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# Innovation Through Collaboration

*An exploratory study examining the open innovation output created through strategic partnerships and the subsequent effect of ongoing change processes.*

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# Executive Summary

This thesis has explored how an established firm can achieve technology-based innovation by partnering with a startup ecosystem. The objective of studying this phenomena is to gain greater understanding of what mechanisms aid established firms in ensuring innovation and value creation when collaborating with startups.

Through a qualitative, embedded case study, findings revealed that closed startup ecosystems can at easier ensure quality, which benefits both the startups and the corporates as matching between the two is somewhat easier, provided that there is an activity where the established firm can get to know and explore the startups better over time. Change makes large, established firms more agile. However, slow processes, poor internal and external communication, regulation and risk aversion are bottlenecks in collaborations between large and small companies.

Modularity in ecosystems can aid produce a healthy, collaborative environment, and will alleviate the matching process between the startups and established firms. By applying open innovation principles to the dynamic capabilities' framework, an established firm can outsource parts of the sensing capability to a successful startup ecosystem as it develops its own sensing capabilities. In seizing opportunities, agile decision making is easier when the opportunity at hand is a product innovation. Disruption within the financial industry by a service-providing startup is unlikely in Norway. The threat of disruption from incumbents in other industries is more eminent, therefore, sensing and initiating combinatory activities with startups providing products and services is of high strategic value.

Change is a double edged sword for open innovation collaborations. It increases the organization's change capabilities and makes it more agile. On the other hand, it creates only short term change capacity and complicates internal and external communication, which is especially unfortunate as agile decision-making is of the utmost importance in an open innovation setting.

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# 1. Introduction

We live in increasingly uncertain times, where the ability to be agile is increasingly important. Whether it is new technology disrupting the market or a pandemic, established firms innovate to survive.

Traditionally, an established firm was been viewed upon as an isolated entity within a market, that has to find new ways to deploy its resources and capabilities within itself to innovate. In recent years, open innovation has received more attention. Open innovation increases an organizations innovation capacity by exploiting external sources (Carlsson & Corvello, 2011), meaning that established firms can share the risk of investment but still increase internal innovation capacity. It is therefore interesting to consider whether or not, there is a systematic way of accessing these external sources of innovation that can be exploited more efficiently, and how an established firm can innovate through these collaborations. This thesis will explore through an embedded case study the following research question:

**How can an established firm achieve technology-based innovation by partnering with a startup ecosystem?**

It is, however, unlikely that a large, traditional firm has the organizational set up to exploit external sources of innovation, which gives importance to how change affects external collaboration. Within this setting, the following sub-question will be examined:

**How does an ongoing change process affect an open innovation collaboration?**

The illustration on the next page will illustrate the conceptual framework and relation between the established firm, *NordicFin*, the startup ecosystem, *EcoCo*, and two of the startup with affiliation to the EcoCo ecosystem, *TechCo* and *ServiceFinco*.

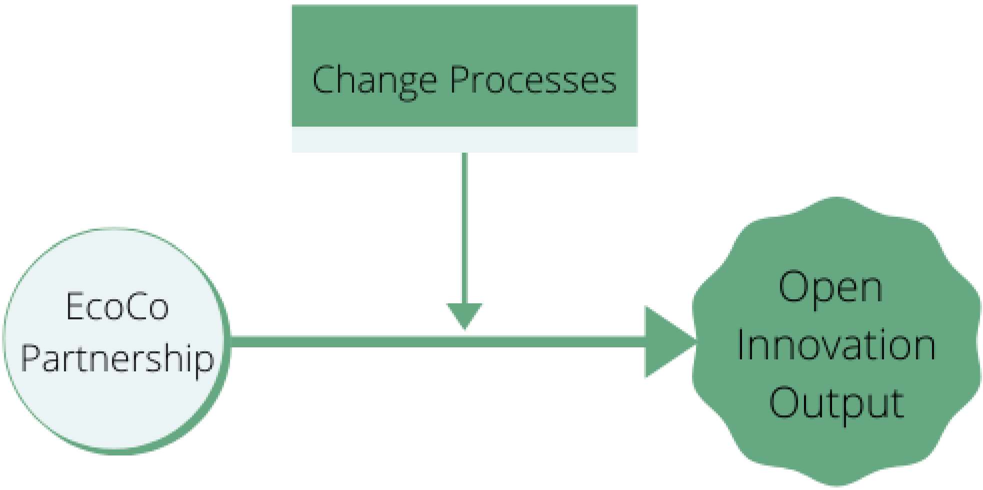



*Figure 1: Conceptual framework for research question.*

# 2. Literary Review

*This section presents literature relevant in answering the aforementioned research question and will review literature on innovation and organizational change.*

## 2.1 Innovation

The Business dictionary (n.d.) defines innovation as “the process of translating an idea or invention into a good or service that creates value or for which a customer will pay”, and here adding that the innovation must be replicable and satisfy a need. Johnson, Whittington, Kevan Scholes, Regnér, Angwin (2017) definition highlights using new knowledge in process, product and service development with the end result of putting the innovation into commercial use. The ability to innovate is relevant and important for a firm if they are to stay competitive and viable. Literature identifies two divers for innovation; technology and the market (Johnsen et al, 2016). The former refers to innovation stemming from discoveries made in research or the development of new technologies that make it possible to realize new processes, products or services. The latter suggests a market push, i.e. customers and other players in the market address elements like user experience, that can and should be improved. (Johnson, Whittington, Scholes, Angwin and Regnér, 2014).

### 2.1.1 Process Innovation and Product Innovation

The literature differentiates between product innovation and process innovation (Johnsen et al, 2014). Product innovation concerns the product or service that is eventually distributed and sold to customers, essentially the *what* aspect of what is being delivered. Process innovation, on the other hand, refers to *how* that product or service is produced and distributed. Naturally, in new markets, a product or service must emerge, and thereafter the methods of producing it can be improved. It is therefore common that the market chooses a dominant product innovation before process innovation and economies of scale can be achieved (Johnsen et al, 2017). Another natural consequence of this is that in developing industries, product innovation is where the stiffest competition is set. Maturing industries, on the other hand, favor process innovation as large incumbents are often situated in mature markets and focus their efforts on increasing their margins. Small entrants are therefore likely to offer a product innovation as an attempt to acquire market share through disrupting the current competition with a new product or service or creating a new market all together (Johnsen et al, 2017).

Although the literature does not often differentiate between the innovation of services and the innovation of products, the emergence of the two do at times have different preconditions. Nijissen, Hillebrand, Verme and Kemp (2006) found that new product development in established firms requires great research and design strength within the organization. Research and design strength is less important for service innovation, conversely, it requires larger prior investments and strategic deliberation considering whether or not the established firm is willing to cannibalize organization routines (ibid). While product innovation encompasses both services and products, and in some instances can be both, there can be a difference. For instance, a new beverage is a can be considered a product innovation, while a new way of serving beverages is a service innovation. For the purpose of clarity, a distinction is drawn between product innovation and service innovation in the rest of this paper.

