



**UiT**

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## **Open Innovation in the Norwegian finance industry:**

*How a Norwegian bank collaborates with startups*

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*“The future ain't what it used to be.”*

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## **Abstract**

The overall purpose of this study has been to shed light on how an actor in the Norwegian finance industry uses elements from Open Innovation in order to collaborate with startups. We have conducted a single-case study with three units of analysis to investigate the research phenomenon. We propose and use the corporate-startup collaboration (CSC) model to portrait how a corporate actor uses elements from Open Innovation in order to collaborate with startups. We found that an actor in the Norwegian finance industry actively uses Open Innovation elements, but we recognize that the elements have potential for a more optimized and structured approach.

Keywords: Open Innovation, corporate innovation, corporate-startup collaborations

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# 1 Introduction

In the famously known folktale about the slow-moving Tortoise and the quick Hare, the Tortoise is able to out-race the Hare. The perhaps overconfident Hare can run a lot quicker than the Tortoise; yet, the Tortoise's ability to consistently move forward at all times makes the Tortoise win in the long-run.

The folktale about the Tortoise and the Hare illustrates the new competitive situation in the European (and Norwegian) finance industry. Previously, the finance industry consisted of banks competing against other banks, meaning Tortoises have competed with similar preconditions, and most importantly, without the Hares. As the European Union (EU) introduces a new finance directive which effectively opens up for new competitors, the quick-moving Hares (i.e., startups and other third-party actors) will now increasingly enter the industry. However, the banks, or the Tortoises, may still win the race in the new competitive landscape: Similarly to the Tortoise in the folktale, the banks rely on consistently moving forward in order to out-perform third-party actors and competitors in the market with new preconditions.

This thesis examines how internal-external collaboration might contribute to making Norwegian banks, or Tortoises, transition to the new competitive landscape, perhaps by even teaming up with Hares.

## 1.1 Background

The European (and Norwegian) finance industry faces a new competitive environment as the EU makes changes to its finance directive (European Parliament, 2015). The new EU directive, the Revised Payment Service Directive (PSD2), is a game-changer for retail banking (Hafstad, et al., 2017). The intellectual property on data shifts from banks to consumers, which consequently opens the banking sector to new third-party actors and startups (Omarini, 2018). As the directive currently becomes increasingly implemented across the EU and the European Economic Area (EEA), banks' previous monopoly of customer's transaction data and payment services will cease (Hafstad, et al., 2017). Additionally, Folcia & Firnges (2017) point out in a report by PWC that banks generally respond in the "eleventh hour" to implement and adjust to new market preconditions. In the meantime, active internal-external collaboration might be a fundamental approach for banks to stay ahead in the new and dynamic competitive landscape.



PSD2 enables the customers of banks, both consumers and businesses, to access and use third-party providers to manage their finances (Hafstad, et al., 2017). Two-thirds of banks expect that every single bank function will be affected (Folcia & Firnges, 2017): financial services and products have thus far been exclusive to banks, but the introduction of PSD2 opens up these services and products to any licensed company (Hafstad, et al., 2017). As a result, 90% of banking executives believe banks will lose existing market share to new actors in the industry (Omarini, 2018). Imagine using Facebook or Google to pay bills, transfer money, or to analyze your personal finances, while still having your money securely placed at your current bank (Hafstad, et al., 2017). In other words, third-party actors are able to build services on top of banks' existing data and infrastructure (Hafstad, et al., 2017); and consequently, the transition of payment- and banking industry services going from banks to third-party actors will threaten banks' previously exclusive revenue streams (Omarini, 2018). Following, banks will no longer compete only against other banks and financial institutions, but also against any licensed third-party business.

The objective of PSD2 is for the European Commission to induce innovation, reinforce consumer protection, and to improve the security of internet payments and account-access within the EU and EEA (Hafstad, et al., 2017). By law, banks have to make customer data available in a secure way to third-party actors (Folcia & Firnges, 2017). The effects of PSD2 will thus fundamentally change the payments value chain, business models profitability, customer expectations, and the use of account information (Hafstad, et al., 2017). In essence, PSD2 will be key in opening up the previously "closed" competitive environment in the finance industry. While the banks may need to adjust to the competitive changes, there are also new opportunities to capitalize on. For instance, banks can more easily collaborate with emerging startups and third-party actors. Hence, banks can potentially profit from the new competitive landscape if they can transition successfully.

## **1.2 Motivation and purpose**

The entry of PSD2 has given the finance industry a notion of "Open Banking," which is similar to the "Open Innovation" theoretical framework: the free flow of inside- and outside ideas and resources to improve, develop and implement new products and services (Omarini, 2018; Chesbrough, 2003). Furthermore, banks recognize the need to establish a proper response to the new competitive landscape (Folcia & Firnges, 2017). Some banks are taking a venture position to acquire stakes in new industry actors, while other banks seek to become

innovation partners with new third-party actors by facilitating good partnership-strategies, and a few banks seek hybrid solutions (Erichsen, 2018; Weldeghebriel, 2017; Jakobsen, 2018). As a result, there is not a clear consensus for how banks adequately should respond to the new competitive situation.

In a conventional perspective, researchers have favored analyzing the internal innovation processes of companies, but the previous decade has brought a recalibrated academic attention to the concept of external collaboration and Open Innovation (Hung & Chou, 2013). Open Innovation, introduced by Henry Chesbrough, recognizes how companies can leverage external resources to increase their innovation success, while at the same time reduce project risks by involving additional stakeholders (Chesbrough, 2003). In this theoretical framework, companies' innovation processes are gradually centered toward a free flow of innovative ideas, experiences and knowledge embodied in people and intellectual property across internal- and external stakeholders, resulting in Open Innovation (Hung & Chou, 2013). Open Innovation could in that way prove useful to shed light on challenges and opportunities actors in the finance industry may encounter in the new competitive landscape.

To summarize, the concept of Open Innovation shows clear parallels to the increasing “Open Banking” paradigm profoundly induced by PSD2: banks are opening up their APIs (application programming interface), which allows non-banks to enter the financial market without the need to build their own infrastructure and heavily invest in compliance (Evry, 2016). At the same time, elements from the Open Innovation framework could lead to successful transitioning for banks. Therefore, following the new competitive landscape in the finance industry, banks could purposefully apply similar principles as taught from the Open Innovation framework to improve internal innovation success.

### **1.2.1 Existing literature**

In general, existing literature respectively explores how businesses can implement Open Innovation and how businesses can collaborate with startups; yet, the combination of these literature approaches is still underrepresented in existing research. However, Weiblen and Chesbrough (2015) identified and suggested several approaches for collaboration between corporations and startups: startups bringing their entrepreneurial ideas and capacity matched with corporate capital and resources (Weiblen & Chesbrough, 2015). In addition to Weiblen and Chesbrough's (2015) exploration of corporate-startup collaboration, Kohler (2016) has provided a “corporate-startup collaboration spectrum” based on the Open Innovation

conceptual framework. Kohler (2016) claims that startups are major drivers for innovations within technology and new business models. In that way, research from Weiblen and Chesbrough (2015) and Kohler (2016) suggest corporations have great potential gain by strategically collaborating with startups.

Furthermore, according to Weiblen and Chesbrough (2015), large corporations need to change faster; otherwise, the corporations will be left behind in a dynamic landscape. As previously mentioned, new regulations such as PSD2 and emerging trends within Open Banking in the finance industry will result in a more dynamic competitive landscape. Simultaneously, Open Innovation has proved to be a theoretical framework efficient in leveraging internal-external collaboration. Accordingly, this thesis further explores how collaboration between corporations in the Norwegian finance industry and startups may found upon the Open Innovation framework. Specifically, the thesis sheds light on how an actor in the Norwegian finance industry uses Open Innovation elements in order to collaborate with startups.

### **1.2.2 Empirical context and problem statement**

SpareBank 1 Nord-Norge is one of the banks transitioning to the new competitive landscape in the Norwegian finance industry; and as a result, SpareBank 1 Nord-Norge is a captivating corporation to examine in this paper.

SpareBank 1 Nord-Norge is a regional savings bank located in Northern Norway, and the bank carries out all bank services, including payment, savings, loans, and insurance (SpareBank 1 Nord-Norge, 2018). Furthermore, SpareBank 1 Nord-Norge promotes its profile of being accessible and close-at-hand: the bank has 38 regional branches located all over Northern Norway, serving more than 350 000 retail customers and approximately 40 000 corporate customers (SpareBank 1 Nord-Norge, 2018). Besides, SpareBank 1 Nord-Norge claims to operate as a key regional stakeholder in sustainable development due to its high ethical standards, credible business partnerships, close relations with customers, and as an influential actor for developing the regional community in Northern Norway (SpareBank 1 Nord-Norge, 2018). Still, the scope of SpareBank 1 Nord-Norge's operations makes the company exposed to the changes induced by the introduction of PSD2.

While SpareBank 1 Nord-Norge maintains significant market shares in Northern Norway (SpareBank 1 Nord-Norge, 2018); the bank has only a total of 2,4% of the national finance

market in Norway (Finans Norge, 2018). Also, SpareBank 1 Nord-Norge is a part of the SpareBank 1 Alliance (SB1-Alliance) as one of 14 independent savings banks located in Norway (SpareBank 1, 2019). SB1-Alliance delivers joint management of development services to the alliance banks, such as website- and financial technology solutions (SpareBank 1, 2019), and the collective development within SB1-Alliance is called *Banksamarbeidet* (“the bank collaboration”). As a result, relatively small savings banks, such as SpareBank 1 Nord-Norge, gain advantages of economies-of-scale; including access to high-quality services and solutions which would otherwise be unaffordable to develop solely.

The community of Northern Norway owns 53,6% of SpareBank 1 Nord-Norge Group; and consequently, the bank pays out dividends to the regional community every year: *community dividends* (SpareBank 1 Nord-Norge, 2019). In 2018, this included MNOK 465, and all of the community dividends are used to contribute to regional development through *Samfunnsløftet* (SpareBank 1 Nord-Norge, 2019). As a part of Samfunnsløftet, *Innovasjonsløftet* (“the innovation pillar”) specifically contribute to entrepreneurial activities and innovative advancements in the region of Northern Norway (SpareBank 1 Nord-Norge, 2019).

To recap, SpareBank 1 Nord-Norge is now entering a new competitive landscape evoked by the new EU directive. As the competitive landscape changes, SpareBank 1 Nord-Norge might increasingly leverage external collaboration with startups by founding upon the Open Innovation framework. On that basis, the operationalized problem statement of this thesis is:

*“How does SpareBank 1 Nord-Norge use elements from Open Innovation in order to collaborate with startups?”*

The research of this thesis is structured as a case study with three units of analysis. The methodology is further elaborated in chapter 3.

In the existing literature, startups and corporations might have different incentives for joint collaboration: Weiblen and Chesbrough (2015) emphasizes that large corporations and startups are categorically different organizations: each side has what the other lacks. Thus, the existing literature addresses both the startup- and the corporation’s perspectives. Consequently, the purpose of this research project is to illuminate the collaboration processes between SpareBank 1 Nord-Norge and startups, in line with the suggestions for collaboration presented by Open Innovation literature.

To answer the problem statement, and to get a clear picture of the collaborations, we will analyze four elements 1) objectives of collaboration, 2) knowledge- and resource flows, 3) structures for value creation, and 4) value capture. These elements will be further elaborated by using the corporate-startup collaboration (CSC) model presented in chapter 2.2.

### **1.3 Thesis delimitations**

There are three delimitations set as guidelines for the research and empirical scope of the thesis.

The first delimitation in this paper is restraining the *finance industry*. The biggest interest organization in the Norwegian finance industry, Finance Norway, represents actors across the different branches of the industry: banking and capital, insurance, life insurance & pension, and other financial services (Finance Norway, 2018). Although the finance industry may include a wide range of financial industry actors, this paper specifically concentrates on the perspectives of banks (i.e., banking and capital).

Also, this thesis separates between “banking financial institutions” as opposed to “non-banking financial institutions.” The banking financial institutions include Norwegian banks which primarily engage in delivering banking and capital services, although these banks also frequently branch out in other parts of the finance industry.

The second delimitation in this paper restrains the geographical scope. While the European finance industry may have several similarities in regulations and protocols, the geographical conditions are not as generalizable. The thesis, therefore, exclusively focuses on the actors in the Norwegian finance industry.

The third delimitation is the scope of the term “startups”. In this thesis, “startups” include both legal/registered companies in their first stages of operations as well as projects only in their idea-phase, i.e., projects without legal/registered companies.

## 2 Theoretical framework

The theoretical framework in this thesis includes two parts. The first part introduces and reviews existing literature on Open Innovation and how it addresses corporate-startup collaboration. In the second part, we present our proposed model for corporate-startup collaboration built on elements from Open Innovation.

### 2.1 Open Innovation and corporate-startup collaboration

*Open Innovation* finds upon the understanding of where valuable ideas originate; they may occur both inside- and outside of a company (Chesbrough, 2003). Consequently, the theoretical framework of Open Innovation emphasizes the importance of collaboration across internal- and external organizational borders using flows of knowledge and resources to generate higher-quality innovations, and how these collaborations ultimately can generate- and capture value (see Figure 1).

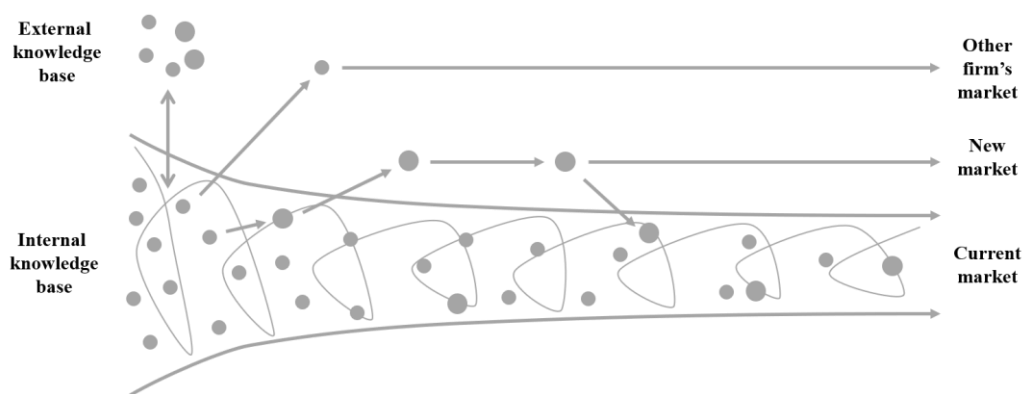


Figure 1: Simplified illustration of Open Innovation (Chesbrough, 2003)

Open Innovation is an emerging paradigm within corporate innovation, and Open Innovation is progressively replacing the older paradigm of *Closed Innovation* (Hung & Chou, 2013; Chesbrough, 2003). Upon Henry Chesbrough's introduction of Open Innovation in 2003, the theoretical framework has generated significant academic contributions and momentum by fellow researchers and dedicated conferences (West, et al., 2014; Chesbrough & Bogers, 2014). Also, according to a study comprised of 125 large European- and US companies, an increasing amount of companies are adopting the Open Innovation framework in practice (Chesbrough & Brunswicker, 2013). Thus, Open Innovation represents an academically explored and mature theory for corporate innovation across different industries; yet, there are still underrepresented areas to study, such as corporate-startup collaboration.

In contrast to the emerging paradigm of Open Innovation, the preceding Closed Innovation paradigm explores corporate innovation as a vertically integrated model popularized by researchers such as Chris Freeman (Chesbrough, 2003; Freeman & Soete, 1997). The key difference between Open- and Closed Innovation condenses to the use of external knowledge and competency as part of the innovation process of companies (Chesbrough, 2003): on one side, Open Innovation invites and encourages external partnership as a key enabler for corporate innovation; and on the other side, Closed Innovation perceives external collaboration as a threat and aversion to corporate innovation.

Chesbrough (2003) elaborate on key differences between the two innovation paradigms; for instance, Open Innovation recognizes that not all smart people can work for a specific organization, external R&D creates significant value, companies can profit from research originated outside of the companies, and “winners” make the best of internal- and external ideas. In contrast, Chesbrough (2003) states that Closed Innovation argues organizations should hire all the smartest people, companies must discover intellectual property (IP) to profit from it, and companies that create the most and best ideas will win.

Furthermore, the discussion on degree of “openness” is an important take on the Open- and Closed Innovation paradigms: Trott & Hartmann (2009) argue no company possibly can be “100% closed”. Responsively, the Open Innovation literature has widely accepted that there are different degrees of openness in regards to the Open Innovation paradigm (Dahlander & Gann, 2010; Lazzarotti & Manzini, 2009). The joint contribution of the two paradigms can thus be used to identify that companies operate on a continuum of Open- and Closed Innovation (Dahlander & Gann, 2010; Lazzarotti & Manzini, 2009). Dahlander & Gann (2010) categorizes the Open Innovation framework as beneficial, while at the same time emphasizes that it is complicated and comprehensive. However, Chesbrough (2003) argues that companies should strive for corporate strategies that skew in favor of the Open Innovation paradigm.

