla Foods, and Tryg Insurance. Each of these cases present a different angle on startup programs. E.ON's accelerator is embedded in the organization, while Arla Food runs the accelerator in collaboration with an external partner. Tryg engages with startups through a co-working space at Tryg's headquarters.

E.ON Danmark A/S

E.ON Denmark started its business operations in the year 2000 and belongs to the privately-owned E.ON Group. In Denmark, the company had a net turnover of DKK 320 million during 2015 and 69 employees in 2016 (E.ON Denmark, 2018b). E.ON actively contributes to the transition towards a more sustainable future, producing and selling sustainable district heating, wind power and biogas. The company also sells and advices on electricity and gas, energy efficiency and green mobility. For instance, E.ON has the largest network of charging stations for electric cars in Denmark and opened gas stations in collaboration with OK (E.ON Denmark, 2018b). All of E.ON's investments and activities constitute building blocks for the future energy system that is gradually taking place in the transition from fossil to renewable energy sources. Today, more than 93% of the energy produced by E.ON in the Nordic region comes from renewable sources (E.ON Denmark, 2018b). One of E.ON's building blocks to develop smart solutions for the future of energy and sustainability is supporting startups through their accelerator program called #accelerateCPH. The

goal of the program is to "find engaged and visionary entrepreneurs, and together foster more innovation" (E.ON Denmark, 2018a). Selected startups work for three months at E.ON's office with access to industry experts, global knowledge, resources, customers, mentors and funding. After that, startups present their company to top executives at E.ON, who then decide whether to further fund the startup. If that's the case, startups are offered an agreement for further cooperation and continuous support, as well as possible long-term relationship that benefits both parties (E.ON Denmark, 2018a).

Arla Foods

Arla Foods resulted of a merger of two dairy companies, Arla from Sweden and MD Foods from Denmark, both with roots tracing back to the 1900s. Today, Arla Foods (in the following referred to as Arla) is the fourth largest dairy company based on milk intake and the largest organic dairy producer in the world (Arla Foods, 2017). Despite having built a global presence, 12,500 farmers in Europe are at the core of the business model, true to the initial cooperative structure. Arla's mission is to maximize the value of milk by continuously seeking growth opportunities, pushing for sustainable market leadership, and improving value creation through innovation as well as brand building (Schroeder, Strand, & Gandsoe, 2018). Arla's revenue in Europe amounted to EUR 6,321 million in 2016, with UK as the largest market (38%), followed by Sweden (21%), Germany (19%) and Denmark (13%) (Arla Foods, 2017). Arla's product portfolio is composed of milk, milk powder, milk-based beverages, yoghurt, butter, spreads, and cheese that are sold under different brands. In recent years the dairy industry in Europe has been especially challenged by young consumes that are changing their dietary habits towards more sustainable lifestyles. Arla is also being threatened by smaller diaries entering the industry that are able to build strong connections with young consumers (Schroeder et al., 2018). As a result, Arla has increased its investment in innovation and re-branding to meet current trends. The goal is to differentiate dairy and gain consumer trust. The newly built Arla Innovation Centre in Denmark aims to create the future of dairy products which are then pushed to other markets. Through open innovation the company works closely with suppliers, universities and specialist technology companies (e.g. small and medium-sized enterprises and entrepreneurs) in order to fast-forward their innovation projects (Arla Innovation Centre, 2018).

Tryg Forsikring A/S

Tryg Forsikring (in the following referred to as Tryg) was founded in 1728 and is currently the largest non-life insurance company in Denmark and the second largest in the Nordic region. The company ended the financial year 2017 with a gross premium income of DKK 17,963 million (Tryg, 2017), is listed on the Copenhagen stock exchange, has 3300 employees and more than three million customers (Tryg, 2018b). The company mainly offers insurance through their own sales and service channels as well as through partners like Nordea, AXA Corporate solutions, car dealers, real estate agents and industrial insurance brokers (Tryg, 2018a). Tryg's insurance policies are targeted both at private customers and companies and cover occupational injury, car, property, movable property, transport, villas, accidents and health. However, by the year 2020 Tryg aims to launch insurance solutions that are not available on the market today (Tryg, 2018c). In this endeavor, Tryg launched a co-working space for 300 entrepreneurs housed in its headquarter in 2016. The company no longer treats technology startups as competitors, but rather as potential collaborators (Plaehn, 2016). Tryg acknowledges that technology, digitalization, and changing customer needs will fundamentally change the insurance business model in the coming years (Møllegaard, 2016).

Data collection procedure

Data collection in exploratory research is often purposefully less structured than quantitative methods to account for emerging themes (Saunders et al., 2016). While the collection of primary data is realized between March and April 2018, secondary data is collected throughout the whole research period starting in November 2017 and ending in May 2018. We carry a research journal to keep notes of the activities during the research process, including interview contacts, dates, problems, key discussion points and outcomes as well as memos of interviews. The goal of the research journal is to allow us to be reflective and see the research process evolve (Corbin & Strauss, 2015). We also build a digital compilation of secondary data to allow for easy access during the analysis.

To explore the concept of disruptive innovation in a corporate environment setting, we use semistructured interviews, also referred to as qualitative research interviews. We choose the semistructured approach since it allows us to maintain some consistency on the topic areas covered in the interviews in order to answer our research question (Corbin & Strauss, 2015). We have a list of themes and key questions to be covered that can vary from interview to interview. For example, some questions might be omitted in particular interviews or the order of questions may also be varied depending on the flow of the conversation. On the other hand, additional questions may arise to explore our research question depending on the organizational context (Saunders et al., 2016). The nature of our questions and the following dialogues mean that our data is captured by note taking and audio-recordings. The interview schedule for our semi-structured interviews contains the list of themes to be covered as well as comments to open the discussion (See Appendix B). Interviews last between 30-45 minutes and are preferably held in person. Because of time constraints and different geographical locations one of the interviews is conducted by telephone. All interviews are conducted in English between March and April 2018, in the Greater Copenhagen metropolitan area (see interview overview and transcripts in Appendix C and D). Prior to the interviews, we collect background information about the case companies through the company's website, annual reports, other online articles and conferences where the companies are present.

The overall structure of the interview is divided into three parts:

- a) Context building: We inform the interviewee on the purpose of the interview and ask for his/her consent to record the interview in audio format. We introduce ourselves and ask about the role and daily work of the interviewee in order to create trust and a relaxed atmosphere.
- b) Investigation: The goal of this part is to allow the interviewee to speak freely but also to get insights about certain topics that are predefined. One interviewer drives the interview asking the main questions, while the other interviewer takes notes and asks clarifying or follow-up questions.
- c) Concluding remarks: We briefly reconfirm the key features of our ideas, thank the interviewee for the time allocated and ask for follow-up interviews if necessary.

After each interview, we write a short memo containing key findings and insights relevant to our research question.

Data analysis procedure

To make use of the Grounded Theory approach, we first transcribe the interviews and curate the data using Microsoft Excel. Our data curation process consists of three phases:

- 1) We prepare data in the form of memos right after the interviews and transcribe the interviews.
- 2) We individually select concept-free sentences from the transcribed interviews and depict a timeline of the sentences within an interview. The goal is to help us get a perspective on the data and facilitate the coding process later on.
- 3) We label the sentences by:
 - a. Interview number
 - b. Interviewee's first and last name initials
 - c. Sequential sentence number within the respective interview
 - d. Sequential timeline within the respective interview
 - e. Researcher's first and last name initials to identify which code is analyzed by which researcher

For example, the code *1-LvH-39-12:08-LL* indicates that researcher LL analyzed sentence number 39 during the first interview with Lars van Hauen. We then combine all interview sentences from all transcribed interviews, resulting in a collection of 428 interview sentences. These are later used to examine the nature of our research question.

After the collection and curation process, we focus on open coding, axial coding and selective coding as explained below:

Open coding: We disaggregate data into sentences or short paragraphs provided with a label. The same name or label is given to similar units of data resulting in multiple labels. We intentionally use concept-free labels to avoid readers interpreting these according to prior understanding of such theoretical concepts (Corbin & Strauss, 2015). The goal is to generate categories by analyzing the respective properties of each sentence. We individually evaluate all possible meanings of a

sentence and assign a category, which allows us to analyze data from different perspectives. Our categorization indicates themes and issues that help us consider where we should focus our data collection in the future as well as develop a sharper focus in relation to our research question. To further refine our open codes, we compare and combine our individual descriptions of code (GF and LL) and match them into a higher-level code (GFLL) with its respective category (see Table 1). Through discussion we manage to improve or refine previous categories, which in turn allows us to better identify the emerging meaning from each line of code.

Table 1: Examples of Combined Open Codes

Interview sentence / Paragraph	Combined Open coding	Label
I think the energy market is changing very	Fast market changes in an	1-LvH-6-2:22-
rapidly right now and has been an industry	industry that did not change	GFLL
that has not changed that much actually	much before	
And if they are not there, then they should	Supporting current business	3-PH-38-16:52-
at least have some sort of relationship with	with new markets	GFLL
some of the existing business. That could be		
another way.		
In general, you can engage people into the	Corporate employees have	4-CR-46-36:10-
project, but the people working here, they	different priorities	GFLL
have other tasks or goals which they are		
being measured on.		
And corporates like us, we have to do a lot	Corporations have to learn to	7-MJ-31-19:22-
of learning, moving into working with	work with startups	GFLL
innovation in general and startups in		
particular.		

Source: Authors' own illustration

Axial coding: This stage refers to the process of looking for relationships between categories of data that have emerged from our combined open codes. We recognize relationships and rearrange them into a hierarchical form, with the emergence of subcategories. From the previously identified 428 open codes, we recognize 32 subcategories. An example of subcategories can be found in Table 2, with the count of open codes that relate to the respective subcategory. The goal is to explore and explain the subject of our research question by identifying what is happening, why it

is happening, the environmental factors that affect it, how it is being managed in our case companies and what the outcomes of the actions taken are (Corbin & Strauss, 2015).

Table 2: Examples of Subcategories

Subcategory	Total Count of Open Codes
Create new business opportunities	55
Change is difficult for big corporations	26
Strategy based on partnerships	23
Choosing the right startup for collaboration	22
Goal of startup program is to create long-term partnerships	22

Source: Authors' own illustration

<u>Selective coding:</u> This last stage refers to the process of identifying main categories from the axial coding. We relate similar categories with the intention to integrate the research and develop a Grounded Theory (Saunders et al., 2016). From the 32 previously identified subcategories, we recognize seven main categories (See Table 3). The relationships between these main categories are narrated through a case story and analyzed in subsequent chapters.

Table 3: Main Categories

Main Categories
A traditional industry is starting to change
Adapting the strategy for a changing environment
Finding external ideas and generating new opportunities with the startup ecosystem
Selection
The corporate legacy
Creating the interaction with the startup ecosystem
Learning

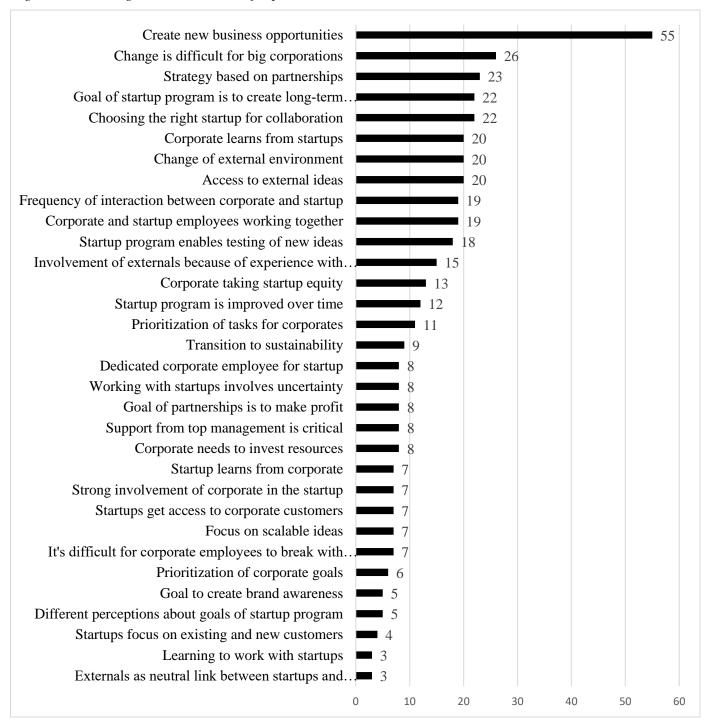
Source: Authors' own illustration

5. Case Story

This chapter narrates our empirical experience in the form of a case story with the goal to describe startup programs and their implication for corporate innovation efforts. The case story consists of seven parts. We start by describing how traditional industries are starting to change and the strategies that corporations use to adapt to these changes. Further, we elaborate on the goal of finding external ideas and generating new opportunities with the startup ecosystem and mention the selection process of startups. We then describe the corporate legacy as well as the interaction with the startup ecosystem and the learning processes that follow.

The seven elements of our case story resulted after clustering 32 different subcategories identified during the interviews. The subcategory that comes up the most is "create new business opportunities, followed by "change is difficult for big corporations and "strategy based on partnerships". The complete list of different subcategories and their frequency during the interviews can be seen in Figure 6.

Figure 6: Subcategories with Count of Open Codes



Source: Authors' own illustration

5.1. A Traditional Industry is Starting to Change

The first part of our case story describes the environment in which the companies operate. With environment we refer to different industry characteristics and market conditions. Our findings suggest that the external environment poses both opportunities and threats for big companies. Specifically, we found that technology plays a key role driving environmental changes and that customer needs as well as preferences change over time. Moreover, we found that there is a general trend of companies focusing more on sustainability and that companies need to adhere to strict government regulations regardless of the industry.

Change in the external environment

The environment in which E.ON operates did not change much in the last decades. However, the company is facing significant changes that are happening very fast in recent years (van Hauen, 2018, min. 2:22). Our findings suggest that the energy industry in Denmark is transitioning from fossil fuels to renewable energy sources, partly due to government regulations. Van Hauen explains that "companies in the energy sector need to relate to the government and its regulations in every way" (2018, min. 23:10). Energy is becoming cheaper, which means that profits as well as margins are constantly decreasing (van Hauen, 2018; Halling, 2018). Van Hauen states that "the profit of only producing energy will diminish and eventually vanish, which is why energy companies need to shift from being only commodity providers to service companies if they want to survive" (van Hauen, 2018, min. 22:47). If companies in the energy sector "continue doing what they do, they will die within five to ten years" (Halling, 2018, min. 10:42). Customers are normally bound to one energy company, making it difficult to motivate customers to switch from one provider to another. However, "if there's a completely new approach on how customers get energy and disconnect from the grid that all the big companies are living off, that would be a threat" (Halling, 2018, min. 10:42). For example, Rasmussen, who is Business Developer and one of the startup mentors at E.ON, perceives that "the production of energy is becoming more decentralized" (2018, min. 14:15) and that technologies are becoming cheaper, which makes it difficult to predict the future of the energy industry. It is certain that the companies operating in the energy sector need to broaden their market in the coming years and adapt to "another board game" to survive (van Hauen, 2018, min. 3:00). They need to respond to constant pressures from the outside and communicate with all the stakeholders.

Arla's changing environment is mainly driven by changes in consumer preferences. On the one hand, consumers are abandoning the three-meals-a-day paradigm and moving towards "eating frequent but smaller healthier meals on the go" (Reppening, 2018, min. 8:40). On the other hand, dairy alternatives such as plant-based drinks are becoming more popular among younger consumers. Despite these trends, Barraza, Head of Open Innovation, Universities and Consortia is confident that "the dairy industry has a future and that other alternatives will co-exist and not replace dairy products" (2018, min. 21:06). However, he explains that dairy companies need to change how they produce milk and how they operate their farms. "Operations will become more efficient and also address climate change issues" (Barraza, 2018, min. 19:40). Another relevant aspect in the dairy industry and its competition is that government regulations shape future developments. In Europe, plant-based alternatives cannot be called milk anymore since they are coming from plants. In other regions of the world, regulations are more relaxed. For example, in the United States of America, "genetically modified algae are being used to synthetize the components of milk" and then being mixed with fat to provide a nutritious meal (Barraza, 2018, min. 22:05).

So far, the insurance industry has been quite resistant to changes compared to other traditional industries. The main reasons are complex regulations and heavy capital requirements. However, these barriers will not hold for long. The digital revolution poses a threat for insurance companies, specially following the increase of innovative new entrants and the rapid rise of comparison websites. Tryg is no exception and is currently facing changes mainly due to new technological developments and changing customer needs that make traditional insurance irrelevant. One of the main markets for traditional insurance companies is car insurance, which will become a fraction of the current business due to autonomous cars (Løck, 2016). Home insurance, another major business area, will likely become less prone to accidents due to "sensors and detection systems available with the Internet of Things" (Juhler, 2018, min. 07:21). Furthermore, Juhler (2018), claims that one of the major trends affecting the insurance industry is the concept of sharing economy and

ownership. For companies like Tryg this means that the insurance market will drift towards short-term insurance and that insurance is built into the products (Juhler, 2018, min. 30:54; Løck, 2016). The platform economy will also bring major changes to all businesses because it impacts how and by whom products and services are delivered (Juhler, 2018). Juhler also believes that all existing business will be "disrupted within the next ten to fifteen years" (2018, min. 34:29).

Transition to sustainability

The fact that sustainability is very important for E.ON Denmark was confirmed by our interviews with different E.ON employees. Van Hauen (2018) states that the company aims to become a modern and green energy company. He explains that the energy industry is "moving much faster" thanks to the "green transition that makes it very very hard to be in the old energy world" (van Hauen, 2018, min. 2:40). He believes that the fast changes are mainly driven by the need for climate change, which is why E.ON aims to redefine itself as a company that focuses on sustainability and new technologies. Rasmussen (2018) perceives this transition as an opportunity for new players in the market. This is one of the reasons why E.ON aims to partner with other companies that are also interested in the area of sustainability and circular economy (Halling, 2018, van Hauen, 2018). Therefore, sustainability plays an important factor when considering potential partnerships and collaboration with other companies.

All three case companies support that the external environment in which they operate is changing faster than ever. New technologies, shifting customer preferences and needs, as well as government regulations and a stronger focus on sustainability mean that companies need to adapt if they want to survive in the coming years. Big companies are threatened by new entrants that can potentially adapt faster or even shape the future business environment.

5.2. Adapting the Strategy for a Changing Environment

During the interviews we found that it is highly important that the aim to adapt to the changing environment is deeply embedded in the organizational strategy and supported by top management. This can be done by embracing change and by being open to external ideas and to partnerships.

The following section presents the importance of having a clear plan of action on how to adapt to the changing environment.

Strategy based on partnerships

To deal with changes in the environment, the firms in our study recognize that they cannot solve all challenges by themselves. Instead, they rely on a variety of external partners to solve problems, to source new ideas, and to grow through partnerships.

Especially in the case of E.ON it becomes very clear that working together with external partners is an important objective. Partnerships help the firm evolve: "We have a very defined strategy that we want to evolve through partnerships on all levels. So we actually see it as much much stronger going into partnerships and finding new playmates" (van Hauen, 2018, min. 15:27). Van Hauen explains that the company realizes that they cannot do everything themselves, especially in a small unit of 70 employees based in Denmark: "Because we are only 70 people here, so we don't have the scale and muscle to actually look into all the stuff that is going on right now" (2018, min 15:27). It is important to note that a strategy of doing partnerships needs time to unfold. E.ON decided several years ago that they should focus on partnerships, starting by building bio and gas plants in partnerships where E.ON owned 50 per cent. The reason for relying strongly on partnerships is that external partners have competences that E.ON does not, so the partnership helps them go into and understand new market areas: "The idea is that instead of building our competences every time we go into a new market, we can actually rest on the competences we have, maybe expand them a little bit, but taking new from our partners" (van Hauen, 2018, min 16:21). Peter Halling, who is the Project Manager for the #acclerateCPH program, confirms that innovation activities around partnerships are very important at E.ON. He also mentions that this makes working in the accelerator much easier: "It makes a difference, just having a project on the side to actually having it as your core business. It's a core activity in this house. And it is treated like it is." (Halling, 2018, min 30:57). Being seen as part of E.ON's core business facilitates getting commitment from directors or core employees who help the startups on specific tasks.

Also at Arla it becomes evident that partnerships are an important part of their business. Barraza mentions that the company has been using open innovation for a long time. At Arla, open innovation is located within the research function, initially to generate new science and new technology (Barraza, 2018). Nevertheless, it is not limited to technology research, but also spans other areas such as market research and new business models. The aim of open innovation at Arla is to build networks for research and to create value by partnering externally. Barraza states that external value creation is an important area of Arla's strategy: "It's a source of competitive advantage to have open innovation as a tool for the business, to create new business and to be better than your competitors." (Barraza, 2018, min 02:40). He states that value creation through external partnerships includes economic value, brand value, and product advantages.

At Tryg a new business development department was set up during a big organizational change in 2016 to strengthen the work of creating new business. The focus on creating new business also includes the work with external partners. The main driver for this setup was the necessity to address changing customer needs, often driven by new technology (Juhler, 2018). The idea of creating a co-working space with tech startups then came from Michael Juhler, Head of Innovation at Tryg, and was presented to the executive board to strengthen the new business approach and to learn from tech startups.

Even though partnerships are an important part of all our case company's strategies, E.ON formulated the goal of creating partnerships much clearer in their overall strategy. This is also reflected in the way they operate the startup program, which is described in a later section.

Support from top management is critical

To successfully build and operate a strategy based on partnerships it is critical that top management is involved and supportive of external collaboration. Employees are looking up to top management, following their lead and working harder on areas they perceive as a priority for top management. It becomes clear from our case stories that support from top management is critical for a successful implementation of a strategy based on partnerships.

At E.ON Denmark, top management was involved in the strategy of doing partnerships from the beginning. This was important for getting dedicated resources and for creating the role of the Chief Innovation Officer (van Hauen, 2018). Halling confirms that the top management support is critical for motivating employees to work on the accelerator: "Because everybody is looking up to the top management, so if they don't do anything, you don't have to do anything" (Halling, 2018, min 29:29). At E.ON, this has been working very well: "And they have been really good at that. The CEO has been pushing and the rest of the management has been supporting in their different arms of the organization" (Halling, 2018, 29:45). Halling mentions that having top management on board for the accelerator means that the collaboration work can be done much faster. If the startup needs help in a certain area, Halling can involve the respective director, who either does it himself or asks somebody else to help (Halling, 2018). Nevertheless, it is important to note that this perspective is not shared by everyone in the organization. Rasmussen confirms that top management is very engaged in the beginning of the projects. However, he notes "once we start and once we've chosen the participants, it seems like the interest dies a bit and then it's just back to business as usual" (Rasmussen, 2018, min 28:06).

At Arla, top management also supports the interaction with startups. For instance, they are involved in the selection process given their business expertise. Top managers know what could work for the organization. Further, Barraza notes that it is important that top management is supportive of working with the selected startups: "If they are not interested, there's no point in doing it" (Barraza, 2018, min. 40:20). However, once the partnership is established and a project is defined, top management is not involved any more.

Also at Tryg it is confirmed that the support from top management is critical for working on partnerships. The executive board was the one deciding to look deeper into a new business approach and deciding to set up The Camp, a co-working space for tech startups in Tryg's headquarters. Juhler (2018) further explains the importance of top management support when setting up a new startup program in Norway: "We have total alignment and buy-in from the top management in Norway, they are owing the program. We knew if we didn't get the buy-in from the top management in Norway we shouldn't do it" (Juhler, 2018, min 44:47).

All three of our case companies depict that it is critical to have the support from top management in setting up partnerships with startups. It also makes sense that in E.ON Denmark, which is much smaller than Arla or Tryg, it is easier to get involvement from top management exceeding the decision on the set-up of the startup program and participants. At Arla and Tryg the heads of the respective departments are the drivers for finding external ideas and then search for support from the executive board to implement these ideas.

5.3. Finding External Ideas and Generating New Opportunities with the Startup Ecosystem

The goal of the startup program is a topic that took a high importance in our conversations with the companies. It became clear that the most prominent topic within this area is the creation of new business opportunities, which includes both strengthening the current business and creating new businesses. However, several other goals of the program also appeared during our interviews, such as to access external ideas or to test new ideas, to create brand awareness, and to create long-term partnerships. It also turned out that the perception of the goal of the startup program is not always the same for all employees of a company.

Access to new ideas

Through our interviews we identified that the access to new ideas is often mentioned as an important goal of the startup program that allows companies to discover new business opportunities. The companies realized that in a fast-changing environment, they need to rely on external sources to see what is going on in the industry and to get new ideas. However, our case companies have very different approaches of getting access to external ideas, which are described in the following paragraphs.

E.ON has a very integrated approach of scouting startups themselves and incorporating them into their normal business through an accelerator that is led by E.ON but supported by an external program coordinator. E.ON uses the accelerator to stay informed about what is going on in the energy market, to have a broader view on the market and discover new opportunities (van Hauen, 2018). Van Hauen mentions that because they are only 70 employees in Denmark, they do not have

the "scale and muscle" to look into everything that is going on (2018, min. 15:27). At E.ON, an external project manager is coordinating the program to get better access to the startup ecosystem. The external project manager has a broader network and contact base within the startup ecosystem, allowing him to get access to a broader base of ideas (Halling, 2018).

Also for Arla this network into the startup ecosystem was an important factor to find new ideas. Arla is using an external accelerator, Accelerace: "To be able to look more systematically at different startups, to have a bigger pool of startups to look at, and that's through the help of the network that Accelerace has" (Barraza, 2018, min. 12:07). Accelerace is scanning between 500 and 1,000 startups each year. By partnering with them, Arla can get access to a very big network and be exposed to the newest technologies and developments (Reppening, 2018). It is also Accelerace who is searching for the startups and then suggesting them to Arla. The startups that Accelerace suggests are not always focused on Arla's core business, but instead Arla sees the program as an opportunity to learn about ideas that are further away from Arla's core innovation needs. They focus on a long-term orientation, which is more difficult to develop internally as it does not fit into the existing innovation portfolio. "By connecting to Accelerace they actually get the opportunity to get a broad sense of what's going on while maintaining their prime focus on the internal R&D" (Reppening, 2018, min. 03:05).

For Tryg, the idea to set up The Camp was born out of the realization that startups have a very different way of working, are much more agile and fast-moving. The Camp was set-up as a coworking space to attract technology startups because many of the changes in the insurance industry are driven by developments in technology (Juhler, 2018).

To sum it up, an important goal of setting up a startup program for our case companies was to get access to external ideas and to see what developments are going on in the market. The companies realize that their industries are changing, and that startups are a good source of new ideas around new developments.

Creating new business opportunities

Access to new ideas leads to creating new business opportunities, which ranks as the subcategory that was identified most in our analysis. We identified 55 codes in this category, clearly indicating that the creation of new business opportunities is the most important goal for companies that engage in startup programs. Creating new business opportunities describes a very broad goal, as it does not specify in itself how these new opportunities are realized or what they entail in terms of customers addressed. However, we noted that it oftentimes is not entirely clear to the companies themselves what specifically they are looking for. Mostly, this question was answered with "it depends". It seems like the companies do not set a very clear goal for the program, they rather want to explore a variety of opportunities that are coming from startups. These new opportunities are, in some way or the other, different to what the company is already doing. The difference can for example lie in developing a new technology for an issue the company is already addressing, in developing complementary offerings, or in improving a process that goes into current product offerings.