### 2.1.2 Open Innovation

Traditionally, business strategies have been created in such a way where a firm is to use its internal resources and capabilities to innovate and create competitive advantages. Closed innovation focuses on innovating within the enterprise and protecting one's intellectual property, while open innovation on its part is defined as the deliberate import and export of knowledge in order to accelerate and enhance innovation (Johnsen et al, 2017).

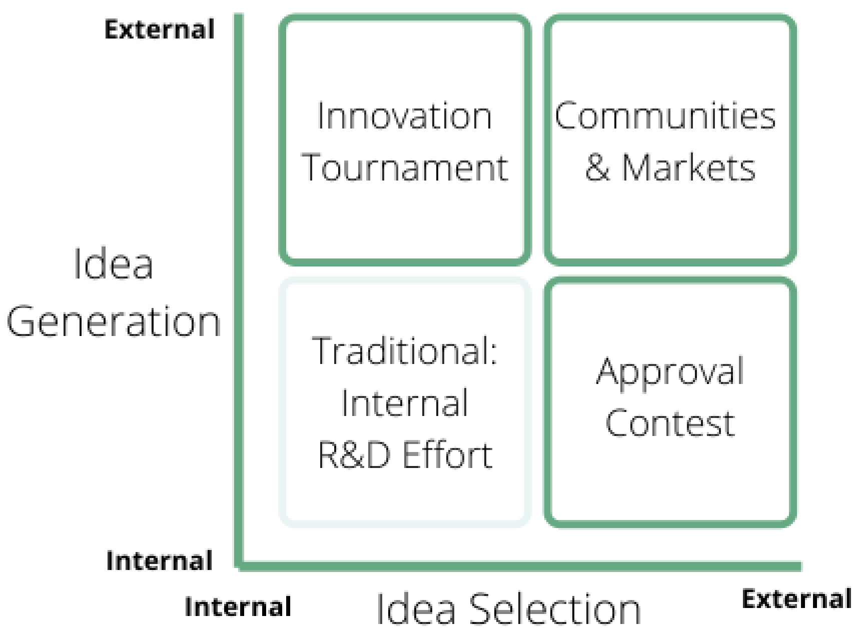



*Figure 2: Illustration of different approaches to innovation. King & Lakhani (2013).*

Open innovation as a process requires inviting internal as well as external parties to improve innovation success and is a deliberate managing of knowledge across company borders (Bogers, Chesbrough and Moedas, 2018). The diagram above (figure 2) illustrates some of what open innovation encompasses. One can view open innovation as a process where a company opens up its idea generation process, its idea selection process or both to external parties, opening up numerous possibilities of external cooperation (King and Lakhani, 2013).

Bogers, Chesbrough, Heaton and Teece (2019) differentiate between outside-in, where a company opens up its innovation processes for external contributions, and inside-out where it allows its unused resources to be used by external parties . The figure below displays some of the different strategies a firm can utilize based on whether or not they want to build the solutions in-house and want to own the solution they use (figure 3).

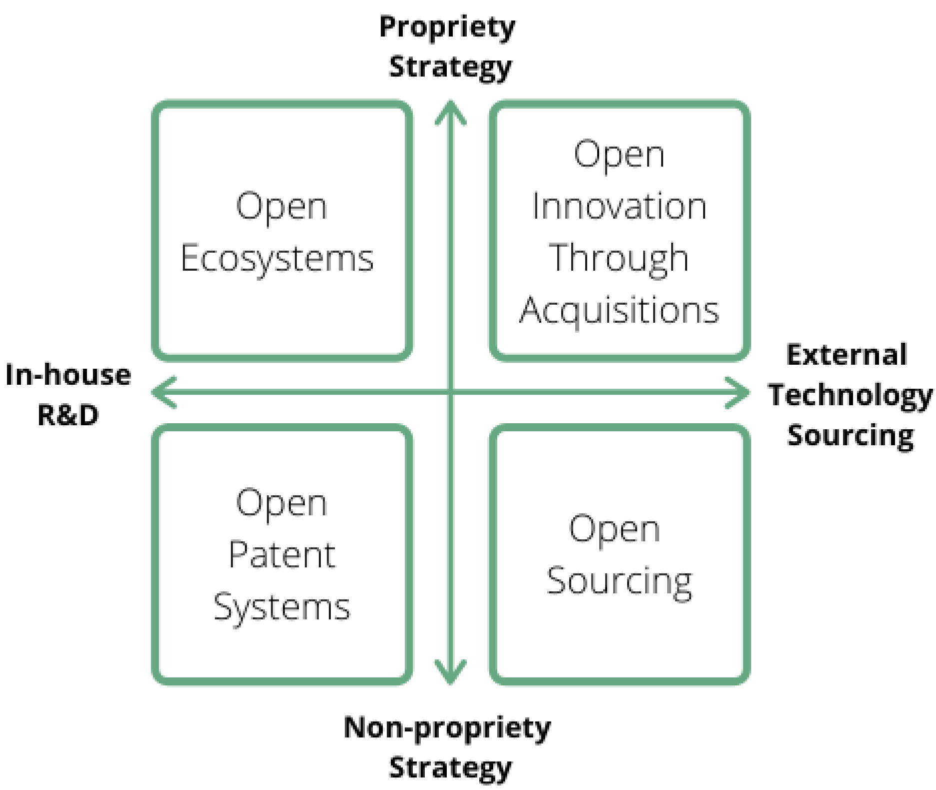



*Figure 3: Different forms of open innovation. Bogers, Chesbrough, Heaton and Teece (2019).*

Some research shows that geographical proximity has a role to play for the potential of open innovation initiatives (Kapetaniou and Lee, 2018). Domestic open innovation is said to allow for easier access and sharing of resources, which benefits product innovation that would be new to the firm (ibid), whilst international open innovation is suitable for exploration and knowledge enhancement of novel technologies.

### 2.1.3 Ecosystems

A corporation can apply various forms of strategy to facilitate its approach to open innovation. In a technology setting, Johnson et al (2017) emphasize the importance of a good ecosystem as open innovation requires the careful support of collaborates, and benefit from having a platform leader; a large corporation that nurtures the independent companies within the ecosystem. Some scholars describe ecosystems as having a hub and spoke model, with a lead company as the hub (Hannah & Eisenhart, 2018; Jacobies et al, 2018). Jacobies et al (2018) define ecosystems as a set of actors with varying degrees of multilateral, nongenetic complementarities that are not fully hierarchically controlled. They further argue that ecosystem do not emerge spontaneously and are designed, as well as for the case of modularity within an ecosystem. Modularity or modular architecture in an ecosystem is the existence separate organizations that operate their respective “modes” or businesses autonomously but are interconnected through “thin crossing strings” (ibid). Adner (2017) emphasizes that the different actors within the ecosystem should have different desired states and end goals in mind, and that in successful ecosystem, the actors are satisfied with their positions. Modularity is an important, if not critical facilitator for the success of the ecosystem as value capture in ecosystems is made easier by supermodularity (Jacobies et al). In other words, it is easier to capture value in an ecosystem where the members can easier complement one another instead of competing against each other in a saturated environment. This gives importance to the governance structure of ecosystems and regulations within it. Jacobies et al (2018) point out the abundance of compositions when considering that ecosystems can be open or closed, operate by rules of engagement that are imposed or emerge, as well as how the heavily behavior within the ecosystem is regulated. There is, however, no conclusive consensus on what governance mode that bears the most fruit as of now.