To summarize, the continuum between Open- and Closed Innovation strategies paints a more nuanced picture of Open Innovation; showing that the degree of implementing Open Innovation requires thorough planning and alignment with organizational capabilities and strategies, as well as contextual features.

## **Open Innovation beyond the innovation funnel**

As previously stated, the source of Open Innovation derives from Chesbrough's (2003) studies, which primarily focused on R&D giants in the US. This has colored the Open Innovation literature the first decade of its existence: Open Innovation has been treated as a paradigm for large corporations doing extensive R&D internally, seeking to exploit external sources of innovation. Thus, the Open Innovation funnel describing an internal innovation process interacting with external sources (as shown in Figure 1) has been a symbol for Open Innovation. However, this description has not necessarily been as fitting for smaller corporations.

In recent years, the Open Innovation literature has evolved in its second decade of academic life, and Open Innovation is being accepted as applicable in situations where companies do not develop new products or services themselves (Vanhaverbeke, 2013). Instead, Vanhaverbeke (2013) advocates for how collaborations, networks, and partners can provide companies with innovation and competitive advantages. This makes Open Innovation relevant for a larger group of companies compared to before (Vanhaverbeke, 2013). One of these organizations will be further explored in this thesis.

### **2.1.1 Objectives of corporate-startup collaboration**

The objectives of Open Innovation collaborations should base on corporate actors' overall strategies (Chesbrough, 2003). Weiblen and Chesbrough (2015) emphasize that ahead of collaboration, the actors need to state which goals they want to achieve through the collaboration. Vanhaverbeke (2013) adds that by anchoring the objective of collaboration in one or more of the strategies of the organization, the actors can successfully determine the strategic objective for an Open Innovation initiative. In that way, the fundament to prosperous collaborations starts with clear objectives.

The inflow of knowledge and networking protrudes as the overarching strategic objective for engaging in Open Innovation amongst corporations (Chesbrough & Brunswicker, 2013). Chesbrough and Brunswicker (2013) argue that there are common strategic objectives for engaging in Open Innovation. In a larger survey study, Chesbrough and Brunswicker (2013) examined the strategic objectives for engaging in Open Innovation amongst large European and American corporations, finding that the four most valued objectives were: 1) Establishing new partnerships, 2) exploring new technological trends, 3) identifying new business



opportunities, and 4) accelerating time to complete R&D. In that way, the survey suggests that the practice of engaging in Open Innovation amongst large corporations has an explorative nature.

### **2.1.2 Knowledge- and resource flows**

In Open Innovation, the knowledge- and resource flows comprise of transferring, for example, ideas, competency, and personnel, both in and out of an organization (Chesbrough & Bogers, 2014). According to Chesbrough (2003), the flow of knowledge and resources across organizational boundaries lies at the core of Open Innovation, and Open Innovation processes such as corporate-startup collaboration. At the same time, Chesbrough (2003) stresses that there are both inbound- and outbound flows, meaning ideas, resources, and personnel may both enter or exit the focal organization.

Furthermore, the flows of knowledge- and resources can be of pecuniary or non-pecuniary nature. A pecuniary flow includes an immediate monetary transaction (Dahlander & Gann, 2010). For instance, a typical pecuniary flow is when an organization sell IP licenses to third-party actors. In contrast, a non-pecuniary flow does not include a direct monetary transaction, and the benefits of the flow may be more abstract (Dahlander & Gann, 2010). For instance, if an organization provides free IP licenses to third-party actors, the benefit might be a future result of mutual value creation to the organization's customers. Weiblen and Chesbrough (2015) argue that collaborations can consist of one of the two flows or both. Thus, there are multiple approaches and options in terms of establishing knowledge- and resource flows.

The following subchapter presents how knowledge- and resource flows may result in different structures of value creation.

### **2.1.3 Structures of value creation**

Structures of value creation refer to potential types of collaborations that are feasible between a corporate actor and a startup actor. Additionally, there are three implementation approaches to Open Innovation: outside-in, inside-out, and coupled innovation (Chesbrough, 2003).

Figure 2 illustrates how the strategies differ.

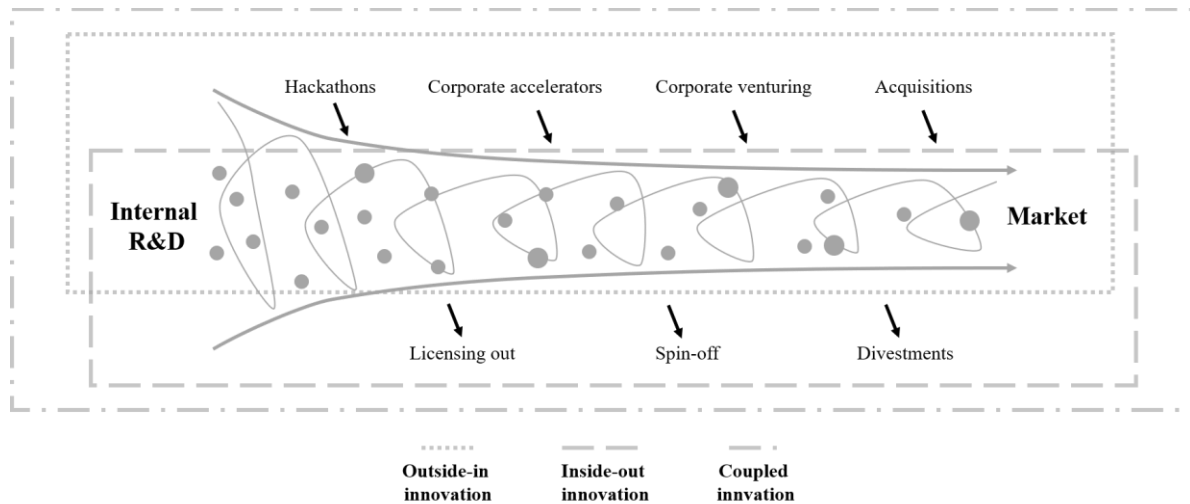


Figure 2: Examples of Open Innovation implementation (van der Zee & Rehfeld, 2015)

There are several leading examples of Open Innovation in the Norwegian finance industry, which will be examined in the following subsections.

### Outside-in innovation

Outside-in innovation occurs when external ideas “flow” from outside an organization *to* the organization, as illustrated in Figure 2 (Chesbrough & Bogers, 2014; van der Zee & Rehfeld, 2015). The outside-in innovation approach focuses on attracting external input and contributions to enhance the internal innovation process of a company (Chesbrough & Bogers, 2014). Weiblen and Chesbrough (2015) state that outside-in innovation intends to function as a “bridge” for startup technologies to become useful in the corporate world. Furthermore, outside-in innovation may be a result of acquisitions, corporate accelerators, corporate venturing, and hackathons (van der Zee & Rehfeld, 2015). In the subsequent paragraphs, four examples of outside-in innovation in the Norwegian finance industry are presented.

The first example of outside-in innovation in the Norwegian finance industry illustrates the use of *acquisitions* when SB1-Alliance acquired mCASH in 2015. Acquisitions take place when a corporation acquires a startup, or another business entity, to gain additional resources (Dahlander & Gann, 2010). An acquisition of a startup can be a quick and impactful way to gain exclusive access to external resources such as new technology, competency to solve specific problems, or access to new markets (Weiblen & Chesbrough, 2015). SB1-Alliance acquired mCASH in 2015 to gain new technology: mobile payment services (Sagmoen & Wig, 2015). However, after barely one year, mCASH shut down due to the lost rivalry against

competitor DNB's mobile payment service *Vipps* (Jørgenrud, 2017). The origin and development of *Vipps* will be elaborated later, as part of analyzing inside-out innovation. Nevertheless, the story of mCASH proves that SB1-Alliance has actively attained the necessary external technology by acquiring smaller companies.

The second example of outside-in innovation in the Norwegian finance industry shows how banks, such as DNB and SR-Bank, collaborate with startups through *corporate accelerators*. Such corporate accelerators are corporate-supported programs with a predefined duration that support cohorts of startups (Kohler, 2016); and, these programs have since the beginning of the 2010s been thriving across many industries (Kanbach & Stubnet, 2016). Corporate accelerators intend to create unique long-term- and corporate renewal benefits (Kohler, 2016). The programs typically offer mentoring, education, and corporate-specific resources for corporations to attract and collaborate with startups (Kohler, 2016). Corporate accelerators have in recent years also entered the Norwegian finance industry.

DNB, Norway's leading bank in terms of market share (Finans Norge, 2018), has its own accelerator program; DNB NXT Accelerator (StartupLab, 2019). In DNB's corporate accelerator, startups are offered to get expert mentors, unique industry insights, and investment funding; all for the duration of the program (StartupLab, 2019). In addition to supporting startups in the accelerator program, DNB sends its employees to work and learn from the startups (Hvamstad, 2019). Another bank in Norway, SR-Bank (an alliance bank to SpareBank 1 Nord-Norge), created an accelerator program to engage with startups (Eikeland, 2019). SR-Bank's accelerator program resulted in, amongst others, the artificial intelligence chatbot-service "Boost.ai", now valued at over 1 BNOK (Erichsen, 2018). Thus, these examples indicate that accelerators have proved important for Norwegian banks to both acquire technological insights from startups and acquire talented personnel.

The third example of outside-in innovation in the Norwegian finance industry illustrates the use of *corporate venturing*. Corporate venturing allows corporations to participate in the success of external innovation and insights into non-core markets (Kohler, 2016), usually as a result of internal entrepreneurial efforts or investing in new startups (Covin & Miles, 2007). DNB and SR-Bank have both created venture capital funds of NOK 250 million, specifically to invest in startups (Weldeghebriel, 2017). The CEO of DNB claims the venture capital funds are a direct response to the new EU directive; PSD2 (Weldeghebriel, 2017). Also, the

emerging trend of corporate venturing shows how Norwegian banks have an increasing interest to engage with smaller companies.

The fourth example of outside-in innovation in the Norwegian finance industry is *hackathons*. Hackathons are intensive collaborations of various teams (both external and internal) within a limited time, where the team is put together to solve corporate innovation challenges (Kohler, 2016). SpareBank 1 Nord-Norge, similar to larger banks such as DNB, have embraced the concept of hackathons, particularly to engage with university students (Arnstad, 2017; Giske, 2019).

To summarize, the Norwegian finance industry shows an active use of outside-in innovation in various ways, including acquisitions, accelerator programs, corporate venturing, and hackathons. In essence, the Norwegian finance industry embraces a broad and diverse approach to outside-in innovation: the examples examined in this section shows how Norwegian banks can harness new technology and putting startups in a position as technology suppliers.

### **Inside-out innovation**

Inside-out innovation occurs when internal ideas “flow” from one organization to an external organization, as previously illustrated in Figure 2 (Chesbrough & Bogers, 2014; van der Zee & Rehfeld, 2015). As Weiblen and Chesbrough (2015) point out: not all clever ideas and technologies originate outside of a corporation; hence, the inside-out approach of innovation emphasizes exploitation of a corporation’s unused and underutilized assets and ideas by letting them “flow out” of the organization for others to use in their business (Chesbrough & Bogers, 2014). However, the outflow of assets must not be misinterpreted, as they are not simply given away. The purpose of the outflow is for the originating source to be able to capture externally generated value (Dahlander & Gann, 2010). In the following subsections, two examples of inside-out innovation in the Norwegian finance industry are presented.

The first example of inside-out innovation in the Norwegian finance industry presents *spin-off* companies. A spin-off is a company which originates within its parent company to pursue goals that are deemed to be difficult for the parent organization or which are more suited for a startup (Chesbrough & Rosenbloom, 2002). The engagement levels between the parent company and startup are often close, and it is not uncommon for the parent company to have equity stakes in the spin-off to capture value from its long-term success. By breaking off, the

newly formed spin-off can unlock and develop its embedded value and potential, such as developing a specific technology, while the parent company can continue to focus on its core operations without the distraction of a diverging company segment. In turn, the spin-off can potentially gain access to the heavy resource apparatus of the originating parent organization.

A spin-off in the Norwegian finance industry is DNB's *Vipps*. As already mentioned, Vipps was able to succeed in the rivalry against other mobile payment services such as mCASH (Jørgenrud, 2017). While certain characteristics of the spin-off maintain relations to the parent organization, much of the strength of a spin-off lies in creating separation from the parent organization (Weiblen & Chesbrough, 2015). The purpose of the separation is to gain the agility and innovativeness of a startup, which can be difficult to achieve within a larger company where slow-moving bureaucracy is more common (Weiblen & Chesbrough, 2015). DNB strategically invited competing banks in Norway to collaboratively develop Vipps instead of all banks separately spending resources on individual mobile payment solutions (Jørgenrud, 2017); which likely would create sub-optimized solutions in the perspective of customers. Besides, joining forces in Vipps, the mobile payment solution may also increase its chances to compete against international giants entering the Norwegian market. Furthermore, the joint collaboration made Vipps spin out of DNB, and became an independent company co-owned by DNB and more than 100 other Norwegian banks (Jørgenrud, 2017). In that way, Vipps is a clear example of inside-out innovation in the perspective of the finance industry actor DNB.

The second example of inside-out innovation in the Norwegian finance industry is *licensing-out*. Intellectual property (IP) and patents play an important role for most companies, and IP is central in terms of transferring and sharing knowledge to external partners (Bogers, et al., 2012). Licensing is a way to transfer this knowledge, where the rights of an IP or patent is licensed from a licensor (seller) to a licensee (buyer) (Bogers, et al., 2012). A license is thus, by definition, an agreement that states how a part of knowledge is protected and what is transferred from a licensor to a licensee (Bogers, et al., 2012). Due to the implementation of PSD2, Norwegian banks are in large part obligated to open up parts of their IP to third-party actors.

Instead of only complying with regulatory demands, banks are in a position to facilitate an ecosystem to innovate and disrupt (Evry, 2016). DNB, Danske Bank, S'banken, SB1-Alliance, and other banks operating in the Norwegian market are complying with PSD2

regulations to open up and license APIs to third-party actors (Jakobsen, 2018). New services created on top of a bank's platform include visualization tools, personalized financial management, and more user-friendly saving apps (Evry, 2016). In short, customers of banks can expect higher quality services as new actors will be able to create new financial tools on top of the banks existing infrastructure. Thus, banks must be better at offering valuable services to their customers as competition increases.

To sum up, inside-out innovation in the Norwegian finance industry is a double-edged sword: on one side, banks show a willingness to facilitate inside-out innovation, e.g., through establishing spin-off companies; and on the other side, banks are "forced" to inside-out innovation by industry regulations such as PSD2.

### **Coupled innovation**

The coupled approach of Open Innovation combines various forms of outside-in and inside-out innovation processes, previously illustrated in Figure 2 (Chesbrough & Bogers, 2014; van der Zee & Rehfeld, 2015). While the coupled innovation approach can utilize any combination of both outside-in and inside-out strategies, Chesbrough & Bogers (2013) accentuate specific mechanisms that involve complementary partners: strategic alliances, joint ventures, ecosystems, and platforms. In the following subsections, two examples of coupled innovation in the Norwegian finance industry are presented.

The first example of coupled innovation in the Norwegian finance industry is in regards to *alliances*, where co-creation is central (Canik, et al., 2017). In Norway, and as mentioned, several savings banks have established a strategic alliance; SpareBank 1 Alliance (SB1-Alliance), which SpareBank 1 Nord-Norge is a part of. SB1-Alliance provides independent savings banks with economies-of-scale by providing high-quality development services such as website- and financial technology solutions (SpareBank 1, 2019). In that way, smaller actors, like SpareBank 1 Nord-Norge, can deliver technological solutions to its customers at a similar level as bigger banks.

SB1-Alliance provides a broad collaboration amongst its represented banks, which naturally makes the alliance work on a comprehensive range of projects. However, SB1-Alliance also facilitate and acquire startups to gain new technology and test new financial services. As formerly mentioned in outside-in innovation, SB1-Alliance acquired mCASH to gain mobile payment services. Also, SB1-Alliance have facilitated the growth of startups such as Spleis,

i.e., a crowdfunding service for events and entrepreneurs (Næss, 2017). In that way, SB-1 Alliance proves to be an alliance working on startup projects as well as large-scale technology services.

The second example of coupled innovation in the Norwegian finance industry is through *platforms*, which is exemplified through *Open Banking*. Open Banking is enabled as consumers give consent to regulated third-party providers to securely access their bank transaction history or even make payments (Evry, 2016). The introduction of PSD2 to the European finance sector provides a regulatory boost to Open Banking as banks will be obligated to share customer data with certified third-parties (Hafstad, et al., 2017). While Open Banking has allowed third-party actors to enter the traditional service-sphere of banks, it has also provided banks with opportunities for innovation through incentives for collaboration with external organizations, such as startups.