Since E.ON is addressing the transition to sustainability within the energy market, it is interested in any kind of sustainability opportunities and startups working with circular economy. The other development for E.ON is to move from a commodity provider to a service provider, so it is considering opportunities that could help that development (van Hauen, 2018). The opportunities can be on a variety of levels and involve a high amount of change "Being able to see new markets, see new products, being able to introduce new products very rapidly and change some, close some, come up with new ones" (van Hauen, 2018, min. 06:02). Further, it is noted that working with startups usually entails a more long-term view, as the opportunities that startups work on are not directly linked to the core business of E.ON. However, it is important that they can be connected to it. So, the purpose is to find opportunities of going into a new area by connecting them to the current business. This is exemplified by van Hauen who explains why E.ON is currently working with a waste-handling startup: "If you go to a segment, hotels for instance, and sell them solar power and heating solutions, then actually being able to provide them with a waste solution with a sustainable view makes good sense." (van Hauen, 2018, min. 07:18). Creating this connection between current business and new opportunities often means that the new opportunity targets the

same customers: "Then it does not matter if it's already in the business or a new business, as long as it's something that connects somehow to how we are already working with the customers today" (Halling, 2018, min. 04:47). The fact that startups and E.ON serve the same customers creates the common interest that is needed for a long-term partnership. On the other hand, Halling (2018) also mentions that E.ON created the accelerator to look into small niches that might grow into future markets. One development is decentralization, meaning customers de-connect from the energy grid and find alternative ways of sourcing energy. This development might push big energy providers out of the market, as the margins are already very small now (Halling, 2018). Working with startups offers the big companies an opportunity to look into these developments, to get involved in a market that is currently small but might grow in the future.

At Arla the goal to create new opportunities came up frequently as well. Barraza mentions that the focus of the accelerator is research in new areas: "With startups, we are looking into territories that we are not actively engaged in with our research" (Barraza, 2018, min. 04:11). Arla is using the accelerator to get in touch with startups that do technology research in areas that could improve Arla's processes or offerings. For example, Arla is currently working with the startup Mimica, which developed a new high-tech food label that changes when the food expires (Reppening, 2018). It is a technology that is very different from Arla's core business of producing dairy products but highly relevant for it. Barazza (2018) notes that big companies are good at doing more of the same products, but that generating new benefits is very difficult for them. A goal of the accelerator is to find new technology that "creates new business for Arla or enhances existing business into a new direction" (Barraza, 2018, min. 24:26). Furthermore, it is highly important for Arla to keep the focus on its consumers: "We are looking for our consumer base first and adjacent areas where there might be an extension of what dairy is about" (Barraza, 2018, min. 17:21). Reppening (2018), who works for Accelerace and is involved in selecting the startups for Arla, explains that they use a 60% - 30% - 10% methodology for suggesting startups to Arla. 60 percent of the startups are directly linked to the strategic areas that were discussed with Arla, which could for example be fermentation or snacks on the go. 30 percent is exceeding these areas, for example a next generation of fermentation. The last 10 percent are the "crazy stuff", as Reppening (2018) calls it. These are areas or technologies that Arla would not have considered by themselves. He explains this by the example of a startup working on a powder that can be mixed with milk and interacts with the PH-level in the stomach, turning into a gel. By turning into a gel in the stomach the product ensures that people get a feeling of being full, which can usually not be achieved with liquid products.

The reason for setting up The Camp at Tryg was that the company noted a strong development within the insurance industry driven by changes in technology. By working with startups, the company aims to explore new opportunities in this field. One focus area for Tryg is to develop new services for their customers in relation to their homes. This does not directly have to be linked to selling insurance, but it is related in the way that it creates a feeling of safety for homeowners (Juhler, 2018). Working with startups allows Tryg to look into new opportunities that they would not have considered by themselves. For example, having a startup that was working with blockchain sitting at The Camp gave Tryg the opportunity to work with blockchain in a pilot project and later apply the learnings to another project.

To conclude, for all our case companies it was highly relevant to create new business opportunities in their startup program. For E.ON, the new opportunities mostly lie in creating new offerings for their existing customers and to look into small niches that might grow into future markets later on. At Arla the program is more research-focused and the goal is often to find new technology for their offerings, both related to the production process and the final product. By doing so, Arla takes a very consumer-focused approach. Tryg uses the startup's inputs mostly to explore new technology opportunities within insurance, but also exceeding that area and moving into opportunities that are not directly related to insurance but might be interesting for Tryg's customers.

Testing new ideas

Even though testing new ideas is closely linked to getting access to external ideas and to building new opportunities, our findings indicate that this should be treated as a separate goal. Working with startup allows the companies to test ideas on a small scale and without much commitment from the corporate side.

Working with startups in the accelerator allows Arla to test new ideas "faster and cheaper" (Barraza, 2018, min. 13:57) before they are taken into a full innovation project. For example, in the case of Mimica, the startup that creates a high-tech label for food expiry, Arla first wants to test if consumers would buy such a product before investing heavily in it. The accelerator does not only give Arla the opportunity to investigate new ideas and developments, but also to test them on a small scale. Most of the ideas or opportunities that come up in the program do not work on a "plug & play" basis but have to be researched with customers or in the lab (Barraza, 2018). Reppening adds that Arla has to allocate only very little resources and money to the work with startups and lets the startup do all the hard work: "So it's an easy way of testing crazy stuff" (Reppening, 2018, min. 14:44).

A similar logic also plays an important role for Tryg. The company uses startups to co-develop and test solutions. In turn, working with startups allows the organization to be very fast in testing new solutions. Further, Juhler (2018) explains that only by seeing new technologies being used, by demonstrating them with customers, other employees can be convinced of their relevance. In that way, Tryg uses testing with startups as an 'eye opener' for new technologies.

To sum it up, testing new ideas together with startups is an important goal of the program because it is fast and cheap and it demonstrates the relevance of a new technology to corporate employees.

Creating long-term partnerships

Our findings show that even though working with startups oftentimes brings the advantage of testing new ideas in a fast way, the final objective is usually to create long-term partnerships. It becomes evident that corporations see startup programs as an opportunity to develop ongoing partnerships, not as a quick fix to their problems.

This was especially prevalent in the case of E.ON, who state that they try to change themselves through getting new "playmates" (van Hauen, 2018, min. 04:31). It is very important for E.ON to really be involved in the startups they are working with. They have a clear goal of working with the startups on a long-term basis, and van Hauen states "We have a very clear strategy that we do

not have an exit strategy" (2018, min. 12:08). He explains that the goal is not to make money by investing in startups, but to create long-lasting relationships. The accelerator at E.ON runs for three months with the goal to create an initial collaboration and establish a plan of working together in the future (Rasmussen, 2018). Of course, this does not work with all startups in the program, but van Hauen (2018) states that they have been successful in establishing partnerships coming out of the program from last year and that they expect the same in the ongoing program.

Arla and Tryg are also interested in creating long-term partnerships from the programs they are running. If a technology is relevant for Arla, they might for example license the technology or become a customer (Barraza, 2018; Reppening, 2018). Tryg is currently working with several startups from The Camp, typically in pilot projects, but the collaboration might continue if successful (Juhler, 2018).

Taking equity

In continuous work with the startups it is common that the corporations are taking equity from the startups. On the one hand, this provides funding to the startup. On the other hand, this is also an investment opportunity for the corporation, gaining profit from successful startups. Nevertheless, it became evident in our analysis that the startup programs are not primarily seen as creating investment opportunities with the aim of gaining returns on the investments. Rather, investments are done to create a commitment for the partnership.

E.ON usually takes 20 to 25 percent of equity in the startups they establish long-term relations with: "Because we want them to be independent and work by themselves. Because otherwise we could just do it ourselves. It makes no sense of investing and taking over as it is right now when it's new markets" (van Hauen, 2018, min. 13:43). Van Hauen adds that taking equity from the startups has two reasons. On the one hand, startups often need money and giving equity can provide them with some funding. On the other hand, it shows a commitment: "That's just a way of saying ok we are very much into your business, we want to work with you, we want to be a part of your business" (van Hauen, 2018, min. 41:05).

Arla, on the other hand, considers acquiring the startups if the technology is relevant and has proven successful in the development phase: "I mean we also, it's not part of for what we want to do now, but at some point we'll be thinking about just acquiring the company" (Barraza, 2018, min. 15:35.).

Creating brand awareness

On top of the goal of the startup programs to access external ideas and create new business opportunities, the program can also be seen as a branding opportunity. Companies wish to create a positive image about their organization, being associated with being innovative and working with creative startups.

Rasmussen from E.ON states that "And of course stuff like this, we do the accelerate program, it helps us gain a sort of brand or reputation of being progressive and focused on new things which people like working with. So it's also to brand ourselves in that sense." (2018, min. 11:51). When talking about measuring the success of the accelerator, he notes: "So it could be measured in some sort of visibility within the startup community or as simple as startup articles, media coverage within the whole startup sphere." (Rasmussen, 2018, min. 25:40). Therefore, one of the goals of the accelerator at E.ON is to build a positive and innovative image of the company, both as a reputation in general and in specific aimed towards the startup community.

This is also the case for Arla. Reppening notes that "They use us as a branding opportunity, but first and foremost to use the program as an innovation scout or program where they can seek out and be exposed to the newest technologies" (2018, min. 02:06). Even though the creation of brand awareness is not the most important objective, it plays a role in the accelerator.

Different perceptions about the goal of the startup program

Even though we only identified this topic in one of our case companies, E.ON, we think it is very relevant to note here that the goal of the startup program is not perceived in the same way for all employees of a company. At E.ON we had conversations with van Hauen, Chief Innovation Officer, with Halling, the external coordinator of the program, as well as with Rasmussen, a business developer and mentor working with the startups. We observed that the perceptions about

the program were well aligned between the Chief Innovation Officer and the external coordinator, but that the employee actually working with the startups as a mentor had very different perceptions. While van Hauen and Halling clearly describe the goal to create new business opportunities in long-term partnerships, Rasmussen mentions doubts about the goals or outcomes of the program. He says that "This comes back to the question of what are the goals, and I don't think they are very clear to be honest." (Rasmussen, 2018, min. 25:40). He also does not see a clear path towards integration of the startups in E.ON's business: "There's not really an ambition how to incorporate it into our current setup. So you could maybe see some synergies down the road, but right now it's fairly blurry." (Rasmussen, 2018, min. 09:07).

5.4. Selection

Choosing the right startups for collaboration

The selection of the startups to participate in the programs is an important element, as startups and corporations need a common direction for their business in the future as well as a personal connection to be able to work well together. Further, startups are selected based on alignment with the goal that the corporation has with executing the program.

For E.ON the goal of the accelerator is to build new opportunities through long-term partnerships. This is also reflected in their selection process: "If we can't see a common business, we would not go into it. We would not select them, and we would not go into it. But of course, we need to open our minds and see if we can find new barriers, new markets and the accelerator is a good way of doing that." (van Hauen, 2018, min. 06:31). E.ON is looking for startups that create new opportunities, but can also be connected to their current business. How exactly startups should offer new opportunities is not clearly defined: "We have a very loose defined goal for it and it's very loosely defined what to take in" (van Hauen, 2018, min. 24:39). Even though E.ON has made a plan of selecting startups once a year for the program, they look for candidates all year and also take startups in in between. Halling explains that working with startups which already have some experience works best for E.ON: "And then if we look at this year, we were eager that they should have a running business, they should have customers, they should make money. [...] We can help them a lot more if they are already in business." (Halling, 2018, min. 16:52). E.ON is choosing

startups that have a running business, where E.ON can help them to increase in volume: "This year we have some businesses that have already customers and are making money, so we are focusing on one thing that can actually really increase their business and where E.ON could be the customer, or E.ON's customers could be their customers." (Halling, 2018, min. 12:25). Moreover, it seems very important that E.ON can imagine working with the people from the startup. Van Hauen states "It's about figuring out, do these people really have the energy, or the ambition, or the resources to actually do it." (Van Hauen, 2018, min. 27:05). Halling confirms that the startup team is highly important: "It's a lot about looking at the potential and that means looking at the team, who is in the team, what are their capabilities, do we believe in them, do they have a track record, how do they actually approach it, and how is the business model" (Halling, 2018, min. 18:04). The way for E.ON to find out if they see potential in the team is by talking to them. Van Hauen states that before selecting a startup for the accelerator they have talked to them several times: "So when they are selected we have talked to them at least 4 or 5 times. You need to sit and see if you can work together." (van Hauen, 2018, min. 28:31). Further, he clarifies that when selecting startups it is also highly relevant that the expectations between E.ON and the startup are clear: "It's also important that the people who apply for our program understand what our aim is and how we work with them. Some think it's only about getting some money and a free seat, because a lot of programs are run like that. In reality, we explain to them that is not how we do it here and if you are looking for that find it somewhere else. Because then, you would just be annoyed that we want to actually interfere in your business and we do that." (Van Hauen, 2018, min. 29:08).

At Arla the process of selecting startups is very systematic. Accelerace, an external program, suggests startups to Arla based on a 60-30-10 methodology: 60 percent of the startups are closely linked to the strategic areas of Arla, 30 percent is exceeding these areas, and 10 percent is areas that Arla would not have looked into by themselves (Reppening, 2018). Based on these criteria startups are suggested to Arla, and they pick which ones pitch to the selection board: "12 pitch to Arla selection board we call it. But it's people from marketing, from supply chain, from different functions where they can see where the potential for these companies are. And then for those 10 we select two or three, maximum three, then we start discussions with, you know, under CDA, the confidentiality agreement, OK, so what can we do, what would be the interest. And then after this

discussion you formulate a project and that's how you kick off the activity of development." (Barraza, 2018, min. 28:20). Barraza explains that all this is a systematic process that takes time and effort: "So in addition to be a very convoluted process you really need to do it systematically to be able to get the benefit of it. It's not that you just call startups and then things happen. It does take time and it does take discipline in getting the things moving." (Barraza, 2018, min. 25:58). Reppening notes that startups that are selected need to align with Arla's current situation: "Right now there's a major cost focus at Arla and when there's a big cost focus, then what they find most interesting is the stuff that they can connect to their current business immediately." (Reppening, 2018, min. 14:44). This means that at times with a cost focus, Arla is selecting startups that are closely aligned with current activities and have lower risk.

The Camp by Tryg operates differently because it is a co-working space. Tryg tries to attract tech startups, but all kinds of startups can rent a desk-space, so there is no initial selection of which startups are situated at The Camp. The partnerships are then created whenever a match between an internal project and a startup comes up. For example, the director of Tryg Guarantee wanted to look into blockchain and there was a startup at The Camp working with blockchain, so they decided to start a pilot together (Juhler, 2018). Juhler explains "And that's just the typical example of what's happening when you engage, when you attract startups, you don't necessarily know exactly which kind of cooperation or partnership you can set up, but it gives you much better opportunities to have the dialogue and actually be explorative in your approach." (Juhler, 2018, min. 12:37). For creating more of these opportunities in the future, Tryg wants to change the way in which they attract startups for The Camp: "We will be much more focused on taking our innovation strategy and saying, OK, we want to find startups within this area with this technology, with these offerings and invite them to become part of Tryg's camp. And it's not because we haven't done that, but we haven't done it very much, so we will be much more focused." (Juhler, 2018, min. 19:22).

All three case companies have different ways of selecting startups. For E.ON, it is highly relevant that they see a common business with the startup, which often means serving the same customers. Further, they need to see potential in the startup team and they emphasize that the expectations of working together between the startup and E.ON need to be clear and well-aligned. E.ON finds out

if a startup is a good match for them by frequently talking to the startup team. At Arla, on the other hand, the selection is more systematic and based less on interaction. It is the external party, Accelerace, who suggests startups. Arla then decides for some startups to pitch to a selection board, which selects the startups to engage with. With the current cost focus, Arla chooses startups that can easily be integrated in their normal business. The Camp at Tryg is a co-working space, so initially there is no selection of which startups can work there. However, Tryg plans to change this and invite startups based on their fit for the company. Collaborations then start whenever there is a fit between a project at Tryg and one of the startups.

5.5. The Corporate Legacy

Our findings suggest that change is difficult for big corporations because of various reasons. One of them is that change needs to happen on all organizational levels. Apart from that, the organizational structure may not allow for changes to happen or the organizational goals are not properly aligned for change. Corporate employees have their set tasks they pursue and continually focus on current customers, which makes it difficult to engage with new or entirely different opportunities with startups. In the following subsections we elaborate on the aspects that make change difficult in our case companies.

Change is difficult for big corporations

Lars van Hauen (2018) explains that if organizations cannot change on all organizational levels, it will be very difficult for them to change. E.ON's management realized that something more radical had to be done around innovation in energy and came up with the accelerator program. The reason is that it is "very very hard to drive [innovation] within an established company" (van Hauen, 2018, min. 20:01). When comparing E.ON Denmark to subsidiaries in other countries, E.ON Denmark is much more flexible because of its small unit size. Decisions can be taken fast and also implemented in a short period of time. As an example, the decision process around new innovation methods takes three weeks in E.ON Denmark compared to one year in Germany. The reason is that there are 30,000 employees in Germany, as well as structures and legacies that make it difficult to make quick decisions. Apart from that, "there are many people involved in building bigger plans, lasting 50-100 years, so it's a whole other game" (van Hauen, 2018, min. 22:30). Van Hauen states

that in order to change, "companies need new competences, new ways of thinking, new structures and new bureaucracy" (van Hauen, 2018, min. 22:50). He believes that having these characteristics is also possible in bigger organizations like E.ON Germany: "I think that you can be able to do this on a much bigger scale than we are, up to a couple thousand employees. It's very much in the culture" (van Hauen, 2018, min. 35:56). He concludes that developing a new culture is possible even though an organization has thousands of employees. Even though van Hauen believes change is possible, Rasmussen (2018) states that change is not easy in a big corporation like E.ON. He explains that every E.ON subsidiary is innovating and it can become difficult to keep track of it all. Receiving the right information is sometimes difficult because "there is a long line of communication before it ends up here in Denmark" (Rasmussen, 2018, min. 17:10). In his opinion, smaller units need to be proactive about getting information from other subsidiaries. If there is a change in one of them, it does not necessarily mean that all of them change automatically, it is a lengthy process.

In Arla, with almost 20,000 employees around the globe (Arla Foods, 2017), change also comes difficult. Harry Barraza (2018, min. 24:26) explains that big companies are "really good in producing more of the same". Oliver Reppening (2018) confirms that big companies like Arla focus very much on current operations, which makes it difficult for them to change in the future. For instance, Accelerace "would like to push the agenda of where this [the dairy industry] is going in ten years rather than how can we increase the energy efficiency in the pasteurization of milk" (Reppening, 2018, min. 30:11). Nevertheless, Arla focuses "80% of resources on known territory and 20% within unknown territory" (Reppening, 2018, min. 32:30). Reppening believes that if all startups that Arla works with were only concerned with new territories, it would be very difficult to integrate their work into Arla's current business. However, he states that "if you want to do good stuff, fast, with big impact, it requires that as an organization you realize and you accept that you have a team of people working in your company which has the agenda to disrupt your company" (Reppening, 2018, min. 34:13).

In Tryg change is also difficult and a slow process. Before The Camp was created, Tryg tried to partner with startups but quickly realized that the internal processes were too slow and that the

decisions that had to be taken were impossible to make within such a big organization. In Juhler's words, the company needs to "be mature enough to actually meet the startups" (2018, min. 14:02). Tryg then decided to establish a new business department and later The Camp to strengthen its current work with creating new business and influence the culture in a more innovative way. Juhler (2018) explains that it's difficult for big companies like Tryg to change, given that the focus lies on current operations and current structures. "Of course the short-term perspective wins because the whole business is focused on the results for the next quarter" (Juhler, 2018, min. 23:45). In other words, the short-term perspective does not support changes and future innovations. As an example, when Juhler first started talking about Blockchain back in 2015, top managers thought he was talking "about the moon" (Juhler, 2018, min. 24: 30) without realizing that it had the potential to change their entire way of working. Juhler also points out that it can be difficult for big companies to change because they like to have a clear plan of action: "we tend to have a, both in developing our core business and developing new business, we kind of want to have a plan" (Juhler, 2018, min. 27:20). However, in times of change it is not always possible to have a clear plan.

Difficulty for employees to break with old ways of thinking

In all three companies we found evidence suggesting that it is difficult for employees to break with old ways of thinking.

In E.ON, one of the reasons that make it difficult for employees to change their way of thinking is that there are "structures and a legacy, you have so many people constructed around building bigger plans, lasting for 50-100 years" (van Hauen, 2018, min. 22:30). Van Hauen recognizes that in order to break with the old, employees need "new competences, you need new ways of thinking, new structures, new bureaucracy" (2018, min. 22:30). One of his goals is to make employees "come up with new ideas" (van Hauen, 2018, min. 03:21), which is why the accelerator program is "involved with the everyday of employees" (Halling, 2018, min. 0:38).

Reppening mentions that Arla is "at a very high stage of maturity. So you are used to everything being in operations, budgets being cleared every year" (2018, min. 06:14). When someone tries to change something within the organization, employees often try to maintain the old way of doing

things. For example, when someone asks for assistance on marketing campaigns the legal department might say "you need to follow the normal process so I can get the hours cleared" (Reppening, 2018, min. 34:13).

Tryg employees "sometimes don't even understand new things" (Juhler, 2018, min. 32:11). Juhler mentions that identifying people within the organization that are "open to redirect their way of thinking and understanding" is "the biggest challenge we have right now" (2018, min. 32:11). Some of these employees have been working on the core business their entire life so sometimes they do not understand what the changes mean. That it is partly due to the education they receive, which is targeted to "the old world" (Juhler, 2018, min. 32:11). One way to overcome this is by setting up a completely independent unit to drive big organizational change. For example, Tryg Insurance is developing a new digital insurance company that works totally independent of Tryg. The reason is that "if we wanted to develop a digital insurance company within Tryg, we would never succeed because there would be way too much resistance from the existing business" (Juhler, 2018, min. 46:34). Employees are used to a way of working and to structures that influence their way of thinking. The company even considers hiring people that have no extensive experience working in the "old business world", the problem however becomes that they lack the "insurance understanding" (Juhler, 2018, min. 32:11).

The fact that it is difficult for employees to break with old ways of thinking was present in all cases. The reason is that corporate employees are used to doing things in the same way, they are used to the same structure, operations and budgets that have been used in the past.

Prioritization of financial goals

Clearly the aim of accessing new ideas, building new opportunities and partnerships is to also create financial benefits in the end. Van Hauen made this explicit: "What we haven't seen yet is the big money coming out of it and by the end of the day that is really the goal" (van Hauen, 2018, 36:34). He states that the goal is to make a profit from the accelerator program within one or two years. However, it was also noted that seeing revenue from partnerships with startups takes time: "I mean it's probably several years before it's going to start making a profit" (Rasmussen, 2018, 30:56).

Reppening (2018) notes that when Arla has a cost focus "what they find most interesting is the stuff that they can connect to their current business immediately. When there is no cost focus, companies are much more open to discuss stuff that has a timeline of maybe three, five even more years before it will become a thing" (Reppening, 2018, min. 14:44) In other words, the current focus on costs leads Arla to prefer working on solutions that can be implemented in the short-term. Reppening mentions that Accelerace would like to push the agenda of where the future of milk is going in the next ten years, but that Arla is focusing mostly on more short-term opportunities. He calls this the "sleeping giant syndrome" (Reppening, 2018, 30:11). Arla is so big that on a global scale they are not yet bothered by developments in some European countries towards milk-replacement products, saying where Arla "really makes their money it's not even a thing" (Reppening, 2018, min 30:26).

Prioritization of daily tasks

Similar to the different perception of goals around E.ON's accelerator we also noticed that there were different perceptions about the way in which corporate employees and startup teams at E.ON work together. While van Hauen emphasized the importance of working together: "And we want our employees to work together with them and that means they have to be here." (van Hauen, 2018, min. 08:37), Rasmussen notes that E.ON employees often prioritize other tasks than working with the startups. He explains "In general, you can engage people into the project, but the people working here [at E.ON], they have other tasks and goals which they are being measured on." (Rasmussen, 2018, min. 36:10). In his view, employees prioritize other tasks because they are not measured on the performance with startups: "So it's really hard to get people really excited about it and involved because it doesn't have anything to do with what they're being measured on." (Rasmussen, 2018, min. 36:30). This can lead to delay for projects with the startups: "I mean, we have had some issues where we had to wait several weeks for some people to deliver what they had to. [...] So, in a situation like this, it's just naturally going to end up at the bottom of the pile to be honest." (Rasmussen, 2018, min. 37:04). He said that this problem also occurred for him as a mentor, even though he tries to prioritize the work with the startups: "I know for a fact that I have been the bottleneck a few times as well." (Rasmussen, 2018, min. 39:17). As a mentor, Rasmussen does not have any dedicated hours to working with the startups because the time they need together varies from week to week: "It's hard to say how much time I need to spend on it on a weekly basis. So last week I spent a day or two and this week so far it looks like I'm probably going to more or less nothing. So I haven't had let's say five hours set aside every week to working with them because it's just, it depends on their needs." (Rasmussen, 2018, 38:27).

Working with corporate customers

For startups it makes sense to work with big corporations because they can gain a big customer base, both in terms of the customers that the corporation has as well as by gaining the corporation as their customer. During our interviews, the topic of startups gaining access to corporate customers frequently arose.

Van Hauen made clear that E.ON's big customer base is certainly an advantage when attracting new partners: "Obviously, it's easier for us to attract partners who see E.ON as a very big player with a very big customer base worldwide. We try to use that." (van Hauen, 2018, min. 18:11). This also means that E.ON allows the startups to test ideas on their customers: "The scope of the project is very limited to a certain project where we have to test something on some of our customers." (Rasmussen, 2018, min. 22:03).

At Arla testing on customers is also an important aspect of the startup program. For example, in the case of the high-tech label startup that Arla is currently working with, they are testing how customers respond to the technology: "In the first phase we do a consumer study on how people would respond to that technology sitting on a milk carton." (Reppening, 2018, min. 22:02). Barraza confirms that testing new technologies on consumers is highly relevant: "We've done testing their concept of an indicator for shelf-life of products with consumers and we wanted to know first would consumers buy this, and all these things the startup cannot do on their own. [...] What sort of things we would require to be able to say this is something that consumers see as relevant for the dairy business." (Barraza, 2018, min. 16:15).

Also at Tryg projects with startups commonly involve testing new concepts on Tryg's customers: "In this example we test solutions, we co-develop together with Anyware Solutions services that homeowners can use and test them on some of our customers." (Juhler, 2018, min. 08:01).

We observed that many of the projects between corporations and startups involved corporate customers, meaning that new technologies or concepts were tested on the corporation's customers. Through the collaboration, startups easily get access to a large customer base they can test new solutions on, and the corporation equally benefits by finding out what kind of new solutions their customers approve.