### 2.1.4 Dynamic Capabilities

Dynamic capabilities are a set of capabilities that are required in order for corporations to successfully navigate uncertainty and changing competitive landscapes. Defined by David Teece, dynamic capabilities are an organization’s ability to renew and recreate its strategic capabilities to meet the needs of changing environments (Johnsen et al, 2015). Dynamic capabilities are requisite for organizational agility, which refers to a corporation's ability to efficiently and effectively redirect its resources as internal or external conditions necessitate it (Teece, Pederaf, Leih, 2016), which would translate to the organization's ability to be flexible. Organizational agility is costly to maintain, nonetheless, Teece et al (2016) argue that its absence is even costlier for the corporation.

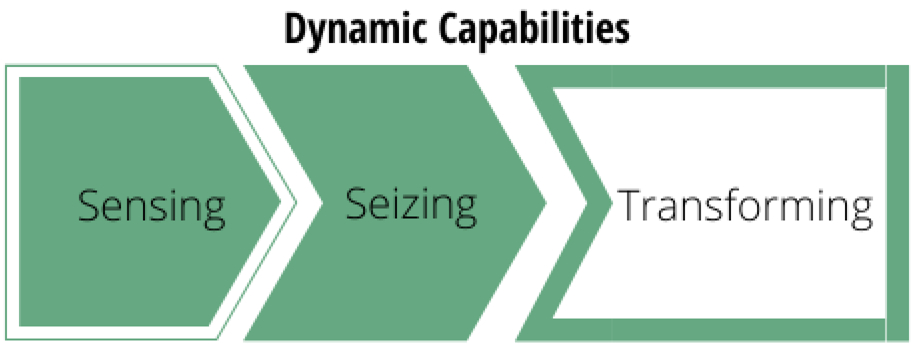



*Figure 4: Dynamic Capabilities, Teece et al (2016).*

Dynamic capabilities can aid an organization's ability to innovate as it better equips it to identify possible new arrangements of competencies and assets that can create competitive advantages and create a suitable strategies in order to seize those. For an organization to have dynamic capabilities, it requires three attributes; sensing, seizing and transforming (Teece et al, 2016). By sensing, it is meant the ability to detect new stirrings on the market, and process and assimilate the new knowledge quickly. This should enable an organization to sense how the market is change, detect threats and opportunities swiftly, and prepare to position itself accordingly before its competitors and rivals have a chance to do so themselves. Second is seizing opportunities, by which it is meant that the organization is able to implement new systems and innovate to take advantage of the its findings. In short, seizing is developing opportunities based on the insights gathered from sensing the market shift. Lastly, is the ability to transform the organization and the accommodating ecosystem to fully take advantage of the organization's newly implemented systems or innovations. Day and Shoemaker (2016) make the point that such capabilities are especially important in rapid-moving markets and technologies. This is especially relevant as technologies the past decade have developed quickly and resulted in making business models in various sectors obsolete almost overnight.

### 2.1.5 Dynamic Capabilities and Open Innovation

Bogers et al (2018) argue that, empirically, companies that have been able to successfully capitalized on open innovation have organizational flexibility that resembles dynamic capabilities and therefore argue the case that dynamic capabilities and open innovation go hand in hand. Outside-in innovation requires sensing, sense-making and filtering external innovations, while inside-out innovation would require substantial sensing and learning in order to seize the opportunities most relevant and advantageous for the company (Teece, 2020). In both instances, execution is key, which refers to the seizing capability. Borger et al (2018) further argue that both the outside-in and inside-out approaches to open innovation are required to develop the transforming capability within the framework.

Teece (2020) reasons that open innovation processes can strengthen an organization's dynamic capabilities. Sensing is enhanced by deeper technological understanding through access to external knowledge sources. Seizing is enriched as new capabilities are created to accommodate the additional technology or innovation that the organization is incorporating into their business model. Lastly, the transformation capability is affected when the internal innovation process is opened up, allowing resources to be allocated to non-core deployment, which result in increased organizational flexibility. The table below summarizes how strong dynamic capabilities can make open innovation effective (Teece, 2020).

| | |
|---|---|
| Sensing | **Recognizing** external know-how **opportunities** |
| | **Learning** from external sources of know-how |
| Seizing | **Agile decision-making** once an external source is identified |
| | **Initiating combinatorial activities** |
| | **Adopting** hybrid **business models** |
| Transforming | **Selecting governance mode** for external linkage |
| | **Integrating** internal and external knowledge |

*Table 1: Strong dynamic capabilities make open innovation effective. Teece (2020).*

## 2.2 Organizational Change

As a firm tries to reposition itself in order to became more innovative, it has to undergo a change process, making organizational change a relevant topic in this thesis.

Balogun (2001) argues that organizations are constantly undergoing change. While some change is incremental and other change is more comprehensive, change is driven by the need to reposition the organization in the face of a changing competitive landscape. Before undergoing a change process, it’s important to analyze the organizations competitive position to figure out whether or not change is needed, thereafter, identifying the desired future state of the organization. (Balogun, 2001). Johnson, Whittington, Scholes, Angwin and Regnér (Fundamentals of Strategy, 2014) define strategy as the long term direction of an organization, formulating the goals of the organization, the scope of its activities and its capabilities to deliver on those goals. The change process can be considered as recognizing the organization’s current state and creating a bridge to the desired state, while identifying barriers to change (Balagun, Hailey and Gustafsson, 2018).

There are two main dimensions that are important to consider when describing strategic change; the nature of the change and the end result (Balogun, Hailey and Gustafsson, 2018). The nature of the change considers whether or not the change is incremental or comprehensive, whilst the end result refers to whether or not the change is a transformation or realignment (Balogun et al, 2018). In this, there are four main kinds of strategic change; evolution, adaption, revolution and reconstruction. Evolutionary change is transformational change that is implemented incrementally and gradually, in anticipation of the future (ibid). Adaptative change is non-paradigmatic and undertaken to realign the way the organization operates, and it is implemented slowly through staged initiatives (Balogun, 2001; Balogun et al, 2018). Comprehensive and transformational change is referred to as revolutionary change. It occurs when initiatives on many different fronts are initiated at the same time. This type of change is often reactive and forced and takes place within a short period of time (ibid). The last type of change is reconstruction, and like revolution, it is also comprehensive but reactive change caused by a changing competitive environment. Unlike a revolution, it is not a fundamental change, but rather focuses on stabilizing and changing the way the organization operates.

Balogun et al argue (2018) that organizational change is about changing the people not the organization, therefore, understanding the culture in an organization is important.

Organizational culture is defined as the taken-for-granted assumptions and behaviors of an organization's members by Johnsen et al (2014; 2017). The culture web, a framework developed by Johnsen and Scholes (1992), is useful for analyzing and assessing the required extent of change needed to enter the desired state (Balogun, 2001; Balogun et al, 2018; Johnsen et al, 2014; Johnsen et al, 2017). Six components contribute to comprising the paradigm, which can be described as the collective experience of the organization and viewed as the essence of the organizational culture; symbols, power structures, organizational structures, control systems, routines and rituals, and stories (ibid). Understanding these six components is key for correctly identifying the current "as is" state and can be useful in creating and imagining the desired state, especially if the organization is to undergo transformational change. Transformational change is fundamental organizational change that not only changes the way people in the organization operate, but also how they behave (Balogun, 2001).