Open Banking and PSD2 have made banks create platforms for developers, such as “DNB Developer”. DNB offers external creators’ access to bank data and services as well as a toolkit to develop technology (Giske, 2019). By providing a platform for innovation, DNB can attract an ecosystem of developers who create value with mutual potential.

To summarize, the Norwegian finance industry also practices coupled innovation, including developer platforms and strategic alliances.

#### **2.1.4 Value capture**

Value capture is defined by Chesbrough et al. (2018) as the process of acquiring pecuniary or nonpecuniary returns from a collaboration’s value creation. The pecuniary and nonpecuniary returns may be intrinsic, prosocial, nonpecuniary extrinsic and pecuniary extrinsic rewards; in effect, ranging from inherent rewards (e.g., enjoyment of intellectual challenges) to monetary rewards.

Chesbrough (2003) states that practicing Open Innovation is both about creating value in processes involving external partners, but also optimizing the process of capturing generated value. In essence, collaborations can generate value; however, value creation itself does not guarantee value capture. Actors in Open Innovation collaborations must, therefore, take precautions and plan for not only value creation, but also value capture.

There are several approaches to value capture from corporate-startup collaboration engagements (Prats, et al., 2017). Typically, these include accessing personnel, ideas, monetary profit, new technological solutions, market insights, and intellectual property (IP). See Table 1 for an overview of value capture.

Table 1: Different approaches to value capture (Prats, et al., 2017)

	Hackathons	Corporate accelerators	Corporate venture	Strategic alliances	Spin-off	Licensing-out	Acquisitions
<b>Value capture</b>	Capture personnel and/or ideas	Develop ideas/solutions, usually to corporate-specific problems	Monetary profit, new technological solutions, market insights	Economies-of-scale, development programs	Monetary profit, market insights in non-core markets	Monetary profit, further development of IP	Monetary profit, technological development, acquire personnel, market share

In addition to value capture presented in Table 1, Chesbrough (2003) claims there is another abstract potential in value capture, such as visionary startups that are challenging industry frontiers.

## 2.2 The corporate-startup collaboration (CSC) model

In the second part of our theoretical framework, we introduce our model of analysis (i.e., the “corporate-startup collaboration (CSC) model”), which emphasizes on the interaction between the key theoretical elements from Open Innovation previously presented: 1) objectives of corporate-startup collaboration, 2) knowledge- and resource flows, 3) structures of value creation, and 4) value capture.

Our model accentuates the four key collaboration elements identified in the Open Innovation literature and their synergetic potential. The goal of our model is to understand and present the elements of collaborative interaction between corporations and startups from a compound perspective. The CSC model is constructed to shed light on what each individual collaboration element encompasses, its features, and how the elements interconnect.



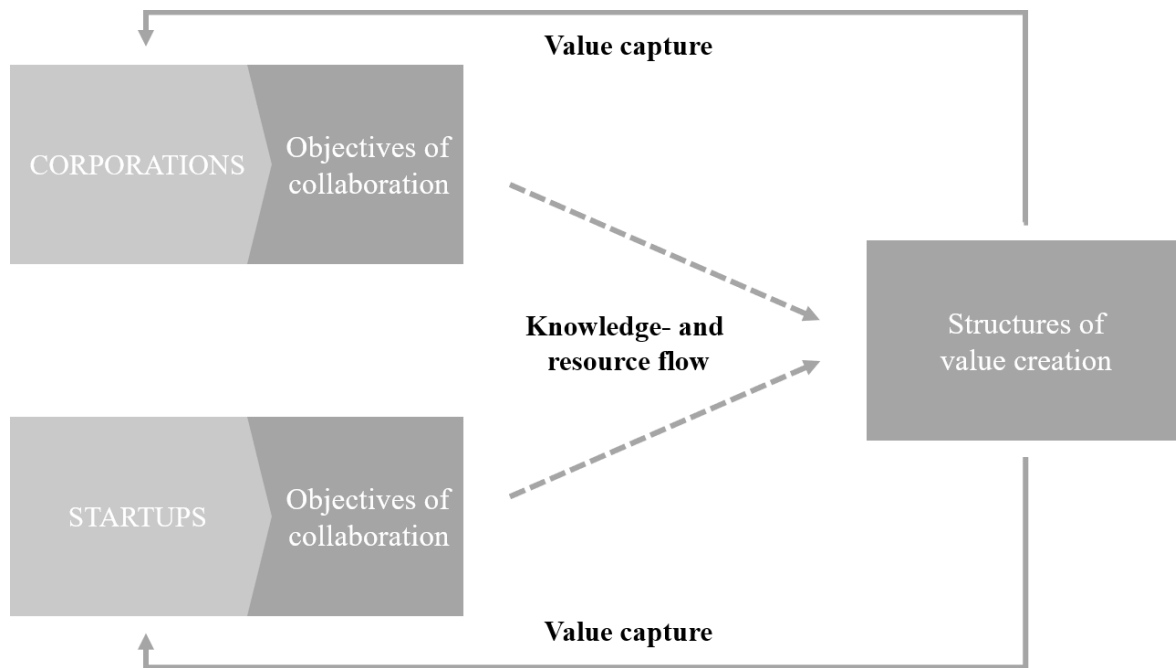


Figure 3: Model of analysis; the corporate-startup collaboration model (CSC model)

The first element of the analysis model is identifying the strategic objectives of the collaboration. Weiblen and Chesbrough (2015) state that different types of corporate-startup engagements have different virtues and challenges, and key in selecting the correct collaboration structures lie in finding those that match the strategic objectives of collaboration, both in the perspective of corporations as well as in the perspective of startups. It is therefore important to understand and clarify the strategic objectives of collaboration, as it provides important insights for later choosing appropriate structures of value creation.

The second element of the CSC model is knowledge- and resource flows. The three different approaches of Open Innovation implementation focuses on knowledge- and resource flows in innovation processes. A more distinct picture of collaboration efforts can be established by understanding how the actors in the collaboration strategically and respectively contribute with knowledge and resources. In essence, the knowledge- and resource flows represent what the actors “invest” in collaborations.

The third element of the CSC model is identifying structures of value creation between corporations and startups. As explored and exemplified in the previous chapters, there exist several mechanisms to implement the three approaches of Open Innovation. The identification

and classification of the structures of value creation stand as a necessity in describing the corporate-startup engagement of any actor.

The fourth element of the CSC model is identifying value capture of the collaboration. Although the outcome (value capture) of collaboration and the objectives of collaboration naturally will correlate to some extent, there are certain factors which might affect the correlation. First of all, if the collaboration is successful, the objectives and value capture will have a higher correlation. For instance, if a corporate actor wishes to gain software competence in a specific field, and the startup provides such software competence; then the value capture and objective match. However, value capture may both be affected directly and indirectly. Imagine if a startup and a corporate actor collaborate, and then the corporate actor can later recruit one of the employees from the startup collaboration. Then the value capture also includes employee acquisition, in the perspective of the corporate actor. Thus, value capture and strategic objectives of collaboration might diverge and should be addressed accordingly.

In our research, the CSC model and its four elements are used to identify how an actor in the Norwegian finance industry uses Open Innovation elements in order to collaborate with startups.

### **3 Methodology**

In this chapter, we present the thesis' methodological approach, which predominantly aligns with the research approach presented by Saunders et al. (2009). Hence, the methodological approach diverges into several layers, including our: 1) constructive research philosophy, 2) research design, 3) data collection, 4) data analysis, 5) research quality assurance, and 6) research ethics. The purpose of our methodological approach is to provide a thesis of high quality and to add valuable contributions to the existing field of literature.

#### **3.1 Constructive research philosophy**

We pursue a constructive research philosophy, meaning we believe every individual has their unique perspectives of any phenomena (Gray, 2004). By this train of thought, the same phenomenon can hold a different meaning to different individuals (Gray, 2004). Therefore, researchers seek to gather several comparable perspectives to increase the chances of gaining a comprehensive and holistic understanding of a phenomenon. For instance, researchers may conduct several interviews with different people regarding the same phenomenon or use several sources of data collection. Consequently, in a constructive research philosophy, the combined data will increase the likelihood of a more thorough and holistic understanding of a specific research phenomenon.

In this thesis, our primary data includes three units of analysis (elaborated in chapter 3.2.1). Additionally, we used official corporate documents as secondary data to supplement our primary data. Our research data has in that way been collected from several sources and provided different perspectives, and in accordance to a constructive research philosophy: our combination of research data has contributed to a stronger and more inclusive understanding of the research phenomenon. When applicable in our results and analysis, we will present the breadth of statements the informants may share. However, to avoid excessive use of quotes, we will strategically select statements that are representative of the different opinions the informants may express. Then, we analyze any contradicting perspectives.

We also recognize, as part of constructive research philosophy, that it is always possible, and usually desirable, to include more sources and perspectives to shed light on a phenomenon. However, it is rarely feasible to seek out every single perspective of a phenomenon due to limited resources and time. We have therefore intentionally selected and interviewed key internal and external informants, as well as we have supplemented and compared statements

with official corporate documents, such as annual reports and corporate social responsibility (CSR) documents. In that way, we have increased the chances of producing research that is credible, transferable, dependable, and confirmable. This will be elaborated in chapter 3.5.

## **3.2 Research design**

In this subchapter, we introduce our research strategy, abductive research approach, and cross-sectional time perspective.

### **3.2.1 Case study**

Researchers must choose between several research strategies (Mehmetoglu, 2004), and Saunders et al. (2012) state that the research strategy used in a study will have implications for the gathered data. Researchers should, therefore, choose the strategy that is perceived to be best suited to answer the specific research phenomenon (Saunders, et al., 2012). We note that our research phenomenon is contingent on the broad and complex empirical context of the Norwegian finance industry.

Furthermore, Dul and Hak (2008) claim that case study research has been backed as a credible research strategy, particularly when the research study emphasizes the importance of context, and when the study includes broad and complex topics. Johannessen et al. (2011) emphasize that case studies consist of an intense collection of rich data from a smaller number of units or cases over shorter or longer periods of time, and that the data is often gathered from several sources from the same context.

Although there is no consensus on defining all types of case studies, Yin (1981) suggests that case studies can be used for exploratory, explanatory, and descriptive purposes. Explanatory case studies are often used to test for why certain phenomena have occurred; and in an explanatory function, a case study may, therefore, generate causal inferences (Yin, 1981). Mehmetoglu (2004) states that explanatory case studies are particularly suited to use in complex analysis of organizations. We argue that our thesis has an explanatory nature, as the purpose of the thesis is to explain how an actor in the Norwegian finance industry uses Open Innovation elements in order to collaborate with startups.

## **Case selection**

We used criteria selection (Johannessen, et al., 2011) to identify the case for our research, and our criteria selection primarily included industry selection and choice of geographical location.

To begin with, we pursued to identify an industry with a dynamic and progressive competitive landscape. This resulted in a shortlist of potential industries for our thesis; and we later chose the finance industry, particularly because the new EU regulation PSD2 will induce a new competitive situation for existing actors in the industry. We specifically recognized that the finance industry will transition to a new and fast-moving competitive landscape and that corporate innovation likely will be of paramount importance.

Next, we categorized the different actors in the finance industry based upon different industry branches (as mentioned in chapter 1.3). In addition, Johannessen et al. (2011) state that interviews optimally should be conducted in-person and in controlled settings. We, therefore, chose to seek out a case business with close geographical proximity to be able to conduct interviews and data collection in-person and primarily face-to-face.

Based upon our industry selection and preferability of geographical proximity, we chose SpareBank 1 Nord-Norge as the single-case business. SpareBank 1 Nord-Norge has its headquarters in the same city as us, and it is, therefore, an optimal fit for our selection criteria.

## **Units of analysis**

Our single-case study has three units of analysis. The first unit of analysis is internal informants at SpareBank 1 Nord-Norge with leadership and strategic decision-making responsibility (from now on called “internal informants”). The second unit of analysis is external informants representing the startup perspective, in which these informants have held a key position in collaboration with SpareBank 1 Nord-Norge (from now on called “external informants”). These two units of analysis are not further specified due to the protection of their identity. Finally, the third unit of analysis is public documents relevant to the chosen case.

We chose informants by using “strategic selection” and the “snowball method” (Johannessen, et al., 2011), after initial contact with SpareBank 1 Nord-Norge. Following, both internal- and

external informants have shed light on our empirical phenomenon. As a result, our single-case study includes information from three units of analysis.

### **3.2.2 Abductive research approach**

There are two core sides of theoretical development: on one side, *deduction* involves starting with theory and then designing a research strategy to test the theory; and on the other side, *induction* involves starting by collecting data and exploring a phenomenon to later generate a theory about the phenomenon (Saunders, et al., 2009). However, Saunders et al. (2009) suggest that *abduction* is a “middle ground” to induction and deduction. An abductive research approach combines elements from both deductive and inductive approaches; and in that way, the researchers move back and forth between theory and data (Saunders, et al., 2009). The theoretical development of our thesis has, in that sense, followed an abductive approach.

In our thesis, we started by examining the existing literature on corporate innovation. Throughout this process, we identified that Open Innovation is a relatively new theoretical framework; and at the same time, Open Innovation has in recent years gained significant academic contributions by researchers across the world. However, we also noticed that beside contributions by Weiblen and Chesbrough (2015) and Kohler (2016), Open Innovation in the perspective of corporate-startup collaboration remained underrepresented in the existing literature.

To summarize, we have identified that an abductive approach to our theoretical development may result in a valuable contribution to further push the academic frontiers of Open Innovation in the perspective of corporate-startup collaborations.

### **3.2.3 A cross-sectional time perspective**

We use data from a limited and short period of time, i.e., a cross-sectional research approach. A cross-sectional study provides data on a phenomenon at a specific time (Johannessen, et al., 2011). Alternatively to a cross-sectional study, a longitudinal study follows the development of a phenomenon over a longer period of time (Johannessen, et al., 2011). However, due to time constraints on our thesis, we have limited opportunities to perform a longitudinal study. As a result of the time constraints, we chose to conduct our research in a cross-sectional study.

Opposed to longitudinal studies, cross-sectional studies are less reliable when attempting to conclude long-term developmental processes (Johannessen, et al., 2011). For instance, a longitudinal study might provide more useful data in an analysis of long-term effects. While our thesis, with a focus on corporate innovation, has a natural interest in development over time, we must recognize the limitations of a cross-sectional study. However, during data collection, we can get historical indications, which provides a sense of long-term development. For instance, informants may elaborate on both current and past projects, and in that way illustrate long-term progress and changes. Simultaneously, the use of several informants reduces the risk of subjective and vague memory. Thus, a cross-sectional study can mimic some of the benefits of a longitudinal study, while at the same time making a cross-sectional study feasible for our research approach in this thesis.

### **3.3 Data collection**

In this section, we introduce our semi-structured interviews, document review, and triangulation.

Thagaard (2002) illustrates that the world of research effectively separates between two approaches to data collection: qualitative- and quantitative research. Our thesis exclusively stays within the qualitative research sphere. The research process in qualitative research is practically a circular process, as opposed to a quantitative research process (Mehmetoglu, 2004). Mehmetoglu (2014) elaborates that in qualitative research, the three phases of research (i.e., research design, data collection, and data analysis) are iterative. In that way, a researcher may start a research study at any stage of the three phases, and that the advantage of a circular research process is that researchers may reflect and produce a more coherent study (Mehmetoglu, 2004). Our research has also included a circular process.

During our research process, we have moved between the different research phases. For instance, we iterated between the theoretical literature and our empirical findings several times. That process helped us gain insights into the literature field, as well as we could later modify and develop the theoretical framework to reflect our new empirical findings. Hence, our thesis has benefited from a circular research process in terms of iterating between existing literature and findings from our data collection.

### **3.3.1 Semi-structured in-depth interviews**

To gain a comprehensive and holistic understanding of how an actor in the Norwegian finance industry collaborates with startups, we have conducted qualitative in-depth interviews with both internal and external informants. The selection of interviewees is specified in chapter 3.2.1. Consequently, both internal and external informants have shed light on our empirical phenomenon.

Semi-structured interviews, as opposed to structured interviews, allow the researchers to cover a broader area while simultaneously collecting comparable data (Noor, 2008). Additionally, we note that researchers studying similar cases conducted semi-structured in-depth interviews (Weiblen & Chesbrough, 2015; Kohler, 2016). In our thesis, we also conducted semi-structured in-depth interviews, with each interview lasting approximately one hour. The data collection concluded once we perceived new information only to confirm existing data and not to provide any new valid insights: we reached an empirical saturation point on the key topics of our thesis after ten in-depth interviews.

As mentioned in chapter 3.2.1, we have three units of analysis, in which two of the units include internal informants and external informants. Therefore, we created two different semi-structured interview guides to enable the interviewees to share their perspectives and reflections on the empirical phenomenon conveniently.