5.6. Creating the Interaction with the Startup Ecosystem

The ways of working together between corporate employees and startup teams differ a lot across the companies. In the following we describe how teams work together, how corporations are involved in the startups, how frequently the teams interact, and what role uncertainty has. Further, we found that corporations need to invest resources when working with startups. These do not only come in the form of funding, but also include hours spent working together and giving startups access to facilities and corporate customers. Finally, it is important to note that corporations often involve externals in the collaboration with startups because of their experience with startups and their ability to build a neutral link between the corporation and the startup.

Corporate and startup employees working together

When startups are accepted into E.ON's accelerator they are assigned one dedicated employee called mentor. The mentor is a person who is chosen to be able to help the startups with their specific needs: "We try to screen what is the problem for the startup, what's their basic needs, and then we try to find someone who can actually complement that, but also someone who has a broader experience and can go into a dialogue and be the mentor." (van Hauen, 2018, min. 32:40). Halling adds that the mentor should also have good connections within E.ON: "We have a mentor that is connected to them from day one, that is the connection, one that can benefit from working with the startup but also has the right connections inside E.ON, both in Denmark and globally to support the startup." (Halling, 2018, min. 22:47). The mentor is in frequent interaction with the startup:

"And then we work with them, we're meeting 2 to 3 times a week as a standard and then we have different tasks we're working on but it differs a lot what the need is." (van Hauen, 2018, min. 33:00). At E.ON, the mentor is the main contact person for the startup, and then connects them to other employees whenever needed. When we asked one of the mentors who else is working with the startups, the reply was: "Most of the time it's just me. But it's more on a task-to-task level that we do that. At one point we needed some marketing help so of course I just engaged marketing people and they sat down and they delivered something and then they were free to go their separate ways again" (Rasmussen, 2018, min. 20:32). Together with the mentor the startups formulate a goal for the three months period of the program: "And then we take them in and make a plan for the 3 months depending on the project. Typically it's something where we spend 1-2 weeks in the beginning, talking about different options on what we should focus on and then try to narrow it in so we have one aim, one target, that we work with for the period." (Halling, 2018, min. 12:25). The goal varies for the startups "And that could be anything, it could be a presentation, or business concept that we've tested with 10 people, something like that." (Rasmussen, 2018, min. 26:58).

The work between Arla and startups also starts with one dedicated employee for each startup, in Arla's case referred to as a 'champion'. Similarly to E.ON, the champion at Arla is assigned in order to connect Arla employees to the startups. However, at Arla the champion is not involved much after establishing that initial connection: "that champion is not the person that will lead the project, but it is the person who will make the connections internally with the right people to be able to do a project in place. And once the project is in place, they will have a project manager separately." (Barraza, 2018, min. 29:58). Reppening confirms and explains further: "They assign one Arla champion per startup. And the champion they assign may not be the one that can actually scope or approve a pilot, but the champion is the one that can help establish contact with the proper team in Arla. So my role and the role of the champion is to find and match the right team in Arla with the startup and then get them onboarded and then set the first meeting." (Reppening, 2018, min. 18:04). Once the champion connected the startup to a matching team at Arla, Arla's team and the startup discuss the opportunities, which often means starting a pilot together: "And then the rest of the meeting is about understanding what is the interest of the team that the startup is pitching to and open discussion of areas of opportunity, so what opportunity space could a potential pilot

evolve into." (Reppening, 2018, min. 20:06). The responsibility in the early phases of the pilot lies within the startup (here exemplified by Mimica), but as the pilot proceeds Arla employees become more involved: "In phase one, they [Arla employees] are only involved in deciding the questions and methodology for asking people how they respond to this and then they approve and sign off, but all of the operation sits with Mimica. In phase two, designing how the Mimica product goes onto the Arla product that will be more work involved for Arla. So probably then the balance will shift from phase one, I think 90-95 percent of the work is in Mimica, in phase two it's probably 70 / 35. And then in phase three it will be 50 / 50." (Reppening, 2018, min. 23:53).

The interaction between Tryg and startups takes places at The Camp, a co-working space located at Tryg's headquarters, where both startups and Tryg employees work: "There are around 200 people working in these startups, and then we have a lot of Tryg teams, development teams, that are situated in the camp in shorter periods of time to get them out of the normal day to day routine." (Juhler, 2018, min. 03:51). Sitting together at a co-working space creates opportunities for working together: "when you attract startups, you don't necessarily know exactly which kind of cooperation or partnership can you set up, but it gives you much better opportunities to have the dialogue and actually be explorative in your approach." (Juhler, 2018, min. 12:37). However, it is not always easy to bring corporate employees and startups together: "people from our core business, our old business, [...] they just don't understand how to talk with startups because it's a totally different way of thinking, it is a totally different business model they run, and the whole education they have gotten is targeted at the old world. So they don't understand what they are sitting in front of." (Juhler, 2018, min. 32:11). According to Juhler, it is a big challenge to create the collaboration between startups and corporate employees: "You have to find the people that actually have the openness to redirect their thinking and understanding. But that's the biggest challenge we have right now actually." (Juhler, 2018, min. 32:30).

To sum it up, both E.ON and Arla have one dedicated employee per startup to make the connections to the right people internally. At E.ON, this mentor is also the main contact during the project and other employees are involved on a task basis. At Arla, after the champion established connections internally, the project has a project manager. This project manager is the main responsible for the

pilot project, which evolves in different phases, including tests on customers and incorporating the technology in Arla's products. At The Camp from Tryg corporate and startup employees sit together in a co-working space and collaborations are established whenever opportunities arise. However, it is challenging for corporate employees to work with startups.

Strong involvement of E.ON in the startups

For E.ON it is highly relevant to create in-person collaboration and have a strong involvement in the startup. E.ON integrates the accelerator very much into its business, meaning that the startups also sit at E.ON's office together with E.ON employees: "We want them to be here because we want them to work together with our employees. And we want our employees to work together with them and that means they have to be here." (van Hauen, 2018, min. 08:37). Van Hauen also sees this as one of the factors of success for their program, leading to more collaborations with the startups. Rasmussen confirms that, compared to Germany, where the accelerator is a separate business unit, it is easier to get E.ON employees engaged: "At least we can do it here. I've heard in Germany that the setup they have, I mean of course it's nice because the people working with it are super focused on it, but once they need help from somebody else it's more or less completely shut off because they have no involvement at all and there's no visibility" (Rasmussen, 2018, min. 41:33). Further, E.ON in Denmark aims to have an active involvement in the startups: "We do not invest in any startups where we can't see ourselves having an active role, either in the business or in the market or something like that." (van Hauen, 2018, min. 05:41). This involvement can take different forms: "Sometimes we sit in the board, sometimes we do some active role, but we actually are striving to do some common business. In general, we need people from EON to work with the startups on common customers." (van Hauen, 2018, min. 07:53). Deciding to have this strong involvement also indicates a time commitment. Van Hauen states "When we started we actually thought that we should be doing two batches a year but we realized that that was way too much. If you actually really want to work with the people you can only do it once a year." (van Hauen, 2018, min. 37:37). He sees the outcome of that more valuable: "So we rather do it slow and actually do some fruitful collaboration instead." (van Hauen, 2018, min. 37:50).

Involvement of externals

We found that in their work with startups companies frequently use external collaborators, both because they have access to the startup community and because they can be seen as a neutral link between the startups and the companies.

Especially for E.ON the neutral role of the external coordinator came up: "Right from the beginning our idea was that we shouldn't use an internal because it's very good to have an external who could be objective and who could be critical on both sides. In practical, in everyday life it's a lot about that I'm the zero pole, I'm the one that everyone can talk to, [...] we try to sort it out and I'm the neutral part. That's a good thing." (Halling, 2018, min. 27:25). Rasmussen confirms the importance of having an external coordinator: "because he definitely had the experience working with startups. We didn't have anybody who had that experience. I mean, it would probably fail miserably if we didn't have him in." (Rasmussen, 2018, min. 40:47).

For Arla, engaging with Accelerace brings several benefits. On the one hand, they do not have to find the startups themselves, and Accelerace has a much bigger network in the startup community to do so: "[Accelerace] has extensive networks in the food area that help us into reaching out to more companies that might be of interest to us" (Barraza, 2018, min. 08:04). On the other hand, Barraza explains that the external program trains and prepares the startups for working with a big corporation: "The other thing that is interesting and we find useful about collaborating with Accelerace and this scale-up program is that they offer the startup not just a contact within the big company and the opportunity for them to pitch to us and to the business, but also they are trained into how to pitch, how to construct and how to prepare to scale up their companies. So when we are ready to engage with a company then this is much easier to do." (Barraza, 2018, min. 08:57).

To run The Camp, Tryg collaborates with Rainmaking, mostly because they have a good network and experience with startups: "Again, Rainmaking, they know everything about the startup community in Denmark" (Juhler, 2018, min. 49:13).

To conclude, our case companies find it highly relevant to partner with externals who have knowledge about and experience with the startup ecosystem. This makes the search for startups easier, but also eases the work together.

Working with startups involves uncertainty

In our conversations with corporations we frequently encountered the topic that the work with startups was linked to uncertainty and involved some kind of risk.

At E.ON, the uncertainty was linked to both the selection of the startups as well as the actual work together. Van Hauen states "You have to guess a little. See, maybe this could actually be something." (van Hauen, 2018, min. 10:00). However, it is also accepted that not all collaborations work out: "Obviously we will fail sometimes. That's how it is." (van Hauen, 2018, min. 10:06). Further, the attitude can quickly change: "That's a part of working with startups, it's not a very defined process. It's another way of working. It goes up and down every week. Something is looking very good one week and the next week everyone is like 'oh no'." (van Hauen, 2018, min. 10:17).

Barraza confirms that also at Arla the work with startups does not always lead to certain results: "even luck is a big factor in this because having the right networking, connecting with the right people and having the right champions internally, you see there is a lot of steps where errors can be made and then something can be dropped. Maybe it's not the right time for a company, maybe later on." (Barraza, 2018, min. 27:50).

The uncertainty of working with startups can also be found at Tryg, but Juhler states that they learn how to evaluate the opportunities better: "And we have to take a lot of chances because we don't know which of them is going to be the success in the end. We can have considerations about it. And that is certainly what Tryg has become much better at over the last two years." (Juhler, 2018, min. 28:56).

All our case companies agree that working with startups involves uncertainties and that not all collaborations lead to successful projects.

5.7. Learning

We found that learning plays a big role in the interaction between corporations and the startup ecosystem. Learning takes places from both sides, however we focus on the learnings acquired by the corporations. The reason is that our research aims to answer how corporations engage with the startup ecosystem to enable disruptive innovation. We find relevant aspects that corporations learn from startups and also how corporations improve their startups programs over time.

Corporations learn from startups

Our findings suggest that E.ON learns from startups and other partners on multiple dimensions. The accelerator program at E.ON is designed to open the mind of corporate employees through frequent interaction with startups. Depending on the startups' needs, E.ON employees are assigned to work on specific projects in collaboration with startups. However, the ultimate goal is to involve all employees in all organizational levels with the accelerator program. The reason is that startups bring innovative approaches to big companies, they bring "another way of looking at the market, a fresher way of looking at the market" (van Hauen, 2018, min. 18:53). Not only do startups bring a fresh way of looking at the whole market, but also innovative approaches to address part of the market that E.ON might not be currently serving (Halling, 2018). Apart from new perspectives of the market, E.ON also learns "a lot about agility" (van Hauen, 2018 min. 18:48; Halling, 2018 sec 22:18). The aim of the program is to "make all employees come up with good ideas since that's the kind of agility the company needs right now" (van Hauen, 2018, min. 04:43). This finding is also confirmed by Peter Halling (2018, min. 34:34): "The aim of the program is to make E.ON agile and to work to some extent like a startup" as well as "to become better at being more full of ideas, innovative" (Halling, 2018. min. 02:01). Through collaborations E.ON leverages its partners' competences when entering new markets, however there is also a learning component involved: "The idea is that instead of building our competencies every time we go into a new market, we can actually rest on the competences we have, maybe expand them a little bit, but taking new from our partners" (van Hauen, 2018, min. 16:21). Another relevant finding is that E.ON employees learn

how to break free from paradigms and the traditional way of doing things in the company. Peter Halling (2018) explains that in a big corporation, employees are very conscious about the organization in which they work in. This means that when employees work on solving problems, they are keen on solving them in the way that their managers expect them to be solved: "Employees are not innovative because they always limit themselves" (Halling, 2018, min. 22:18). Through collaboration with startups, employees learn how to be more innovative and how to remove mental barriers. E.ON employees also learn to "being able to communicate and actually spread the word... So that's something we learn from them" (van Hauen, 2018, min. 18:48). Nevertheless, it is important to note that these perspectives are not shared by everyone in the organization. Christoffer Rasmussen, who is Business Developer and one of the startup mentors at E.ON, believes that corporate employees do not learn that much from startups, partly because they have other tasks or goals which they are being measure on. "They [employees] will help out and they'll deliver but they won't go the extra mile. I don't think there's much knowledge flowing the other way to be honest" (Rasmussen, 2018, min. 36:10). In his opinion, startups learn much more from E.ON than the other way around.

Our findings show that Arla also learns from its interaction with the startup ecosystem. Harry Barraza (2018, min. 04:11) states: "it's a big learning for us to be able to engage in collaborations with startups". It's important to mention that this applies to a variety of corporate employees, including scientists from the research and development department at Arla. Some of these employees want "to be a better scientist or a better marketer" (Barraza, 2018, min. 35:44) and the interaction with startups provides them this learning opportunity. One of the things Arla employees learn is to work the same way as in small companies in terms of flexibility and faster approaches. Champions that are exposed to startups learn how to approach innovation in new ways, which according to Barraza "is not the same as working with a university or with a supplier" (Barraza, 2018, min. 32:41). Arla benefits from this interaction because employees bring "some of those very innovative ideas into our pipeline" (Barraza, 2018, min. 32:49). As an example, Barraza (2018) mentions that after being exposed to startups, employees working on similar projects "will do it faster and much easier because they know how to work with startups" (Barraza, 2018, min. 32:50). Barraza states "in one way or another you won't believe how people learn from those interactions"

(Barraza, 2018, min. 32:41). Oliver Repenning, who worked at Arla for five years before joining Accelerace explains that Arla learns about innovations that have "not been on the table in Arla, but they connect to it immediately" (2018, min. 08:40). He also perceives that Arla learns how to energize the organization and how to have fun. It's important to mention that not all corporate employees are interested in learning from and working with startups: "Not everyone is interested in working with a startup" (Barraza, 2018, 35:44). Besides the lack of interest, Barraza mentions that being able to learn from startups "requires certain skills" that not every employee has (Barraza, 2018, min. 35:44).

Tryg Insurance confirms our previous findings. The company recognizes that it can learn from startups which is why The Camp was founded in the first place. In general, Tryg learns from startups because they "have a totally different way of working, mentality, approach, agility" (Juhler, 2018, min. 01:25). One specific aspect Tryg learns from the interaction with startups is how to influence the innovation culture within the company (Juhler, 2018). Another specific aspect that the company learns is how to improve their existing value proposition. Tryg codevelops services that their customers can use together with startups: "we test something out and we learn and then we can further develop our value proposition based on that" (Juhler, 2018, min. 07:26).

We conclude that our three case companies learn from the interaction with the startup ecosystem. The reason is that startups have a different way of working which opens employee's minds. Specifically, corporate employees learn how to be more innovative and how to remove mental barriers. They also learn about new perspectives of the market, about agility, flexibility and faster approaches to develop innovations.

Corporations learn how to improve their interaction with startups over time

A common finding throughout the three case companies that corporations learn how to improve the interaction with startups over time. This is not necessarily a learning from startups itself but a general learning of how corporations can improve their programs for future collaborations. For example, E.ON changed the accelerator program from last year and now focuses more on mature startups that have customers and are selling a product or service (van Hauen, 2018). This was

something the company learned through interaction with startups, since focusing on mature startups allows E.ON to get more out of the collaboration. Lars van Hauen (2018, min. 38:37) also states that the company will not do the accelerate program forever: "at some point we will probably have done it so many times that it is not fruitful anymore and we will figure out another way of doing it". In his view, there are a lot of competing programs, so at one point the relevance of doing accelerator programs "will totally vanish" (van Hauen, 2018, min. 39:03). One possibility would be to partner with other corporations around the program, for example a big hotel chain to develop sustainable solutions for energy and hotels together. Peter Halling (2018) who is responsible for designing the accelerator program at E.ON explains that there are always some necessary alterations to be made.

Harry Barraza (2017, min. 19:04) states that "each company has to actually try and test different approaches", as well as "go through a journey until they find what works for them". Arla found the right way to collaborate with startups through trial and error. By trying different approaches, the company found a way that fits their innovation objectives and that works for them.

Tryg has experience of working with startups and is "in the process of kind of re-directing The Camp, the whole approach to make it more as an innovation hub for Tryg" (Juhler, 2018, min. 19:22). The experience acquired in Denmark is also used by Tryg in Norway: "We are much better prepared now in Norway than we were here in Denmark three years ago, but we have to learn a lot" (Juhler, 2018, min. 46:10). This statement reflects that the collaboration with startups entails a great learning process for the corporation and it is important to point out that the programs evolve and are continuously improved over time.

We conclude that the three case companies learn how to improve the interaction with startups over time. Since every company is different, each company uses the approach that works best for them.

Startups learn from corporations

The learning process is not only relevant for big companies but for startups as well. Peter Halling (2018, min. 22:18) explains that through the interaction with corporations, startups "learn a lot

about corporate structure and how a corporate works basically". He points out that the startup benefits most if someone in the team has worked in a corporation before. The reason is that these people "already know how the game is, which makes it really easy for them to fit in and get the best out of the corporate structure" (Halling, 2018, min. 22:25). Another aspect startups learn from corporations is to work in a structured way and to focus on one thing at a time instead of "trying to do this and that and subscription and everything" (Rasmussen, 2018, min. 05:30). It's important to point out that startups need to be transparent and open about their business if they want to learn from corporations and be helped by corporate employees. The success of the program depends on the startup itself since startups always have different needs. "It's critical that they are open and really want to share and discuss what's their problem" (van Hauen, 2018, min. 22:47). Lars van Hauen (2018) states that startups need to believe that their idea and resources are so good that no one can take it away. Transparency is also required from the corporate side, which is why both parties sign a non-disclosure agreement. Lars van Hauen (2018) points out that E.ON allows startups to look into the business and see if they can work with E.ON's customers.

From Arla's perspective, "startups learn how to pitch to real businesses and to real people that know how to put things in the market" (Barraza, 2018, min. 32:41). Through this interaction, startups also learn how to sharpen their business models and their technology. Another aspect that startups learn from interacting with corporations is finding new channels that big companies can provide for their products. Barraza (2018) confirms the finding from E.ON in the sense that startups learn how things are done in a bigger company.

6. Empirical Framework

In the previous case story, we describe the empirical findings from our research. In the following analysis, we bring these findings together in an empirical framework, which describes the key features and dynamics that play a role in the interaction between corporations and the startup ecosystem. The findings we present are supported by relevant literature in the respective fields. The framework presents three chronological timeframes in which the interaction between corporations and the startup ecosystem emerges. For our case companies the first chronological timeframe, T0, represents the past, T1 the present we observe, and T2 the future we anticipate.

Through the startup programs our case companies evolved from T0 to T1 and are now transitioning to T2. At the end of this chapter we present our empirical model (Figure 7) which visually depicts the features and dynamics described in the following sections.

6.1. Time 0: Need to Adapt to a Changing Environment

In the first chronological timeframe, T0, we describe the factors that lead to changes in traditional industries as well as responsive measures taken by the corporations.

A traditional environment is starting to change

We found that the industries of our case companies, namely the energy, dairy, and insurance industries in Denmark, can be characterized as traditional industries with little changes in the past decades. Nevertheless, new technological developments as well as changing customer needs and preferences lead to changes in the environment. Government regulations and a focus on sustainability start to play a key role across various industries opening up opportunities for new entrants. In this timeframe there is limited interaction between corporations and the startup ecosystem. Corporations as well as startups work independently from one another, developing their own ideas, technologies and markets.

Adapting the strategy for a changing environment

In light of the changing environment companies realize that they need to adapt their strategy and open up to new partners if they do not want to be driven out of business. Companies become aware of the fact that not all the good ideas lie within their organization (Chesbrough, 2003) and that they can benefit from incorporating external ideas to solve problems (Katila & Ahuja, 2002). Especially when adapting to technological change, collaborations with new entrants allow for a quick adoption and understanding of new technologies (Rothaermel, 2001). Further, external players have different perspectives on the changing market, so partnerships can help corporations understand new market areas (Chesbrough & Crowther, 2006). It is highly relevant that a strategy based on partnerships is supported by top management to demonstrate commitment towards collaborations and the partners involved (Kohler, 2016). However, our case companies explained that a strategy

based on partnerships needs time to unfold. Therefore, the outcomes of the changed strategy cannot be seen immediately in T0 but create the foundation for fruitful collaborations in T1.

6.2. Time 1: Limited Opportunities Created through the Engagement with Startups

In this timeframe corporations identify startups as valuable partners in the endeavor to adapt to the changing environment. In the following, we shed light on the dynamics and practical implications of the interaction between corporations and the startup ecosystem. We first describe how corporations engage with the startup ecosystem and then explain that corporations are inhibited by a "corporate wall", which restricts them in their choice of startups, the way of working with the startups and the opportunities that are created. We then elaborate on the outcome of the current engagements and describe ways to overcome inhibitors, allowing corporation to create better opportunities.

Finding external ideas and generating new opportunities with the startup ecosystem

In order to engage with the startup ecosystem, corporations create startup programs that facilitate a structured interaction between corporations and startups (Kohler, 2016; Weiblen & Chesbrough, 2015). From this interaction corporations gain access to new ideas and insights into market developments that they cannot explore by themselves. The objective is to create opportunities that fall outside of the scope of the core business and represent growth objectives related to potential new business (Weiblen & Chesbrough, 2015). Corporations aim to explore a broad range of new areas that fall outside of their known territory, they want to discover the "crazy stuff" that startups work on and that could impact their business. This can for example take shape by considering small niches that might grow into future markets or by regarding groundbreaking technologies. Addressing these potential new growth opportunities means adopting a long-term perspective, as it takes time to develop ideas and technologies that cannot directly be implemented in the core business. Therefore, the aim is also to create long-term partnerships with new partners. Further, the startup programs allow corporations to test a variety of new ideas in a fast and cheap manner.

The "corporate wall" representing the corporate legacy

Corporations want to create growth through the interaction with the startups. Nevertheless, they are inhibited by a "corporate wall", which limits the opportunity space in which they create new opportunities. It does so by a variety of key factors and dynamics that lead the corporation to focus on short-term objectives and the core business instead of on the creation of new business in the long-term. In the following we describe the role of corporate structures and incentive systems, as well as a focus on core customers and traditional ways of thinking in the pursuit for new opportunities. Corporate legacies, which have been built over long periods of time, make change difficult for corporations.

Corporate structure and processes

First, we found that employees from big corporations are grounded in work processes and decisionmaking patterns that support the core business of the corporation. Employees are used to strategies, processes, expectations, and incentives that have been in place for long periods of time. They are used to a corporate bureaucracy in which projects need to follow certain rules and procedures and where decision-making takes time. These static structures and processes do not fit to working with startups, as startups have a more agile and flexible way of working. This makes the collaboration between corporate employees and startups very difficult. Further, it is not easy to change a corporate bureaucracy that has emerged over a long period of time. Secondly, we found that there can be a misalignment between the objective of closely working with startups and at the same time fulfilling daily tasks, which can create prioritization issues for corporate employees. When corporate employees are not measured on their performance with startups and have no dedicated hours for this work, it can be difficult to get them involved and leads to delay in the startup projects. Further, this issue can be linked to misperceptions about the objective of engaging with the startup ecosystem. Innovation activities need to be designed in a way that matches their strategic intent (Kohler, 2016). This means that a strategic intent of creating new growth opportunities with startups also needs to be supported by structures and processes that enable the collaboration.

Traditional ways of thinking

The above-mentioned structures and processes limit employees' ability to break with traditional ways of thinking. Our findings show that employees who have worked their entire life in the core area of a company sometimes do not understand new developments or do not see their potential. They are limited in their decision-making and ability to process information (Simon, 1982). They are caught up in their traditional way of thinking about the business and accept the long-established bureaucracies. Their focus on the core business and existing routines might explain why some companies ignore relevant developments and trends outside their domain (Miles, Snow, Meyer, & Coleman, 1978). In order to break with traditional ways of thinking, they need to learn to accept new ideas and technologies as well as acquire new skills and competencies.

Short-term orientation

Another aspect that hinders corporations to change is their focus on current operations and innovations that can quickly be implemented in the core business, yielding returns within a short time period. Incentive schemes are often linked to the achievement of short-term results, for example meeting quarterly results. The focus on short-term results is further strengthened in times of financial constraints, where it is especially important for the corporation to be able to link their innovation activities to their core business quickly. However, if companies want to change in the long-term they need to look for opportunities that do not yield a financial return right away.

Focus on current customers

In their endeavor to create new opportunities, corporations commonly rely on their current customer base. Startups are chosen based on the premise that they can work with the same customers as the corporation. They develop complementary offerings for the corporation's existing customers or focus on products or services that their core customers favor. New ideas coming from the startups are tested on existing customers. This is convenient for both the corporation and the startup. It allows for quick and cheap testing because the customer base already exists, and both the corporation and the startups see which offerings are quickly accepted by customers. Nevertheless, the focus on current customers also restricts corporations in their opportunities. It

creates the risk of focusing too much on current customers while neglecting potentially new customers (Christensen et al., 2015).

To conclude, corporate structures and processes, traditional ways of thinking, a short-term orientation, as well as a focus on current customers limit the corporation in creating truly novel opportunities. New processes, new routines, and new ways of thinking are required in order to change and break down the "corporate wall". The incentive systems, the organizational structure and ultimately the culture also need to change (Govindarajan & Kopalle, 2006). Our findings suggest that these changes need to happen on all organizational levels, which makes it even more difficult.

Opportunities bypassing the "corporate wall"

Through startup programs the engagement with the startup ecosystem happens, however due to the restrictions of the "corporate wall" the new solutions created are often close to the core business and focused on existing customers. Nevertheless, corporations also find mechanisms to work around that "corporate wall", to bypass its limitations. External actors as well as dedicated corporate employees help create ways to bypass the "corporate wall" and strengthen the interaction with the startup ecosystem.

External actors

Corporations engage with external actors to create a connection to the startup ecosystem and to maintain a more neutral perspective on the collaboration. This allows them to get access to a broader base of ideas. Further, external actors are not guided by the short-term focus that is often prevalent among corporate employees. Therefore, they can have a more open mind towards opportunities that focus on the long-term or are not closely linked to the corporate's core business. They are less biased in their culture and experiences towards the corporation, and regard opportunities from a more neutral perspective.

<u>Dedicated employees</u>

Dedicated corporate employees who work with startups also play an important role facilitating interactions. The dedicated employees, also called mentors or champions, are necessary to create the right connections between corporate employees and the startups. They help the startups get access to necessary resources and link them to employees that can further benefit from the collaboration. Therefore, it is highly relevant that these dedicated employees have a good network within the corporation to make the right connection, but are also open for external ideas and interested in partnerships (Kohler, 2016). These dedicated employees represent a bridge between the startup and the corporate world.