### 2.2.1 Capacity and Capabilities for Change

Change is dynamic and is a process that can be managed over time (Balogun et al, 2018). Building capacity and capability for change within the organization can therefore be very useful to ensure stamina in the organization throughout the change process. Capacity refers to the amount of resources the organization can invest in the change process and whether or not it can invest sufficient resources to create the desired outcome. Meyer and Stensaker (2006) define capacity for change as the ability to implement change without compromising the daily operations or subsequent change processes. Capacity for change is necessary to ensure rapid adaptation in a changing competitive environment (Balogun et al, 2018), and in that it is important to be able to sustain the business while implementing those changes. In order to create change capacity, Meyer and Stensaker (2006) name the following methods; framing, participation, pacing and sequencing, routinizing and recruiting, with the latter two being the methods that can ensure sustainable capacity for change. Recruiting experts to aid in the change process provides expertise and if the capabilities are transferred to the organization offer a sustainable capability. Recruiting permanent workers with change capabilities can lessen the workload as the change expertise will permanently be in the company and hiring temporary personnel can elevate the operational strain during the change process (ibid).

Capabilities for change, on the other hand, relate to how capable the organization is to change, its ability to be agile and adaptative. One differentiates between capabilities at an individual level and the organization as a whole. Experience and willingness for change can benefit capabilities for change at an individual level, but are, however, not the same things (Balogun et al, 2016). There is research supporting these findings, suggesting that experience with change can aid the employees in developing their change capabilities (Stensaker and Meyer, 2012). Stensaker and Meyer found that experienced employees are less likely to show resistance to change, and that level of experience as well as how that previous experience was, matter for employees. This indicates that in order to develop capabilities for change, change is needed , albeit, successful change.

# 3. Research Setting

The research question considers how an established firm can achieve technology-based innovation by partnering with a startup ecosystem. The illustration below explains the relationship between the established firm in this thesis, NordicFin, its partner, EcoCo and the ecosystem that EcoCo manages. This thesis will also examine the relationship between NordicFin and some of the startups in EcoCo's ecosystem, as well as the effect NordicFin's internal change process on these various collaborations.

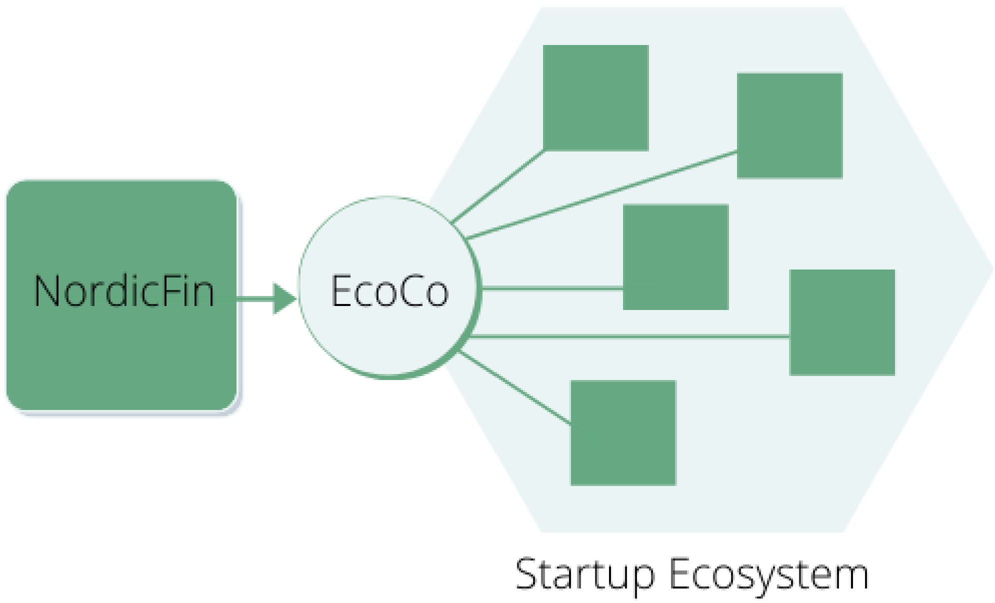



*Figure 5: NordicFin is able to access the startup ecosystem by partnering with EcoCo.*

## 3.1 NordicFin

NordicFin represents the established firm in this thesis and is one of the largest financial institutions in the Nordics. At the turn of the century, a series of mergers and acquisitions formed the financial institution NordicFin is today. Today, it offers a wide range of services ranging from loans and investments, to real estate brokering and pension products. It is a leading actor within selected industries, e.g. shipping and energy. The financial institution has branch offices all over the Nordics, as well as an international presence on various continents, as well as a significant online presence through social media and its various mobile and web applications.

### *Strategy I*

In the beginning of the last century, NordicFin launched its new strategy that was meant to restructure the bank after the global financial crisis of 2008, as well as unite the bank following the mergers of the previous decade in creating a unified culture. The strategic interest at that time were concerned to minimizing the damaged caused by the crisis.

### *Strategy II*

A few years into the decade and a new strategy was launched. This strategy was launched in 2012 and focused on strengthening NordicFin's capital base and improving the financial institutions competitive ability. NordicFin set stringent financial targets for itself with the purpose of being in a strong financial and competitive position by the middle of the decade. In order to meet those targets, NordicFin went through an extensive restructuring that ultimately centralized the financial institution, closed a significant amount of smaller branch offices and let a substantial number of employees go. Other targets set during this period concerned brand equity, such as to improve reputation and deliver common brand image. Enabling a higher of self-service for the customer was another focus the financial institution had. During this period, the NordicFin started investing more in digital resources and technologies, even setting up an ambidextrous structure for one of its digital services. It was during this period that NordicFin partnered up with EcoCo and eventually ran their first accelerator together.

### *Strategy III*

Following the first graduating class of the EcoCo accelerator, NordicFin launched its new strategy in 2017. NordicFin chose to focus more on being bold and curious, than helpful and reliable as was the previous customer focus. For the first time, NordicFin took a clear stance on innovation and decided to become a financial institution and bank for the future. The focus on capital and the bottom line was removed from the strategic targets, and instead replaced with corporate social responsibility and the user experience. NordicFin communicated that they were going to position themselves more as a technology company and less like a bank in various aspects of their operations, including third party collaboration. In the launch of this strategy, NordicFin really mobilized its organization in delivering this messaging, inviting the entire organization to the official launch, changing its visual identity and really focusing its message on brand image.

This new innovation focus sets the premise for NordicFin's exploration with open innovation. From the time of the first accelerator and new strategy launch, NordicFin has managed to position itself as a credible partner and collaborator for start-ups. NordicFin spun out an investment branch after the launch of the strategy in 2018, who now have invested in numerous startups. NordicFin has also partnered up with startups instead of other established corporations in procuring technology for some of their applications. This makes NordicFin's approach to innovation a very interesting case study.