Table 2: List of interviewees/informants – primary data

<b>Informant</b>	<b>Perspective</b>	<b>Position</b>	<b>Interview location</b>	<b>Duration</b>
INT1	Internal	Project manager	Tromsø, Norway	60 minutes
INT2	Internal	Senior management	Tromsø, Norway	55 minutes
INT3	Internal	Middle management	Tromsø, Norway	50 minutes
INT4	Internal	Middle management	Tromsø, Norway	65 minutes
INT5	Internal	Middle management	Tromsø, Norway	55 minutes
EXT1	External	Project manager	Phone interview	45 minutes
EXT2	External	Project associate	Tromsø, Norway	40 minutes
EXT3	External	Senior management	Tromsø, Norway	50 minutes
EXT4	External	Project manager	Tromsø, Norway	60 minutes
EXT5	External	Senior management	Tromsø, Norway	55 minutes

When possible, we conducted the interviews in-person per recommendations by Johannessen et al. (2011). Only one interview, due to geographical challenges, was conducted by phone. All of the interviews were scheduled in advance with each interviewee by email, and the interviewees were able to select a location of their preference. We wanted the interviewees to select locations where they would be comfortable and feel freer to speak openly about the topics. Each interview was scheduled to last one hour, yet several of the interviewees got highly engaged in the topics and spent additional time to make sure they shared all their thoughts on every topic.

Furthermore, our research project is registered and approved by the Norwegian Centre for Research Data (NSD) (see Appendix C). The approval from NSD is a result of satisfactory research privacy policy, and good practice in terms of processing, storing, and collecting research data. Every interviewee has signed and approved to part-take in our research project, and the interviewees were also aware that they could at any time withdraw their acceptance. Also, all the interviewees approved to be audio recorded during the interviews.

### 3.3.2 Document collection

The primary data from interviews have been supplemented with secondary data, including annual reports and publicly-available documents, press reports, and other news articles.

In the document collection process, we chose not to ask the informants about relevant documents for our research. We wanted the secondary data to be completely independent of our primary data. Thus, we identified relevant documents through online searches. We decided to mainly use the newest annual report (which is from 2018) and use its two preceding annual reports to recognize any potential key changes. We have also used the corporation's official sustainability report from 2018.

*Table 3: Documents – secondary data*

	<b>Document name</b>	<b>Document type</b>	<b>Year</b>
1	Annual report 2018	Official corporate report	2018
2	Annual report 2017	Official corporate report	2017
3	Annual report 2016	Official corporate report	2016
4	SpareBank 1 Nord-Norge Sustainability	Official corporate report	2018

Additionally, we have continuously supplemented our secondary data with publicly available news articles.

### 3.3.3 Triangulation

In research, triangulation refers to the use of several sources to accentuate on the same phenomenon (Mehmetoglu, 2004). There are several types of triangulation, and two of these types are applied in our thesis.

First, we have conducted data triangulation: we have used both primary sources of information and supplemented with secondary data. Data triangulation allows us to strengthen our primary data as the secondary data is collected and presented by independent entities. Our key data in this thesis is collected from semi-structured interviews, and we have supplemented the data with document analysis. Second, we chose to be two students collaborating on this thesis, which results in researcher triangulation (Mehmetoglu, 2004). The risk of doing research studies alone is that data collection, findings, and analysis, particularly in qualitative

studies, may be adverse and unilateral (Mehmetoglu, 2004). As we are two students working on this thesis, we can have two perspectives on our findings, and discuss and analyze any opposing perspectives.

To sum up, this research includes two types of triangulation: data triangulation and researcher triangulation.

### **3.4 Data analysis**

In this section, we introduce our general approach to data analysis, and then we introduce in detail our data analysis for our primary data (i.e., interview analysis) and secondary data (i.e., document analysis).

As pointed out by Punch (2014), any empirical research depends on good analysis. In qualitative research, there is not *one* standardized approach to analysis, similar to what we may see in quantitative research (Mehmetoglu, 2004). In our thesis, we fundamentally followed the data analysis process first introduced by Merriam (1988) and reproduced by Mehmetoglu (2004). The steps include intensive analysis, category development (coding), and theoretical development.

In the first step of our data analysis, the “intensive analysis” step, we gathered and structured all the empirical data we had collected: both our transcribed interview data and relevant documents. Next, we read through all the data a few times to make ourselves well-acquaint with the information. We then proceeded to take notes and separated it from the raw material. In the second step of our data analysis, the “category development” step, we started developing categories for our data; we coded our findings. We based the coding on the frequency of the finding and its relevance to our research phenomenon. In the third step, the “theoretical development” step, we related our findings to the existing literature to modify and adapt the theoretical framework to reflect our empirical data.

#### **3.4.1 Analysis of the interview data**

After completing each interview, we transcribed the audio recordings and anonymized the informants. The post-processing of the data included four steps. In the first step, we transcribed the interview data, which resulted in approximately 60 000 words in which the informants had addressed relevant topics of our research. Then, in the second step, we categorized all the data into four categories reflecting the four elements we presented in

Figure 3. Next, in the third step, we mapped out key findings and statements from each interview. In our fourth and final step, we identified similarities and contradictions between the data we had collected from the different informants.

The quotes and data we present in chapter 4 are originally in Norwegian, and has been translated to English by us. In the translation process, we have attempted to keep the original meaning preserved.

### **3.4.2 Document review**

We used document review to complement our primary data, a common practice in research, according to Thagaard (2002). An advantage of using document review as a secondary data source is that the researchers cannot affect the documents used in the review (Thagaard, 2002). Also, the document review has allowed us to triangulate data.

We selected official documents from the selected case. The documents were presented in both English and Norwegian. We did a few sample tests between the documents with different languages, where our objective was to identify any potential opposing statements, e.g., within the conduct of corporate responsibility. However, the documents did not alternate in context. Thus, we proceed to analyze the documents in English only.

The analysis of the document review followed the same procedure as our analysis of primary data: we categorized the data and mapped out key findings and statements. We then identified any potential similarities and contradictions between the document years. When this was complete, we merged the analysis process with interview data.

## **3.5 Research quality assurance**

Researchers must reflect on the meaning of the data in a research project (Thagaard, 2002), and particularly qualitative studies have an interpretive nature: researchers must understand the communicated meaning of interviews with informants and other accessible information. In our thesis, we assess the quality of our research in terms of credibility, transferability, dependability, and confirmability.

### **3.5.1 Credibility**

Credibility refers to the trustworthiness of the research's findings and results (Mehmetoglu, 2004). Where applicable, we have followed Lincoln and Guba's (1985) strategies for credibility, as presented in Mehmetoglu (2004). First, we have discussed our findings with

peers and other academic scholars who have not had direct involvement in our research. Second, we have shared raw data and key findings with some of the informants as “member checking”. Third, and finally, we have assessed how our findings match with our theoretical elements.

According to Mehmetoglu (2004), credibility can also be strengthened by, for instance, spending a persistent and continuous time collecting data. However, due to the natural time constraints of our thesis, we have not had the opportunity to spend long periods of time in data collection, i.e., a longitudinal study. Efforts have still been made to collect rich data on the topic from different sources, providing a multi-angled perspective.

### **3.5.2 Transferability**

Transferability refers to the potential to transfer findings and results from one setting to another (Mehmetoglu, 2004). In quantitative research, the desired outcome is generalizability; but in qualitative research, we do not have the same opportunities to take a sample and “replicate” a population (Johannessen, et al., 2011). Instead, researchers look at the transferability of a qualitative research study, and how it can be relevant for other studies or similar phenomena.

To increase the transferability in our research, we have shared a detailed and rich description of the empirical context, following recommendations by Mehmetoglu (2004). Next, our study has presented a proposed model for corporate-startup collaborations (presented in Figure 5). We argue that the proposed model, based on existing Open Innovation literature, can be transferred to studies on corporate-startup collaboration in other sectors as well. Thus, our research contributes to transferable results.

### **3.5.3 Dependability**

Dependability refers to the integrated process of data collection, analysis, and theoretical development (Johannessen, et al., 2011). The dependability criterion can be obtained through Lincoln and Guba’s (1985) auditing technique, as described in Mehmetoglu (2004). In essence, the researchers provide a clear process of its research to provide transparency and openness to the readers.

In our research, we have provided a clear description of how the data collection process was conducted. During interviews, we used an audio recorder and post-processed all data to transcribed material. In that way, we reduced the risk of subjectivity influencing our memory

during the post-process period, after the data collection. Furthermore, we have presented the analysis process of the collected data, as well as the logic applied to the analysis. The goal of the described steps was to provide transparency in the research process, as well as the train of thought we had as students through the different phases of the research project.

#### **3.5.4 Confirmability**

Confirmability addresses the importance of researchers' objectivity and integrity, and it encompasses the ability of researchers to avoid personal subjectivity (Johannessen, et al., 2011). Mehmetoglu (2004) states that confirmability requires an empirical basis for findings and results. In our research, we have interviewed several informants and had them address the same topics resulting in a cross-reference of findings. Also, during the interviews, we regularly rephrased important statements to see if we understood the informants correctly.

As mentioned, we follow a constructivist philosophical research approach for this thesis; and thus, it has been important for us to contemplate on how our subjective biases should not conflict the expressed statements and data from informants. We have, therefore, reflected on how our theoretical-, social- and cultural background may affect our decision-making process and ability to interpret informants appropriately. Our reflection process has increased our ability to maintain neutral positions in contact with informants and the interpretation of the empirical material, ensuring that the narrative of the informants is properly extracted from the data.

### **3.6 Ethical research principles**

All research should follow ethical principles and legal guidelines (Johannessen, et al., 2011). Thagaard (2002) adds that the relationship between researchers and informants is important and that ethical principles are vital because the informants may be affected by the research. In our research, we have taken ethical precautions and responsibilities.

All informants in our research have voluntarily contributed and participated with information to our thesis. The informants have, in writing, accepted our invitations to participate in interviews; and as previously mentioned, our research is formally registered and accepted in the Norwegian Centre for Research Data (NSD). As a result, informants have been able to have a transparent relationship with our research process

Furthermore, we have treated all the collected data with confidentiality and in accordance with NSD standards. The informants have been able to withdraw their contributions to our research at any time and without the need to give explanations for their potential withdrawal. However, none of our informants have used their right to withdraw any data. At the same time, the informants expressed gratitude to our formal and transparent process to participate in our research. Our emphasis on ethical principles and procedures seemed to relax the informants during our interviews, and in that way positively affect the informants' willingness to share information with us openly.

We have also taken precautions to fulfill our ethical and academical responsibilities as students. Throughout our research process, we have focused on the importance to maintain objectivity in our interviews and findings. We have, therefore, at the best of our abilities tried to retain an objective perspective on all information received, intending to be good ambassadors for academic research.

## **4 Results and analysis**

In this chapter, we will present and analyze the results of our data collection. In chronological order, we will present results and analysis of 1) objectives of corporate-startup collaboration, 2) knowledge- and resource flows, 3) structures of value creation, and 4) value capture.

Following, in chapter 5, we discuss our findings in context to other relevant literature and the theoretical framework we presented in chapter 2.

### **4.1 Objectives of corporate-startup collaboration**

During the empirical analysis of our case study, four objectives for corporate-startup collaboration stand out. In the following subchapters, we will present and analyze: 1) objectives on corporate social responsibility (CSR), 2) objectives on innovative capacity, 3) objectives on pecuniary resources, and 4) objectives on recruitment.

#### **4.1.1 Objectives on corporate social responsibility (CSR)**

The informants frequently accentuated objectives on CSR as an important part of collaborating with startups, especially pointing out the ownership model of the bank introduced in chapter 1.2.2. The findings show that CSR initiatives targeting startups primarily are organized by SpareBank 1 Nord-Norge's Innovasjonsløftet (a part of Samfunnsløftet).

#### **Innovasjonsløftet**

SpareBank 1 Nord-Norge collaborates and supports startups and innovative initiatives through the bank's distribution of community dividends.

The efforts to pay out community dividends to the region has since 2018 been organized through SpareBank 1 Nord-Norge's CSR program Samfunnsløftet, as previously mentioned (SpareBank 1 Nord-Norge, 2019). One of Samfunnsløftet's six focus areas is Innovasjonsløftet (i.e., the innovation pillar), which is dedicated to fostering innovation in the region. Innovasjonsløftet directly funds and initiates collaborations with startup companies and entrepreneurial ventures, and seeks to strengthen the innovative capacity of the region (SpareBank 1 Nord-Norge, 2019). According to the annual report of 2018, the available funds for Innovasjonsløftet in 2018 were 40 MNOK (SpareBank 1 Nord-Norge, 2019).



INT5 explained how SpareBank 1 Nord-Norge always has had a two-sided focus: on one side, the bank focuses on its business development; and on the other side, the bank focuses on regional development in Northern Norway. The other internal informants shared the same view as INT5, as well as they elaborated on how Innovasjonsløftet was an important initiative to strengthen the innovative capacity of the region. INT5 emphasized that SpareBank 1 Nord-Norge had the pecuniary resources to think about the region as well as the bank.

Furthermore, INT4 believed that SpareBank 1 Nord-Norge could act as a facilitator for an innovative ecosystem in the region. INT2 perceived, personally, that the most important part of Innovasjonsløftet was to retain and attract competence to Northern Norway. Additionally, INT1 claimed that the Northern Norwegian region has a shortage of people to sufficiently occupy the current- and future work capacity. As a summarizing statement about Innovasjonsløftet, INT1 articulated the general message from the internal informants:

*“What we do with Innovasjonsløftet, is to give startup help to innovations that are important to Northern Norway, but also to increase the pace of innovation in the existing business sector in our region.”*

Next, the informants expressed how Samfunnsløftet often provided altruistic grants to sports and recreational activities, which seemed to be quite straightforward transactions. However, Innovasjonsløftet had a different challenge due to its engagements with businesses and entrepreneurs rather than non-profit organizations. Some of the internal informants expressed how this occasionally could result in conflict of interests: grants and support from Samfunnsløftet shall, in general, be of public benefit and not cause commercial skewness (for startups and grant recipients). For this reason, INT1 stated that it was hard to find ways under Innovasjonsløftet to support young startups without conflicting with the goal of public benefit as well as the commercial aspect.

In the data analysis process, we noticed that the internal informants all showed strong loyalty and dedication towards Samfunnsløftet and the tasks connected to it. Objectives on CSR are embedded in the ownership structure of SpareBank 1 Nord-Norge, which reinforces the bank's devotion to CSR activities. Besides, the informants seemed to perceive Samfunnsløftet as a unique opportunity to generate “win-win situations” for the bank and the region.

SpareBank 1 Nord-Norge points out in the annual report of 2018 that the bank will continue to work for the people and businesses in the region, with the goal of mutual benefit

(SpareBank 1 Nord-Norge, 2019). The annual report also emphasizes on how CSR initiatives make the bank's ownership structure becoming more widely known (SpareBank 1 Nord-Norge, 2019).

To recap, SpareBank 1 Nord-Norge's objectives on CSR activities involve several engagements toward collaborating with startups, particularly in terms of grants and gifts. Although strengthening SpareBank 1 Nord-Norge's reputation and position in Northern Norway is not a main articulated objective of its CSR activities; it seems to be a silent and appreciated side-effect. This will later be elaborated in the sub-chapter of value capture.

#### **4.1.2 Objectives on innovative capacity**

Analysis of the empirical data points out objectives on innovative capacity as key in collaborations with startups. Two main findings illustrate that improved innovative capacity is important for SpareBank 1 Nord-Norge's collaborations with startups: 1) innovative necessities, and 2) synergizing on regional innovative capacity.

##### **Innovative necessities**

INT1 claimed that "innovative or die" was increasingly relevant in the Norwegian finance industry in recent years. Similarly, INT3 and INT5 argued the competitive environment had accelerated into a state of rapid change, where innovation was a must. In addition, INT2 elaborated on SpareBank 1 Nord-Norge's reliance on SB1-Alliance and third-party actors for innovative capacity. INT2 stated that:

*"The bank collaboration [i.e., Banksamarbeidet] and the alliance has been important for the past 20 years, where we have chosen to invest our primary part of competencies. The alternative for us would be to create a more expensive and less scalable solution in Northern Norway. At the same time, we see that the next 20 years might require us to have more competence closer to us."*

In the opinion of INT3, vital innovation should happen with partners, and that an active partnership strategy could allow disruptive innovations to emerge from collaborations with startups. Also, in the annual report of 2018, SpareBank 1 Nord-Norge acknowledges the risk of international technology giants and emphasizes that developing partnerships with third-party actors is an important goal (SpareBank 1 Nord-Norge, 2019). Additionally, the same annual report states that building an organization and network for innovation is a goal; which

includes enhancing innovation skills and the capacity to develop new products, processes, and channels (SpareBank 1 Nord-Norge, 2019).

By analyzing the statements of the informants and the strategies outlined in the annual reports, we identify that SpareBank 1 Nord-Norge is experiencing a change in the competitive context. The corporation appears to react by attempting to improve its innovative capacity, and collaborations with startups seem to be a part of the strategy, as the potential for fast-paced and disruptive innovation in startups is recognized.