In T1, many of the opportunities created are influenced by the "corporate wall" and represent solutions that support the core business. However, it seems as if the interaction with the startup ecosystem also leads to some collaborations that are partly overcoming the "corporate wall" and represent a leap into unknown territory and long-term opportunities. How these develop in the future is uncertain. Time can be seen as an exogenous force, given that it is not in the control of the corporation how markets evolve.

Transition from T1 to T2

We observed that corporations manage to decrease the "corporate wall" through ongoing interaction with startups. The reason is that corporate employees learn from the startups' different ways of working, different mentalities and approaches to innovation. For example, they learn how startups address parts of the market that their companies are currently not serving or acquire new perspectives of the whole market. Through the interaction with other organizations corporate employees acquire new skills and competencies (Hamel, 1991). They get access to new ideas which in turn opens their minds. They learn how to break free from paradigms and from the traditional way of doing things. Through the interaction with startups corporate employees also learn about agility and how to work fast and flexible. These learnings allow employees to remove mental barriers and adapt their daily work.

We found that the wall also decreases as corporations learn how to improve their interaction with startups over time. Different approaches are tested and refined as corporations interact with startups. Our findings suggest that companies find the right way to collaborate with startups through trial and error. Moreover, each company adopts the approach that works best for them. It's important to point out that this interaction constantly evolves and is continuously improved, suggesting that it might change in the future.

6.3. Time 2: Forward-looking Opportunities

Our findings mostly relate to T1, however they indicate how the interaction between corporations and startups evolves further to T2. Nevertheless, this section is speculative and should be regarded with caution.

In the last timeframe, T2, corporations keep learning from startups which in turn keeps decreasing the "corporate wall". The "corporate wall" in T2 becomes insignificant and may eventually vanish, allowing corporations to seize new opportunities that are far from their current business. In T2, corporations are less constrained by their corporate legacy and are able to pursue long-term growth. It's important to point out that the uncertainty of working with startups is still present in T2. The reason is that opportunities that are far form the core business take time to unfold, however corporations in T2 are better positioned to actually recognize and pursue those opportunities.

6.4. Empirical Model

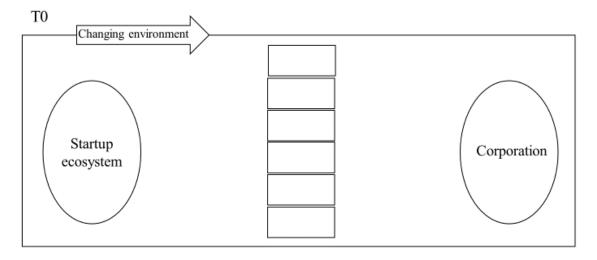
The empirical model visually depicts the three timeframes in which the interaction between corporations and the startup ecosystem evolves.

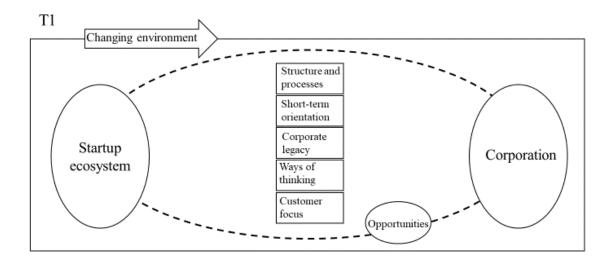
In T0 a formerly steady environment starts to change due to new technological developments, changing customer needs, and a transition towards sustainability. There is limited interaction between the startup ecosystem and corporations. However, the corporation becomes aware that change is needed and establishes a strategy based on partnerships to adapt to the changing environment.

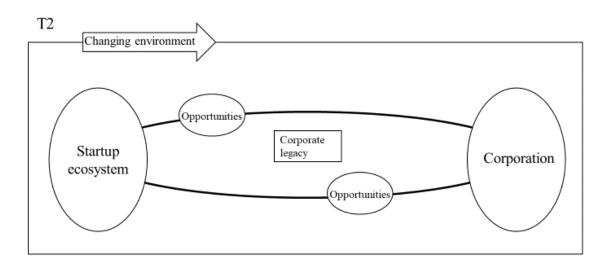
In T1 a startup program is established with the goal to create new business opportunities which focus on long-term adaptation to changes. However, the "corporate wall" represents the corporate legacy and inhibits the corporation to pursue long-term goals. It consists of structures and processes which are established over a long period of time, short-term orientations of employees and incentives, traditional ways of thinking about the business and a focus on current customers. The "corporate wall" induces the organization to create collaborations with the startup ecosystem that focus on short-term perspectives, known territories and the core business. Nevertheless, corporations are learning new ways of thinking and working through the interaction with startups, allowing them to decrease the "corporate wall" in their transition to T2.

In T2 the "corporate wall" decreases to a negligible level, meaning the corporation is no longer limited by their corporate legacy. This allows corporations to seize opportunities with the startup ecosystem that are not directly linked to their core business and have the potential to change their markets dramatically.

Figure 7: Empirical Model







Source: Authors' own illustration

7. Discussion

7.1. Synthesis of the Theoretical and the Empirical Framework

To synthesize the theoretical and the empirical framework we first give a short recapitulation of the two frameworks. We then compare them and describe how our empirical framework expands the existing theory.

Recapitulation of the theoretical framework

In the theoretical framework disruptive innovation is described as a phenomenon where new entrants initially target marginal segments but gradually improve their offerings until they compete in the mainstream market. Incumbents often fail to address disruptive innovation early on as they focus on their core customers and do not see the new entrants as a threat. As the new entrants gain a foothold in the mainstream market incumbents are pushed into higher ends of the market and finally out of the market. In order to remain competitive and create disruptive innovations themselves, incumbents need to be able to build new competences. The existing literature suggests that sourcing ideas externally and engaging with startups can help build new competences. To build new competences firms need to be able to follow learning processes which change their dominant logic and adapt their structures, processes, and routines. Several authors mention that there might be a relation between engaging with startups and creating disruptive innovation as an incumbent, however that relation has not been empirically confirmed.

Recapitulation of the empirical framework

In the empirical framework we depict three chronological timeframes in which the interaction between the corporation and the startup ecosystem emerges. In T0 a formerly steady environment starts to change due to technological developments, changing customer needs and a transition towards sustainability. There is little interaction between corporations and the startup ecosystem. Nevertheless, corporations become aware that they need to adapt to the changing environment and develop a strategy based on partnerships to help them in their transition. In T1 the corporations establish a startup program with the aim to create long-term opportunities that are not directly linked to the core business. However, a "corporate wall" inhibits corporations to pursue these goals. The "corporate wall" represents the corporate legacy and consists of structures and processes that developed over a long period of time, a short-term orientation, traditional ways of thinking, and a focus on current customers. It leads the corporations to create interactions with the startup ecosystem that focus on short-term goals and the core business instead of pursuing the initial goal of creating entirely new opportunities. Nevertheless, through their interaction with the startup ecosystem corporations are able to learn new ways of thinking and are slowly able to decrease the "corporate wall". External actors further support these interactions and learning processes. In T2,

corporations are able to decrease the "corporate wall" to a negligible level. This allows them to be less restricted by the corporate legacy and focus on opportunities which fall outside of their core business and have the potential to change their market dramatically in the long-term.

Synthesis

The theoretical framework suggests that incumbents can become disrupters by engaging with startups and following learning processes but notes that there are no empirical findings of this relation yet. Our empirical framework, on the other hand, describes the dynamics in which the engagement between corporations and the startup ecosystem emerges as a process over time. It clearly depicts the goal of corporations to create long-term opportunities by interacting with the startup ecosystem. Further, it identifies several elements of the corporate legacy which inhibit corporations from creating those long-term opportunities. Nevertheless, external actors and mentors help create interactions with the startup ecosystem. Further, our empirical framework describes learning from startups as a process which challenges the corporate legacy and finally aids the corporation to consider new opportunities. By doing so, our empirical framework describes the process of engaging with the startup ecosystem to create new opportunities over time.

Discussion of the synthesis

In our empirical data we find that corporations are at aware that their environment is changing very fast, driving them out of the market if they do not change their way of doing business. Their aim in the engagement with the startup ecosystem is to create new opportunities that do not directly build on the core business, for example by considering niches that might grow into future markets. In terms of theoretical concepts, we thus identified that corporations use the engagement with the startup ecosystem with the goal to create disruptive innovations themselves. Nevertheless, our empirical framework reveals that there is a "corporate wall" which inhibits the implementation of this objective. The corporate legacy leads corporations to focus on short-term goals and to pursue opportunities close to their core business, which is not addressed by the theoretical framework. Our empirical framework reveals the strong influence that the corporate past, structures, ways of thinking, and focus on current customers have on the interaction with startups. We identify that the dominant logic and bounded rationality inhibit corporations in their goal to create disruptive

innovations. Our empirical findings reveal that employing open innovation by engaging with the startup ecosystem is not enough to create disruptive innovations. Firms need to become aware of their "corporate wall" and consciously invest resources to decrease it. Specifically, corporations need to be able to learn from the interaction with startups, for example to accept new ideas and processes. This allows them to create opportunities that are far from their core business and might develop into disruptive innovations in the long-term. Our research extends the existing literature by building an empirical framework that clearly links the engagement with the startup ecosystem to creating new opportunities far from the core business which could turn into disruptive innovations in the future. This is a process that takes time and effort, as depicted by the three chronological timeframes in the empirical framework and the "corporate wall" that initially inhibits fruitful collaborations.

7.2. Key Findings

In the following section we discuss the key findings that extend the existing literature.

The first finding of our research discusses inhibitors of disruptive innovation. We find that the engagement with startups leads to new opportunities but not necessarily to disruptive innovations. The reason is that the corporate legacy forms a "corporate wall" that inhibits corporations from focusing on disruptive innovations. This "corporate wall" prompts corporations to focus on short-term objectives and the core business instead of on the creation of new opportunities in the long-term. What causes the "corporate wall" are corporate legacies that have been built over long periods of time as well as a bounded rationality by corporate employees. Our findings indicate that corporations find it difficult to change given the existing corporate structures and incentive systems for employees. The corporate culture which also influences the way of thinking leads the corporation to focus on its core business and current customers. Our findings suggest that the "corporate wall" is a determinant for the innovative capabilities of a firm.

Finding 1: The "corporate wall" inhibits corporations to focus on disruptive innovations in their engagement with the startup ecosystem.

Our second finding relates to how corporations can decrease or even eliminate the "corporate wall". We found that learning processes are extremely important for decreasing the "corporate wall" since employees need to acquire new skills and competencies. Through the engagement with startups corporate employees learn about different ways of working which allows them to break free from paradigms and the traditional way of doing things in the company. Through this interaction, they get exposed to new ideas, different mentalities and approaches to innovation. They learn to open their minds and get new perspectives of the market. For example, they can learn how to address parts of the market that their corporations are not currently serving. They also learn about agility and faster approaches used by startups.

Finding 2: The "corporate wall" can be decreased through learning processes.

The third finding deals with the creation of opportunities with the startup ecosystem. Through the engagement with the startup ecosystem firms are exposed to a variety of new ideas, technologies, and ways of doing business. Through startup programs they can quickly scan a variety of recent developments and consider what might be relevant for their business. Internal innovation efforts are often restricted to the core business, current customers, or closely related areas that the corporation has knowledge about. External innovation efforts, on the other hand, take a different angle on the market and might focus on niches or developments that are either unknown or deemed not relevant to the corporation. Those are often characterized by a long-term focus that might change the market dramatically in the future. By engaging with startups, corporations are exposed to these developments and are able to create new opportunities that are not closely linked to their core business. Because the interactions between corporations and startups in our research have not been going on for more than two years we cannot evaluate their long-term impact on the whole market. Therefore, it is not possible to state at this time whether the interaction leads to the creation of disruptive innovation. Nevertheless, we clearly found that startups bring in new opportunities that focus on different perspectives and developments far from the corporation's core business. Through the work with startups corporations follow opportunities that have the potential to become disruptive innovations. However, as noted in finding 1 and 2, creating those opportunities takes time and effort.

Finding 3: The engagement with the startup ecosystem creates opportunities that have the potential to become disruptive in the future.

The last finding discusses the notion of time in disruptive innovation. We noted that we cannot find evidence for a direct link between engaging with the startup ecosystem and creating disruptive innovation. This does however not mean that such a link does not exist, nor does it mean that we could not discover disruptive innovation due to flaws in our research. Rather, we emphasize that disruptive innovation is a process that takes a long time to unfold and become visible. Markets do not change from one day to the other. Incumbents are not suddenly pushed out of the market within months. This is a very slow process, which also makes it dangerously easy to ignore. If disruptive innovations were easy to detect, they would not be disruptive as all firms would invest in them early on. While the existing literature notes that disruption is a lengthy process (e.g. Christensen, 1997), it does not make explicit that time acts as an exogenous force in this lengthy process. Regarding time as an exogenous force means that it is a factor that lies outside of the control of the corporation. One cannot foresee nor control the consequences of disruptive innovation in the future, indicating that it is difficult to create forward-linkages of how industries are impacted by disruptive innovation.

Finding 4: *Time acts as an exogenous force in disruptive innovation.*

7.3. Answering the Research Question

The theoretical foundations from the literature as well as the empirical framework based on the data we collected help us to answer our research question. To recapitulate, our research question is as follows: *How do corporations engage with the startup ecosystem to enable disruptive innovation?*

We find that corporations create startup programs to enable disruptive innovation. They are aware that their industries are changing and see these startup programs as a way to gain access to new sources of ideas and insights into market developments that they cannot explore themselves. The startup programs also allow them to test new ideas and develop new products and services. The aim of this interaction is to create opportunities that fall outside of the scope of the core business

and represent growth objectives related to potential new business. Our empirical model depicts the process of how corporations engage with the startup ecosystem through startup programs. Even though corporations are aiming to create new opportunities far from their core business, they are limited by their corporate legacy. The corporate legacy, or the "corporate wall" as we denote it, consists of corporate structures, processes, ways of thinking, bounded rationality, and a focus on short-term goals. These factors lead corporations to focus on their core business instead of on potentially disruptive innovations. Nevertheless, the interaction with the startup ecosystem allows corporations to learn and evolve, which helps them to decrease their "corporate wall" and consider long-term opportunities far from their core business. These opportunities have the potential to develop into disruptive innovations in the future. We conclude that startup programs are not a guarantee for disruptive innovation. However, they open employees' minds and challenge corporate structures and processes which is necessary for corporations that aim to be disruptive.

7.4. Limitations of the Research

Methodological limitations

The methodological limitations of our research stem from two sources, namely sampling and data analysis. Regarding sampling, it's important to mention that corporate startup programs are still a relatively new phenomenon in Denmark and Europe in general. Consequently, there is a limited amount of suitable case companies available. It is difficult to get access to the few relevant existing players and once contacted, not every potentially valuable case company is interested in participating. Time constraints and confidentiality are the reasons why companies often decline. Furthermore, purposive sampling cannot be considered to be statistically representative of the total population. The logic of selecting cases for a purposive sample are dependent on our research question and objectives (Saunders et al., 2016). Given the specific context of our research and findings, we cannot generalize our insights and apply them to other research settings, suggesting there is limited external validity (Saunders et al., 2016). We also note that we have a small sample size of three case companies. Further we note that disruptive innovation is a complex phenomenon that takes time and we are limited by the thesis period of six months to conduct the research.

Regarding data analysis, we need to acknowledge that as human beings, a bias is inherent to our way of thinking. Since we, as researchers, are also subject to bounded rationality a risk of bias exists, limiting the reliability of our research. Our preconceptions might unconsciously shape how we construct theory using the Grounded Theory methodology. Existing concepts might subconsciously influence the coding process, even though our purpose is to include only ideas instead of concepts in our theory building process.

Research limitations

Our research has three major limitations that need to be considered with respect to the findings. First, we entirely take the perspective of the corporation. This allows us to find enablers of new opportunities, potentially leading to disruptive innovation, as well as the "corporate wall" that inhibits corporations to pursue opportunities far from the core business. Nevertheless, we do not consider the perspective of the startup. We do not analyze which factors enable or inhibit the creation of disruptive innovation with corporations from the startups' perspective, which might lead to a different picture. Secondly, the theory of disruptive innovation suggests that disruptive innovation should be nourished in a separate business unit (Christensen, Johnson & Rigby, 2002). Our research considers interactions between startups and corporations that are integrated in the main corporation. Possibly creating startup programs in a separate business unit would create less issues involving the "corporate wall", as employees in a separate business unit might be less focused on the core business. Lastly, in discussing the interaction between startups and corporations we limit ourselves to structured startup programs, namely accelerator programs and a co-working space. We do not investigate unstructured interactions between startups and corporations, which could potentially have different enablers or inhibitors for disruptive innovation.

7.5. Implications for Academia and Industry

Our research adds on to the existing literature regarding disruptive innovation, external idea sourcing from startups, and learning. We identify the engagement with startup ecosystems as a valuable possibility for corporations to create opportunities that have the potential to be disruptive. We also extended the existing literature by emphasizing the relevance of the corporate legacy when

engaging with startups for creating new opportunities and how learning from startups can be employed to overcome this issue. Further, we identify time as an exogenous force in disruptive innovation, which has not been addressed by existing literature. Our research builds a novel framework that describes the dynamics in the engagement between corporations and the startup ecosystem for creating new opportunities. This builds a foundation for future research, which can extend our empirical framework. It would be highly interesting to follow up on the startup programs we analyzed as they have only been in place for a short period of time (below two years) and their long-term outcomes could not be evaluated. Further, future research could address our research from the startup angle, investigating what enablers and inhibitors for disruptive innovation can be found in the startup ecosystem. Lastly, it would be interesting to study if our empirical framework also applies to 1) startup programs that are implemented in a separate business unit; 2) engagements with the startup ecosystem that are more unstructured than the startup programs we considered.

Our study also has important implications for the industry. First, our findings indicate that the engagement with startups cannot be used as a "quick fix" to enable disruptive innovation. The reason is that it requires considerable time and effort from the corporation as well as a long-term commitment to learn from the startup ecosystem. Secondly, our research indicates that engaging with the startup ecosystem enables corporations to explore unknown territories, new developments, new technologies and new ideas. This in turn can lead to commercial opportunities between the startup ecosystem and the corporation, potentially leading to disruptive innovation. Thirdly, the empirical framework we developed can be used by corporations that operate in stable or changing industries. As a first step, corporations can assess their current state and evaluate in which timeframe they are located. Once the timeframe is known, corporations can take specific actions that are needed to move forward, for example by engaging with the startup ecosystem or by challenging their corporate legacy.

8. Conclusion

This study investigated the corporate-startup engagement to enable disruptive innovation. Specifically, we examined corporate startup programs, a phenomenon that became increasingly popular during the past years. We anticipated that rather than helping startups, as promoted by many corporations, the goal of these startup programs is to avoid disruption by new entrants in times of a changing environment. Instead, corporations aim to be the disrupter themselves. To investigate the engagement between corporations and the startup ecosystem we used Grounded Theory and a case study of three companies. This allowed us to map the key features and dynamics, resulting in an empirically grounded model.

Our study confirms that corporations see the engagement with startups as an opportunity to acquire new ideas and create new opportunities that are not closely linked to their core business and could potentially develop into disruptive innovations in the future. In doing so, our study extends the existing body of literature which suggests that the engagement with startups might enable corporations to create disruptive innovations but does not provide empirical evidence. We built a novel framework based on empirical findings that maps how the engagement between corporations and the startup ecosystem evolves in three chronological timeframes. We elaborate on inhibitors as well as enablers of creating disruptive innovation with the startup ecosystem throughout the three chronological timeframes. We identified the corporate legacy, or "corporate wall" as we denote it, as a key factor limiting corporations in pursuing opportunities far from their core business. Enablers are learning processes that change a corporation's perspective on markets and opportunities. To our knowledge, this research which clearly links the objective of creating disruptive innovations to the engagement with the startup ecosystem as well as elaborates on inhibitors and enablers is the first of its kind.

Further, our study can be used as a point of reference for corporations that aim to engage with startups for developing disruptive innovations. They can assess in which timeframe of the empirical framework they are located and derive the necessary next steps to evolve in their interactions with startups.

Nevertheless, we also emphasize that disruptive innovation is a phenomenon that is difficult to detect and takes a long time to unfold. Due to the short time period of this study and the fact that corporate startup programs are rather recent, this study could not find evidence that the collaboration with startups leads to disruptive innovation. However, we could observe and lay out the foundations for a corporate-startup engagement which creates opportunities that are not closely linked to the core business and could potentially develop into disruptive innovations. For future research it would be especially interesting to evaluate the long-term outcomes of the engagement between corporations and the startup ecosystem.

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Barraza, H. (2018, April 10). Interview Head of Open Innovation, Universities and Consortia Arla Foods.

Halling, P. (2018, April 9). Interview Project Manager E.ON.

Juhler, M. (2018, April 20). Interview Head of Innovation Tryg.

Rasmussen, C. (2018, April 10). Interview Business Developer and Mentor E.ON.

Reppening, O. (2018, April 18). Interview Business Accelerator Accelerace.

van Hauen, L. (2018, March 27). Interview Chief Innovation Officer E.ON.

Appendix A: List of Reviewed Literature

Number	Author, Year, Name (spot references in bold)
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1	for Innovation
2	Nambisan, S., & Sawhney, M. (2007). A buyer's guide to the innovation bazaar.
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3	and Coordination in Collaborative Search
	Kohler, T. (2016b). Corporate accelerators: Building bridges between corporations and
4	startups.
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5	Innovation
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7	International Strategic Alliances.
	Teece, D. J. (1992). Competition, cooperation, and innovation: Organizational arrangements
8	for regimes of rapid technological progress.
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9	Assets Via Interfirm Cooperation.
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14	technological innovation: Insights based upon strategy type.
15	Gilbert, C. (2003). The Disruption Opportunity.
16	Christensen, C. M. (2006). The Ongoing Process of Building a Theory of Disruption.

17	Bass, M. J., & Christensen, C. M. (2002). The future of the microprocessor business.
18	Yu, D., & Hang, C. C. (2010). A Reflective Review of Disruptive Innovation Theory
19	Rao, B. C. (2013). How disruptive is frugal?
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21	Immelt, J. R., Govindarajan, V., & Trimble, C. (2009). How GE Is Disrupting Itself.
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22	Sustaining Successful Growth.
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24	Firms to Fail.
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25	Innovations Ex Post in Making Ex Ante Predictions.
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26	Markets in New Product Ideation.
	Katila, R.; Ahuja, G. (2002). Something Old, Something New: A Longitudinal Study of
27	Search Behavior and New Product Introduction.
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29	Chesbrough, H. W. (2003). The Era of open innovation
	Chesbrough, H. W., & Crowther, A. K. (2006). Beyond high tech: early adopters of open
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31	Problem.
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	Raisch, S., Birkinshaw, J., Probst, G., & Tushman, M. L. (2009). Organizational
38	Ambidexterity: Balancing Exploitation and Exploration for Sustained Performance.
39	Schilling, M. A. (2013a). Chapter 2: Sources of Innovation.
	Kuratko, D. F., Covin, J. G., & Hornsby, J. S. (2014). Why implementing corporate innovation
40	is so difficult.
41	Inauen, M., & Schenker-Wicki, A. (2012). Fostering radical innovations with open innovation.

Appendix B: Interview Guide

Number	Topic	Key issues
1	Context	Role and tasks of interviewee, daily tasks, industry environment
2	Goals	Rationale for searching external ideas, goals of the startup program, customers addressed
3	Structure	Set-up of the program, location, logistics, timeframe, selection
4	Processes	How do corporate employees work with startups? Who is involved?
5	Resources	Corporate resources allocated, e.g. people, funding, access to corporate customers

Appendix C: Interview Overview

Date of Interview	Type of Interview	Contact Name	Position	Company
27.03.2018	In person	Lars van Hauen	Chief Innovation Officer	E.ON
09.04.2018	In person	Peter Halling	Project Manager (external)	E.ON
		Christoffer	Business Developer and	
10.04.2018	In person	Rasmussen	Mentor	E.ON
			Head of Open Innovation,	
10.04.2018	In person	Harry Barraza	Universities and Consortia	Arla Foods
		Oliver		
18.04.2018	Telephone	Repenning	Business Accelerator	Accelerace
			Head of Innovation &	
			Founder of Trygs corporate	
20.04.2018	In person	Michael Juhler	co-work space The Camp	Tryg Insurance

Appendix D: Transcripts of the Interviews

1) Interview with Lars van Hauen, 27.03.2018

Person	Min.	Interview Question/Answer
GF		Can you tell us more about your role at E.ON?
LvH	00:18	I am the Chief Innovation Officer, but that's only part of what I do. I used to be CFO in Denmark working hard on the transition of E.ON Denmark going from a solely heating producing company to a more modern energy company with a lot of other aims and with sustainability as very important. Now my role is to drive all business modelling, new products, innovation programs as the accelerator, try to do innovation as a partnership on various levels, let's say startups but also with very much more mature companies. Besides that, I am the head of the heating business, so I also have blue collar workers under me doing the practical stuff. The last leg is where I try to develop what we call customer solution. That is a headline for the modern energy company where we go to, more customer centric solutions and partnerships with customer instead of just being a commodity producing energy supplier.
GF		When you say innovation programs, do you have more than the accelerateCPH?
LvH	01:53	Not as a program but we do a lot of other innovation stuff. We also do sprints, and a lot of other things within the business developments.
GF		That's really interesting. I thought it was just the accelerateCPH, but that's basically what we are focusing on. Do you see any threats of new ideas or products in the market specifically in energy market?
LvH	02:22	I think the energy market is changing very very rapidly right now and has been an industry that has not changed that much actually. It has been very slow and big plans and stuff like that. Now things are moving much more faster and that's definitely due to the green transition that makes it very very hard to be in the old energy world. You need to change, you need to look at it in another way. Energy is becoming cheaper and cheaper and is becoming more and more renewable so it's actually another board game to be in energy. You have to broaden your market view quite a lot.
LL		How do you then address this change?
LvH	03:20	Well, we try to redefine ourselves as an energy company focusing very much on sustainability and focusing very much on new technologies. Trying to see ourselves as a service company instead of a commodity producing company. All these kinds of things are in game so to speak. And then we are also moving into other areas where we were not before. Our e-mobility business is one of the easiest understandable examples I can say where 10 years ago no energy company would have gone into e-mobility but now we actually see that as our main. People have a tendency to think of us in e-mobility as oh they just want to sell some power. But the business model is not within selling power. The BM is within being able to make the infrastructure in the right way and make the right products as a telco or something like that. So, it's really not about the power. That's just a barrier in the end.
LL		How do you attract these new ideas or changing business models as you said?