## 3.2 EcoCo

EcoCo was established in 2012, right around when NordicFin launched its second strategy, with the purpose of helping Norwegian tech founders. At that time, the open startup ecosystem was very small and undeveloped. EcoCo helped accelerate this by creating its very own closed ecosystem of startups. It is an early stage incubator that gives its startups access to workshops and digital labs, office spaces, mentoring, free legal and accounting services, and so forth. Its main asset, however, is its network. EcoCo has built a large and deliberate network of large corporate partners, investors, industry experts, alumni, etc. In other words, a very favorable and founder-friendly environment.

The EcoCo team consists of less than 20 people and one can split their operations into three parts; corporate partnerships, investments and community. The majority of the EcoCo team works with corporate partnerships in one way or another. Some work directly with the different corporate partners and operate as their key account managers, actively looking for possible matches between the startups they have in their ecosystem and their corporate partners, whilst other corporate partnerships are organized in industry specific programs. EcoCo has two funds it manages, which allows it to invest in companies it believes has potential by investing a few million NOK for a minority stake in the company. The investment team runs these funds. Lastly, the community team works on building the community amongst the startups at EcoCo.

EcoCo is an application based incubator, with around 400 – 500 startups applicants annually and an acceptance rate of 10% - 15%. However, the EcoCo team also scouts after interesting companies and offer its services and capital. The average startup spends somewhere between 12 – 18 months in the incubator. Their selection criteria include the ability of the founder, the strength of the team and the technical capabilities of the team to build its solution completely inhouse.

EcoCo runs a biannual accelerator, where it invites a corporate partner to offer a special track to a select few startups once a year. For the last four years, NordicFin has been the selected partner for this accelerator. The participants on the NordicFin track receive the same resources and mentoring from EcoCo, but in addition also receive a mentor from the bank, a top management sponsor and open access to the NordicFin resources and network. Since the inception of the joint accelerator, the majority of startups that NordicFin has close relations to have come from this accelerator. This is further demonstrated by the fact that 2 out of every 3 startups that NordicFin invests in has been through the accelerator.

### 3.2.1 TechCo

TechCo is a startup offering a technology or product that can be integrated with other existing platforms. TechCo was founded in 2016 and participated in the first accelerator program shortly after, on the NordicFin track. Throughout the accelerator period, TechCo was free to utilize NordicFin’s resource, however, by the end of the program, no commercial agreement was entered. Towards the end of 2017, as NordicFin’s Strategy III was being launched, TechCo attempted to resume talks with a daughter company of NordicFin but was instead approach by a division within the parent company where TechCo’s technology could be of use and integrated into their application. TechCo has since been the provider of one of the components in NordicFin’s applications.

### 3.2.2 ServiceFinco

ServiceFinco is a service-providing fintech. It was founded in 2016 and like TechCo also joined the first accelerator on the NordicFin track. ServiceFinco was granted access to the resources of NordicFin throughout the accelerator period and has continued to utilize NordicFin’s resources to this day, despite having no financial agreement. After ServiceFinco received its operating license, NordicFin invested in the company, taking a minority stake. Despite the lack of official agreement, NordicFin and ServiceFinco maintain a close relationship, where ServiceFinco is frequently invited to speak to various parts of the NordicFin organization about their story and success. NordicFin has also sent some of its new hires to work for ServiceFinco for a few months as a part of their internal exchange program at the NordicFin organization.

My interest in including TechCo and ServiceFinco in my research was to gain a better understanding of the interaction that NordicFin has not only with the ecosystem manager, that is EcoCo, but also how it interacts with the companies within the ecosystem. A timeline summarizing the events explained above can be seen below.

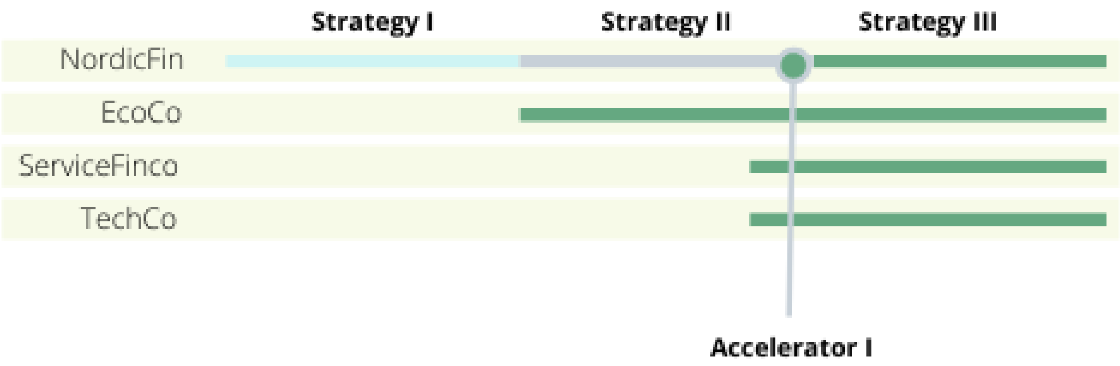



*Figure 6: Timeline, 2010 – 2020, displaying the foundation of EcoCo, ServiceFinco and TechCo in relation to NordicFin's three strategies.*

# 4. Methodology

This section gives an elaborate description of the methodology used in this thesis. First, the research design is presented, thereafter the method in which the data was collected, handled and analyzed is presented. This chapter concludes with a discussion of strengths and weakness of the methods used and ethical considerations.

## 4.1 Research Design

Sanders, Lewis and Thornhill (2019) define research design as the general plan detailing how one will go about answering the research question. Setting clear objectives, specifying sources for data collection, including describing how the data will be collected and analyzed and discussing constraints and ethical issues are highlighted (Sanders et al, 2019).

In order to the research question, a qualitative, exploratory design is needed. Qualitative methods are often used to deepen the understanding (Chatfield, 2018) and are interpretive in nature as the researcher is oftentimes required to interpret the opinions expressed of the research subject (Sanders et al, 2019). In order to understand answer **how an established firm can achieve technology-based innovation by partnering with a startup ecosystem** and **how an ongoing change process affects an open innovation collaboration**, interpreting and giving meaning to the data collected will aid me in gaining insight on these topic and deepen the understanding of these phenomena. In interpreting the findings, an exploratory design is especially helpful for clarifying the finding as the researcher is meant to ask open questions with the goal of gaining new insights on the topic (Sanders et al, 2019). Exploratory research is flexible and adaptable, and often includes interviewing experts and reviewing existing literature on the subject (Sanders et al, 2019). A case study is a recommended method of inquiry when trying to answer "how" and "why" questions as it facilitates tracing the operational process of a phenomena over time (Yin, 2018). This thesis studies the relationship between a large corporate corporation, NordicFin, in Norway and a startup ecosystem, EcoCo, which makes case study research the appreciate mode of inquiry in this instance. The collaboration between NordicFin and two startups within the EcoCo ecosystem is also studied in this thesis, making this an embedded case. Exploration through open innovation has only gained traction in Norway within the last decade, making this a revelatory, embedded single case study (Yin, 2019).