### **Synergizing on regional innovative capacity**

Informant INT2 claimed that strengthening regional innovative capacity could benefit SpareBank 1 Nord-Norge and SB1-Alliance. In regards to regional innovative capacity, INT2 expressed that:

*“We see the need to develop, that is why we wish to capitalize on regional innovations, which also may positively affect the alliance. I mean, we must innovate in Northern Norway on behalf of the alliance.”*

According to previously presented empirical data, SpareBank 1 Nord-Norge recognizes a need for improved innovative capacity internally. It is our understanding that the internal informants see the development of the innovative capacity of the region as a useful means to increase internal innovative capacity. They recognize that connecting competence and innovative environments can strengthen regional and internal innovative capacity. The corporation perceives collaborations with startups to contribute to this objective: SpareBank 1 Nord-Norge suggests that strengthening the regional innovative capacity will be beneficial for internal innovation efforts as well.

#### **4.1.3 Objectives on pecuniary resources**

Objectives on pecuniary resources are like a two-faced Janus: on one side, pecuniary profit has been vital for startups' objectives to collaborate with SpareBank 1 Nord-Norge; and on the other side, pecuniary profit has been far less important for the bank's objectives to collaborate with startups. Thus, we separately present the perspective of startups and SpareBank 1 Nord-Norge in this subchapter.

## **Startups' perspective on pecuniary resources**

All the external informants expressed that the financial aspect of the collaboration with SpareBank 1 Nord-Norge had been central for their initiation. The informants explained that their startup-oriented initiatives would probably not be possible without the pecuniary involvement of SpareBank 1 Nord-Norge. Informant EXT1 stated that:

*“Without their financial support, our project would not exist.”*

In that sense, the informants described how the financial funding had been decisive for their project's existence, which in turn suggests the probable dependency between the startup initiatives and SpareBank 1 Nord-Norge.

## **SpareBank 1 Nord-Norge's perspective on pecuniary resources**

INT1 explicitly stated that money spent through Innovasjonsløftet was not to benefit the bank financially. This statement was also expressed by all the other internal informants when they spoke about Innovasjonsløftet. SpareBank 1 Nord-Norge's sustainability report for 2018 confirms the same statement, and that the objective of Innovasjonsløftet is to profit the community of Northern Norway (SpareBank 1 Nord-Norge, 2019).

Furthermore, even in other forms of corporate-startup collaboration, none of the internal informants mentioned pecuniary objectives when collaborating with startups. However, INT3 spoke of how the informant believed SpareBank 1 Nord-Norge had made earlier attempts at investing in startups for profit, without luck:

*“I know that before; many years ago. Probably long before I started working at the bank. The bank tried its luck as an investment company, without success. I do believe that the motivation was wrong; the motivation was perhaps to generate monetary value for the bank. In the cases where we succeed, it is because we go in philanthropically or because we have a specific need that requires a solution”.*

The empirical findings suggest that SpareBank 1 Nord-Norge does not collaborate with startups for pecuniary objectives. SpareBank 1 Nord-Norge declares in its strategy that the corporation will focus on core activities, namely banking, real estate, accounting, and financing. INT3 proposed SpareBank 1 Nord-Norge had made failed attempts at venturing

and since seized activity. This indicates that the bank expect its revenue streams to come from the core activities and not initiatives such as venture capital.

Although we have seen that pecuniary objectives are relevant for our case; our empirical evidence only displays them as significant on the startups' side of collaborations.

#### **4.1.4 Objectives on recruitment**

Our empirical analysis suggests that recruitment is one of the key objectives for corporate-startup collaborations, particularly embedded in two findings: 1) recruitment as a side-effect of collaborations, 2) external perspective on recruitment.

##### **Recruitment as a side-effect of collaborations**

In SpareBank 1 Nord-Norge's annual report from 2018 (SpareBank 1 Nord-Norge, 2019), recruitment of qualified and talented employees is expressed as a challenge, and that renewing staff is a priority. INT1 claimed that the competition over employees had hardened and how the bank recruited differently than before:

*“A lot more [of our employees] have backgrounds in, for instance, innovation. I see that in our team, we do not have any typical “bank people” in our division.”*

INT1 elaborated on different measures the bank had taken to recruit talented employees (see chapter 4.3 for structures of value creation). Additionally, INT3 argued that collaborations with startups were an arena where the corporation potentially could meet future employees. In the annual report from 2018, SpareBank 1 Nord-Norge states that hackathons specifically were a measure to find qualified personnel to work in the bank (SpareBank 1 Nord-Norge, 2019). Thus, the empirical findings indicate that SpareBank 1 Nord-Norge is considering recruitment as important for corporate-startup collaborations. However, not all types of collaborations focus on recruitment: although hackathons focus on recruitment, according to annual reports. The informants expressed recruitment as an appreciated side-effect, on some of the collaborations.

##### **External perspective on recruitment**

Several of the external informants shared their thoughts on recruitment as an objective on SpareBank 1 Nord-Norge's collaboration with startups: EXT1 and EXT4 explained how they

perceived recruitment as an important part of collaborations. Additionally, EXT2 stated that the objective for some collaborations was:

*“I think, in a cynical perspective, recruitment. They wished to test students, test the people who participated in the event, and to see, for one, how well they worked in groups, and for second, to see how well they work intensively over certain periods of time.”*

To recap, both internal- and external informants indicate that recruitment is an important objective for corporate-startup collaborations, which is also anchored in SpareBank 1 Nord-Norge’s annual report from 2018. However, it also seems like recruitment is an active objective in many activities, not unique for corporate-startup collaborations. Also, not all corporate-startup collaborations seem to target recruitment as an objective.

## **4.2 Knowledge- and resource flow**

Our empirical analysis has highlighted five key knowledge- and resource flows. In the following subchapters, we will present and analyze: 1) pecuniary resources, 2) organizational infrastructure and competence, 3) network connections, 4) entrepreneurial skills and methodology, and 5) products and services.

### **4.2.1 Pecuniary resources**

The first flow includes pecuniary resources and goes from SpareBank 1 Nord-Norge. As previously mentioned, pecuniary objectives have been important for startup collaborators. Additionally, monetary resources from SpareBank 1 Nord-Norge have been identified as a key resource flow in the collaborations.

All the external informants stated that they had received some financial support to develop their projects. EXT1 claimed that:

*“Without [SpareBank 1 Nord-Norge’s] monetary support, we would not exist. In other words, they have had a great impact on our project.”*

Direct financial support has been present in many of the collaboration projects examined. EXT5 stated that financial streams from the bank allowed the startup to focus on developing their product, and not having to constantly work to secure funding for the continuation of the company.

As mentioned in chapter 1.2.2, SpareBank 1 Nord-Norge manages and shares community dividends to facilitate regional development. Large portions of the monetary flow (to startup collaboration) is a part of the community dividends program, and the financial support is given out as gifts or grants. While they can be classified as gifts, INT1 explains how the bank has changed the terminology from gifts to collaboration:

*“We do not call it gifts anymore; it is an allocation and a collaboration where we together are to strengthen Northern Norway.”*

INT1 elaborated on the quoted statement, arguing that the bank wanted to move from “giving money and receive a written report” to “actively collaborate with the recipients”.

The use of pecuniary resource flows to support external partners seems to be one of SpareBank 1 Nord-Norge’s main methods of outbound interaction with startups. It is the leading way of interaction for the CSR initiative Samfunnsløftet. In this case, the resource flow stems from the philanthropic objectives of the community dividends, and no direct consideration is made.

#### **4.2.2 Organizational infrastructure and competence**

The internal informants argued that the bank had accumulated a lot of competence in various fields, such as human resources (HR), legal, and of course, finance. INT4 explained how the competence they have in the organization could be useful, and typically hard to access, for startups:

*“We can provide general consultancy, support within technology or commercial assistance in new markets, human resources, and compliance. We are a huge organization with a lot of well-developed specialty skills. These things can be hard to manage for small companies.”*

Both external informants EXT2 and EXT5 explained how access to corporate facilities had been highly beneficial. EXT5 described how access to the organizational infrastructure of SpareBank 1 Nord-Norge greatly benefited the startup: the informant explicated how they had received legal resources when making agreements, and that the HR department of the bank assisted them in recruitment and personnel cases. Additionally, EXT2 elaborated how access to professional environments such as legal support had been helpful, and most likely saved them a lot of time and money.

Furthermore, the internal informants acknowledge that the organizational infrastructure and resources can be valuable for the startup collaborations. In particular, INT2 explained how the bank has both competence and capacity in which would be valuable for startups in the innovation lab (which will be elaborated in chapter 4.3.4). INT3 followed up the same message of INT2, explicating that SpareBank 1 Nord-Norge wants to take part in knowledge exchange, and that the bank has specialty competence that may be available to startups.

To recap, we note that the described knowledge exchange has potential to be beneficial for both parties, according to the empirical data: the corporation obtain access to startup agility and development in exchange for services that in large are day-to-day business and routines.

### **4.2.3 Network connections**

EXT2 explained how SpareBank 1 Nord-Norge has an extensive network, and that SpareBank 1 Nord-Norge actively helped them gain contact with relevant organizations and people. Additionally, EXT5 described how being associated with the bank has “opened doors”, and provided access to crucial knowledge and new opportunities:

*“Of course, the collaboration through the bank, it opens many doors without a doubt, amongst collaborative partners and customers. It gives us access to knowledge and new opportunities.”*

The internal informants also elaborated on networking arenas: the bank is involved in several programs and arenas that connect businesses with other businesses, as well as it connects stakeholders with other stakeholders. INT2 explicates on the regional responsibility SpareBank 1 Nord-Norge has, as part of the ownership structure, and how the bank should support the whole region. Additionally, INT3 elaborates how the broad network connections synergies; the more connected partners and stakeholders involved in the network, the more accessible the network becomes.

In essence, the extensive regional network connections of SpareBank 1 Nord-Norge has helped startups. However, it seems like the network connections, in terms of startup-collaborations, have potential to be increasingly used.

### **4.2.4 Entrepreneurial skills and methodology**

Informant INT1 explained how the employees in SpareBank 1 Nord-Norge were influenced by interacting with the startup environment. INT4 shared the same thoughts and argued that



interaction with different startups affected “the way they think” in SpareBank 1 Nord-Norge, since the startups supplied the bank with new ideas and inputs.

EXT5 argued that the slowness of corporate actors reduced the speed of their process and the startups could help corporations act and think faster:

*“I believe we partake in training [businesses] in regards to a willingness to change and ability to change. And of course technological understanding, how to work with development: they get profound insights by being so close to us.”*

Furthermore, EXT5 explained how the relationship between their startup and SpareBank 1 Nord-Norge expands beyond a regular supplier-customer relationship and how there also is room for them to influence their more powerful collaboration partner.

*“Even though we have a supplier-customer relationship, we are not like a regular supplier where the bank says, “if you do not do as we wish, we will find another supplier who will”... You have to understand what we do and what it means for how we operate.” -EXT5*

EXT2 added how the informant felt that all processes were considerably slower from inside the bank compared to external startup processes, building on the expression of slowness from EXT5. In general, both the internal and external informants expressed how the developmental agility of startups could potentially transfer to SpareBank 1 Nord-Norge through the collaborative interactions.

#### **4.2.5 New products and services**

INT2 and INT5 explained in detail that SpareBank 1 Nord-Norge has limited internal competence for development, and relies on the alliance and third-party actors for development of products and services. INT4 also argued that most of the technological development was done through the alliance, as previously mentioned.

INT2 stated that collaborations with startups is a potential source for a stream of products and services added to SpareBank 1 Nord-Norge. INT5 explained that SpareBank 1 Nord-Norge has acquired a startup that develop products and services currently deployed at SpareBank 1 Nord-Norge and other SB1-Alliance banks. Additionally, INT5 stated that startups could solve specific problems for SpareBank 1 Nord-Norge, and close collaborations with startups may result in new products and services for the bank and the alliance.

The findings illustrate that the direct collaborations with startups has potential to open up access to new products and services, in the perspective of the bank. This will be further elaborated in the chapter 4.4.

### **4.3 Structures of value creation**

Our empirical analysis has highlighted four key structures of value creation. In the following subchapters, we will present and analyze all four structures: 1) corporate venturing, 2) CSR initiatives, 3) indirect collaborations, and 4) “the innovation lab”.

#### **4.3.1 Corporate venturing**

SpareBank 1 Nord-Norge has a limited approach to corporate venturing, but is currently equity stakeholders in at least one startup.

INT3 elaborated on the collaboration: the startup had “a great solution” to a specific problem that SpareBank 1 Nord-Norge and other alliance partners had; and at the same time, the startup had issues to identify a sustainable business model. SpareBank 1 Nord-Norge, in collaboration with other alliance partners, decided to join forces to develop the startup further. According to INT2, the bank currently owns 20% of the startup.

The informants expressed that the corporate venturing was more random than intentional, but with a desirable outcome. At the same time, the informants elaborated on how similar collaborations can take place in the future. INT3 claimed:

*“I believe the best ways to find sustainable solutions and to retain competence, is to connect external and internal resources to work together in a joint project. That is the future of collaboration.”*

The informants expressed that corporate venturing had resulted in successful collaboration with a startup. In addition, several of the informants pointed out the innovation lab (see chapter 4.3.4) as a vital piece for future startup collaborations.

#### **4.3.2 Corporate social responsibility initiatives**

The informants have pointed out several corporate social responsibility initiatives in order to collaborate with startups. INT1 argues that SpareBank 1 Nord-Norge has many activities targeting corporate-startup collaborations organized under their CSR programs. For instance, the bank has co-hosted “pitching events”, to help startups share their ideas with a greater

audience, and hosted hackathons, which are intense collaborations in multidisciplinary teams. INT1 also emphasizes that Innovasjonsløftet is specifically targeting startups, with grants and other forms of support.

Furthermore, INT5 points out that SpareBank 1 Nord-Norge hosts hackathons to work on different challenges. EXT2 argue that these hackathon themes have focused on regional challenges. This is confirmed by INT3, who adds that it could be possible in the future to host hackathons on financial technology (fintech) challenges.

INT5 claims that the idea from the hackathons have been additionally developed in the bank:

*“In some cases, we pick up the ideas and teams [to let them keep working on the projects in-house at the bank].”*

To sum up, the informants have pointed out how Innovasjonsløftet has several activities and forms of support to help startups in Northern Norway’s region. Through Innovasjonsløftet, the funding is specifically meant to help startups, without the direct intent of generating pecuniary value to SpareBank 1 Nord-Norge.

### **4.3.3 Indirect corporate-startup collaborations through SB1-Alliance**

In SpareBank 1 Nord-Norge’s capacity as an alliance bank, some startup collaborations root indirectly from the alliance, for instance, the chatbot startup “Boost.ai”, which started in another bank of the alliance, and later ended up collaboration with other banks such as SpareBank 1 Nord-Norge:

*“Boost.ai started in SR-Bank, and was later implemented here [in SpareBank 1 Nord-Norge]. In some cases, it happens that someone comes up with great ideas and that it covers a need we might not have realized we had to begin with.” – INT5*

INT5 adds that it is likely that even more cases such as Boost.ai will take place in the future. INT3 claims that alliance collaborations have been important to create competence reflecting economies-of-scale, and emphasizes on how alliance projects have generated essential innovations. Also, INT3 states that joint collaborations within the alliance have been a way, in some instances, to develop startups further. Additionally, according to the informants, there have been some indirect collaborations with startups through SB1-Alliance. The informants expressed the results of these collaborations as desirable and that future, and similar, collaborations may occur.

#### 4.3.4 Innovation hub

In addition to existing activities, SpareBank 1 Nord-Norge is currently establishing an Innovasjonslab (“innovation lab”). INT5 argues that the innovation lab will operate on behalf of the region and work with regional challenges and opportunities. The innovation lab will be a part of Samfunnsløftet/Innovasjonsløftet, according to INT3, which adds that they also will collaborate with academia and other organizations. As a result, according to INT3, the innovation lab will be a highly competent environment from day one.

Also, the innovation lab will potentially capture new startup collaborations as INT3 states:

*“I think there will be more examples of [new collaborations with startups], because we are now more active to seek and develop this, particularly through the innovation lab – or whatever it ends up being called. It is all about finding the correct path.» - INT3*

INT2 elaborates on the innovation lab and claims that the lab, in addition to external partners, could also host internal employees for shorter periods of time: this should contribute to a competence sharing environment. INT2 adds that the innovation lab should be located inside the bank’s facilities, and not be placed outside of the bank’s parameters. However, INT5 states that the lab will collaborate with external partners:

*“We want to develop our innovative initiatives together with universities, [organizations], and other central actors.”*

The informants have expressed that the innovation lab as a key “puzzle piece” in future collaboration with startups. In addition to internal resources, the bank has established collaboration with central external partners, which can contribute to create an innovative environment for developing innovations and startups. As the innovation lab will be a part of Innovasjonsløftet, the mandate requires the innovation lab to also operate on behalf of Northern Norway.

To recap, from the empirical material we identified four vital structures of value creation between SpareBank 1 Nord-Norge and startups. The collaborations include CSR initiatives, indirect collaborations, equity partnerships, and the innovation lab.