LvH	04:31	We try to get new playmates so to speak, on various levels. We try to change ourselves. I see myself as a greenhouse for innovation. My biggest task is not only come up with good ideas by myself, but I actually need to make all employees of EON DK to come up with good ideas because that's the kind of agility we need right now. Being able to see new markets, see new products, being able to introduce new products very rapidly and change some, close some, come up with new one. That's a whole new way of thinking and doing business. If you can't change on all the levels it will be very hard actually. I mean the accelerate program is not a quick fix for that. Not at all. It has to click in to what we are doing on our part. And I think that's a part where we are a little different from some of the other incubators that we actually are very hard on we want to be involved with it, we want to do partnerships with the startups. We do not invest in any startups where we can't see ourselves having an active role, either in the business or in the market or something like that. And that's quite different from the other (incubators).
GF		So basically, the goal of the accelerateCPH is looking for startups that you can collaborate with later on?
LvH	06:02	It is, by making new business for EON Denmark. So, it's not saying oh we have invested in some startups. That in itself is very uninteresting for us, you need to build new markets and obviously you can have a long-term view or short-term view of what you are doing, and it has a tendency of some startups to have a more longer view, but still is the same process. If we can't see a common business, we would not go into it. We would not select them, and we would not go into it. But of course, we need to open our minds and see if we can find new barriers, new markets and the accelerator is a good way of doing that. Actually, open your mind for new markets. So, it's a way of testing new markets. So, for instance right now we are working together with one of the startups that is working with waste handling, which is an area where we are not at all involved in at the moment. But we see that as a possibility of clinging to the markets we are in and actually supporting our current business.
GF		Ok that's interesting so more like also complementary (services?)
LvH	07:18	So, if you go to a segment, hotels for instance and sell them solar power and heating solutions so whatever you sell them then actually being able to provide them with a waste solution with a sustainable view is actually, eh, makes good sense. So that's a very good example of going into something that is new but can actually fit into the old.
GF		It complements the whole package
LL		You said it's quite important for you to actually be involved with the startups, how does that look like in practice?
LvH	07:53	We mean that very much. We go into it. Sometimes we sit in the board, sometimes we do some active role, but we actually are striving to do some common business. In general, we need people from EON to work with the startups on common customers.
LL		What kind of people is it then that work together with startups?
LvH	08:16	It depends solely on the startup and what's needed. It differs a lot. Sometimes it's finance people, sometimes it's legal, sometimes it's sales people, sometimes marketing. It could be anything really.
GF		Are you usually bringing them here and working here?
LvH	08:37	Yes, when we do the accelerate program we try very hard to get them in here and we are quite hard on that. We want them to be here because we want them to work together with our employees. And we want our employees to work together with them and that means they have to be here. Obviously, we can't have them all here sitting forever. They do when it's over get out, but they come here a lot actually. We try to involve ourselves very much. And we try to find some common business.

GF		And the EON employees that work with the startups are basically the needs from the startup, like what they need?
LvH	09:17	Or the common goal. Sometimes we are pushing them as well. Saying hey, we need to go into this, look what we can do there. Refarme is a good example of that. Where they are doing their business, which is totally out of scope of what we are doing but they are on the roof of big buildings where you can do a lot of climate things, you can do a lot of energy and technical installations and stuff like that. With them we are working on new markets actually and looking into new projects where we can actually combine the Refarme core with some more energy saving.
LL		How do you choose then If it's not your core business? How do you choose which ones might be interesting?
LvH	10:00	You have to guess a little. See if you can see ah maybe this could actually be something. Obviously, we will fail sometimes. That's how it is. So, we are guessing. It's very much a stomach a feeling. But we always have you can say We are defining sustainability as very important so as long as it has a sustainability kind of product then the possibility of actually clicking in our portfolio is pretty high. But it is a guess, you never know. That's a part of working with startups, it's not a very defined process. It's another way of working. It goes up and down every week. Something is looking very good one week and the next week everyone is like "oh no". But it's a good learning for us and a way to understand new markets.
LL		Who is making the decisions which kind of startups will continue with you?
LvH	11:19	It is often me together with my colleagues in the management. But I am the one saying I think we should do this. We have a very good common understanding of why we are doing this. The scope of the program, the scope of being very much to innovation is very clear defined and it's really not a hard process. And we are all very aware, we see the accelerate program as some kind of funnel for doing new businesses. And some will fail.
GF		If one of them works out well, you continue to work with this startup indefinitely?
LvH	12:08	Yes. Actually, we have a very clear strategy that we do not have an exit strategy. And that is actually with all we do in EON Denmark. We do with purpose do not define an exit strategy because we do not want to be compared with seed investors or business investors that are very much going into with some money and with a clear goal of getting out again. We are not. We don't see value as stock value, we see value as bottom line. Totally old school, you know more revenues and cost. It's not a stock valuation or something like that. And we are very clear on that and that's how we do it. So, if startups say, "oh we want to do this and within 2-3 years we a way to exit and we can make so much money" we say, "good luck with that". It's not my business. I am really not interested.
GF		So, you are interested in the long-term?
LvH	13:17	I am only interested in business who want to make real money. I am not interested in venturing as itself. That's a whole other department of EON who does that. That's not my game. And there's a lot of money for that. They (startups) don't need EON money for that.
LL		How independent do the startups stay in the long term?
LvH	13:43	Oh, they do. We never take more than 50%. We will not ever do that. We actually aim to have 20-25% in equity. Because we want them to be independent and work by themselves. Because otherwise we could just do it ourselves. It makes no sense of investing and taking over as it is right now when it's new markets.
GF		But what if it's already an established market? Is it then different?
LvH	14:25	Then we would not go into it. If we feel we already have it, then we would not go into it. There's no point of making a collaboration. If it's around cannibalism, it's another process. Then it's a business acquisition and not an innovation. It has nothing to do with innovation. So, it's a totally other ball game.

GF		So basically, just for my understanding the accelerateCPH is more about finding new markets and not improving your existing ones?
LvH	15:11	Yes, but it may do both actually. Preferably do both.
LL		Why do you think you need external solutions for seeing new opportunities or new markets?
LvH	15:27	Because we are only 70 people here, so we don't have the scale and muscle to actually look into all the stuff that is going on right now. We have a very defined strategy that we want to evolve through partnerships on all levels. So, we actually see it as much much stronger going into partnerships and finding new playmates who can do this. It's way more interesting than doing it ourselves. I think it's very old-school saying we will do everything ourselves. Some are still doing it, but we won't.
LL		And you said it's very much in the strategy to develop partnerships. Is that coming from top management or who decides this?
LvH	16:21	Yes, that's the strategy we decided years ago on how to evolve. We started in our bio and gas business where we have been building and constructing very big plants in DK all in partnerships where EON has a 50% share. It's often a group of farmers or something like that on the other end. So, we have actually developed that model over the years and the same in e-mobility business where we have been working with DriveNow, Wemobility, Sixt, hotels, Qpark and stuff like that. A lot of stakeholders within that field instead of doing it ourselves. We try to find partners to open new markets. When we talk about gas stations, we have a 50/50 split with OK. OK sells gas and gasoline and we have made a partnership with them. So actually, all of our new areas have some kind of defined partnerships. Some in new companies and some much more structured. That's really not the point of how we do it. The point is that we look for people to work closely together with. The idea is that instead of building our competences every time we go into a new market, we can actually rest on the competences we have, maybe expand them a little bit, but taking new from your partners.
LL		Would you say then that you are also learning from the partners? What are you learning?
LvH	18:04	Oh, most definitely. We learn a lot.
GF		So, it's not just them learning from you, but you also learning from them?
LvH	18:11	If it was like that then it's not a partnership. Obviously, it's easier for us to attract partners who see EON as a very big player with a very big customer base worldwide. We try to use that.
GF		But for example, when you say that you also acquire some competences from the startups, can you give us an example of when you acquire competences or things that you learn?
LvH	18:48	We learn a lot about agility. Another way of looking at the market, a fresher way of looking at the market. Refarme for instance which is very much about how you actually present your idea. So, it's not really just about doing greenhouses and selling some crops, but this is also about making some kind of playground around your company. That's actually a new part of the energy business, that we are seen as important, so we learn from them and their connections. On our biogas plants have a lot of businesses that have surprised us. We are used to that no one is really interested or cares about what an energy company does, but it has changed a lot. So, we have actually pressure from the outside. Being able to communicate and actually spread the word and that's a new way of doing business. So that's something we learn from them.
GF		Before we talked about top management is involved, so they set the strategy of doing partnerships?
LvH	20:01	That's been part of the strategy for many years, we want to expand, we want to be greener, and then at some point we realized now we need to do something more drastical around innovation in energy, because that is very very hard to drive within an established company. And then we decided we will make the role for me, work much harder on it, we will have

		some dedicated resources for it, and we will try to run this program, to see if we can make some marketing around what we're doing and attract some new companies.
GF		Would you say that you have more freedom, as supposed to E.ON, like the big corporation?
LvH	20:54	I think we have a little bit more flexibility. Definitely we have some flexibility of being a very small unit and that means that we can do decisions and actually implement them extremely quick compared to our German colleagues, it's very very hard for them, it always takes 1.5 years when they talk about it. I mean, we have just been doing some new innovation methods this year, they have been talking about it for a year and we made the decision about it in 3 weeks and started it and that's solely because we are so small, it's very much easier.
GF		So, you have autonomy but also access to the corporate resources?
LvH	21:41	Yes, we do. And we also try to put what we do into the bigger area as well. Recently we have been working a lot on putting our resources within e-mobility into the whole E.ON group and been quite successful with that as well. So of course, we see ourselves as a place where a new idea can evolve in the small and then it has to have a bigger view as well. Of course, we see the success as well, if we can see something that we can scale up to whole E.ON and that's what we are looking for.
GF		Why is it more difficult to implement in Germany?
LvH	22:30	They are 30.000 employees, so they are very big, so you have structures, and a legacy, you have so many people constructed around building bigger plans, lasting for 50-100 years, so it's a whole other game. So, you need new competences, you need new ways of thinking, new structures, new bureaucracy.
GF		You mentioned before that the energy industry didn't change much in the past but now it's changing a lot. Why?
LvH	23:10	Now the market is changing very very fast. I think it's the need for climate change. When working in energy, it's very much related to the government and to regulation and you need to relate to that in every way.
LL		How come you are changing your focus from mostly supplying energy to supplying service solutions?
LvH	23:47	Because the profit of only producing energy will diminish and vanish. We also do retail selling of our power and gas, and the profit is extremely small. The margins are so incredibly small, and it will decrease further. So, it's really not a business, you need to put something up and look at that as you cooperate. So, the power and the gas is just the barrier to going in.
LL		Going back to the program, how much freedom and structure is there in getting startups in and working with them?
LvH	24:39	There is quite a lot of freedom. We have made a structure where do a selection once a year and work with them, and work with them afterwards as well. We have a very loose defined goal for it and it's very loosely defined what to take in. We spend a lot of time screening for startups and we do that all year around, it's not only when we call for applicants. All year around we try to go on conferences and make our name well-known on the market and in the startup environment, that is quite important I think. And then we also take startups in outside the program. But we try to follow the schedule we have made, once a year, and we have a precise way of doing it. The success of the program is very much up to the startup itself because it's always different needs they have. If they are open and really want to share and discuss what's really the problem here. And we often have it that the startups are coming in, saying these are our main concerns, and after talking to them for a couple of weeks you figure out 'oh that's really not your biggest concern or problem, it's over here, and we can work with it'. And then of course they are different maturity levels, so they have different needs. We put a mentor on, we have one dedicated employee for each startup and then we have a

		program leader who runs all the logistics around it and then we try to listen and figure out what is the best way of doing it here. It doesn't make sense to discuss financing for a long time if that is not a problem, but it can be the biggest problem and then we spend a lot of time on it.
LL		Does one maturity level work better than the other?
LvH	27:05	No, I don't think so. Our aim of doing collaborations and doing business with the startups tends to make us look for a little bit more mature startups. It's not the one who has a good idea and has been working on it for 2 months, that's probably too early to go into that kind of debate, so it's more someone who has been working for a year / 1.5 years, due to our needs of doing business with them. That was not something that was decided, it was more something that we learned, to go for more mature companies – mature in a startup way, they often haven't sold anything. But I don't think that the maturity level in itself is interesting. When we talk about startups, it's not about technology, it about people. It's about figuring out, do these people really have the energy, or the ambition, or the resources to actually do that.
LL		How do you figure that out?
LvH	28:31	The only way you can do that is by talking to people and do that a lot. We do some screenings before our pitch day and afterwards we also talk to them. So, when they are selected we have talked to them at least 4 or 5 times. You need to sit and see if you can work together. It's also important that the people who apply for our program understand what our aim is and how we work with them. Some think it's only about getting some money and a free seat, because a lot of programs are run like that, in reality we explain to them that is not how we do it here and if you are looking for that find somewhere else. Because then, you would just be annoyed that we want to actually interfere in your business and we do that.
GF		Do you expect the startups to share everything?
LvH	29:41	To some extent, yeah. If they want us to help them if you're not transparent about your business, you cannot be helped. And I think most startups know that. There are a few that are like that, but they very seldomly succeed because no one can help them, and no one can do business with them. So, you have to be transparent, you have to believe that your idea is that good and your own resources is that good that no one can take away your idea. It's really not about the idea, it's about the implementation, making it work, that's the hard part. And that is a surprise to a lot of people because they think it's the idea that's the core, the value, and it's really not, it's the implementation.
GF		What about the other way around, are you as E.ON completely transparent?
LvH	31:06	Yes, we have a mutual NDA. So, if they want to look into our business and see if they can work with our customers we are open to that as well.
GF		Can they test a product with your customers?
LvH	31:22	Yes. We are currently doing that in our accelerator program. We are testing some products on our heating.
GF		Do your customers know?

LvH	31:34	Yes, it's completely transparent. You rarely make good business of cheating. If you're only
2,11	01.0.	in it for making money, you should look into porn, that's where the big money is. But that is
		a very poor ambition, only making money. It's very good to have that ambition, making
		money, on top of it.
LL		How do you choose the dedicated mentor for each startup and how do they work on a daily basis?
LvH	32:40	We try to screen what is the problem for the startup, what's their basic needs, and then we try to find someone who can actually complement that, but also someone who has a broader experience and go into a dialogue and be the mentor. And then we work with them, we're meeting 2 to 3 times a week as a standard and then we have different tasks we're working on, but it differs a lot what the need is. Some need some very precise guidance and some very precise help in a couple of weeks and then they're on their own. But we try to make a timetable for the 3-4 months, so when they come in they have a plan of what we do. And the coordinator is taking care of all the organizational aspects?
LvH	33:41	
LVII	33.41	Yes, that's more the logistics. We also have some external speakers coming in, for instance one talking about funding in general. We try to provoke them a little with some externals as well, so it's a combination of E.ON employees and external advisers.
LL		How do you choose the external advisers?
LvH	34:06	We have defined the areas we will take and have some people we know we can take in. We have around 10 areas we have selected, management to funding, and then we look at the participants and decide which are relevant.
LL		Why did you choose to take external people for that?
LvH	34:34	Because I think we can teach them some, but we can also learn from externals, so it's a common process. Yea but the aim of the program is also to make E.ON agile and to work to some extent like a startup, so that's a common thing. And some of the lecturing is actually open to every employee, and some is more closed.
GF		Do you think in Germany the accelerator has the same purpose?
LvH	35:14	No, in Germany it's a department located outside of E.ON in their own building, so it's dedicated people working with the program, selecting and nurturing the startups. That's the more traditional way of doing it.
GF		So here it's more about all employees getting involved?
LvH	35:30	Yes, it's part of our innovation strategy.
GF		What would happen if you grow more?
LvH	35:56	Actually, I think that you can be able to do this on a much bigger scale then we are, up to a couple of thousands of employees. It's very much in the culture, and you need to put that in. I don't buy the argument that you can't do new culture if you're a lot of people, it's still people.
LL		Is there any way you can measure the success of integrating it so much here compared to in Germany?
LvH	36:34	Well, up to now the success of actually doing collaborations with the startups has been much bigger in Denmark, obviously, and that's where we measure success, also when we look at all our programs, it's very rarely actually that it is fruitful afterwards. And that's where we have been very successful. What we haven't seen yet is the big money coming out of it and by the end of the day that is really the goal.
LL		When can you expect that?
LvH	37:08	We should preferably have some money coming out of the program within a year. A year or two. That's the goal. So, We're pretty ambitious on that.

GF		When did you start here in Copenhagen?
LvH	37:37	This is our second batch, we're currently doing that. And we're having a demo day for summer. But when we started we actually thought that we should be doing two batches a year, but we realized that that was way too much if you actually really want to work with the people you can only do it once a year. Cause otherwise you will end like the others, you will just end up having a department doing that, totally disconnected from everything else that's going on, and that's really not the aim. So, we rather do it slow and actually do some fruitful collaboration instead. But let's see. We will definitely not do this forever. I don't know when, but at some point we will probably have done it so many times that it is not fruitful anymore and we will figure out another way of doing it. We have already changed a little bit for this year and we will definitely change a lot next year.
LL		What is it, for example?
LvH	39:03	I think we will do some partnering with other corporations around the program, see if we can get something out of that. And maybe see if we can make a specific selection within markets or areas, I don't know yet. You need to change it a little. But also, there is a lot of competing programs, so at one point I think the relevance of doing these kinds of programs will totally vanish and we will have to do it in another way.
GF		Why did you choose to do it here, and not hire for example Rainmaking?
LvH	39:56	Then you would never ever get the kind of collaboration. I don't think if we were doing it with rainmaking the possibilities of actually doing a partnership afterwards is very very small.
GF		So, what did you mean when you said before that you would do partnerships with other corporations in the future?
LvH	40:13	Yeah but that would still be like here, but probably more selective. So, I could for instance partner with a hotel chain to do something about energy and about hotels.
LL		So, you would still be the main partner, but get some third parties in?
LvH	40:39	Yeah but we can also learn of other businesses. To think that you can only learn from startups is really – that is not how it is, you can learn from everyone if you actually are open and want to share.
LL		You mentioned before that you are taking shares form the startups, why did you decide to do that?
LvH	41:05	That's just a way of saying ok we are very much into your business, we want to work with you, we want to be a part of your business. But it's not a necessarily. If we can figure out a way of doing it without E.ON putting in equity, that's totally fine for me. It's not the goal. The goal is to work together. But it is a way of helping them move forward. And often their problem is that they need money. And we would never lend them money, we're not a bank.

2) Interview with Peter Halling, 09.04.2018

Person	Min.	Interview Question/Answer
GF		Can you tell us about your role at EON?
РН	0:09	I am the project manager for the accelerator in Copenhagen, which is the Danish arm of the agile accelerator program that originated in Germany and now is running in Germany, Sweden, The Netherlands, Czech Republic and Denmark.
GF		Can you elaborate on what being a PM entails?

PH	0:38	Basically I have been responsible for designing the (accelerator) program based on basics that originated in Germany. We made some alterations because it was an old concept a lot of things happened since they did that and because this organization (Danish) is a lot smaller than the German one they actually had a lot of people hired to do the accelerator program. The idea here was to make a setup that was much more involved with the everyday employees in the company. What they did in Germany was to make a new setup, in a new building and new office. Here the basic principle is that they should be part of the team and of the organization. So I have been setting it up, making the outline of how to do and executed all the plans as well So responsible for the project and all the events. You mentioned that it's a lot more integrated here, can you maybe explain why the decision was
		made?
РН	02:01	To make sure that it not only be a project that helping startups but also a project that would actually help the company, the organization here, to become better at being more full of ideas, innovative and learning to cooperate with startups. And there's a lot of difference in making something that is more like fostering startups, you are making a hub to help them, support them and actually work closely with them. That was the idea here to actually make business with the startups instead of just nurturing them somewhere arm length from the company, which is one of the basic obstacles that you have with accelerator programs. How do you actually work with your normal business, the core business.
LL		So what would you say is the biggest aim of the accelerator, the goal?
PH	03:04	It's to make business for E.ON and help startups getting a stronger business as well. One point down for that is to actually make a cooperation that will give the startup a sustainable business in the long run it makes a lot of sense and if we can E.ON actually having a new startup that is a lot more agile and sometimes have more innovative approaches to part of the market that would be a big advantage to E.ON as well.
РН		If you say parts of the markets is that a market that E.ON is already serving or is that new markets?
PH	03:51	It could be both. In the approach we have been very open. When you talk about startups there a fundamental assumption that startups are always better at disconnecting things and making new ideas but sometimes they are not. We have to be aware of that the business could be close to energy, it could be in food, or some complex structure in these industries and as a startup it can be a problem to actually make things to work because they don't know exactly how the rules are today. That makes it really hard for them to actually disconnect everything and make a disruption of that.
GF		Would you have any preference as to focusing on existing or new markets?
PH	04:47	It depends on the approach, the market size and that sort of thing. Fundamentally it's always about the customer. Helping a need of the customer and how big that customer base is. Then we can talk about it. Then it does not matter if it's already in the business or a new business, as long as it's something that connects somehow to how you already, now we are talking E.ON, how we are actually working the customers today. Because if it's very close to how you work with them today, it makes sense to maybe it's just another service offering for the same customer. That could be one approach. The other could be that you have a service offering that might be really interesting to how your service business is set up today to serving clients/customers that E.ON has. If it's very simple to just plug in another offering, then let's do it. One thing that E.ON is really good at is serving customers and billing. That's always something startups have a problem with. You might say they don't but when they start out it's always a big problem when you scale. If you have 10 customers It's okay, but as soon as you start scaling it gets messy.

LL		Why do you think that's the case?
PH	06:24	It's just a matter of scale. In a big business you have a setup where it's very simple because have a lot of customers so of course it's very easy. If you work with simple solutions I believe that you should start with simple solutions but as soon as you can see that you can scale make sure you get partner up with someone who can help you scale, that have the right things in order because that's where you collapse. Scaling that is hard. That is what they are good at, big business. They are very big, very good in these global businesses to actually serve a lot of customers. They are very rigid about how they do it. But if you can fit into that frame, partner up and they will help you quite a lot. You say if you can fit in with them, does that mean there are certain requirements for making it
		work to work together?
PH	07:30	Yes, of course there is. The first thing is that it's always very important that you have a sense of what There should be some chemistry that makes you work. And of course there should be some common interest in the customers you're looking at. Because if you are not on the same agenda you'll have problems long-term. After that you will basically find out how to make things work. If you have a business focus tight from the beginning.
GF		Before you talked about the customer base, would you also engage with startups that are focusing on a small customer base?
PH	08:17	It depends on the value. I am not scared of I mean if you have a small customer base it does not matter if they are valuable. If you can see that they are very strict and you can see that there are other customer bases similar to that, where you can basically move your approach to another customer segment and be very focused in the same way. But there needs to be In order to make business in an environment like this there needs to be some economy of scale building somehow.
PH		Can you explain how you see the environment in which E.on operates in? (e.g. competitive landscape, new entrants)
РН	09:20	There is competition of course but it's really hard to get into this field. If you look at electricity or heating, normally you are bound They are connections that are commoditized basically, we don't really care about it. It's hard to make people move as a customer from one to another provider. That's one thing. It's a tough market. Because all the players are really bit, the margins are really small. It's really hard to be a startup in that environment because you don't have that sort of money where you can run for a long time with a small margin. On the other hand there are niches that are interesting and that's why E.ON has built the accelerator, to find all those small niches. Where you can see that things might grow and it might be the future market.
GF		Do you see those small niches as a threat or more like an opportunity?
PH	10:42	Basically if companies like E.ON continue doing what they do, they'll die within 5-10 years. Because it's a scale game and the margins are very low, so it's a If things scale a bit down and systems are built at a certain level you have a problem. If there's a completely new approach on how you get your energy and you disconnect from the grid that all these big companies are living off, that would be a threat.
LL		Are the startups going into those new opportunities?
PH	11:30	Some are trying but every time they have this problem where they need a lot of capital to actually get there and get a market position. Usually what I have seen is that they make solutions that can plug into existing setups. And then they can sort of nurture from that and I don't know what will happen (Can't talk about an example)
LL		You're leading the project for the time period set, can you tell us a bit about the structure and what's happening during those month (during the accelerator program)?

PH	12:25	We take people in, before we take them in we look very much at who they are, the team, the concept they are working on, we want to make sure that there is a match with what we are doing here. There should be some people that can actually work with them. That's very important both for the startup and the company. The whole setup is based on that there is a connection, otherwise it won't work. And then we take them in and make a plan for the 3 months depending on the project. Typically it's something where we spend 1-2 weeks in the beginning, talking about different options on what we should focus on and then try to narrow it in so we have one aim, one target, that we work with for the period. This year we have some businesses that have already customers and are making money, so we are focusing on one thing that can actually really increase their business and where E.ON could be the customer, or E.ON's customers could be their customers. So using the salesforce and the backing of E.ON is part of this approach.
LL		What is the long-term perspective then?
РН	13:59	We have three different ways of exiting the program. One is just thank you it's been very interesting, which is not what we hope to do and until now it has been very different. We have made cooperations and invested in some of them as well. We expect that to happen this year as well – relationships that are long-lasting and as long as there is a business that you can meet yourself, you can gather around, it makes sense to work together. The sort of money that startups need is very small compared to what they (corporations) normally invest in projects. So that's a good thing. And sometimes it's actually a problem because it takes the same time to get involved in a small company as in a hundred million investments. It has to be strategically important that you go into this, to actually back up that you can spend so much time on it. It would be the same, all the deal work, all the lawyers, and stuff.
LL		You mentioned that you are not aiming for an exit strategy but rather at other long-lasting relationships?
PH	15:44	Yes, it's not a goodbye exit we want. When people leave the program we want a contract, some sort of contract. It can be a relationship, long-term relationship with E.ON. It could be another partner that we think they should work with where we can see that they actually have a lot of benefit from. Refarm last year, we helped them make some deals as well. So there is a deal with E.ON but there is also a deal with some other company.
PH		And E.ON is not afraid that some customers might be taken over?
PH	16:22	No, that's in the contract, an agreement that makes sure that E.ON has covered their back, but that's standard. Everybody would do that. There is like a way of sorting that.
GF		Can you tell us more about the selection process of the startups?
РН	16:52	That's always hard. Basically, we get a lot of applicants. It needs to be something that has We are very much into circular economy. So we focus that they should be within that area. And if they are not there, then they should at least have some sort of relationship with some of the existing business. That could be another way. And then we look at this year, we were eager that they should have a running business, they should have customers, they should make money. Learnings from last year was that we can make them learn the rest of activities. We can help them a lot more if they are already in business. Because then they have cracked the code, instead of spending a lot of time finding out what sort of business they should do we can actually help them scale the business and make it a success. It's much more interesting for both parties.
GF		So, you are basically targeting more mature startups?
PH	18:04	Yes, but only mature in a way – real startups are startups that have customers. Because if you don't have customers you only have an idea. And then from there it's a lot about looking at the potential and that means looking at the team, who is in the team, what are their capabilities, do we believe in them, do they have a track record, how do they actually approach it, and how is the business model, how strong is the BM, basically the combination of those two. And of course

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GF		business model is market size related, putting people into the right category, getting to the big (stage?). And then of course there is a lot of discussions. This year we had internal people looking at the companies as well and rating who they would like to work with from a personal perspective, and we had business agents coming in, looking at the companies, but also taking part in the interviews with the companies. So when we had selected, I don't know the exact number but I think it was around 20 that we had in the pool, we had interviews with all of them because the team is so important, so we wanted to make sure that we can believe in them, that they could actually make it. And then we made a system where we basically gave them points and in the end it was quite clear who was in for the pitch. Can you please explain us why the team is so important?
PH	20:15	It's all about execution. Execution power is basically what makes a success. Anybody can have an idea, anybody can build a business model, but only few can actually make it into a success.
LL		What does it need to bring it from the business model or the idea to a success?
PH	20:40	The right combination of people in the team, a lot of people see it this way, I think it's really important that there's one who's really focused on who's the customer, and how do we get to the customer. And who's actually willing to spend the whole of his life for a year to make it a success. If this person is not in the team we will have a big problem. And you need somebody who can actually make the product, it might not be the same, but I don't think the technician is very important. There's a lot of people talking about the techies, but I think as long as you have a very strong sales guy, a very strong product guy, product guys can always talk to technicians about how to do things right. But sometimes of course in this environment, we had this crazy gas project last year, nobody really understood what it was about in the beginning until we started talking to the techies and figured out what we could use it for — and then it was brilliant. And that's technology-driven more than anything else. But they have a strong sales guy as well.
		Can you also talk about the learning? What do they learn from you and what do you learn from them?
PH	22:18	The people we had in learn a lot about corporate structure and how a corporate works basically. And if you want to be in this sort of setting, I mean you need to learn a lot. So I think that's very good for them. This year, in both of the teams we have sitting here, there's one in both of them that has been in a corporate, so they already know how the game is, which makes it really easy for them to fit in and get the best out of the corporate structure. And the thing that the company here (E.ON) learns is a lot about agility. Being able to stay focused, stay at work until you actually solve things, and don't think about when you have to go to lunch, and just keep on working like that. Sometimes things get very corporate, people meet at 9 in the morning and leave at 5 in the afternoon and that's it. But in here we have a lot of people that are very passionate as well. And as a corporate there's another thing you can learn from a startup, which is that as a corporate you are very conscious about the organization you are in, so it means that when you work with problem solving you are keen on actually solving problems in the way that your manager would expect you to make the solution, which means that you are not very innovative because you always limit yourself and that's really funny when we are meeting the startups with the people here because they start putting it into the boxes and they shouldn't basically. We have a lot of good discussions about that because maybe it's more important if they try to follow the startup guys. But that starts working now, after 2 years we have a lot of followers at E.ON. And we have other projects as well, working with innovation. The accelerate program is part of the whole innovation approach. Of course it's also an alternative and a way of actually attracting talent. It's also about attracting investment, potential interesting targets for investment. There are other initiatives, we are doing sprints and a lot of other stuff that supports it.