### 4.1.1 Research Approach

Sanders et al (2019) differentiate the approach to theory development mainly between two approaches; deductive and inductive. The deductive approach takes a stronger position in existing literature, where the researcher's main is to validate and test assumptions made given a specific theoretical explanation. If the researcher is hoping to develop new theory, using the inductive approach where the there is a more active focus on letting the data speak for itself and explore where or not new theory can emerge from the data. There has been a substantial amount of research on open innovation in recent years, that this thesis can build on. However, there has been less literature on how an organization can organize and mobilize in order to facilitate open innovation. Existing literature generally focuses on how the benefits of exploring and exploiting from an internal viewpoint, not taking into consideration the attributes the external ecosystem must possess in order for the exploring to be successful. There is also a substantial amount of literature on startups, ecosystems and startup ecosystem, however these are seldom linked to literature on open innovation from the perspective of the established firm. The context in this thesis considers an established firm in ongoing change processes, on which there is an extensive body of literature on. Nevertheless, existing literature has not focused on how established firms can ensure innovation throughout change processes nor how its partnerships are affected by the change processes. The research approach in this thesis will therefore feature a mix of inductive and deductive approach. Deductive as it bases its presumptions on existing literature and revisits these after analysis the data, inductive as the qualitative approach and consequent coding process will facilitate the possibility of new theory to be develop by the data.

### 4.1.2 Research Objective and Strategy

The objective of studying this phenomena is to gain greater understanding of what mechanisms aid established firms in ensuring innovation and value creation when collaborating with smaller, less established actors outside of the organization. This research is meant to aid researchers and practitioners in their seek for more understanding on how to create lasting and sustainable ecosystem for innovation where small and large actors are present, in order to continue developing relevant and innovate products and services to their customers. This research also touches upon how to secure innovation even in times of change and uncertainty and examines the affect the ongoing internal change process has on external collaborations.

The strategy for achieving these objectives is a qualitative, embedded case study, as it uses qualitative data as it uses non-numerical data such as interviews, public information and documents (Sanders et al, 2019). Qualitative methods are appropriate for studying new phenomena and gaining new insights (Yin, 2019). Understanding complex mechanisms such as how established firms can ensure technology-based innovation when given access to a startup ecosystem, it is important to gather the opinions and experiences of all the parties involved, as well as available public information and documents

As an embedded single case study, this research explores how NordicFin increased its innovation capabilities through constant change and how it was able to seize open innovation via an ecosystem, exploring outside-in innovation, product innovation through TechCo and inside-out, service innovation through ServiceFinco, making it a highly interesting case. This thsis presents a single case study as case at hand concerns the collaboration between a large estabslised firm and a specific startup ecosystem. However, this research also further examines two cases within the startup ecosystem and their relations with the established firm, hence, making it an embedded case study. Embedded case studies examine subunits within the organization or case (Yin, 2019), in this instance two companies within the startup ecosystem being studied.

## 4.2 Data Collection

The primary data in this research was collected with the support of the RACE program at the Norwegian School of Economics. Most interviews were conducted in tandem with another RACE student, Simon Rahause, and a few where conducted as a trio, including my supervisor, Professor Christine B. Meyer. This section explains what kind of data was used in this thesis, as well as how it was collected and handled.

### 4.2.1 Data Sources

This thesis has utilized several sources of data. Using various forms of data is referred to as triangulation and is useful in case studies to verify that the data is telling you what you think it is telling you (Sanders et al, 2019). The primary data was obtained through a total of seven semi-structured interviews lasting between an hour to an hour 30 minutes. An interview guide was created in corporation with Simon Rahause before the interviews and adapted throughout the interviews. The interview guide development was driven by theory and consisted of open-ended questions in order to extract target and insightful information from the informants (Yin, 2019). The structure of the interviews was flexible, allowing for further inquiry to various topics as they were brought up. All interviews were recorded with the consent of the informants and all transcripts were sent to the informants with a consent form for the RACE research program that included detailed information about how the data was to be used. In order to ensure triangulation, secondary non-numerical data was also utilized. This included and varied from news articles, marketing material, annual reports, Linked-in profiles, videos and resources sent by the informants. These secondary sources were useful in verifying and gaining greater understanding of the various themes that emerged during the data collection process.

### 4.2.2 Sample

The sampling technique used in this thesis to collect data is purposive, non-probability sampling. Non-probability sampling is practical in exploratory studies as it allows influence from researcher's judgement (Sanders et al, 2019). Purposive sampling is useful in case studies as it allows the researcher to select particularly informative cases (ibid). I was searching for a case where I could explore the innovation capabilities of an established firm in relation to its external environment. After an informal conversation with EcoCo, NordicFin was chosen as the research focus in this thesis. I was given information to relevant informants within the NordicFin organization, as well as EcoCo. As I started collecting data, it became evident to me to explore the NordicFin organization more broadly and through my supervisor, Christine B. Meyer, I was granted access to other parts of the NordicFin organization. It also became increasing patent that to truly understand the relationship NordicFin has with the startup community, I needed to gather data from a few startups a well. Based on my preliminary findings, I interview ServiceFinco as well as TechCo, as they appeared to be the most informative cases. The table below gives a brief description of the informants.

| Organization | Division | Role | Time in organization |
| --- | --- | --- | --- |

| | | | |
|---|---|---|---|
| **NordicFin** | Corporate Banking | Top Management Executive | 2015 - 2020 |
| | | Senior Management Executive | 2008 - 2019 |
| | Partnership Department | Manager | 2018 - Present |
| | Investments, Daughter Company | Manager | 2016 - Present |
| **EcoCo** | Partnerships | Manager | 2016 - Present |
| **ServiceFinco** | Management | Top Management Executive | 2017 - Present |
| **TechCo** | Management | Top Management Executive, Co-founder | 2016 - Present |

*Table 2: Overview of informants and their roles*

All informants, excluding two, were initially contacted through email by myself, with information regarding my research, the purpose of my inquiry and information about the RACE program. The other two informants were initially contacted by my supervisor, Professor Christine B. Meyer. A majority of the interview were scheduled to be in person at the informant's place of work or at the Norwegian school of Economics. However, due to the ongoing pandemic, all but one interview were conducted online through a video conferencing application, only one was conducted in person.

## 4.3 Data Analysis

The case study being examined in this thesis is exploratory in nature, and therefore requires a method of analysis that allows new phenomena to emerge from the data. Grounded theory is useful in developing theoretical explanations of complex processes (Saunders et al, 2019), and presents clear guidelines for analyzing data. Data analysis principles developed by Charmaz (2006) were used in this thesis and follow a two stage analysis, following the initial transcription; initial coding and focused coding. These two are explained in more detailed in the sections to come.

### 4.3.1 Transcription

All audio recordings of the interviews were transcribed verbatim in their entirety to be coded later. All interviews were transcribed by me and Simon Rahause to ensure quality control. Notes expressing laughter, informants searching for words and of that sort were added, as not only what the informants said but also how they expressed themselves could be useful insight (Saunders et al, 2019).

### 4.3.2 Initial Coding

Coding is used to decode and categorize complex, qualitative data with similar meaning (Sanders et al, 2019). The initial coding process is used to study fragments of data for their analytical denotation (Charmaz, 2006). The coding process in grounded theory forms the skeleton of the analysis, therefore the initial coding process should open, stay close to the data and preserve action (ibid).