## 4.4 Value capture

Our empirical analysis has highlighted two key sides of value capture. In the following subchapters, we will present and analyze: 1) value capture in the perspective of the corporate actor, and 2) value capture in the perspective of startups.

### 4.4.1 Value capture in the perspective of the corporate actor

In this subchapter, we present the empirical findings connected to the value capture of SpareBank 1 Nord-Norge's collaborations with startups. The four main categories of value capture include 1) recruitment and talent acquisition, 2) customer awareness, 3) access to new products and services.

#### Recruitment and competence acquisition

As introduced as an objective in chapter 4.1.4, recruitment is also a value capture based upon our empirical findings.

Informant EXT1 and EXT2 expressed how SpareBank 1 Nord-Norge was actively recruiting from entrepreneurial student environments. Similarly, EXT4 revealed how the informant had experienced that SpareBank 1 Nord-Norge did recruitment through university startup-programs:

*“The bank has been very supportive towards entrepreneurial activities, but then the bank is hiring all of the students that show interest for entrepreneurship. It is a paradox; those who are candidates to become entrepreneurs end up becoming corporate “bank people”. However, the students are probably happy to get a job in the bank; it is positive for them.”*

EXT4 called the practice a paradox, as the initiative was meant to foster regional innovation and startups, but many of the potential entrepreneurs were recruited into corporate jobs. However, the external informants emphasized that these recruitments were desirable for both parties: particularly student entrepreneurs were glad to have opportunities to work in the bank.

As previously mentioned, the objective of recruitment is important for the bank, and particularly INT1 pointed out the increasing challenges to recruit talented people to the bank. Recruitment within some of the startup activities may therefore be a result of general recruitment initiatives; and not only a result of recruitment reflected through certain startup programs.

## Customer awareness

Improving customer awareness is considered essential for the organization. By analyzing the empirical data, we have identified customer awareness as a value capture for SpareBank 1 Nord-Norge based upon findings from internal- and external informants, as well as in the public documents.

INT1 stated that the community dividends from Samfunnsløftet were intended to benefit the region of Northern Norway, and not SpareBank 1 Nord-Norge specifically. However, INT1 added that the bank tried to “be smart” when managing the funds so that the bank potentially could gain from the collaborations through Samfunnsløftet. This could, for instance, mean that the bank could join public relations (PR) events, or attend a meeting with local governance. Moreover, INT3 explicitly explained how being philanthropic embeds in the history of SpareBank 1 Nord-Norge, but that “win-win”-situations are desirable:

*“Let us dare to be philanthropic: it lies in the history of SpareBank 1 Nord-Norge. But of course, we happily seek win-win situations. Let’s say that we through the “innovation lab” manage to bring up some startups that solve problems for our customers, that obviously acts as “customer-glue” for us.”*

EXT1 explained how they, in capacity of their entrepreneurial program, often talked in front of people and presented their project to audiences. In these settings, they would always promote SpareBank 1 Nord-Norge as a key supporting partner. In like manner, EXT2 explained how the activities through Samfunnsløftet increased the corporate reputation and customer awareness for SpareBank 1 Nord-Norge. Also, EXT4 argued that their relationship with SpareBank 1 Nord-Norge was very close:

*“The bank has become a close partner; a collaborator we speak warmly about. I have even started referring to them as just “the bank”.*

In the annual report from 2018 (SpareBank 1 Nord-Norge, 2019), SpareBank 1 Nord-Norge states that a goal of Samfunnsløftet was to achieve customer awareness of their ownership structure:

*“We can already report that SpareBank 1 Nord-Norge has achieved parts of the objectives of Samfunnsløftet. Awareness of SpareBank 1 Nord-Norge’s ownership model has clearly increased, from 42% in the first quarter of 2018 to 56% in December 2018. The impact*

*survey shows that far more people now know that the Group is owned by the community of Northern Norway and private individuals, unlike banks that are characterized by being exclusively owned by professional investors. This is regarded as a very important point when it comes to explaining how by being a customer of the Group is contributing to millions being returned to the region.”*

The informants promoted the same narrative as in the annual report: the more customers SpareBank 1 Nord-Norge had, the more money would return to the region as part of Samfunnsløftet. In addition, the external informants that collaborated through Samfunnsløftet were clear on how they believed that their collaboration with SpareBank 1 Nord-Norge had a positive effect on the reputation of the bank. Since the collaboration was philanthropic, it seemed to us like it put the external collaborators in a position where they often advocated SpareBank 1 Nord-Norge. The internal informant INT1 and INT3 expressed that while the strengthening of reputation was not outspoken goals of the collaborations, they were undoubtedly appreciated secondary effects.

### **Access to new products and services**

Our empirical findings propose that access to new products and services is a value capture for SpareBank 1 Nord-Norge from the collaborations with startups.

Informants INT5 and INT2 described how the collaboration with a tech startup has resulted in new technology and services which are currently in use by SpareBank 1 Nord-Norge, and other banks in SB1-Alliance. INT5 elaborated on the collaboration, and argued that the corporate venturing was because it addressed and solved a specific problem for SpareBank 1 Nord-Norge:

*“Let us say [the tech startup]; it is an example. It was a startup company we ended up acquiring [together with other alliance partners] because we saw that the product was both sellable and it solved our problems. So, in some cases, you could say that the startups help us and cover some of our needs”.*

Furthermore, INT5 claimed hackathons had resulted in originating ideas that were taken into the bank and developed as projects, by the startup agents.

The value capture from collaborations with startups in the forms of access to new products and services is not prominent from our research. We see that this specific type of

collaborations, providing this type of output is more common in SB1-Alliance rather than by SpareBank 1 Nord-Norge directly.

#### **4.4.2 Value capture in the perspectives of startups**

In this subchapter, the empirical findings surrounding the value capture of the start-ups in collaboration processes with SpareBank 1 Nord-Norge will be presented and analyzed. Three main categories of value capture have been identified for the startup collaborators: 1) pecuniary resources, 2) corporate resources 3) brand credibility.

##### **Pecuniary resources**

Innovasjonsløftet is centered around monetary resources: granting financial support to startups and innovative projects that are deemed important to the region (SpareBank 1 Nord-Norge, 2019). Understandably, one of the key values captured by the startups involve pecuniary resources. All the external informants that were part of the collaborations through Samfunnsløftet highlighted how the money had been important to them. Informant EXT1 described how the money they have received through the collaboration has been vital for the existence of their project:

*“They have given us the monetary resources, so they have contributed to establishing our project. Without that money, it would not exist. It has had a significant effect in other words.”*

EXT5 expressed that the financial capital they received through the collaboration provided them with enough capacity to develop quality products before introducing them to other customers and the market.

##### **Corporate resources**

In chapter 4.2, we recognize how SpareBank 1 Nord-Norge has provided some of its startup collaborators with the necessary support in the form of monetary resources, corporate resources, and network connections. We have identified the means to develop and continue operation as a significant value capture for startups based upon the finding that the external informants have explained how the collaboration has been crucial for the development of the startup as well as the continuation of operations.

All the external informants expressed how the monetary support from SpareBank 1 Nord-Norge had been crucial for their project. However, informants EXT5 and EXT2 also



expressed how the corporate resources made available through collaboration with SpareBank 1 Nord-Norge have eased their non-core processes, as well as contributed to their core business. The same informants, EXT5 and EXT2, argued the network connection backing from SpareBank 1 Nord-Norge had helped them get into contact with potential customers and collaborators as they leveraged the extensive network connections of the bank.

The external informants have described how the collaboration with SpareBank 1 Nord-Norge has significantly helped them in developing their startup companies, as well as the survival of the company.

We have already seen how corporate infrastructure has been an essential knowledge and resource flow within the corporate-startup collaborations of SpareBank 1 Nord-Norge. We have also identified this aspect to be a substantial value capture for the startups in these collaborations. Furthermore, the corporate resources can contribute to the core business tasks of the startup by means of, for instance, access to testing or facilities.

### **Brand credibility**

The signal-value in having a collaboration or customer relationship with a large corporation can be decisive for startups. This effect has also been recognized as one of the critical value captures for the startups collaborating with Spare Bank 1 Nord-Norge.

External informant EXT5, which is in a customer-supplier collaboration with SpareBank 1 Nord-Norge, explained how the affiliation to SpareBank 1 Nord-Norge had given them access to other collaborative partners and customers. EXT2 claimed the bank had helped their startup project meet relevant contacts, but also how the informant felt that the introduction through the bank gave the contacts patience to hear them out. EXT2 partly credited the patience to SpareBank 1 Nord-Norge as “door opener” and as credible contact point.

While brand credibility appears to be important for informants EXT5 and EXT2, it was not mentioned by the other external informants. We believe that the reason for this might be that their startup initiatives have not yet reached phases of operation where brand credibility is relevant to the same extent as for EXT5 and EXT2.

To summarize, a large part of the startup collaborations of SpareBank 1 Nord-Norge is through the CSR initiative Samfunnsløftet; these initiatives are in essence focused on

developing the region. But as we have seen in the analysis of value capture, they also provide some benefit for the bank.

# 5 Discussion

In the following subchapters, we will discuss the key findings and its relation to the theoretical framework. At first, we present and discuss the corporate-startup collaboration (CSC) model in practice, and then we discuss SpareBank 1 Nord-Norge’s collaborations with startups through CSR programs, its increased interest to engage with startups, and indirect collaborations.

## 5.1 The CSC model in practice

In Figure 4, we present the findings from the empirical data gathered in the research process of this thesis and place them in the CSC model. In this chapter, we use the model to provide an overview of the corporate-startup collaboration of SpareBank 1 Nord-Norge and address the findings in the four elements of the model.

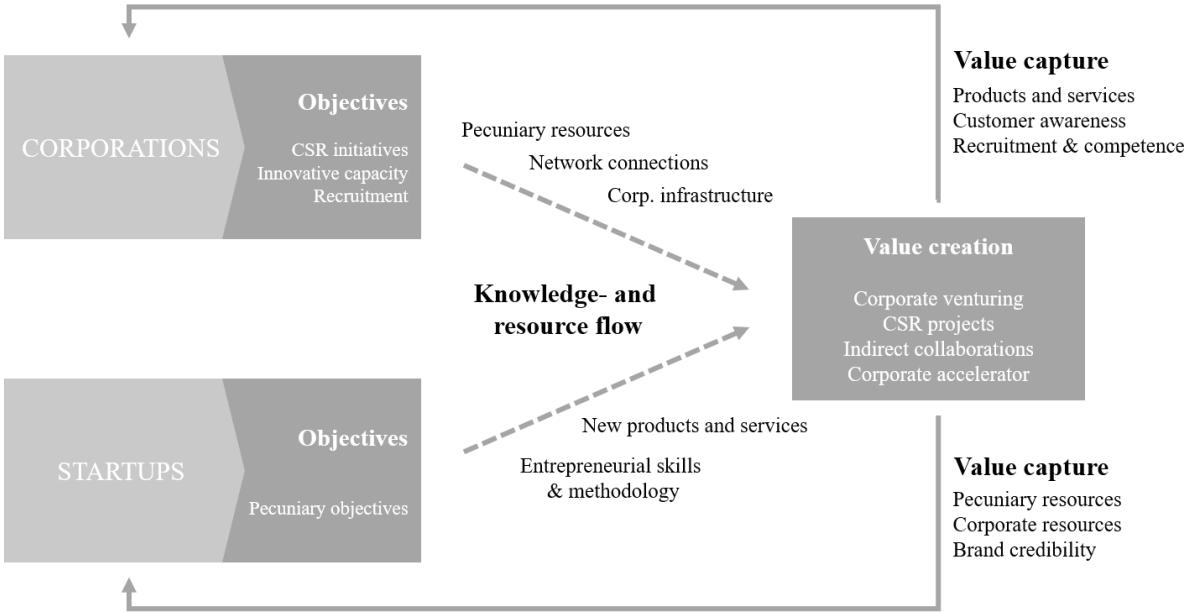


Figure 4: The CSC model in practice

The first element in the model sheds light on objectives for collaboration. SpareBank 1 Nord-Norge’s objectives for collaborations with startups relate to CSR initiatives, improving innovative capacity, and recruitment objectives; and in contrast, startups mainly target pecuniary objectives. The empirical data suggests that the objectives, and particularly the CSR programs of SpareBank 1 Nord-Norge, are well-anchored in the corporation’s core strategy, which is in accordance with theoretical best practice (Weiblen and Chesbrough, 2015; Vanhaverbeke, 2013). The common objectives of Open Innovation collaborations, which was presented by Chesbrough and Brunswicker (2013) in chapter 2, only partially

overlap with the ones of SpareBank 1 Nord-Norge. This might be a result of the bank's current coverage of innovation and development through SB1-Alliance. The objectives for corporate-startup Open Innovation collaborations presented in Open Innovation literature align well with the stated objectives of SpareBank 1 Nord-Norge (Weiblen and Chesbrough, 2015; Kohler, 2016), indicating that there are noticeable differences between internal, innovation funnel-focused Open Innovation and Open Innovation from the perspective of a corporate actor with a lower degree of internal innovation engaging in collaborations with startups as proposed by Vanhaverbeke (2013).

The second element in the model illustrates the knowledge- and resource flows. SpareBank 1 Nord-Norge's evident flows include pecuniary resources, corporate resources, and network connections. On the opposite side, startups provide flows of new products and services, and entrepreneurial skills and methodology. The knowledge-and resource flows appear as typical for corporate-startup collaborations from corporate-startup Open Innovation collaboration literature, and we see the common pattern of corporations investing money and common corporate resources while startups are mainly focused on continuing innovative operations and contribute through its outputs (Kohler, 2016; Weiblen & Chesbrough, 2015).

The third element in the model points out structures of value creation. In our CSC model, we identify four key structures of value creation. Most prominent are CSR initiatives, as part of Innovasjonsløftet; but, there are also other structures of value creation including corporate venturing, corporate accelerators (i.e., the proposed innovation lab), and indirect collaborations. The unique value creation structure, in this case, is the CSR initiatives. While the structure is unique, many of the collaborations are of a rather uncomplicated nature and consist of monetary grants being given without expectations of reciprocity. Open Innovation with an innovation funnel focused perspective, commonly presents collaborations as innovation funnels with outside-in, inside-out, and coupled innovation (Vanhaverbeke, 2013;) (Chesbrough, 2003). In terms of corporate-startup collaboration, SpareBank 1 Nord-Norge primarily engage in outside-in innovation through hackathons, corporate venturing, and corporate accelerators. However, the bank also engages in coupled innovation through the capacity of SB1-Alliance.

The fourth and final element in the model highlights value capture. In perspective of SpareBank 1 Nord-Norge, value capture consists of new products and services, customer awareness, and recruitment and competence acquisition. In the perspective of startups, value

capture consists of pecuniary resources, corporate resources, and brand credibility. In terms of value capture, we see that SpareBank 1 Nord-Norge in large achieve its objectives of corporate-startup collaboration, the only objective where the value capture might be lower than expected is the improvement of innovative capacity. While we see that SpareBank 1 Nord-Norge improves its innovative capacity through the interaction with startups, the effects found in our empirical material does not constitute a major organizational improvement of innovative capacity. We acknowledge the potential of the innovation lab to have a greater impact on innovative corporate capacity, and the initiative has, however, not been implemented yet.

To summarize, we have seen how SpareBank 1 Nord-Norge extensively collaborates with startups with mainly pecuniary objectives. SpareBank 1 Nord-Norge engages in the collaborations with objectives focused on becoming more innovative, recruiting employees to the organization, and upholding its CSR obligations. SpareBank 1 Nord-Norge invests large amounts of money into these collaborations but cannot reap commercial benefits from the collaborations.

The structures of collaboration centered around CSR objectives are often of the grant type, and the extension of the collaboration for corporate non-pecuniary value capture is a challenge. While SpareBank 1 Nord-Norge has limited choice in whether this money is to be invested, we recognize a potential disconnect between the monetary resource flow and the value capture through the CSR initiative structure of value creation; these collaborations can appear as transactions of gifts. We argue that the potential for non-pecuniary value capture could be better through other constructs of value creation. Thus, the prospect of the innovation lab is interesting.

Also; and fascinatingly, throughout the empirical process, the informants were not consistent and clear in what they expected and aimed to achieve through corporate-startup collaboration. In fact, many of the elements highlighted in the CSC model are consequences of serendipity, at least in the way the informants elaborated on corporate-startup collaboration. However, the CSC model can thus provide important insights in future collaborations, and how to ultimately increase value capture by identifying and specifying key objectives, prepare sufficient knowledge- and resource flows, and choose the adequate structures of value creation for its purpose.

During the analysis of empirical material and process of analyzing how SpareBank 1 Nord-Norge collaborate with startups in the CSC model, three findings stand out: 1) the corporate-startup collaborations through CSR programs, 2) the increased interest in engaging with startups, and 3) indirect collaborations. These three points will be further elaborated in the following subchapters.