PH		You mentioned that within the 3 months people from E.ON and the startups work together, how does that actually look like?
РН	22:47	It depends on the project. We try to find the right people. We have a mentor that is connected to them from day one, that is the connection, one that can benefit from working with the startup but also has the right connections inside E.ON, both in Denmark and globally to support the startup. And then if we find other people in the organization that can actually support, so it's like a marketing guy or a customer service guy that can help setting up the right structure for what we are working on. Or it could be – now we're working for 2 months and we're at a time where all the business models need to be put into Excel sheets, so we have started talking with the finance department because then they will start with crushing numbers and giving critiques on that.
LL		How do you initially choose the mentor?
PH	26:53	We look at the startup and say who could actually help them the best and where could we have a good relationship. So it's 2 things, it's about what sort of companies these people have but it's also about chemistry. We try to find a good match.
PH		How come you are doing this as an external and E.ON is not doing it themselves?
РН	27:25	Right from the beginning our idea was that we shouldn't use an internal because it's very good to have an external who could be objective and who could be critical on both sides. In practical, in everyday life it's a lot about that I'm the zero pole, I'm the one that everyone can talk to, without having any - , I mean I don't have to go to E.ON and say that the startup is having these - , we try to sort it out and I'm like the neutral part. That's a good thing. And the other thing is that I have a much broader contact base than E.ON has because I have a life in the startup ecosystem. And if I came as just E.ON that would be different. I use a lot of my contacts and I actually have 2 other companies, I'm involved in other startups as well. So it means I have a very broad connection. For all sorts of connections, the mentors we bring in and I mean we're very 1 to 1 with the startups, if they have a specific need I can go out and see if I can get somebody to help them. So I go back in my network and say could you please help them for a day or a couple of hours.
PH		What is the involvement of E.ON's top management with the accelerator?
РН	29:29	They have been involved right from the beginning. I said that if I should be involved, they needed to be involved. I've been involved in other accelerator programs and innovation in general, if you don't have the top management involved, you won't get any – because everybody is looking up to the top management, so if they don't do anything, you don't have to do anything. And if they say its important, I mean you push the whole organization. And they have been really good at that. The CEO has been pushing and the rest of the management has been supporting in their different arms of the organization. It's been an absolute pleasure working with them. But it's very important that you have talked this through if you're considering starting with an accelerator program, make sure to make this agreement right from the beginning (with top management).
LL		Are they also involved in any way in the daily, more operational life?
PH	30:57	PH: 30:57 Yes, they are in some – usually if we can see that we need for instance a push in sales I talk to the sales director and then he just either himself or asks somebody to help. That makes it a lot faster. It makes a difference, just having a project on the side to actually having it as a core, very close to your core business. It's a core activity in this house. And it is treated like it is.
LL		And that is different in a lot of the other accelerators?
PH LL	31:46	Yes, and a lot of those running right now, it's like something they do because it looks good. And do you think the successes are better here?

PH	31:54	Yes, it is. I don't know exactly how it goes but some of the deals that has been made already
		and we are invested in several companies and it looks really solid already now.
PH		How does E.ON measure the value of the accelerator?
PH	32:19	We have some fluffy goals but on the bottom line its about what kind of revenue comes back but we won't make that before next year. But the most important for E.ON has been to make the innovation effort and have an alternative way of approaching startups and actual () for targeting, for investments and stuff. And they have been very happy about what we have achieved.

3) Interview with Christoffer Rasmussen, 10.04.2018

Person	Min.	Interview Question/Answer
LL		Can you tell us a little bit about what your role here at E.ON is?
CR	01:59	My role is, basically I'm working with part strategy and part innovation and a bit with old jobs as well. So strategy for current business, innovation in the sense that it's everything that's outside our current business and I guess that's more or less it. On a day-to-day it would be project managing, deep dive analysis, stuff like that. I mean, I'm a fairly quantitative guy, due to my studies, so I also always get the task of looking at the financial part of it, that part of the project.
CR		When talking about projects, do you mean startup projects or internal E.ON projects?
CR	03:03	Both. I would say there is probably 2 internal projects and then 3 external projects, startup projects.
LL		And the startup projects do they all come from the accelerator program?
CR	03:20	They are all in a way linked to the startup program. Some of them, the connection came from the startup program but it was fairly quickly decided that ok this is not a good match for the startup program, maybe you are a bit further done the line or your needs are a bit more advanced than just having a place to sit and having some mentoring so some of it we decided ok let's just take it out of the startup program and then we can just see where we go from there without having the normal set of rules apply for the startup program. And then one of them is for the current startup program as well.
LL		How do you work together if it's not from the current startup program?
CR	04:20	Then they are set up as a company and we have an agreement that we have some in-kind hours we give them for parts of the company. So the amount of the hours that we put in we add some point we receive back in equity. And then we basically help them with anything that they cannot do themselves, but mostly it's regarding the BM and finance stuff that we help them with. And generally I would say no matter if it's within the program or outside the program, business model is always a big hit, something we work with them on, because none of them have really reached that point where they have a really good business model.
LL		What exactly is missing most of the time?
CR	05:30	Focus in a sense – Startups in general tend to be a bit all over the place, so we just sit down with them and say ok you need to focus on, you try to work with them and once you got a bit better idea of where they are at and what their capabilities are then you say ok let's try to focus on that and come up with a product that's fitting or a business model that's fitting to the product. So instead of being all over the place and trying to do this and that and subscription and everything.
GF		Why are you helping them, what's the goal for E.ON?
CR	06:24	Well, you've talked to Lars, because I've asked him a few times as well. Because I don't think it's very clearly defined. I'm sure there's plenty of literature as well, not having a clear goal for this is definitely one of the pitfalls for a program like this. But I would say that the goal is

		to create some brand awareness and to kind of tap into different knowledge centers, which
		could be academics, universities, e.g. DTU, and startup communities as well. And try to get
		your name out there, so you kind of create a steady pipeline of ideas so that you don't have to
		go and seek them yourself but they will come to you at one point.
LL		So for you in your daily tasks you feel more like you're helping them instead of getting something out of it?
CR	07:56	Yeah, I would say so. But that's also because there's not really an ambition how to incorporate it into our current setup. So you could maybe see some synergies down the road, but right now it's fairly blurry. What we do now is more or less to help them get started and then we'll see. I mean there's no, we don't make any contracts with them upfront that we'll take ownership. I mean hopefully something will come out of it at the end, but it's just as likely that once the 3 months are done we'll just go our separate ways.
CR		If you're looking at the startups from last year, are you still working with them?
CR	09:07	One of them we are investors and from what I understand then we are also working with them on a common sales setup, at least I understand that sometimes we front the customers as a unity instead of having to go to them 1 by 1. And with one of the other ones we have, well it was a one-man startup to begin with so it ended up being a consultancy contract where he helps us build, or a way of scoping some plants which was basically his idea to begin with. But we haven't gone deeper than that. There's also a third participant where we started a joint venture. They are a hardware producer focused on different industries and we have now done a joint venture where we are looking at one specific industry that we are involved with and we share the business in that industry and then they can do whatever they want with all the others.
GF		With the accelerate program, are you aiming to improve existing products or?
CR	11:17	I think it depends. Some of them are focused on existing customers and others are also focused on gaining new customers.
LL		How can you describe the competition in the market?
CR	11:51	There are a few big players and then there are some locally anchored energy companies as well. And they are a bit governmental set-up. It's a different kind of competition with them so I guess we would more be aiming at those few big commercial players that's in the market. And of course stuff like this we do the accelerate program, it helps us gain a sort of a brand or reputation of being progressive and focused on new things which people like working with. So it's also to brand ourselves in that sense.
GF		Are the other big players also doing that?
CR	13:02	I have not heard of it so far. There must be a few of them that does it but they are not very outgoing about it at least. And companies that we would probably like to compare us with are Orsted, I haven't heard them do it.
LL		Could any of the startups become competitors or are current competitors?
CR	13:46	I wouldn't say any of them are current competitors but I guess they could – I mean I don't see a reason why not. It could be. I mean the whole industry is changing very rapidly right now, so it's really hard to see where we are in 5 to 10 years.
LL		Can you describe how it's changing and why?
CR	14:15	Because of – I mean the overall goal I guess is there is this whole political issue about becoming more green and sustainable in a way. That's the mayor headline that's pushing the changes and due to that new players are entering the market. And digitalization is changing it a bit as well, also pushing new players into the market. And just different business models and then what is usually done is not building big plants anymore and then getting some sort of, like a small interest on a huge amount, it's changing, technologies are getting cheaper. Heat pumps for example can compete with heat from bigger plants now. So yeah it's all changing a lot. And you got solar panels, everything. So it's sort of a decentralization of production.

LL		Are you engaging a lot with this decentralization here in E.ON?
CR	15:45	We're starting to do it, but we're not very far. I mean they (E.ON companies in other countries) are way ahead of us in other countries I would say, but we are looking into it.
LL		Do you sometimes take their knowledge in and try to scope it here?
CR	16:12	We try and it's definitely become easier but it's not easy in a big corporation like this. I mean so much stuff goes on in other countries so you can't really keep track of it all. But of course we try to the best of our capabilities to understand what's going on in the other markets and see if there's anything that we can reuse here in Denmark so we don't have to all invent it ourselves. That's something you don't like to see right, same company in 5 different markets all trying to invent the same thing.
LL		Why do you think it's difficult in a big company to incorporate ideas from other areas?
CR	17:10	First of all, the market might not be the same. So what works in one market might not work in another. And just getting the information there's a long line of communication before it ends up here in Denmark, so you really have to work with otherwise it's never gonna get here, you have to be a bit proactive about it.
GF		How are mentors for the accelerator selected?
CR	18:00	I think I was selected because I did it last year as well and one of the companies were aimed at a segment that I have worked with before as well, so in that way it made sense. In general, I guess they have a panel of 4 or 5 people and then they basically just sit down and discuss and decide which one to choose and there's also negotiations in it because once we've decided who should be in, they also have to agree to enter the program under the circumstances that we describe. Sometimes they are just not willing under those circumstances so you just go on to the next one.
LL		What is it that they don't agree to?
CR	18:06	I haven't been that much in those negotiations but I imagine it has something to do with either equity – I mean we might want an option to buy in, and maybe location wise that we want them to be at the office for x hours and they don't want to do that. Or maybe they are just not satisfied with the money after all. Some of them are in need of fairly much capital and they hope maybe they can get a bit more but that's not really the case so they just decide to go elsewhere. That's just what I could imagine, but I can't guarantee that's the reason.
GF		Why do you want to have the startups here in the office?
For	20:13	For signaling to the E.ON employees also that we're actively involved in this.
GF		Who of the employees works with the startups if you are the mentor?
CR	20:32	Most of the time it's just me. But it's more on a task to task level that we do that. At one point we needed some marketing help so of course I just engaged marketing people and they sat down and they delivered something and then they were free to go their separate ways again.
LL		And how do you work with them as a mentor?
CR	21:00	We sit down, discussing topics and then we just decide on a way forward, and then we do some status meetings to see what we've done, have the reactions been what we expected and if not what do we do. That's more or less it I guess.
CR		When they are here in the office, do you work with them every day?
CR		CR: I wouldn't say, no. I mean it's a bit different now than last time. Last time I worked a bit closer with the company I was mentoring. This time they are fairly independent and the scope of the project is very limited to a certain project where we have to test something on some of our customers. So that's only a small part of what they do, and they do a lot of other stuff as well that I am not really involved in. So this time it's fairly limited how much we see each other in a day to day basis.

LL		So you're actually only interested in part of their business?
CR	22:36	Well the thing with them is that they haven't really found their business model yet so we're trying to test it from an energy perspective to see if we can come up with something there. And then they're trying to focus on other parts, other industries as well to see if that's the way forward for them. So I mean we can't, or I guess we could, but they're also working with insurance and stuff like that, and that's probably they already know more about it than I do, so we're just focused on the energy part of it and see if we can get something out of that.
CR		When the 3 months period ends, does this mentorship also end?
CR	23:31	It doesn't end after 3 months. This test project that we're doing, we're gonna need probably a year or something to really get a scent of it. So maybe after the 3 months they don't sit here that often, or not at all, but we definitely try to follow up on the project.
LL		Do you know what's the reasoning behind choosing the 3 months as the program duration?
CR	24:20	In general in 3 month you should get a fairly good idea of the company and are there any prospects or do you see a way working together going forward. You don't need them around for a year for doing that. This is only because it's a very specific case that we're working on, it's not really doable in 3 months' time.
CR		When you're testing the new idea with E.ON customers, do the customers know that?
CR	25:08	Yeah, we had to reach out to some customers and have them sign up for it because it's something to do with data so you can't really do that without their consent.
LL		How would you measure the success of the program?
CR	25:40	That's a good question. This comes back to the question what are the goals and I don't think they are very clear to be honest. So, it could be measured in some sort of visibility within the startup community or as simple as startup articles, media coverage within the whole startup sphere. It really depends. It could also be, if we have people in for interviews for new positions, is this something they have noticed and is it a reason why they have applied here, something like that.
LL		And for you as a mentor when do you think the work with the startups is successful?
CR	26:58	We always set out some goals in the beginning and I mean if we reach those goals I would say it's a success. And that could be anything, it could be a presentation, or business concept that we've tested with 10 people, something like that. And getting some data.
LL		Do they usually reach those goals that you set?
CR	27:38	Yeah, I mean I would say so. Last year they reached them and this year it looks promising as well.
CR		How is the involvement from top management, how important is the program for them?
CR	28:06	I think it's more of a side project from what I see. I mean they're very engaged in the beginning but once we start and once we've chosen the participants, it seems like the interest dies a bit and then it's just back to business as usual. They would love to have a status about it once in a while but they're not very engaged.
GF		So they are not really involved in the day-to-day business?
CR	CR: 28:37	No, no, no. That would be, I mean, my boss Lars, as you talk to as well, he's very engaged but it's also his responsibility. So that would be weird if it wasn't so.
LL		Could you tell a bit about resources, what is it that the startups get from you?
CR	29:20	Besides the money I guess. We more or less have most capabilities that they're lacking. So it could be strategy, marketing, IT. Well, except, if we're talking like apps, programming apps or something like that, of course we can't do that. That's usually something they can do themselves. But yeah, marketing strategy, what else? Business Intelligence. More or less everything they need and we usually have some. I mean we have a fairly big a customer

		network as well that we can try to engage as well if there's something that we need to test for them.
LL		What kind of customers is it then you're testing it on?
CR	30:15	It's both B2b and B2c. Right now we're testing on households in North Sealand and before that it was B2B, it could be production companies or it was also like a building communities, something like that.
LL		And if you're talking about access to money, does that always mean equity?
CR	30:56	For them or for E.ON? Um, no, not really. I mean the money they'd get up front, that's a, I mean that's more or less a, any, there's no commitment with that at all. So I mean, I think if we like what we see, we will try to get an option to be able to buy us in afterwards, but still nothing to do with the 15,000 euros they get in the beginning. Of course, if they want more then we're going to start talking about equity and it's hard to say after three months that, uh, that they don't need any more money. I mean it's, it's definitely, I mean, probably that for, for several years before it's going to start making a profit. So, uh, so yeah, I mean money is always sort of an issue.
LL		When we're talking about testing on customers, could you give us an example of a specific project?
CR	32:20	I mean, what we're doing now is, one of the companies built a sensor that you install in lamps. You can track your temperature or humidity and also presents actually in noise. So, uh, so we're aiming this specifically at the entity, at an energy angle where we will see, can we, by tracking the temperature and humidity, can we say something about household energy consumption and can we maybe say that they use too much energy that they could lower their temperature without really having an issue or any lack of comfort. And by that saving money as well. So is there anything we can do there. Because if they can build a service where they can tell people, OK, you can save some money on energy. I mean that could be valuable to
TT		them or people might want to pay for that.
LL		And how are you making money on that?
CR	33:32	Well you don't really make money on the energy. I would say you make money on the services that you, that is provided with the energy which could be building a plant, servicing a plant and servicing installations and handling governmental contracts and stuff like that. The actual heat. So if, if we, if they get a bit bit less heat. Well I mean what we don't get in revenue, we also save in cost of gas and stuff like that. So I mean there is very, very, very little money involved with the actual heat that we deliver. So it's really been an issue for us and if we can tell our customers that we can save our customers some money, I think that's way better than the few kroner we make on the actual heat. Sort of counter intuitive. It's a bit of a funny concept.
GF		So if we go back to when you said that you work with the startups, is it only you working with them?
CR	35:03	Well I will always be the contact, so if they need something they'll come to me and then I'll try to engage, the people at the office who are responsible for it. So, nobody really works with them if I haven't engaged them into the project. So it's very, it would be very specific task. So I would tell them, OK, we need to do a, like a template or an email to send out to our customers to have them sign up for this project. They would help with that and once it's been sent out and they're off.
GF		Is that also why you said that the startups learn more from E.ON than the other way around?
CR	36:10	It's tough to say. In general, you can engage people into the project, but I the people working here, they have other tasks or the goals which they are being measured on. So it's really hard to get people really excited about it and involved because it's not really, it doesn't have anything to do with what they're being measured on. So they'll help out and they'll deliver but they won't

		go that extra mile. Definitely. So I don't think there's still much knowledge flowing the other way to be honest. And I mentioned that's a fairly common project and set up like this.
LL		How easy is it for you then to get access to these other people, to get them in to help you?
CR	37:04	It can be a problem, I would say. I mean, we have had some issues where we had to wait several weeks for some people to deliver what they had to. Yeah. So, it's not easy definitely. But again, that goes back to what are their goals and what are they being measured on and it's not helping a startup to be honest.
LL		So it's not completely aligned yet? The idea that all employees should help the startups but then not being measured on performance?
CR	37:50	I would say so. I mean they know that we are trying to help them and everybody should play their part if necessary, but I mean we can't go in and prioritize for people and prioritize their assignments. So in a situation like this, it's just naturally going to end up at the bottom of the pile to be honest. So, uh, so that, that can be an issue.
LL		And for you as a mentor, do you have dedicated hours for working with the startups?
CR	38:27	Not really to be honest, because it's hard to say how much time I need to spend on it on a weekly basis. So last week I spent, a day or two and this week so far it looks like I'm probably going to more or less nothing. So I haven't had let's say five hours set aside every week to working with them because it's just, it depends on their needs and I mean I of course as a mentor try to prioritize as much as I can so they always get a fairly quick response from me.
GF		Do you think you could become a bottleneck then?
CR	39:17	Yeah. Well I can definitely. I know for a fact that I have been the bottleneck a few times as well. Yeah, that's just how it is.
GF		But they are not allowed to go directly to the marketing department and say, Hey,
CR	39:37	I mean they could, I guess, but they don't really know who it is. So now they're introduced and I guess they could do it now if they wanted to, but it doesn't seem likely that they'll do that. We do have a full time coordinator as well involved. So I mean he's probably, if there's any issues then they can go to him and he'll try to handle it as fast as possible.
LL		That's Peter right? (yes) How do you see his role in this?
CR	40:14	He's making sure that everything is in order for us to be able to deliver or work on this project. He's doing a really good job in my opinion.
LL		Why do you think an external person was chosen to do that and do you think it makes sense?
CR	40:47	Yeah. I think it does because he definitely had the experience working with startups. We didn't have anybody who had that experience. I mean, it would probably fail miserably if we didn't have him in. So, it's really good. I mean, that was definitely the best idea. We have to have somebody externally, uh, taking care of the entire program
LL		For example, in Germany it's more a separate business unit compared to here, how do you feel about that?
CR	41:33	Well, I mean both have advantages and disadvantages. I mean, our set up here, now that we talked about how we engage other people. I mean at least we can do it here. I've heard in Germany that the setup they have, I mean of course it's nice because the people working with it are super focused on it, but once they need help from somebody else it's more or less complete shut off because they have no involvement at all and there's no visibility and suddenly somebody, I mean it's a big office as well. So maybe people haven't even heard of the accelerator program and somebody, some guy just shows up and asks you to help with something that's not really on your agenda right now. So yeah, that's definitely an issue down there.
LL		Ok, thanks for taking the time! It was very interesting to get a different perspective.

CR	42:56	Oh yeah. I know me and Lars see it quite different and I have pushed him a bit about what's is the outcome of this? I mean, what should we expect from this because I don't think that when it was set up that it wasn't very clear what we wanted. I mean I like to have clear goals for what we need to deliver or this program to deliver. Otherwise it's just a waste of time. Yeah. And I think Lars probably thinks that we get more from this program than I do.
LL		And do you think he takes the critique and tries to make the goals a bit clearer, for example
		this year compared to last year?
CR	44:03	Yeah, I think so, but it's still fairly unclear what the outcome is. But I mean, again, my understanding is that this is a general problem with programs like this. I've heard plenty of stories and I know some people who work with it as well like the whole corporate startup involvement in the. And they've told me that there is really no evidence that this is actually something that works.