The interview transcripts were coded line by line, and incident by incident, using the guidelines formulated by Charmaz. Phrases, lines and sentences were given codes, words or short phrases that shows how one selects, separates and sorts data for analytical accounting (Sanders et al, 2019; Charmaz, 2006). The coding was conduct in the qualitative data analysis software program Nvivo. The software is useful in qualitative analysis as it allows you to easily group and review the data under each code from all the various sources. This makes it easier to compare the data and themes at a later stage. The codes were used to conceptualize the data and form the basis of the analysis.

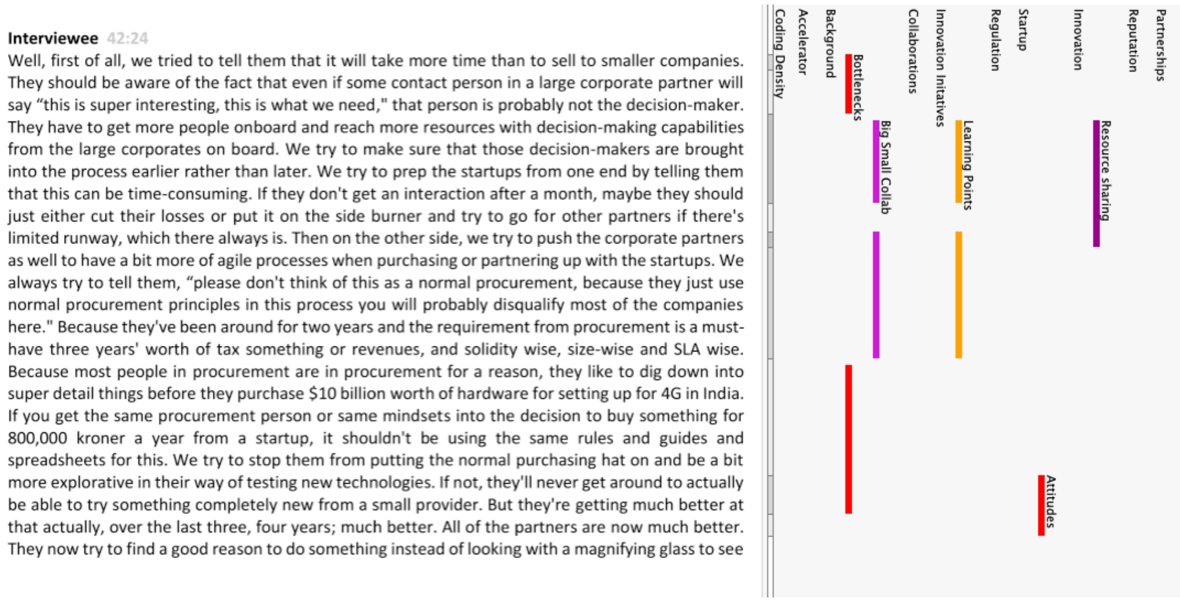



*Figure 7: Initial coding*

### 4.3.3 Focused Coding

Focused coding refers to the act of using the most meaningful and/or frequent codes to shift through the data, explaining larger chunks of data at a time (Charmaz, 2006). This requires the researcher to make important decisions on which of the initial codes that make that will give the most analytical sense to categorize the data and is a time-consuming task (ibid).

Using the Nvivo software, I first read through and conducted a preliminary thematic analysis of the data under each code. Thematic analysis is the process of analyzing qualitative data by searching for themes and/or patterns that occur across a data set (Sanders et al, 2019). Thereafter, I regrouped the codes, creating categories and subcategories. Broad explanatory categories emerged from this; *Internal organization and operations, Innovation and Innovation Initiatives, Partnerships and Collaborations, The Role of EcoCo, Bottlenecks in Collaboration*. Subcategories under each broad thematic code were utilized to describe the mechanism within each category, such as communication, employee engagement, regulation. Charmaz (2006) emphasizes the importance of comparing and reexamining the data to develop a higher level of abstraction, which is important when constructing grounded theory. This was conduct through comparing and constantly critically reviewing each code, category and subcategory.

*Reference 18: 0.66% coverage*

No, this is in terms of how s interacting with startups because we have this large organization, and you have even business development, you have a lot of people involved. That's the problem of big organizations to try not, where to put the limit, where not to involve. If you could dedicate one or two persons and you could give them some power to fixing, that's not normally the way it works. It's all the way involving and anchoring your decision. It's, also of course, always the David Goliath thing, working with startups, because they are only a few people and have very shorts kind of horizon in what they are doing while a big organization they can have the liberty to have a very long decision process and long-horizon on what they do.

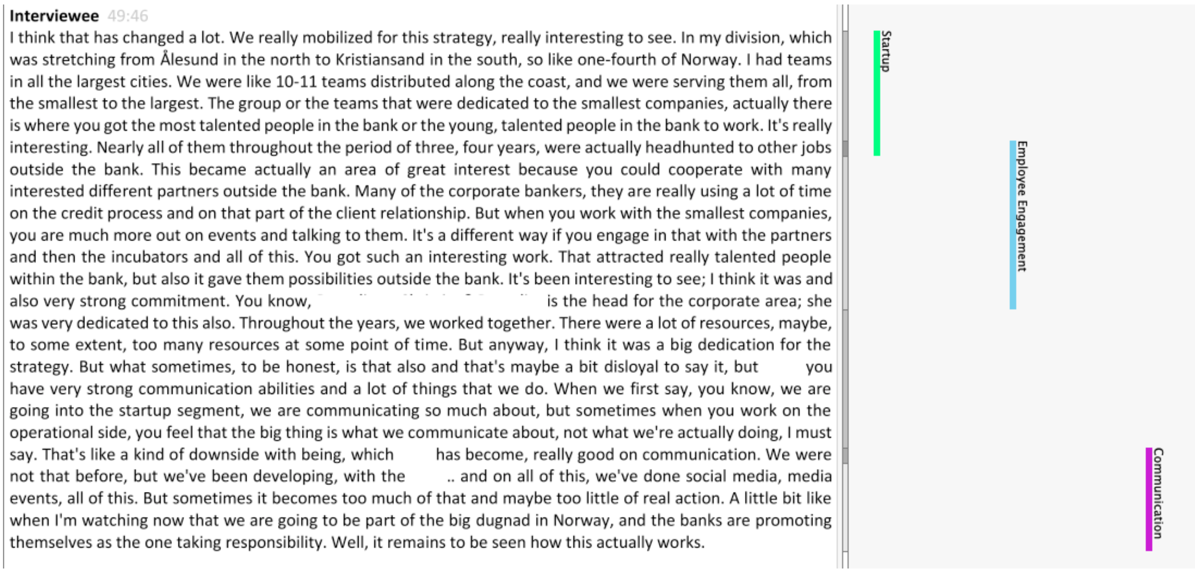
*Reference 1: 0.82% coverage*

HR is doing this, so I don't have any numbers, but they've been doing it for a few years, at least internally. When you do a rotation internally in it's usually three months. You don't have to get a new contract or anything; you just ask your leader if you're able to go on this other team. We have internal positions that we post on Workplace; they can apply for to have mobility or rotation. When it comes to external... for these startups, we have been the ones talking to HR, and they have sent those candidates, and then they have been at a startup for three months. I don't know how many has gone through it, but maybe not that many; I would guess it's less than 10. But internally, it's much more common.