## **5.2 Corporate-startup collaborations through CSR programs**

A key finding from our empirical data is how SpareBank 1 Nord-Norge collaborates with startups through its CSR program Innovasjonsløftet (a part of Samfunnsløftet). Also, the CSR program put certain constraints on the collaborations; the collaborations must be of public interest and create value for the region. As a result, CSR collaborations are not intended to benefit SpareBank 1 Nord-Norge commercially; and thus, the collaborations initiated through Innovasjonsløftet are distinctively different than the corporate-startup collaborations discussed in Open Innovation literature such as Kohler (2016) and Weiblen and Chesbrough (2015); where the corporate objectives for collaborations centered around innovation and commercial value capture.

The link between Open Innovation and CSR is scarcely explored in literature, but Holmes and Smart (2009) explore how corporations engage in Open Innovation collaborations with non-profit organizations for non-pecuniary value capture. While Holmes and Smart (2009) not encompass CSR objectives, their research shows that Open Innovation collaborations in non-profit contexts for non-pecuniary value capture are relevant. Besides, Holmes and Smart (2009) emphasize how broad stakeholder interaction helps the organization pick up “weak signals”, providing insights from the organization's periphery that can be crucial in terms of detecting changes, such as market movement or disruptive innovative processes.

The described process resembles the early stages of innovation, often referred to as “search”, where the purpose is to find new sources of innovation (Laursen and Salter, 2004). If we draw parallels to Innovasjonsløftet, it is reasonable to believe that collaborating with many innovative projects and startups contributes to their ability to “search”; and in effect, improving SpareBank 1 Nord-Norge’s ability to pick up relevant innovation in the region. The planned innovation lab is a part of Innovasjonsløftet and will, as such, further contribute to “search” activities for SpareBank 1 Nord-Norge. The innovation lab will be further discussed in subchapter 5.3 surrounding the efforts of SpareBank 1 Nord-Norge to become a more innovative corporation.

As pointed out in the theoretical framework, the objectives for collaboration are connected to the wanted value capture; and accordingly, the value capture becomes a crucial point of discussion. Also, it has already been established that SpareBank 1 Nord-Norge cannot gain commercial value or benefits from CSR collaborations, so pecuniary value captures are effectively ruled out in the CSR collaborative programs. However, as the objective of the collaborations is to strengthen the region, the achievement of the objectives of Samfunnsløftet should lead to SpareBank 1 Nord-Norge capturing value in the form of intrinsic, prosocial or nonpecuniary intrinsic rewards (Chesbrough et al., 2018). Additionally, we argue that there are intrinsic rewards on micro levels amongst SpareBank 1 Nord-Norge employees such as job fulfillment. The annual report of 2018 stated that employees were dedicated to Samfunnsløftet's CSR missions (SpareBank 1 Nord-Norge), and the informants expressed similar devotion. These rewards are, however, on an individual level, and outside of the scope of this thesis in terms of measuring value capture for SpareBank 1 Nord-Norge as an organization.

Furthermore, the prosocial rewards are significant for SpareBank 1 Nord-Norge as it allows the corporation to connect with its customer base and area of operation by creating a connection between the organization, its employees and the population of Northern Norway. This is, however, also outside the scope of this thesis and will not be taken into consideration as captured value. The nonpecuniary extrinsic rewards have been identified from the empirical material to be customer awareness. The external informants suggested that SpareBank 1 Nord-Norge probably captures value in the form of reputation gains and customer loyalty from its startup collaborations. However, this was not confirmed by internal informants or documents; and thus, we cannot explicitly characterize it as a value capture for SpareBank 1 Nord-Norge.

Recruitment is the final value capture we identified as part of CSR-motivated startup collaborations. Recruitment has also been identified as an objective for startup collaborations for SpareBank 1 Nord-Norge, so we see an overlap between value captures and objectives.

### **5.3 Increased interest for startup engagement**

From both strategic documents and the accounts of the internal informants, we have gained the impression that SpareBank 1 Nord-Norge is actively trying to make the organization more innovative. Due to our findings, we argue that the push for innovation, at least partly, stem from the change in the competitive environment introduced by PSD2. The former CEO of

SpareBank 1 Nord-Norge wrote in the annual report of 2018 that the bank faces challenges in adapting to new and extensive regulations such as PSD2 and GDPR, and that the bank will invest significant resources in the adaption process (SpareBank 1 Nord-Norge, 2019).

Furthermore, the annual report from 2018 elaboratively states that the bank will focus on developing measures to face the introduction of PSD2 and that exploring local/national partnerships/ecosystems will be central to the development (SpareBank 1 Nord-Norge, 2019). Based on previous empirical findings, we believe that increased interaction with startups appears to be a part of how the development processes will be achieved.

By analyzing the empirical material, we found that SpareBank 1 Nord-Norge has an objective to increase the innovative capacity of the organization (SpareBank 1 Nord-Norge, 2019). The strategic documents detailed how SpareBank 1 Nord-Norge was to become a more innovative organization with the ability to innovate for itself and the SB1-Alliance. The informants elaborated on the same message; and additionally, the informants expressed that increasing innovative capacity is an objective for collaboration with startups. The objective for collaboration with startups is thereby rooted in corporate strategy as recommended by Vanhaverbeke (2013), Kohler (2016) and Weiblen and Chesbrough (2015).

We found that SpareBank 1 Nord-Norge has objectives of recruitment through collaborations with startups, the strategic documents, as well as the informants, confirmed this. We see a link between the objective of recruitment and the objective of increased innovative capacity. Using certain startup collaborations, such as hackathons, to attract and recruit innovative talent is considered an effective strategic choice for recruitment (Kohler, 2016). INT1 explained that recruitment of people with nontraditional backgrounds for banking, such as “innovation”, was drastically on the rise. Besides, by recruiting from startups, SpareBank 1 Nord-Norge also fulfills its strategic objective to “renew staffing” as well as increasing innovative capacity, further embedding the objective in the corporate strategy.

Improvement of innovative capacity is not mentioned explicit by Chesbrough and Brunswicker (2013) as a common strategic objective for Open Innovation. However, the meaning of improvement of innovative can be read from the objectives “exploring new trends”, “identifying new business opportunities” and “accelerating time to complete R&D”, which were presented in chapter 2. Furthermore, improvement of innovative capacity is more directly addressed as an objective for corporate-startup collaborations in literature focused on



startup engagement (Kohler, 2016; Weiblen & Chesbrough, 2015). Thus, we recognize that SpareBank 1 Nord-Norge's objective of innovative capacity is anchored in objectives from the Open Innovation literature.

Kohler (2016) lists "rejuvenate organizational culture" as one of five strategic objectives for collaborating with startups through corporate accelerators (such as the innovation lab). Kohler (2016) explains how public commitment to supporting innovation sends a strong signal to internal and external partners, and that by connecting corporate staff with a creative environment it can spark innovative thinking in the corporation. This matches well with how INT2 spoke of how the innovation lab will reside in the same building as the headquarters of SpareBank 1 Nord-Norge, and that employees would have the opportunity to spend time to develop ideas in the innovation lab.

Furthermore, the innovation lab represents a forthcoming initiative from SpareBank 1 Nord-Norge to increase the frequency of corporate-startup collaboration. By using the available information and Kohler's (2016) literature, we classify the innovation lab as a corporate accelerator. Corporate accelerators are permanent structures of value creation focused on facilitating and organizing numerous corporate-startup collaborations at the same time within a given structure. As mentioned in chapter 2.1.3, other Norwegian banks have implemented corporate accelerators with success, showing that it is a valid structure for value creation for Norwegian banks. However, as the innovation lab is funded by Samfunnsløftet, the mandate requires the accelerator to operate on behalf of Northern Norway. This is a feature that distinctively differentiates the innovation lab of SpareBank 1 Nord-Norge from the previous examples we have seen in the Norwegian finance industry; and also other accelerators described in Open Innovation literature.

## **5.4 Indirect corporate-startup collaborations**

Due to the scope of the thesis the aspects concerning SpareBank 1 Nord-Norge's involvement in the SB1-Alliance has been less enquired than direct collaborations with startup companies. However, we recognize how it is important to address the SB1-Alliance and its significance for SpareBank 1 Nord-Norge in the discussion.

The empirical analysis points out how SpareBank 1 Nord-Norge primarily relies on SB1-Alliance in terms of development and innovation. That puts our research in a fascinating two-sided situation: on one side, the alliance involvement makes SpareBank 1 Nord-Norge, on its

own, less prone to partake in Open Innovation collaborations; while on the other side, an alliance is a clear example itself for coupled innovation, as elaborated in chapter 2. Thus, SpareBank 1 Nord-Norge is already profoundly centered around Open Innovation as an alliance partner.

There are several corporate-startup Open Innovation collaborations happening between the SB1-Alliance development organs and startups, which SpareBank 1 Nord-Norge is an indirect part of through its shares in the SB1-Alliance. We identify these collaborations as valid value creation structures, but on the other side they are also of an indirect nature and difficult to fully investigate without comprehensive access to the SB1-Alliance. The study of these collaborations are thus of a more superficial nature than the focused direct corporate-startup Open Innovation collaborations of SpareBank 1 Nord-Norge.

## 6 Conclusion

Our thesis shows that SpareBank 1 Nord-Norge uses Open Innovation elements in order to collaborate with startups. However, our study suggests that the efforts to collaborate with startups still remains at a relatively unstructured level, with potential for improvements. At the same time, SpareBank 1 Nord-Norge appears to have found collaborations with startups as valuable, specifically in their efforts to adapt to the changing competitive situation.

We started our thesis by comparing banks to slow-moving Tortoises, and startup and third-party actors to quick Hares. We also suggested that the competitive situation in the Norwegian finance industry shifts into an increasingly dynamic landscape. Throughout our research of SpareBank 1 Nord-Norge, we show that a Tortoise can collaborate with Hares. After all, our study illustrate how the actors complement each other: the banks have resources, and the startups have ideas and visions.

We proposed and used the CSC model to analyze and discuss the research phenomenon. The CSC model portraits each of the four elements of corporate-startup Open Innovation collaboration separately but also highlights the interactions and potential synergies between them. In this way, collaboration can be broken down and analyzed as individual elements, as well as understood in a united perspective.

The CSC model has essentially provided us with two key insights. First, on an individual level in our CSC model, SpareBank 1 Nord-Norge actively uses Open Innovation elements in order to collaborate with startups. Second, by using the united perspective of the CSC model, we also recognize that the corporate-startup collaborations of SpareBank 1 Nord-Norge and startups have potential for a more optimized and structured approach.

### 6.1 Contributions and implications

In this thesis, we have proposed the corporate-startup collaboration (CSC) model as a tool for analyzing corporate-startup Open Innovation collaborations. The CSC model unites four elements from Open Innovation that have previously existed individually. Our model highlights the interaction between the elements, in which provides insights on relations and the inter-dependability connecting the elements.

Also, we argue that the model has potential for both academic and practice use: on one side, the CSC model in academia can be used for researchers to gain deep insights on corporate-

startup Open Innovation collaborations; while on the other side, the CSC model may have practical potential for managerial staff in corporations. The CSC model can be used to plan collaborations with startups, make calculated decisions for collaborations and for evaluation purposes of existing and past collaborations with startups. In practice, the model can assist the allocation of resources in accordance to its objectives.

While other types of collaborations have not been explored in relation to the CSC model, we believe that there are similarities between the elements of collaborations with startups and other collaborations; and in that way, the model can be relevant to analyze collaborations across other entities than “corporate-startup” with smaller modifications.

Next, this thesis has provided insights into how a bank in the Norwegian finance sector employs Open Innovation collaborations in order to collaborate with startups. The thesis can be useful for both academics and actors practicing corporate-startup Open Innovation collaborations. For academics the case provides a unique reference point in Open Innovation literature through a melting pot of finance industry, CSR and startups; all seen in the perspective of Open Innovation literature. For practitioners in the Norwegian finance industry, the thesis provides valuable insights into the potential for corporate-startup collaboration as well as potential for valuable experiences from practical examples examined academically.

## **6.2 Limitations of thesis**

We see the time aspect of the thesis as a limitation. Due to the time constraints, a cross-sectional study was conducted. The cross-sectional study provides a snapshot of corporate-startup collaborations at a given time. However, innovation usually is a long-term process. A longitudinal study could capture the long-term aspect of innovation better than a cross-sectional study. However, and as mentioned in our methodology, the choice of a cross-sectional study originates in the natural time constraints of a thesis study. In an extended data collection period, we could have followed the process of the planned development of SpareBank 1 Nord-Norge’s innovation lab.

Next, our thesis is a single-case study where we have focused on the collaboration between SpareBank 1 Nord-Norge and startup actors, with SpareBank 1 Nord-Norge as the focal actor. This means that we have not fully exploited the potential of the CSC model as the research of SpareBank 1 Nord-Norge has been significantly more thorough than the startups. Half of the

informants and all documents come from SpareBank 1 Nord-Norge while the external startups are represented by one informant each. Furthermore, we note that having a multiple-case study would also provide richer material where results could be compared, and extra insights drawn from the process.

### **6.3 Future research**

In our thesis we have researched corporate-startup Open Innovation collaborations, an academic topic which is still far from mature. To answer our problem statement, we have proposed the CSC model for research of corporate-startup Open Innovation collaborations.

We argue the CSC model should be researched further; and for the development of the model we suggest three different approaches. First, longitudinal case studies of corporate-startup collaborations where the iterative nature of the CSC model is explored. Studies of this nature could provide insights to the mechanisms of the model not yet known, as innovative collaborations go through cycles of the CSC model over time. Second, the interconnectivity between the four elements of the CSC model needs to be elaboratively explored to uncover relations and perhaps dependencies not yet known. Third, Chesbrough et al. (2018) advocate the incorporation of value-in-use and value-in-exchange into the understanding of value in Open Innovation (in both value creation and value capture). We believe that the theoretical implementation of these perspective on value could contribute to both the development of the CSC model and the Open Innovation literature in general.

We suggest that the work of Vanhaverbeke (2013) is advancing the Open Innovation terminology to increasingly fit R&D outside of the traditional innovation funnel. Specifically, this concerns the terms inside-out, outside-in, and coupled innovation, as they directly address the innovation funnel. We argue that future studies that address Open Innovation outside of the “funnel”, will contribute to broadening the Open Innovation literature to be more applicable for small and medium enterprises without large R&D departments.

Also, in our study, we have encountered a unique variant of corporate-startup collaboration where a commercially active company collaborates with startups, but largely through CSR initiatives. We experienced it as a current hole in the Open Innovation literature: there is limited Open Innovation research concerning CSR and non-profit collaborations.



## Works cited

- Arnstad, M., 2017. *SNN: Vil du bidra til morgendagens Nord-Norge?*. [Internet]  
Available at: <https://nyhetssenter.sparebank1.no/snn/2017/10/18/bidra-morgendagens-nord-norge/>
- BankAxept, 2019. *BankAxept: Om oss*. [Internet]  
Available at: <https://bankaxept.no/om-oss/>
- Bogers, M., Bekkers, R. & Granstand, O., 2012. Intellectual Property and Licensing Strategies in open Collaborative Innovation. *Open Innovation at Firms and Public Administrations*, pp. 37-58.
- Bruneel, J., Ratinho, T., Clarysse, B. & Groen, A., 2012. The Evolution of Business Incubators: Comparing demand and supply of business incubation services across different incubator generations. *Technovation*, pp. 110-121.
- Canik, Y., Bohemia, E. & Telalbasic, I., 2017. Mapping coupled open innovation processes from Activity Theory framework. *Research perspectives on creative intersections*.
- Chesbrough, H., 2003. *Open Innovation: The New Imperative for Creating and Profiting from Technology*. Boston: Harvard Business School Press.
- Chesbrough, H., 2010. Business model innovation: opportunities and barriers. *Long range planning* 43.2-3, pp. 354-363.
- Chesbrough, H. & Bogers, M., 2014. Explicating Open Innovation: Clarifying an Emerging Paradigm for Understanding Innovation. *Oxford University Press*, pp. 3-28.
- Chesbrough, H. & Brunswicker, S., 2013. *Managing Open Innovation in Large Firms*, s.l.: Fraunhofer Verlag.
- Chesbrough, H., Lettl, C. & Ritter, T., 2018. Value Creation and Value Capture in Open Innovation. *Product Development & Management Association*, pp. 930-938.
- Chesbrough, H. & Rosenbloom, R., 2002. The role of the business model in capturing value from innovation: evidence from Xerox Corporation's technology spin-off companies. *Industrial and Corporate Change*, pp. 529-555.