4) Interview with Harry Barraza, 10.04.2018

		w with Harry Barraza, 10.04.2018
Person	Min.	Interview Question/Answer
LL:	00:06	So maybe we could just start by you talking about your role at Arla, what are you doing, what are daily tasks and so on.
HB:	00:21	So, I am currently head of open innovation. My role sits within the research function. This is a lot of introduction to the structure but it is important for you to know that research is part of our marketing and innovation function. So in that respect, I'm not only working on building networks for research, but we also with different partners in other types of arrangements that cover new business models or cover new marketing analysis, etc. So it's not just technology-based research, but it's broader in scope. Open innovation I don't know how much you know, but open innovation is a term that's been used to put together a number of tools and a number of ways of working between companies and partners, independent of what Arla's nature is. In doing that, open innovation uses different tools to be able to create value for the business. And when I say value it's value in terms of economic value, brand value, product advantage in new product change etc. So value covers everything that the company would be interested in. So open innovation covers, how do you partner with others to create value for the company. And the advantage of creating that value for a company lies in using the right tools and the right networks to partner externally. So the better you are at partnering, the better you are at networking, the better you are at collaborating with different partners and getting value out of that collaboration the better you are in business. So it's a source of competitive advantage to have open innovation as a tool for the business and to create a business and to be better than your competitors. And a lot of people see the bulk of the interactions between companies and externals mostly from the point of view of research with academic partners, with universities, with research institutes. But that is not the main activity for Arla. I would say yes, it's a big component of what they're doing, but we also have other partners and suppliers, for instance, big suppliers, they have their innovation processes and we work
LL:	00:21	That is the research partnerships or the suppliers?
НВ:	04:11	The research partnerships with universities. With the small companies and startups the objective is completely different in that with, for instance with startups we are looking into territories that we are not actively engaged in with our research. But by being able to approach what the startups are doing and working with startups, we sort of use that interaction as a way

of creating value not only on potential for new products or potential for new business models, but also in helping our scientists and our employees to get acquainted to use the same way of working as the small companies in terms of flexibility, faster approach, etc. So it's a big learning for us to be able to engage in collaborations with startups. We have known this for some time and we have had different approaches of how to do it. And this is part of what this thesis was about, the different approaches that we've taken in the past to working with startups and starting with competitions, open competitions and then selecting stuff that would be interesting for us. That on its own single competitions, we're interested in that yes, you see lots of things. But the follow up is very difficult because engaging one to one with a startup always proved too difficult for us to do it and there are different reasons for that. First of all, in the alignment with the internal business and with the strategic areas of the business, if there's not a full alignment then it's very difficult to convince the business to invest in a development program, etc. Some of the ideas and some of the work that the startups are doing are really well beyond what we are looking for at the moment. So it's much more longer term and it's more difficult to integrate with existing innovation plans and innovation portfolio. So that has been extremely difficult. And we went through the whole process of trying to do it on a one on one and it was very, very difficult complete. In piloting different ways of working now we enter into this new, multi-party approach where you have big companies. A venture capital organization that does the management and the cumbersome interaction and search for startups and the startups in one single space. And this is why we started working with Accelerace because it opens a space where we're able to look for companies on a more strategic but also on a continuous basis rather than an ad hoc basis. You know, whenever there's a competition, then we're fine with having a targeted approach with us. A venture capital company that is for instance proven in the food area, has extensive networks in the food area that help us into reaching out to more companies that might be of interest to us and at the same time having all the companies, as part of that, of that consortium then helps in minimizing the risk that, for instance, if it's something that is not feasible for us to engage in and there are other companies that can engage with the small company and they have all the avenues to explore, not just on one avenue, which will be Arla if you were a one to one relationship. The other thing that is interesting and we find useful about collaborating with Accelerace and this scale-up program is that they offer the startup not just a contact within the big company and the opportunity for them to pitch to us and to the business, but also they are trained into how to pitch, how to construct and how to prepare to scale up their companies. So when we are ready to engage with a company then this is much easier to do. They already know exactly what we're looking for and they already have sort of expertise, in training of how this sort of things need to be, at what level they need to be to be able to scale up for the business to grow. When I mention scale-up it's definitely related to development of if a startup is successful. They will need to start thinking, how do we produce this? How do we put it to work? So the startups don't need to start thinking about those things before we get to the stage of scaling and they give all this training to the startup. So what I feel is that on one hand we reduce the risk of engaging with too many partners that might lead us into problems and risks because the small company dies and then we cannot follow up or the startup thinks that were going to steal their idea or then we, you know, we might be in a risk of claims from the startup in mistreatment or something like that. So this is sort of a safe space where we can interact not with just one but many startups and the startups in return can pitch to us and also receive training that can help them not just to work with us, but to work with somebody else if the relationship with Arla doesn't work. So, that's in a nutshell what the program is and why we are actually working with startups in Denmark. Maybe it's in the video, your heard some of those things. I just wanted to put it into context that it is not the only thing that we do, it is only one way in which we pilot new ways of innovating and I think the interesting bit is that we have gone through the journey of trying different things and this is the one that works best for Arla. It might be that other companies

		could use other ways of engaging with startups. But it is for each company to actually try and test and go through a journey until they find what works for them. This is what has worked for us.
LL:	11:58	If you say that's what worked best for Arla or for you, what do you exactly mean by that? I mean how do you measure success and how do you measure what works?
НВ:	12:07	So what works is finding a mechanism to reduce risk, to be able to look more systematically at different startups, to have a bigger pool of startups to look at, and that's through the help of the network that Accelerace has and also to be able to offer something to the startups other than just pitching, but you know, giving them the opportunity to prepare themselves to make themselves ready for when they need to be scaled up. So I think that combination of things is what I tried to mention is what works for us. It might be that other people are looking for a quick buy of a startup that has the right technology for them, then they will have to go through a different process. For us acquiring companies is not what we are and for us it's more about the development.
LL:	13:13	What do you mean by development?
НВ:	13:15	So joined development when we try to develop the concept, the ideas, the, the product that the company has to fit with the ally innovation requirements in our pipeline of innovation and see how they can match if, if we want to launch something together or even wanting to have a license from the company. There are different mechanisms that are behind the development. Depends on the starting point from where the startup is and what is the top of mind that we have.
LL:	13:51	So what is it that you're looking for in the startups? What do you think is important?
НВ:	13:57	I mean at the moment the most important thing is to explore new ideas and new business models that they are actually having in place. Even if these ideas are probably a bit away from the core of our innovation needs, we want to be able to try those ideas faster and cheaper and on sort of an incubation basis with the startups before we can take it into a full innovation project.
GF:	13:57	For example, if you test something and it works out then, would you consider them potentially as a threat as well?
НВ:	15:35	Not really, because what we are after is if their technology, if the product works, then we will consider licensing options where we license the options for our business. It could be the technology can be applied to all the businesses that we're not interested in. We're interested in licensing for our business, for the dairy business. So for us is it's not a threat because if the technology can be used for other things they are open and they are free to explore with someone else, even with all the members of the consortium, the other big companies they can also work with them. But if it's for the dairy then we will be interested in that. But I mean we also, it's not part of for what we want to do now, but at some point we will be thinking about just acquiring the company. It depends on the specific technology and the specific proposition at that point when the development has finished. Before the development has finished, then you don't know.
GF:	16:05	But most of the time you're focusing now only on technology and not for example, on different products or new products or services.
НВ:	16:15	Yes, all of them. For instance, we have an example with a company called Mimica, a startup in the UK. We're testing their concept of an indicator for shelf-life of products with consumers and we wanted to know first would consumers buy this, and all these things the startup cannot do on their own. We have been working on what sort of things can you ask consumers. What sort of things would we require to be able to say this is something that consumers see as relevant for the dairy business. They can sell this for other type of businesses. We need to answer those questions for the dairy business and then we're doing that with them. So that's an

		example of a product but it's completely different from what we do but it's related to our products.
LL:	17:11	Would you say that the startups are usually focusing on your current customer base or are you
HB:	17:21	also targeting new customers? We are looking for our consumer base first and adjacent areas where there might be an extension of what dairy is about. So of course, we're looking into how dairy in combination with other things can create new products for instance. So, there are more details in there, but I cannot disclose those because they are confidential, but believe me is not just about new products, it's about new ways of marketing, digital business to market our products. How do we use electronic channels, electronic marketing for testing on new products, for instance. So those sorts of things are sort of what we are working on with the startups to understand better.
LL:	18:18	Could you maybe describe a bit, the dairy industry is it a rather constant or is it changing currently?
HB:	19:40	What do you think? I was pitching to DTU students actually. So what do you think is the future of dairy and can you tell me about in 10 years' time, 15 years' time, what do you think is the future of dairy? The gut reaction was we don't want milk. OK, the gut reaction was we will have plant milk. And then I started saying, OK, but you know, we know for instance, that if you only give children plant milk, they will be stunted because the growth is not happening at the same rate as if they drank milk from cows. And then they said, oh, OK. And I was like, will you in 15 years' time, give your children milk from cows. And everyone said yes. But if you think that you will give to your children milk from cows, what would be the business? What sort of products? And then they started thinking about, OK, so it will be a product like this and that. And that's what I was thinking. I think that dairy and milk have a future. There will be changes in the way that we produce the milk in the way in which, you know, the farms are operated. I think there will be changes in terms of how efficient we will be in producing the milk. Once you get to that point, of course, you know, you will address many of the issues that we have today. Not just in terms of animal welfare, but also climate change, etc. I just think there's a future for the dairy business, I think people will still use milk as a source of nutrients because it is one of the richest food service available per gram of material. And believe it or not, if you take that into account, the nutrient density is much better to have milk from cows than plant milk. Plant milk can be even more damaging to the environment. So yeah, people went like, that's true because this thing's I've never taken into account and it's not communicating properly. I think there is definitely a future for milk.
LL:	21:06	So you don't really see it as a threat, the development towards more plant-based products?
НВ:	21:14	I think they will co-exist. I don't know if they sell it in Denmark, corn. The corn is it's a fungal based protein for vegetarian meals etc. I mean it's been around for 25 years. It's got a market. There are people that only eat corn, but also the other market of meat is still there. I think they will change, but it will not disappear.
GF:	21:57	Do you see many new entrants or maybe smaller entrants or are there many competitors in this industry?
НВ:	22:05	I mean they are competitors in terms of the plant - they cannot be called milk anymore in Europe because the EU court justice said it cannot be called milk if it's coming from plants. It can be called juice or something like that but not milk. I think the plant drinks they will stay around. They will have to change because you need a lot of water to be able to grow these plants. Cows can eat forage that humans cannot eat, nobody can eat, but they can transform into very valuable protein. So they do a job that no other animal would be able to do. There will be developments of course in terms of "moo-free milk" or something like that. So milk that is based on synthetic biology when you have algae that produce the components of milk and then you mix them together. But this is already happening. It's already in the markets, so you use synthetic biology to use algae - genetically modified, of course that's only happening

LL: HB:	24:09 24:26	in the US because in Europe it's not allowed. They just add a little bit of fat and there you have it, but I think it's the same as the margarine and butter. Once you've tasted real butter, why would you eat margarine Let's be honest. And I'm in a position I worked for Unilever before, they have Flora which is margarine. You taste Flora and you taste butter from Arla and then you say why would anybody eat for Flora. So anyway. Anyway, let's get back a bit to talking about the accelerate program. How would you measure success for that? Success for that as different dimensions. One of the dimensions for us is the number of startups that pitch to us that are relevant for the business and we find champions to actually get it into our business and develop a program of testing. That for us is a key fundamental KPI for us. Another big KPI is how much of this new technology creates new business for Arla or enhances exists in business into a new direction. That is very important because sometimes big companies are really good in producing more of the same. But generating new strands of
		products or new benefits is very difficult for us. If you are able to use innovation with startups to create a new area than that is a big win for us.
LL:	24:26	Do you have an example?
HB:	25:33	I mean we started this last year in May. We've gone through two rounds of pitching and we have selected at the moment seven. I mean you start with a big number of startups because we filter down and we only pitched 10 maximum each pitch session. I mean we've done at least 15 pitches and they have gone through five evaluations and from those five, only two are still on the board. So in addition to be a very convoluted process you really need to do it systematically to be able to get the benefit of it. It's not that you just call startups and then things happen. It does take time and it does take discipline in getting the things moving. So at the moment we have two developers that we're very excited about. One is with this company called Mimica and then there's another one that we cannot tell you what we're working on, it's another type of product which is very interesting, it's within the realm of milk derived beverages. So you'll know about it soon. But believe me, it's not that you have 20 projects at the same time. It's very, very laborious and even luck is a big factor in this because having the right networking, connecting with the right people and having the right champions internally, there is a lot of steps where errors can be made and then something can be dropped. Maybe it's not the right time for a company, maybe later on. But it is the nature of research is the nature of innovation, to have to try it. And I think that's the key in the space. You have to try. And as I said that the beginning, find the right way for you that fits your company, that fits your objectives and that is the key of how these things work.
LL:	28:11	How are you then working together with the startups, throughout the whole process from the beginning to the development?
НВ:	28:20	So the startups are actually scouted by Accelerace. They have their networks that they bring 100 candidates. We look at the candidates with a few people internally and say this, this, this, this, we reduce to probably 12. 12 pitch to Arla selection board we call it. But it's people from marketing, from supply chain from different functions where they can see where the potential for these companies are. And then for those 10 we select two or three, maximum three. Then we start discussions under CDA, the confidentiality agreement. OK, so what can we do, what's the interest. And then after this discussion you formulate a project and that's how you kick off the activity of development. You know at the moment we are in development, and I say with 2. But it's very important that you understand that the process is not just the technology that they have will be just plug and play with what we have. There's a lot of discussion formulating the project, answering questions that need to be answered only by researching with customers, by research in the lab.
GF:	28:20	How do you know whom to put to work with the startups?

НВ:	29:58	When we have a selection board we invite around 20 people from Arla and we say these are the ones, vote for them. Once you select the ranking of the top two, three and we say who wants to be a champion. And that champion, that is not the person that will lead the project. But it is the person who will make the connections internally with the right people to be able to do a project in place. And once the project is in place, they will have a project manager separately. But that's more or less how we do it. It's not really new, but I think the idea of asking people to champion it and having a champion does make a big difference. I mean, I don't know who much you are interested in in processes, etc. but that is the way that we do it. Now if you'd like, I can get you an interview with Accelerace so they can tell their part of the story if you're interested.
LL:	31:08	Yeah, that would be really great. And we were also wondering if we could then maybe talk to someone who is directly working with the startup. So maybe one of the champions or project managers?
НВ:	31:23	That will be more difficult just because I really think we are very, very strict in that nothing comes out from that initial work. It's very confidential what they do and I really would prefer just concentrating on Accelerace. I mean you can find some of these things online for example, you can use that information there. But at this point it is difficult to be honest.
LL:	31:23	Accelerace would be very interesting, to see their perspective.
HB:	32:06	Maybe you can call him or I'll make an introductory email so you follow up with them.
LL:	32:20	Thanks a lot. Before we were talking about learning from both perspectives. So learning for the startups but also learning for Arla. Can you explain a bit what that entails?
HB:	32:41	I mean, the important part is that this consortium where they come helps in building a space where the discussions can be easy to establish and we can formulate a potential project very quickly. How do we learn, I mean for us to learn is how to work with startups, which is a completely different partner. Not the same as working with a university or working with a supplier. We get champions, they get exposed to working with startups. And this is important because it gives the dynamic of how this very innovative people - because they're very innovative people - approach innovation and that helps us because people learn from that interaction, in one way or another. You won't believe how people learn from those interactions. And that is very important for us because it creates a critical mass of people that next time they will have this type of project, they will do it faster and much easier because they know how to work with startups. That's how we learn. And we bring some of those very innovative ideas into our pipeline of innovation, that is key for us. How the startups learn. Well they learn by pitching to real business and to real people that know how to put things in the market, you know, by potentially being able to sharpen their business model, to find a new channel that we can provide as a big company for their products. And then they can use this exchange to sharpen their business model and their technology as well. So that is very important for them. And they learn from that. Another thing is that there is a formal training that they are offered when they are selected from the front row. So maybe that's where you should focus your interview with Accelerace. What services do they offer to the startups. When you train them in, what are they trained on? What are the things that are important for them to know to be able to scale up into a bigger organization. So that's what they learn and more than more than that what I've had as a feedback is that they liked the direction that the interaction gives them. So
GF:	32:41	Are you trying to expose a lot of Arla people to the startups?
НВ:	35:44	I think you have to start with the critical mass. You cannot span this to everyone because first of all, not everyone is interested in working with a startup and secondly you need certain skills to be able to get the most out of that interaction and some people are not interested, but some

GF:		a better scientist or a better marketeer.
GF.	26.10	And when you established this interaction with the champions is it a very continuous
	36:18	interaction and frequent or how does that look like?
HB:	36:26	Once it is a project, then they will run the project. I will have nothing to do with the project.
		They will meet when they need to meet, they put their schedules and they put their milestones.
		It's their project. It becomes a project and then I have nothing to do.
GF:	36:45	You give them access to the labs and all the infrastructure?
HB:	36:49	It depends on each particular project and development. Some of them you start with consumer
		test or something like that that can be done externally, internally. They are offered the expertise
		of a scientist. For instance, our scientists can tell them if it's for dairy, you cannot ask this, you
		better ask for that. As a consumer test it is best if you do it this way and not the other. So that
		is really valuable in actually getting the responses that we need, but also helps the startups to
LL:	37:36	learn how things are done in a bigger company. And within the accelerator process, how much resources do you provide to the startups in terms
LL.	37.30	of access to corporate people or labs or anything?
HB:	37:53	I mean, the initial objective is that the interaction becomes a project that is about a proof of
		principle of what it is that we see interest in, that we want to show. Once this becomes a definite
		next step that the project shows that it does have potential, then we need to take it into another
		step that we haven't reached that yet. And so, it's been a year since we started this. Believe me
		this takes many iterations until we have a final product. It takes any company to three years to
LL:	37:53	
HB:		
		arrange. If we decide to go into a licensing model or whatever, then they will have the option
		to invest in a company. We're not interested in acquisitions or equity at this point.
LL:	39:08	Is the top management of Arla involved in any way?
HB:	39:38	We do get the top management involved in the selection board. For instance, we have the heads
GE:	30.38	
ПĎ.	40.20	
LL:	40:36	
	10.50	a bit differently and then you figured out this was a good way.
HB:	40:51	Trying and testing and doing things. I mean we have worked with companies on ad hoc basis.
		Different people have tried to do something and then by just looking at what has done in the
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IJ	41.12	
1 1112	41.14	
		I initially slippilers and liniversities, as part of the innovation tools to deperate new evience and
		initially suppliers and universities, as part of the innovation tools to generate new science and new technology. We still use it. I work with these large consortia, etc. But this, I think you are
		new technology. We still use it. I work with these large consortia, etc. But this, I think you are interested more in the startups and this is only one of the ways that we do open innovation
HB: LL: HB: GF: HB: LL:	39:38 40:20 40:36	get new products to market, for a fast-moving consumer goods company. So yes, innovation cycles take some certain years to do it. So we can accelerate it, but we have to certain steps along the way otherwise there's no use. Do you sometimes take equity in the startups? Not us directly. That's not part of what we want to do. That is fully a venture compararrange. If we decide to go into a licensing model or whatever, then they will have the of to invest in a company. We're not interested in acquisitions or equity at this point. Is the top management of Arla involved in the selection board. For instance, we have the hof marketing, the head of mergers and acquisition. We're not looking to mergers acquisition, but this guys have an eye for what could work and we have scientists, we packaging people, we have people on different levels because we really need that combine of expertise and technical expertise, but also business expertise to evaluate the project. That's for then startups pitch? But other than that top management is not really involved? No, once it becomes a project like any other project we don't have top manager involvement. I mean if they are not interested, there's no point in doing it. How was it decided to do this process? You mentioned before you were working with start a bit differently and then you figured out this was a good way. Trying and testing and doing things. I mean we have worked with companies on ad hoc bufferent people have tried to do something and then by just looking at what has done in past and we said, well let's see. Trying something different because this is not working so is why we have tried this. And the strategy of having open innovation in general? The open innovation started earlier than this. Much earlier than this, as a way to use supplies the product of th

HB:	41:52	Yes you mean the work with the startups? Yes, so it started as a pilot last year as I mentioned, and then this year has been the continuation of the pilot and trying to scale up the pilots. So as
		any test we have to try it in different stages.
LL:	41:52	Let's see how we're doing on the time.
НВ:	42:18	I think it will be worth, first I will send an email to Accelerace and put you in contact with them. I also want to send that email to this guy from CBS to give you a copy of his thesis. I mean you are students, you'd be able to read it.

5) Interview with Oliver Repenning, 18.04.2018

Person	Min.	Interview Question/Answer
LL:	01:06	Maybe you can just start by telling a bit about your role at accelerace and working together with Arla.
OR:	01:31	Accelerace is a program spanning across different verticals or industry sectors. We work with Danish and international companies and help them find a scalable business model and Accelerace has been doing that for some time. We're actually one of the pioneers in Europe starting off almost the same time as 500 start ups in the U.S And for the last couple of years a part of our work has been centered around a program called Scale Up Denmark. Scale up is a couple of initiatives which is seeking to strengthen the Danish position on the innovation and entrepreneurship within 15 areas. We have a contract for five of these, it's foodtech, cleantech, so energy, so just a tech program and then life science and welfare tech. And my role is specifically within foodtech, so I run a program for Accelerace where we find, accelerate and hopefully grow startups within food. And as part of that program we have some corporate partners, we have Coop, (mentions other names I don't understand) and then we have Arla Foods. And Arla Foods is connected to this program through quite deep integration. They use us as a branding opportunity, but first and foremost to use the program as an innovation scout or program where they can seek out and be exposed to the newest technologies and use developments within food. Of course a company like Arla, they have massive innovation department themselves, they put a millions each year into product development and innovation programs. But in terms of seeking out innovations and seeking out the opportunity in all areas is a task they have to limit. And by connecting to Accelerace they actually get the opportunity to get a broad sense of what's going on while maintaining their prime focus on the internal R&D. So, my role it's two parts. One part, I oversee the program management specifically with Arla. So, I do strategic decisions with Arla on what type of areas we're looking for innovations in and how do we connect startups to peers and to stakeholder groups in Arla. And how do we ensure a process o
GF:	05:57	You mentioned that Arla uses you as a scout for innovation, why do you think they don't do it by themselves? Why did they need, like Accelerace to do this?
OR:	06:14	Like I said, Arla is already doing a lot in Innovation but covering innovation in all areas can be really, really difficult. So by entering into a partnership with Accelerace, what they gain is they gain access to a massive venture scouting network. So we scan somewhere between 500 and a thousand startups per year. And that knowledge and that access to this very, very big community is something that they can get very easily by partnering with us. And they would have to spend a lot of resources on it if they want to carry it out themselves. And the other part they get is that when you're in a, in a corporate position, you at a very high stage of maturity. So you're used to everything being in operations, budgets being cleared every year, while a startup is in a much more fragile position and you can't always, if you want you to seek out

		innovation, for instance, let's say that Arla is looking at fermentation as a specific area of interest, then when you find a startup that does something in the fermentation space in elevating that startup, screening that startup and understanding is this actually something that can become a thing? It's a, it's a totally different set of parameters that you use when you assess a startup to assessing an established company. And that process is also something that we help Arla with.
LL:	08:19	In what way do you think the opportunities that Arla is getting through Accelerace are different than the opportunities they for developing internally?
OR:	08:40	The process with Arla is as follows, three times a year we will bring in 20 to 30 startups to Arla and they will assess those and pick the most interesting ones. When we do our venture scouting and when I sit down with my team and we select what startups do, we present to Arla this time, we apply a 60, 30 10 methodology to eight. So 60 percent of the startups we bring are closely connected to the strategic areas of interest, the ones that we have discussed with them. 30 percent of what we bring is exceeding those areas. So meaning this could be next generation of fermentation or healthy snacks on the go, so a space that they re interested in, but a way of thinking about that space that they haven't been exposed to internally. And then the 10 percent is the crazy stuff. So, at least 10 percent if not 20, but at least 10 percent is stuff that they would never have looked in a direction of themselves. As an example, we're working with a startup now that has developed a powder and the powder can be mixed into water or milk. But when the powder interacts with the Ph level in your stomach, it will gel so it will become a gel, it will simply expand into a gel and it's a perfectly natural product. It has no artificial stuff in it. It just the chemical reaction when it reaches a certain Ph level makes it expanded into a gel making you feel more full. And this may sound a little bit creepy, but when you look at it from what Arla can see in it, they are working in for instance on a snack on the go agenda. So how do we develop products that meet the needs of people who are leaving this three main dishes a day type of living and moving more and more into always eating on the go. Smaller but nutritious healthy meals that the, that are available during the day, not just at specific times. And for Arla to develop products that has all the right nutrients, but maybe the main lag is the satiety feeling, so for instance there's this drinking yogurt. It actually has a lot of good stuff that you could say the nourishment that you c
LL:	13:08	Do you think that most of the startups focus on current customers or do they also focus on new customer groups?
OR:	13:20	I think that's probably a mix. I think that if we talk consumer end focused stuff, then nine out of 10 the startups product or technology will be focused on consumer needs that Arla are currently serving or would like to serve. So the consumer needs might not be new to Arla, but the way of approaching it is it's more than often new. Then we also do a lot of technology scouting, so that could be processing, it could also be measurements tracking, stuff like that on goods. So that's a little bit disconnected from your question, but, but that's also a focus, that's more improvement of current processes and stuff like that.
GF:	14:29	From the, from the 60, 30, 10 split you mentioned, do you see any preferences for them to choose any specific startups?

OR:	14:44	Right now there's a major cost focus at Arla and when there's a big cost focus, then what they find most interesting is the stuff that they can connect to their current business immediately. When there's no cost focus they are much more open to discuss stuff that has a timeline of maybe a three, five even more years before it will become a big thing. Just adding onto our earlier, about what they gain, I think actually a valid point for you to get is the gel stuff that we just discussed. For Arla to run that on their own, that will probably never be prioritized because in a, in a big company, there's a ton of ideas in all the departments and they have to prioritize and something like this could be in the risk zone of being deprioritized because it's too far fetched but by running it in partnership with a startup they can actually, only spend a little bit of money, which is easier than allocating resources and then they can make, have to start off, do all the hard work. So it's an easy way of testing crazy stuff.
LL:	16:25	Before we were talking about the, you mentioned the time horizon in, in what kind of timeframe are they looking for? I mean, are they looking for a long-term partnerships or how, how fast does there need to be a profit?
OR:	16:52	I don't think they have a profit target. So a return on investment is not set for these kinds of partnerships, at least not in the early phase of the pilots because it's, it's such a low investment that I think it, it, it will make no impact anywhere on any balance sheet in Arla. So, uh, so I don't think they, I think they see it as a, as an investment and opportunity without knowing what comes back. Once the pilot develops, of course, then they will start doing some, some more thorough calculations, identifying if what actually comes out of this.
LL:	17:50	When you say that then I mean this the startups are integrated into Arla. How does that work?
OR:	18:04	Typically we have a pitch session, which we call selection day and uh, the startups that are selected on a, on selection day, they uh, they, they will fall under my wings and then my, my, my job will be to a have meetings arranged with the relevant teams in Arla. I have a person in Arla, they assign one Arla champion per startup. And the champion they assign may not be the one that can actually scope or approve a pilot but the champion is the one that can help establish contact with the proper team in Alra. So my role and the role of the champion is to find, match the right team in Arla with the startup and then get them onboarded and then set the first meeting. The first meeting is typically the startup coming to Arla pitching again, so that the, the team, which is most likely new to this, they see this in action. And then the rest of the meeting is about understanding what is the, what is the interest of the team that the startup is pitching to and open discussion of areas of opportunity so what opportunity space could have a potential pilot evolve into. And then either there's a lot of meetings where we start going more details into scoping a pilot or the pilot is scoped through exchange of documents. So if the first meeting is very productive then the startup might go back and wrap up meeting notes and on that be able to, uh, to outline what a potential that pilot could be. And it's revised and then finalized and then either after the second meeting or after this, uh, the scope of the pilots has been set then the Arla has a go, no-go decision. And if they decide to, uh, if they decide to go ahead, then we sign NDAs. And then we initiate the first part of the pilot. Usually a pilot is split into two or three parts, phases. Where the first phase is a, is validating the opportunity space. So that can be, yeah, that could be a, it can be a range of stuff. It can be a interviews, focus groups, it can be creating it dummies and testing them online. And I think if you go through a, I can send you a link to an arti
LL:	18:04	Yes exactly on your blog.
OR:	22:02	On the Linkedin page if you go a little bit further down, there's a link to a media called the grocer. There's a picture with a team standing in a clinical outfit. If you don't find it, I'll just send it to you. That explains this Mimica, which is the latest, the pilot that we're running with it with Arla, how, how it's split into three phases. Mimica does to an expiry label technology,

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11.	22.02	which you read about. In the first phase, is to do some, uh, some, the consumer study on how would people respond to that technology sitting on a milk carton. The results of that conclude phase one. If the results are positive, then we will move into phase two, which will be more, strategic on how we are we going to integrate the, uh, the Mimica touch label on a, on a, on a specific range of Arla products. When phase two is completed, this follows phase three. It's outlined that we will start testing this by actually pushing the products into a selected supermarket chain in the UK. So that's a real life test.
LL:	22:02	These three phases how much are Arla employees involved in that?
OR:	23:53	In phase one they are only involved in deciding the questions and methodology for asking people on how, how they will see, how they respond to this and then they, they approve and sign off. But all of the operations sits with a Mimica. In phase two designing how the Mimica product goes onto the, Arla product that will be a more, that will be more work involved for Arla. So probably then the balance will shift from phase one, I think 90, 95 percent of the work is in Mimica, in phase two it's probably a 70, 30. And then uh, in phase three it will be 50/50.
LL:	25:02	Do you think it works well for them to work together?
OR:	25:07	Yes, I think so. And it's always to think when you outline what are the, what are the positive spin-off stuff working with startups for a corporate. It's easy, its innovation, cheap testing of new spaces, you know, you could energizing the organization, people responding well to this, it's fun not to forget so there's a lot of benefits for Arla. If you look from the other side of the table, Arla pays for time and material in this. So it's, it's not, it's not like Mimica. It's not a bad business for them. If this fails, they have their hours covered, but it is of course an investment because the hours they get paid, but they also invest those hours into a very specific thing they did they developed it. If it doesn't work, then they could have put the time to use in a much better way elsewhere. But if they succeed, if this pilot goes well, if there were results of phase three are positive, then of course it's not guaranteed, but then Arla will be very likely to become Mimicas eh second to one biggest customer for a very long time. So for Mimica to build up that type of relationship, getting a big before they could approach a big company like Arla, our Nestlé or Unilever or whatever some company in the media industry could also be relevant. Then they will have to build up with cases. They will have to invest a lot of time in illustrating how can this be done. Why is this a positive thing? This is how well people respond to it, and now they actually take them into a setting where it's outlined how to do it. They have the cost covered, plus if they perform well the likelihood of them really hitting the Jackpot is quite big.
GF:	25:07	Can you just clarify who is paying, who is Arla paying the Accelerace or is Arla paying the startups?
OR:	27:47	Accelerace is paid on a yearly basis by Arla as part of our contract we have a target on how many startups we should get into a pilot program. So, so my time is prepaid so I work, uh, I work hard to make this happen because I know if it doesn't then there won't be a contract next year. So that's program management in Arla, that's Harry's budget. The pilot as such as paid in the specific team that wants to run the pilot and it's not an investment. So there's not a lot, it's not a big amount of money coming in, switching hands, but in this case where Mimica to put in a lot of hours into illustrating how the product would work in the dairy industry than Arla has agreed to pay a, some kind of flat rate discounted hourly price on their hours.
GF:	29:02	Thanks for the clarification.
LL:	29:06	Maybe to wrap it up, we could talk a bit about, um, how, how do you think is the Does the changes in the industry influence how this program is run?
OR:	29:23	Uh, yeah. can you say what do you mean by changes in industry?
LL:	29:28	I mean the whole dairy industry is, is facing some changes I would say. I don't know if you agree to that.

OR:	29:44	So you mean are they under a lot of pressure in certain markets, is milk healthy or not and so
T T	20.52	on?
LL:	29:52	Yes, exactly and also other, um, other replacements coming up and I was just wondering if that somehow influences how the accelerator program is done.
OR:	30:11	Yes and no. This sits in the strategic areas of interests and I talked about earlier that we defined with Arla where we should look for startups and we have a net list of 10 areas that we look at. Two of those concern the future of milk or dairy. Where is all of this heading? What type of replacement product will we see, what type of technologies, uh, will you see that that can increase the production so you lower environmental impact in the production chain it, that type of stuff. So of course, of course it implicates the program. I think Arla is, and that's of course always a dangerous situation to be in, but they are so big that the business of a problem that they see and they want to handle, but also they, they look at this on a global scale seeing that yeah, these discussions are happening in Denmark and Sweden and partially in the UK as well with all other markets that they are present in and where they really make their money it's not even a thing. So that's kind of the sleeping giant syndrome. And I think we, from our side, we would like to push the agenda of where is this going in 10 years rather than a, how can we increase the energy efficiency pasteurization of milk. But it is a mix, they have maybe two out of 10, so that's 80 percent of the focus is within, in known territory and 20 percent is within unknown territory. And I think also that's a parameter of success for us because even though we would like to push this more futuristic agenda, then if, if all startups we brought to Arla where only concerning these spaces, then nothing would really happen. I think there would be no operational integration and, and hence in a year or two that there would be no program anymore.
GF:	30:11	Because it would be too long-term oriented?
OR:	33:03	Yeah. And I think too disconnected from operations and it's just, it's just a fact when you are in a, in a big company at least if you're in a big traditional company, if you're in facebook or Google and then it might be different but in, but in a place like Arla and in most C20 or big companies in Denmark, operation just takes up a lot of your focus and hence if you have a program only concerning this I would fear that at some point someone would say it, should we rather invest that money into something more tangible? Not that I agree necessarily, but that's just the way it is.
LL:	33:59	Do you think it would be, or what's your view on running such an external accelerator program compared to having it more integrated and running it internally?
OR:	34:13	Yeah, I can answer that quite confident because my last year in Arla I ran, I was head of digital in our incubator. Now I sit on the other side. So I think it's a combination of both. I think having an incubator requires some maturity because when you start an incubator, either you become a fast fix team, so you become the team that whenever a person in marketing or IT has a good idea for an incremental innovation, that they can't get the pushed through in their own department they will come to you and then you can do good stuff fast, but with no impact. If you want to do good stuff fast with big impact, then it requires that as an organization you realize and you accept that you have a team working in your company which has the agenda to disrupt your company. And as a, as a very practical example, we did an online only a sports brand in, in Arla that was my project. It's called arena. You were selling Arla products but with totally different branding and in totally different channels than Arla would usually do. So the implications of being a two-person team to do product development, brand development, channel development. Basically doing everything on a low budget requires that you have access to the resources that you would normally have in Arla. So when I was a marketeer in Arla, I would have a legal department that could assist me on saying these messages are OK or we can go ahead and do this or at least we know risk if we do something. If you're in an incubator, then you don't follow the procedures that the rest of the organization has to apply

	24.12	to. So when you come to legal and you say, I need help on this, they will say you need to follow the normal process so I can get the hours cleared in my department. You say I can't wait for that because we are a fast-track team and then you'll have confidence. So I think eight out of 10 times you will meet people, colleagues that will say, I will help you, but I will have to manage this somehow in between everything else. 2 out of 10 times you will have people going directly to the manager saying, what the fuck is this? This is, this is my schedule, this is what I'm employed to do and now this guy is running around saying, and I need a favor here, I need a favor there. And so am I supposed to prioritize this? Yes or no, and then you have conflict again. So, so I think the incubator part requires some maturity, and it can be done and you should do it, but it's not without conflict.
GF:	34:13	Why do you companies should do it?
OR:	38:08	I think they should because the companies sit on data they have. 80% of the insights they need to develop and innovate themselves. So it's the, it's the cheapest way to do it. Then when it comes to why you should use external is, uh, for the simple reason that stuff you get from, from, from external, you will never find internally. So you will never be able to encompass or to figure out the same as, as we can bring to a company like Arla simply because the task of going through a thousand companies a year and being connected to the ecosystem, you will never be able to maintain that as a, as a big company. So one is the resource question, is it feasible or not to do it and the other part is can you actually do it and no, it's not feasible to do it yourself and two, no you can't to it yourself.
LL:	39:35	Do you know, if Arla thought about setting up a separate business unit for running an accelerator or something like that, that would still get externals startups but still have it more integrated than kind of hiring Accelerace?
OR:	39:50	Yes. Yeah, because it was part of the agenda of the incubate team I was in so the idea was that it was supposed to expand into covering incubation, acceleration, meaning external companies and also venture capital. But the two latter parts I think for companies as a whole, for Arla specifically the implications of doing it is quite severe. And so again, back to the question, can you actually connect this to the ecosystem and will the ecosystem respond positively in terms of allowing you to become an integrated part even though you are a really, really you represent a small pot of a really big company. And the other part is if you will be able to, uh, to find the proper resources to do this kind of work in and uh, finding uh, might be one thing, (?) might be a different thing. So the incentive schemes that lot people work with in this area. It's often tied to a, to a low flat base rate and a high success rate, which is also the case for startups, right? You manage on a little budget as you can until you really hit it. And then you exit big time. So that's just the motivation scheme that lies in this time in this very entrepreneurial sort of people or whatever you want to call them. And for corporates that can be an issue because in Arla we experimented with a model where we said we have an opportunity space that we end up prioritizing ourselves, but we know for sure that it's a major, major business opportunity. So how about we take this business opportunity, we give these insights to ex entrepreneurial people who have exited with success and then we set up a company where Arla owns half and they own half. Then we pay them and a little bit of money to uh, as a salary, but very low like a grant that you get from government if you are unemployed. So very low a base rate. But if the, if the competence becomes success, they can exit and make a lot of money.
LL:	42:57	But would Arla than buy the startup. Or how would that work?
OR:	43:04	That depends. But either Arla goes in and buys a hundred percent stake in the company, so buying the last 50 percent or Arla can bring in another investor. So that was not 100% clarified because that depends on what type of business it is. But the thing is in Arla, that it is owned by farmers. And then you will have to go back to farmers saying, we have a brilliant idea on how to, in a cheap way investigate this massive business opportunity. But if it becomes a big business thing then you would have to hand out most of the profit in the first year or not just

		the profit but also a lot of money to these two guys that are going to run it and that will hardly work.
GF:	44:06	It's really interesting, but I think we need to wrap it up here because we are being kicked out of the room to be honest. But we really appreciate the time it took and it was really insightful. Really interesting. Definitely to get a different perspective from what Harry has been telling us.
OR:	44:06	I hope it doesn't conflict too much.
LL:	44:29	No, no. It just adds on so that's good. It just complements a lot of stuff that he said.

6) Interview with Michael Juhler, 20.04.2018

Person	Min.	Interview Question/Answer
LL:	00:39	Maybe we can start by you telling us bit about your role.
MJ:	01:25	Yes. So my name is Michael, I'm head of innovation in Tryg and I'm part of a new business department, we set up in February 2016. There was a big organizational change in the whole company and basically, we wanted to strengthen our work with creating new business. We can see that the whole market development within insurance, the customer needs are changing and of course a lot of it is driven by technology and that's why we set up this new business department with the goal to create new business, but also to influence the culture in Tryg in general in a more innovative way. Before that we actually were engaged in the startup community with something called startup bootcamp, insuretech, based in London, but basically an innovation program fostering new tech startups within insurance around the world. Tryg became a partner of this program three years ago and that was kind of our first move into the startup world. And based on our experience within that, I kind of started thinking about, OK, how can we get even closer to the startup community because we could see that startups have a totally different way of working, mentality, approach, agility, they're much more fast moving than a corporate like us.
MJ:	03:51	And then kind of slowly came the idea of what would happen if we actually created a coworking space attracting the exciting tech startups. And we had the space for it. I presented the idea to our executive board, I guess that was in We had a process where our executive board kind of looked into what should be the purpose of how can that strengthen our new business approach, what can we learn from startups and finally they decided to actually create the camp. And of course, that was kind of a huge decision because I think actually we were the first insurance company in the world that created a space like that. I know you are interested in accelerators and incubators and all that kind of stuff, but that was not what we created with the camp. Actually the camp, it's a co-working space in itself, it functions as a separate part of Tryg, outside Tryg, but what we did was actually to put it in the heart of Tryg, in our headquarter here. And of course we had two purposes or goals from the beginning with The Camp. One, we wanted to create better opportunities to work together to partner up with startups, creating new business opportunities. And then the other purpose was to influence the innovation culture in Tryg in general. We opened the camp first in October 2016. And by now, it's around 35 startups sitting in the camp. And they pay for it. It's not like it's for free, they pay for it, like in any other co-working space. There are around 200 people working in these startups, and then we have a lot of Tryg teams, development teams that are situated in the camp in shorter periods of time to get them out of the normal day to day routine.
MJ:	07:26	By now I think we have set up six partnerships with the startups from the camp. Some are running now, some are finished already and it's typically pilot projects we set up with the startups, based on their technology, what they are working with, that kind of fits into our innovation strategy. One example is a startup called anywhere solutions that are working within IoT, developing solutions for home owners. And that's one of our focus areas. How can

		we develop new services, new value propositions to customers in relation to their homes and
		then in this example we test solutions, we codevelop together with Anyware Solutions services
		that homeowners can use and test them on some of our customers. That's an example from very
		early stage innovation process where we test something out and then we learn and then we can
		further develop our value proposition based on that.
MJ:	09:12	Another example somebody called new banking, actually a company working with payment
1,10,	07.12	solutions but the technology that uses blockchain, And I always love to tell this example
		because that's very much into the heart of what I believe is the value of creating something like
		the camp and attracting exciting startups because, actually our partnership with new banking
		began because we have a business area in Tryg called Tryg Guarantee that's a special kind of
		insurance. And they heard about blockchain, you know, like one and a half year ago and they
		didn't know anything about blockchain. And actually it was our, he's now our CFO, when he
		was appointed CFO you become part of the steering group for Tryg Guarantee. They have their
		own organizational setup and the CFO from Tryg is born into this management role. And he
		was actually at that point when he became CFO, he was the head of our new business
		department and I had told him a lot about blockchain and he was like, oh my God, what was
		that? And then when he went to his first board meeting in Tryg Guarantee he wanted to challenge them a bit and then he asked them, so what do you think about blockchain? And the
		director for Tryg Guarantee told me afterwards, that he was like, what is he talking about?
		Blockchain, we never heard that word. And he just said something like, oh yeah, Christian, of
		course we look, we're going to look into that. So very exciting. He didn't know a clue of what
		he was talking about. And then afterwards he came to me, they said, Michael you know a lot
		about technology and what the fuck is blockchain? And then I told him a bit and then I, I told
		him, yeah, but, his name is Mads, actually we have a startup sitting in the camp. A very exciting
		startup that are actually working with blockchain. Do you want to have a talk with them? Yeah,
		let's do that. And then we sat down, Mads, Christian, the founder of new baking and I, and then
		it just like it made sense for both parties. And then within, I think it was more or less one and
		a half months, they actually set up the pilot, doing a use case with blockchain in our Tryg
		Guarantee business. And that's, that's just the like typical example of what's happening when
		you engage, when you attract startups, you don't necessarily know exactly which kind of
		cooperation or partnership can you set up, but it gives you much better opportunities to have
		the dialogue and actually be like explorative in your approach. , and the beauty about this example for me at least, is that then they did the pilot and then Mads came back to me and said,
		I was curious of course, asked him what happened to the pilot. Did you get the results you
		hoped for? And then he said, no Michael, actually turned out it was a bit more difficult, the
		technological part of it, but it just opened my eyes because we have another big project actually
		and now I can see that we can actually use blockchain in this project, not in the short term but
		in the long-term. And we still have dialogue with new banking.
MJ:	14:02	And, again, that's just the nature of innovation that you cannot plan innovation. You can create
		the foundation for actually having the possibilities. And that's exactly what we have done with
		the camp and our involvement with startup bootcamp, insuretech also. And our engagement in
		general because the camp is one thing, startup Bootcamp is another thing, but we have also
	1	developed a new insurance solutions for startups. We are working a lot within sharing
		economy, delivering insurance solutions to platforms, sharing platforms and in all of that work
	1	we are in a close dialogue and partnership with startups and as a corporate, it's actually quite
		challenging starting this because at least that's my experience and I guess a lot of other
	1	corporates experience that if you don't have the kind of structure, if you don't have the mandate, if you don't have the resources to sexually set up performing then the probability that it will
	1	if you don't have the resources to actually set up partnerships, then the probability that it will be, you know, a long process, you have to go back to your core business to get buy in and often
		it just stalls at some point because you are not mature enough as a corporate. Because we tried
		the Before we, we started the camp and before we established the new business department,
	l	the Before we, we started the early and before we established the new business department,

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		we tried to put up partnerships with startups. But it was such a slow process. It was the decisions that have to be made was kind of impossible. So actually I ended up saying we shouldn't go along this road before we have the setup to actually do it, before we are mature enough to actually meet the startups.
MJ:	16:40	On the other hand, the startups also face a lot of challenges working together with the corporates like us because, you know, a lot of startups are great. They have great business models. They, they kind of disrupt the existing market, they are fast moving. They, they want to, to kind of change everything in a short period of time. And when they approach corporates like us, they often think that hey we have hit the nail, we know exactly what you can use somebody like us to, why don't we just do it like this. And then I often say to them, yeah, but yes, you have a great product. Yes, I can see a partnership, yes, it could fit into our development, but you have to understand that you're just one out of hundred. It's not just if there is a fit, it's also timing. It's also to fit into our strategy right now. The prioritizing we have to do. You come into a much more complex world than you're used to, so you have to really try to understand what kind of world are you meeting here. But it can be done, it can be a success, but there is a lot of failures and a lot of startups, I actually say to them before you approach us or very early in the dialogue, find out if we're mature enough also that you should use your time on us because a lot of startups use a lot of time having dialogues and being sent around in corporates to different departments and kind of get confused at the end because who is actually deciding how do we actually fit in?
MJ:	19:22	So yeah we have a lot of experience by now and actually right now we are in the process of kind of re-directing the camp, the whole approach with the camp because we want to make it even more as an innovation hub for Tyg. That means that we will probably change the way we attract startups. We will be much more focused on taking our innovation strategy and saying, OK, we want to find startups within this area with this technology, with these offerings and invite them to become part of Tryg's camp. And it's not because we haven't done that, but we haven't done it very much, so we will be much more focused, but we're in the process of that right now and considering how to do it. And that's part of the more general change of our way of working with innovation. And corporates like us, we have to do a lot of learning, moving into working with innovation in general and startups in particular. So I'm also kind of humble and I have become much more humble because it is just difficult and it's not like you can set up an innovation process and methods and all that stuff that the kind of give you the way of working.
MJ:	21:44	But it can become kind of theoretical, at some point because again, all these innovation programs you see and the way of structuring it, the organizational set up in big corporates for me at least, a lot of that is driven by OK, you want to create a road for innovation. I'm not saying you shouldn't have it because it gives you some basic kind of infrastructure around innovation. But in real life, innovation is always about, you know, like, OK, we start here, we have done some thinking. You shouldn't think too much, you should have this first phase where you are very explorative in your approach and then you kind of find the road.
MJ:	23:00	And that's really difficult in a lot of corporates because we are so our core business and the whole way of running a corporate business is very much structured, very much instrumental in our way of thinking. It's very bureaucratic, you have to be aware that OK, you have to two different development processes when you think about further development of your core business, and then how do you develop new business? That's two very different things. And again, we're in the process of learning how to work into that and creating a new setup for it because right now actually in our new business development, we doing both and it kind of gets mixed into each other and very often, and I think you can hear that from other corporates that of course the short term perspective wins because the whole business thinking and it's like, what's the results for the next quarter?

MJ:	24:30	How will this contribute into banks? And of course when I started talking about blockchain and did that for almost three years ago, it was just like, yeah, but Michael, that's like talking about the moon. We don't know what it is. I actually think, with blockchain, we have like 3400 employees at Tryg and at that point of time, I think maybe a handful of people in Tryg have heard the expression Blockchain at all and nobody understood it. Then when I say we have to focus on blockchain it was like, what is he talking about? But then actually creating a use case, doing actual stuff, working with this, that's an eye opener for people. So again, the whole, working with innovation and startups is a lot about having the right approach, the right mindset to be explorative and then as fast as you can, become concrete because concrete examples the storytelling into corporates, that opens eyes in even bureaucratic business people because then
MI	26.42	they can relate to somehow. When it's too conceptual or abstract, it only fosters discussions that really has no value or doesn't make sense.
MJ:	26:43	Actually people don't know what they are talking about. And I'm not just talking about the people in our core business. I'm also talking about the people in our business development innovation units. We don't know before we get concrete.
LL:		How do you move to creating a more long-term goal then?
MJ:	27:20	That's very good question because it's kind of a process. And at least in the way I'm thinking, and I tend to say that, OK, when you are in the very early phase of developing something new, you have to have a picture about in which direction are you moving, what's the potential. And then as you get along, and that has a lot to do about the methods, the way of working, prototyping, and testing and piloting and doing a lot of stuff in the beginning that have very short time limits, because you just have to test it. In corporates, we tend to have a, both in developing our core business and developing new business, we kind of want to have a plan. OK, so here's the plan. If we follow that plan, we will get to the result. But that's not the way the world's working. So you have to have a clear picture of, OK, which direction are moving? What's the potential, how could it be?
MJ:	28:56	But knowing that you're never going to end there, but then when you get some experience you can elaborate on your goals and that takes a lot of courage in an organization to work like that. And a lot of, we have to take chances and we have to take a lot of chances a because we don't know which of them is going to be the success in the end. We can have considerations about it. And that is certainly what Tryg has become much better at over the last two years. And of course it gets kind of self-driven when you then start seeing, OK, this makes sense. We can see now we're developing this business within pay per use insurance based on our very early work with the sharing services. And then we have done it so we know we can do it, we developed the competence to actually do it along the road.
LL:	30:36	How does it work to integrate the startups into working with Tryg?
MJ:	30:54	I have to be quite frank here. I still have the feeling that we have only started, so I don't even know if I can say anything that makes sense into that because it's not like we have running business, working together with startups. Everything is still in the early phases of testing out, re-directing, putting up another pilot. But the area where we are working most with startups now is actually within sharing economy. Right now we have 26 partnerships with sharing services and I guess 20 of them are startups. And it's a special case you could say because we decided that we wanted to move into the sharing economy and we decided that, OK, we believe there is a huge market potential here. We believe the market will drift to a short-term insurance.
MJ:	32:11	And then we kind of just jumped into it and just started developing solutions and having the dialogue with the startups And what I can see is it takes totally different competencies from Tryg's side to move into this because people from our core business, our old business, we have seen it and they have been involved and they just don't understand how to talk with startups because it's a totally different way of thinking, it is a totally different business model they run, and the whole education they have gotten is targeted at the old world. So they don't understand

MJ:	34:28	what they are sitting in front of. You have to find the people that actually has the openness to redirect their thinking and understanding. But that's the biggest challenge we have right now actually. So what we're at right now is OK, actually it would be easier to get somebody who don't have the long experience of working with companies in the old business world, but what they are lacking is the insurance understanding because it's still working into the sharing economy and platform business world. Basically, it's still the same issues around the insurance part of it. So it has a lot to do with understanding the way of doing business, and a lot of startups are disrupting the old way of doing things in all kinds of ways, putting up different distribution models, putting up a different value propositions. I don't know if you know about the term exponential organizations. Actually, a lot of start-ups now are just born with this mindset when they start developing business and that's just so totally different. But all startups start like, OK, there is a problem, how can we develop better solutions than the existing ones? And that could be, ok we can create more value for the users. We can do it much more effective. We can attract the resources in different ways. For me right now, the whole sharing economy is just like, all the platform economy is just the core example right now because all businesses are going to change, in the way in which services, the products, are delivered, by whom, by which resources, how they are delivered. And all corporates have to deal with that because I actually think all existing business will be disrupted within the next 10 years, 15 years.
LL:		LL: And do you think with your current models of innovation, can you avoid that disruption?
MJ:		MJ: No, you can't avoid the disruption, but you can kind of move into the new world and create
		new business and perhaps even create more business than the existing business.
GF:	37:15	But do you think that the new business is going to be also new clients or is it existing clients that shift their needs?
MJ:		MJ: Of course, that's when disruption is happening, there is always a transition period it
		depends on a lot of factors, how fast is it changing, how easy is it for consumers to actually use the new possibilities. We know about the big examples, airbnb and uber and stuff like that. And within some branches it will happen very fast and others it will take longer because we as humans are used to doing things in certain ways and changing that is always a challenge. But again, if it's easier, if it's cheaper, if it's more convenient, then people just do it. And that's what we see right now
LL:	38:50	I think for us it would be good also to hear a little bit about the other startup programs you're doing. So maybe you can talk a bit about what's the difference, why you're running that camp?
MJ:	39:21	We started Tryg Xplore because the, because of two things, one the camp and start a bootcamp is not by nature, but because it's placed in Denmark and because our involvement with the start up bootcamp is driven by me who I know the Danish part of our business best of course, because we're the biggest insurance company in Denmark, in Norway we are like number three. And the challenges we have been facing in Denmark and Norway is different, so until now we haven't focused much on innovation in Norway. It was always the plan to, at the right timing we have to develop our brand in Norway also in a more innovative way. And of course we had some thoughts about how to start this. And I said we shouldn't copy, we cannot copy the camp into our Norwegian business.
MJ:	40:51	We have to start it differently. And then we came up with the idea of actually doing not an accelerator program but a program where we could attract interesting startups within areas that we are focusing on in Tryg in general but also specifically in our Norwegian business. And then we have a partnership with rainmaking innovation both in regards to the camp and it's also rainmaking that are owing startup bootcamp. So we have a very, very good dialogue with them around innovation and startups before. And then we talked or discussed to have a dialogue with rainmaking about, OK, if we wanted to do something Norway, attracting startups. On the one hand Tryg Xplore is about changing our position within the Norwegian insurance market,

		becoming more innovative. And the other thing is actually doing something that could result
MJ:	42:34	in business development. And it ended up in the Tryg Xplore program that also within these kinds of programs is it is a different program. It just started and we were very positive. We received like, I think it was 58 applications from startups within a lot of different areas. I think there were startups from 12 different countries and in the selected ones, we selected seven, and I think they are from four different countries, Norway, Sweden, actually there's no one from Denmark and then I think one from UK, one from Lithuania.
LL:	43:43	And why did you choose to run that externally with Rainmaking?
MJ:	43:50	Because yeah, because we just know we cannot run a program like that. We don't have the competencies, we don't have the understanding, we're not able to do that. So it's also a learning process for Tryg in Norway. Again, the project manager is part of the new business department that I'm part of also. And they are responsible for it and running it together with Rainmaking. But it's rainmaking who are doing the workshops and things that are part of this program.
LL:		LL: And do you think it's even more difficult to integrate it into your business if it's run so externally?
MJ:	44:47	No, I don't think so, because now we have a lot of learning. The Danish business in Tryg has become a lot more mature over the last years, our business in Norway is just starting now. So of course there will be challenges. But of course we have set it up, we have total alignment and buy-in from the top management in Norway, they are owing the program. We knew if we didn't get the buy in from the top management in Norway we shouldn't do it because then we would just meet all these obstacles in the process and they have the resources to do it, there is a plan if we decide to engage with some of the seven, we have actually a plan how to do it, either invest in them or put up partnerships are doing pilots.
MJ:	46:10	And so we're much better prepared now in Norway than we were in Denmark three years ago, starting this, but yeah we have to learn a lot.
GF:	46:28	Now that you mention investment, are you also investing in startups here in Denmark?
MJ:	46:34	We don't have an investment fund for startups by now. Maybe we will get it. But what we're doing right now is, actually we have started developing startups together with other partners and founders. We have two examples of that right now. Actually within a week or so, we're launching a digital insurance company called Undo that are partly owned by Tryg, partly owned by Rainmaking and four founders. And they are working totally independent of Tryg and they're going to disrupt our business, but we knew, if we wanted to develop a digital insurance company within Tryg, we would never succeed because there would be way too much resistance from the existing business. So that's actually, that's pretty cool that we started creating our own startups together with partners.
LL:	46:34	Where did that came from, this collaboration?
MJ:	48:22	From our new business department. You have to get that, the camp is in our new business department, we have the responsibility for the camp, but the camp is Tryg's co-working space and the camp is not like an organizational unit within Tryg. It's a co-working space in it.
GF:	49:03	But the founders you mentioned they came from Tryg?
MJ:	49:05	No, no, no, no, no. They came from totally different places.
LL:	49:05	How did you find them then?
MJ:	49:13	Together with rainmaking. Again, rainmaking, they know everything about the startup community in Denmark and they found the people. And we have another example called homebob, which is a platform and an app for homeowners. This we have created together with somebody called solar and a cryg also an innovation company. And the funny story about about homebob is that we have been totally customer driven in the development. So from the beginning homebob is not selling any kind of insurance. It's just delivering services to

homeowners that makes sense to them and are driven by the problems home owners can have related to the house and of course then we believe that at some point of time insurance will become relevant for homeowners also. And it was internally in Tryg when we proposed this, people were just like, what? Are you going to make a platform for homeowners, invest in it and it's not going to sell insurance? What are you doing? That's a totally different approach now within innovation and who knows, maybe we are going to sell services to homeowners together with other partners that are not directly related to insurance but creates peace of mind and safety for homeowners. But again, we don't know. We will see how it develops. Of course we believe in it, but again, we don't know.