- Chesbrough, H. & Rosenbloom, R. S., 2002. The role of the business model in capturing value from innovation: evidence from Xerox Corporation's technology spin-off companies. *Industrial and Corporate Change, Volume 11, Number 3*, pp. 529-555.
- Chesbrough, H., Vanhaverbeke, W. & West, J., 2006. Open Innovation: A Research Agenda. *Oxford University Press*, pp. 1-46.
- Covin, J. & Miles, M., 2007. Strategic Use of Corporate Venturing. *Entrepreneurial theory and practice*, pp. 183-207.
- Dahlander, L. & Gann, D., 2010. How open is innovation?. *Research Policy*, pp. 699-709.
- Dul, J. & Hak, T., 2008. *Case study methodology in business research*. 1. red. s.l.:Elsevier Ltd..
- Eikeland, M., 2019. *Innovationlab: Gründerhub Accelerator*. [Internet]  
Available at: <https://innovationlab.net/case/grunderhub-accelerator/>  
[Funnet April 2019].
- Endresen, R., 2018. *Nord24: Helt ukjent storsatsing i Tromsø*. [Internet]  
Available at: <https://www.nord24.no/tromso/nord-norge/naringsliv/helt-ukjent-storsatsing-i-tromso-vi-er-en-godt-bevart-hemmelighet/s/5-32-117741?access=granted>
- Erichsen, V. M., 2018. *Boost.ai prises til over én milliard kroner*. [Internet]  
Available at: <https://shifter.no/boost-ai-prises-til-over-en-milliard-kroner/>
- European Parliament, 2015. *DIRECTIVE (EU) 2015/2366 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL*, s.l.: Official Journal of the European Union.
- Evry, 2016. *Open Banking Transformation*, s.l.: Evry Financial Services.
- Finance Norway, 2018. *Årsrapport 2018*, s.l.: s.n.
- Finans Norge, 2018. *Markedsandeler*. [Internet]  
Available at:  
<https://www.finansnorge.no/contentassets/1a77378303a9403591ccab82aa9424a2/markedsandeler---brutto-utlan-i-norge.xlsx>



Folcia, M. & Firnges, A., 2017. *Waiting until the Eleventh Hour: European banks' reaction to PSD2*, s.l.: PWC.

Freeman, C. & Soete, L., 1997. *The Economics of Industrial Innovation. I*: s.l.:Routledge.

Gambardella, A., Giuri, P. & Luzzi, A., 2007. The market for patents in Europe. *ScienceDirect*, pp. 1163-1183.

Giske, M., 2019. *DNB: Studenter inviteres til Digital Challenge*. [Internet]  
Available at: <https://www.dnbnyheter.no/nyheter/dnb-utfordrer-studenter/>

Giske, M., 2019. *DNBs API-er åpnes for alle*. [Internet]  
Available at: <https://www.dnbnyheter.no/bedrift/dnbs-api-er-apnes-for-alle/>

Gray, D. E., 2004. Doing research in the real world. I: *Designing case studies*. s.l.:SAGE Publications Ltd., pp. 123-181.

Hafstad, T. et al., 2017. *PSD2 - Strategic opportunities beyond compliance*, s.l.: s.n.

Henkel, J., 2006. Selective revealing in open innovation processes: The case of embedded Linux. *ScienceDirect*, pp. 953-969.

Hung, K.-P. & Chou, C., 2013. The impact of open innovation on firm performance: The moderating effects of internal R&D and environmental turbulence. *Technovation*, pp. 368-380.

Hvamstad, E., 2019. *Hegnar: Storbank sendte 24-åring til startup for å lære*. [Internet]  
Available at: <https://www.hegnar.no/Nyheter/Naeringsliv/2019/02/Storbank-sendte-24-aaring-til-startup-for-aa-laere?r=refresh>

Jakobsen, J., 2018. *Shifter: The tables have turned: Her pitcher bankene til fintech-oppstartene*. [Internet]  
Available at: <https://shifter.no/the-tables-have-turned-her-pitcher-bankene-til-fintech-oppstartene/>

Johannessen, A., Christoffersen, L. & Tufte, P. A., 2011. *Forskningsmetode for økonomiskadministrative fag*. 3. red. Oslo: Abstrakt Forlag.

- Johannessen, A., Christoffersen, L. & Tufte, P. A., 2011. *Forskningsmetode for økonomiskadministrative fag*. 3. red. Oslo: Abstrakt Forlag.
- Johnson, M. W., Christensen, C. M. & Kagermann, H., 2008. Reinventing Your Business Model. *Harvard Business Review* 86, 12, pp. 57-68.
- Jørgenrud, M., 2017. *Digi: Mcash er dødt - leve Vipps*. [Internet]  
Available at: <https://www.digi.no/artikler/mcash-er-dodt-leve-vipps/376488>
- Kanbach, D. & Stubnet, S., 2016. Corporate Accelerators as recent form of startup engagement: the what, the why, and the how. *The Journal of Applied Business Research*, pp. 1761-1776.
- Kohler, T., 2016. Corporate accelerators: Building bridges between corporations and startups. *Business Horizons*, pp. 347-357.
- Laursen, K. & Salter, A., 2004. Searching high and low: what types of firms use universities as a source of innovation?. *Research Policy*, 33, 8, pp. 1201-1215.
- Lazzarotti, V. & Manzini, R., 2009. Different Modes of Open Innovation: A Theoretical Framework and An Empirical Study. *International Journal of Innovation management*, pp. 615-636.
- Lichtenthaler, U. & Ernst, H., 2007. External technology commercialization in large firms: results of a quantitative benchmarking study. *R&D Management*, pp. 383-397.
- Maas, K. & Boons, F., 2017. CSR as a strategic activity: Value creation, redistribution and integration. *Routledge*, pp. 154-172.
- Mehmetoglu, M., 2004. *Kvalitativ metode for merkantile fag*. Bergen: Fagbokforlaget Vigmostad & Bjørke AS.
- Moe, S., 2019. *E24: DNB topp om banksamarbeid*. [Internet]  
Available at: <https://e24.no/digital/bank/dnb-topp-om-banksamarbeid-frenemies-er-et-betegnende-ord-for-tiden-vi-er-inne-i/24515297>
- Nikolaisen, P.-I., 2017. *Shifter: Nordea inviterer startups til "open banking". 130 registrerte på 24 timer*. [Internet]

Available at: <https://shifter.no/nordea-inviterer-startups-open-banking-130-registrerte-pa-24-timer/>

Noor, K., 2008. Case study: A strategic research methodology. *American Journal of Applied Sciences*, pp. 1602-1604.

Næss, S. L., 2017. *SpareBank 1: Spleis - samle inn penger for å få noe til å skje*. [Internet] Available at: <https://nyhetssenter.sparebank1.no/blog/2017/02/21/spleis-samle-inn-penger-for-a-fa-noe-til-a-skje/>

Omarini, A., 2018. Banks and Fintechs: How to Develop a Digital Open Banking Approach for the Bank's Future. *International Business Research*, pp. 23-36.

Osterwalder, A. & Pigneur, Y., 2008. *Business model generation: a handbook for visionaries, game changers, and challengers*. s.l.:John Wiley & Sons.

Prats, J., Amigó, P., Ametller, X. & Batlle, A., 2017. *Corporate Venturing: Achieving profitable Growth Through Startups*, s.l.: mVenturesBcn, Mobile World Capital, IESE.

Punch, K., 2014. *Introduction to Social Research: Quantitative & qualitative approaches*. 3. red. s.l.:Sage.

Sagmoen, I. & Wig, K., 2015. *E24: Sparebank1 kjøper norske mCASH*. [Internet] Available at: <https://e24.no/boers-og-finans/sparebank1-kjoeper-norske-mcash/23542853>

Saunders, M., Lewis, P. & Thornhill, A., 2009. Understanding research philosophies and approaches. I: *Research methods for business students*. s.l.:s.n., pp. 106-135.

Saunders, M., Lewis, P. & Thornhill, A., 2012. *Research methods for business students*. 6. red. s.l.:Pearson Education Ltd..

SpareBank 1 Nord-Norge, 2018. *About the bank*. [Internet] Available at: <https://www.sparebank1.no/en/nord-norge/about-us/about-us.html>

SpareBank 1 Nord-Norge, 2019. *SpareBank 1 Nord-Norge Annual Report*, s.l.: s.n.

SpareBank 1, 2019. *Om oss: SpareBank 1 Gruppen AS*. [Internet] Available at: <https://www.sparebank1.no/nb/bank/privat/kundeservice/kontakt.html>

Spender, J.-C., Corvello, V., Grimaldi, M. & Rippa, P., 2017. Startups and open innovation: a review of the literature. *European Journal of Innovation Management*, Vol. 20, pp. 4-30.

StartupLab, 2019. *DnB NXT Accelerator*. [Internet]

Available at: <https://startuplab.no/nxt/index.html#content3-1>

[Funnet 2019].

Thagaard, T., 2002. *Systematikk og innlevelse*. 2. red. s.l.:Fagbokforlaget.

Trott, P. & Hartmann, D., 2009. Why 'Open Innovation' is Ole Wine in New Bottles. *Imperial College Press*, pp. 715-736.

van der Zee, F. & Rehfeld, D., 2015. *Open Innovation in Industry, including 3D Printing*, s.l.: the European Parliament's Committee on Industry, Research and Energy (ITRE).

Vanhaverbeke, W., 2013. Rethinking Open Innovation Beyond the Innovation Funnel. *Technology Innovation Management Review*, pp. 6-10.

Weiblen, T. & Chesbrough, H., 2015. Engaging with Startups to Enhance Corporate Innovation. *California Management Review*, Vol. 57, No. 2.

Weldeghebriel, L., 2017. *DNB skal investere 250 millioner kroner i oppstartsselskaper*.

[Internet]

Available at: <https://shifter.no/dnb-investere-250-millioner-kroner-oppstartsselskaper/>

West, J., Salter, A., Vanhaverbeke, W. & Chesbrough, H., 2014. Open Innovation: The next decade. *Research Policy*, pp. 805-811.

WOIC, 2018. *World Open Innovation Conference: Call for papers*. [Internet]

Available at: <https://woic.corporateinnovation.berkeley.edu/woic2018/callforpapers/>

[Funnet March 2019].

Yin, R., 1981. The case study as a serious research strategy. *Sage Publications*, pp. 97-114.

Yin, R. K., 2009. *Case study research: Design and methods*. 4 red. Thousand Oaks: CA: Sage Publications.



# Appendix A: Interview guide for internal informants

## Intervjuspørsmålene

### Del 1: Bakgrunnsinformasjon

Q1: Hva er din stilling/posisjon og historikk i SpareBank 1 Nord-Norge?

Q2: Hvordan foregår SpareBank 1-allianse samarbeidet? Hvilken betydning har allianse-samarbeidet for SpareBank 1 Nord-Norge? Gi gjerne eksempler.

Q3: Hvordan balanserer dere innovasjons- og utviklingsprosjekter mellom SpareBank 1 Nord-Norge internt og SpareBank 1-alliansen? Gi gjerne eksempler.

Q4: Hva tror du er de største utfordringene og mulighetene norske banker står ovenfor nå, og de kommende årene?

Q5: Hvilken betydning tror du innføringen av PSD2 vil ha for SpareBank 1 Nord-Norge?

### Del 2: Kunnskaps- og kompetanseklider

Q1: Kjenner du til noen samarbeidsprosjekter SpareBank 1 Nord-Norge har med eksterne aktører? Gi gjerne eksempler.

Q2: Hva tror du motiverer SpareBank 1 Nord-Norge til å samarbeide med eksterne aktører?

Q3: Hvordan tror du eksterne aktører bidrar med kunnskap og kompetanse til SpareBank 1 Nord-Norge? Gi gjerne eksempler.

Q4: Hvordan mener du SpareBank 1 Nord-Norge deler intern kunnskap og kompetanse med eksterne aktører? Gi gjerne eksempler.

Q5: Hvordan mener du SpareBank 1 Nord-Norge anvender intern kunnskap og kompetanse i innovasjonsprosjekter? Gi gjerne eksempler.

Q6: Hvordan mener du SpareBank 1 Nord-Norge anvender ekstern kunnskap og kompetanse i innovasjonsprosjekter? Gi gjerne eksempler.

### Del 3: Samarbeid med oppstartsselskaper og andre innovasjonstiltak

Q1: Kjenner du til noen tiltak SpareBank 1 Nord-Norge gjør for å samarbeide med oppstartsselskaper? Gi gjerne eksempler.

Q2: Hvordan har SpareBank 1 Nord-Norge tidligere samarbeidet med oppstartsselskaper? Gi gjerne eksempler.

Q3: Hva mener du SpareBank 1 Nord-Norge ønsker å oppnå gjennom samarbeid med oppstartsselskaper?

Q4: Hvilke type oppstartsselskaper mener du SpareBank 1 Nord-Norge bør samarbeide med?

Q5: Hvilke ressurser mener du SpareBank 1 Nord-Norge bør investere for å samarbeide med oppstartsselskaper?

#### **Del 4: Resultater av samarbeid med oppstartsselskaper**

Q1: Hvilken verdi føler du at SpareBank 1 Nord-Norge har tilført oppstartsselskapene gjennom samarbeidet? Gi gjerne eksempler.

Q2: Hvilken verdi føler du oppstartsselskapene har tilført SpareBank 1 Nord-Norge gjennom samarbeidet? Gi gjerne eksempler.

Q3: Har målene for samarbeidene blitt nådd? Har SpareBank 1 Nord-Norge vært fornøyd med utfallet av samarbeidene? Gi gjerne eksempler.

Q4: Hvordan tror du SpareBank 1 Nord-Norge hadde blitt påvirket, om SpareBank 1 Nord-Norge unngikk å samarbeide med oppstartsselskaper?

#### **Del 5: Avsluttende spørsmål**

Q1: Er det noe annet du ønsker å tilføye rundt samarbeidet mellom SpareBank 1 Nord-Norge og oppstartsselskaper?

Q2: Har du noen øvrige kommentarer?

Q3: Har du noen spørsmål til forskningsprosjektet?

# Appendix B: Interview guide for external informants

## Intervjuspørsmålene

### Del 1: Bakgrunnsinformasjon

Q1: Hva er din stilling/posisjon og historikk i (aktuelt oppstartsselskap)?

Q2: Kan du fortelle hva som er hovedvirksomheten i deres selskap?

Q3: Har du kjennskap til PSD2? Hvilken betydning har innføringen av PSD2 for deres virksomhet?

### Del 2: Samarbeid med SpareBank 1 Nord-Norge

Q1: Hvordan kom dere i kontakt med SpareBank 1 Nord-Norge?

Q2: Hvordan startet samarbeidet mellom SpareBank 1 Nord-Norge og deres oppstartsselskap?

Q3: Hva er ønsket verdiopptjening av samarbeidet for dere?

Q4: I din oppfatning, hva ønsket SpareBank 1 Nord-Norge å oppnå med samarbeidet?

Q5: Hvordan foregikk samarbeidet?

### Del 3: Resultater av samarbeid med SpareBank 1 Nord-Norge

Q1: Hvilken effekt har samarbeidet med SpareBank 1 Nord-Norge hatt på deres bedrift?

Q2: Hvilken verdi mener du at dere har tilført SpareBank 1 Nord-Norge gjennom samarbeidet?

Q3: Hvilken verdi har SpareBank 1 Nord-Norge tilført deres selskap gjennom samarbeidet?

Q4: Har dere vært fornøyd med utfallet av samarbeidet? Har målene for samarbeidet blitt nådd?

Q5: Hvordan kunne dere oppnådd samme resultater uten samarbeidet, er det realistisk?

### Del 4: Avsluttende spørsmål

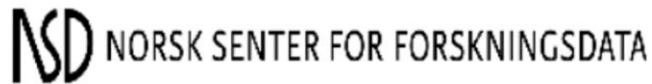
Q1: Er det noe annet du ønsker å tilføye rundt samarbeidet mellom deres selskap og SpareBank 1 Nord-Norge?

Q2: Har du noen øvrige kommentarer?

Q3: Har du noen spørsmål til forskningsprosjektet?



# Appendix C: NSD registered research



## **NSD sin vurdering**

### **Prosjektittel**

Open Innovation in the Norwegian finance industry: How Norwegian banks collaborate with startups

### **Referansenummer**

135095

### **Registrert**

26.04.2019 av Martin David Hamre Mathisen - mma124@post.uit.no

### **Behandlingsansvarlig institusjon**

UiT Norges arktiske universitet / Fakultet for biovitenskap, fiskeri og økonomi / Handelshøgskolen

### **Prosjektansvarlig (vitenskapelig ansatt/veileder eller stipendiat)**

Lene Foss, lene.foss@uit.no, tlf: 77646038

### **Type prosjekt**

Studentprosjekt, masterstudium

### **Kontaktinformasjon, student**

Martin Mathisen, martin.mathisen@gmail.com, tlf: 98448413

### **Prosjektperiode**

14.01.2019 - 01.06.2019

### **Status**

29.04.2019 - Vurdert

### **Vurdering (1)**

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#### **29.04.2019 - Vurdert**

Det er vår vurdering at behandlingen av personopplysninger i prosjektet vil være i samsvar med personvernlovgivningen så fremt den gjennomføres i tråd med det som er dokumentert i meldeskjemaet med vedlegg den 29.04.2019. Behandlingen kan starte.