*Reference 3: 0.43% coverage*

Yeah, in my division, it's through this Forum. That's how they also prioritize resources that work in our department when it comes to UX and service design; that's how they prioritize those resources. But for our team, we're a little bit more autonomous; we follow the strategy of and the BUs, so we prioritize our own time a little bit more.

*Figure 8: Comparing data within the same code.*



**Interviewee** 49:46

I think that has changed a lot. We really mobilized for this strategy, really interesting to see. In my division, which was stretching from Ålesund in the north to Kristiansand in the south, so like one-fourth of Norway. I had teams in all the largest cities. We were like 10-11 teams distributed along the coast, and we were serving them all, from the smallest to the largest. The group or the teams that were dedicated to the smallest companies, actually there is where you got the most talented people in the bank or the young, talented people in the bank to work. It's really interesting. Nearly all of them throughout the period of three, four years, were actually headhunted to other jobs outside the bank. This became actually an area of great interest because you could cooperate with many interested different partners outside the bank. Many of the corporate bankers, they are really using a lot of time on the credit process and on that part of the client relationship. But when you work with the smallest companies, you are much more out on events and talking to them. It's a different way if you engage in that with the partners and then the incubators and all of this. You got such an interesting work. That attracted really talented people within the bank, but also it gave them possibilities outside the bank. It's been interesting to see; I think it was and also very strong commitment. You know, is the head for the corporate area; she was very dedicated to this also. Throughout the years, we worked together. There were a lot of resources, maybe, to some extent, too many resources at some point of time. But anyway, I think it was a big dedication for the strategy. But what sometimes, to be honest, is that also and that's maybe a bit disloyal to say it, but you have very strong communication abilities and a lot of things that we do. When we first say, you know, we are going into the startup segment, we are communicating so much about, but sometimes when you work on the operational side, you feel that the big thing is what we communicate about, not what we're actually doing, I must say. That's like a kind of downside with being, which has become, really good on communication. We were not that before, but we've been developing, with the .. and on all of this, we've done social media, media events, all of this. But sometimes it becomes too much of that and maybe too little of real action. A little bit like when I'm watching now that we are going to be part of the big dugnad in Norway, and the banks are promoting themselves as the one taking responsibility. Well, it remains to be seen how this actually works.



*Figure 9: Focused coding*

The results of the analysis formed the basis of the Findings and Analysis section, as well as supplementing secondary data to form the Research Setting. Insights from the analysis further inspired a review of the literary review, to examine how the findings could contribute to existing research and form the basis of the discussion.

## 4.4 Research Quality

When considering the research quality, one has to assess the reliability and validity of the research (Sanders et al, 2019). The former regarding reliability refers to the extent it is possible to replicate the findings, while the latter, refers to how credible and transferable the findings are. It is also important to consider the validity of the findings, as well as the ethics regarding data collection and analysis.

### 4.4.1 Credibility

The assessment of whether the research is credible and plausible is an important factor when determining research quality, and concentration on whether or not the researcher's interpretation of the informant's responses matches their intent. A great deal of effort was put into determining the focused codes, through thorough reading and analyzing each initial code, and grouping and re-grouping categories. Furthermore, triangulation was heavily utilized as each data point that formed the basis of every finding was compared to several other pieces of data, and where there was a disparity, this was clearly stated in the findings.

Professor Christine B. Meyer provided a critical voice and helped check and discard biases through continuous dialogue and debriefings. Furthermore, the findings were presented to students, faculty members and professors affiliated with the research group FOCUS, which helped reveal flaws in from the initial analysis and delivered valuable criticism. However, one has to consider that there might be a weakness in this study as much of the information gathered deals with retrospective events. Triangulation has been an utilized as a tool to eliminate this threat, especially with the use of news articles dating back to the point of the concerning events.

### 4.4.2 Transferability

As a revelatory embedded case study, the study was largely exploratory and inductive. The cases presented in this thesis were selected because of their rarity with the intent of gaining new understanding on the mechanism of the relations between big and small companies. Transferability concerns the external validity of the findings and regard the degree one can generalize the finding (Saunders et al, 2019). In a qualitative study, such as this one, it is important to give the reader enough context and throughout descriptions so that the reader is able to assess to what degree the findings are transferable. This has been attempted through thorough contextual descriptions and illustration in this thesis.

### 4.4.3 Dependability

Dependability, or reliability, refers to the extent it is possible to reconstruct the same findings based on the data, in essence, would another researcher be able to find the same findings as myself given this data. There are several threats to dependability, for instance participant error and participant bias (Sanders et al, 2019). Participant error refers to the presence of factors that would adversely at alter the participants performance, in this case if there are any factors that could influence the informants. Participant bias, on the other hand, is are any factors that would to the informants giving false responses. The informants were informed that the responses would be anonymized, and the data from the various informants was compared to form strong analytical foundation and in order to combat and reduce these threats.

The researcher is also susceptible to errors and bias. Researcher error refers to the researcher recording false responses, while researcher bias refers to factor that alter the researcher’s interpretation. In order to combat these threat, an interview guide was created and throughout research was conducted prior to the interviews. As all interview were conduct in either tandem or as a trio, the process of “peer audit” was made possible and utilized (Guba, 1981).

### 4.4.4 Confirmability

Confirmability, or validation, is the process of validating the research data, analysis and interpretation (Saunders et al, 2019). Using various data sources, or triangulation, and member validation where the participant validates the data are two of the techniques used in this thesis. After the data was transcribed and review by Simon Rahause, the transcripts were sent back to the informants in their entirety for validation. During the data analysis process, the data for each finding was compared with other data and accompanied with a direct quote from an informant.

### 4.4.5 Ethical Considerations

Ethics has been considered throughout this research as these considerations may potentially influence the research quality (Saunders et al, 2019). Similar to a lot of research in business and management, this research heavily involves human participants, therefore, protecting the participants has been considered in all aspects of this research. Informants have been carefully and thoroughly informed of this research’s objective, how the data would be collected, handled and analyzed. Informants have been asked consent prior to the interview and recording, and all transcripts have been sent back to them for their consent regarding their content. The participants all received a consent form together with their transcripts that explained in detail the purpose of the RACE program and how the data would be used in that regard. The participants were also made aware that they at any point could withdraw from the research. To protect the participants, the data has been anonymized and pseudonyms have replaced all potentially sensitive information. The data has been stored and analyzed in accordance with good ethical guidelines to ensure no identities are revealed, and post the completion of this research, all data will be delivered to the research group FOCUS, and removed from personal computers.

# 5. Findings and Analysis

## 5.1 Open Innovation Output

This first section will examine the relationship between the independent and dependent variables, here considering whether or not the EcoCo partnership has generated open innovation output. This section will also reveal findings on the mechanisms of NordicFin's collaborations with TechCo and ServiceFinco, as well as external factors that contribute to open innovation output.

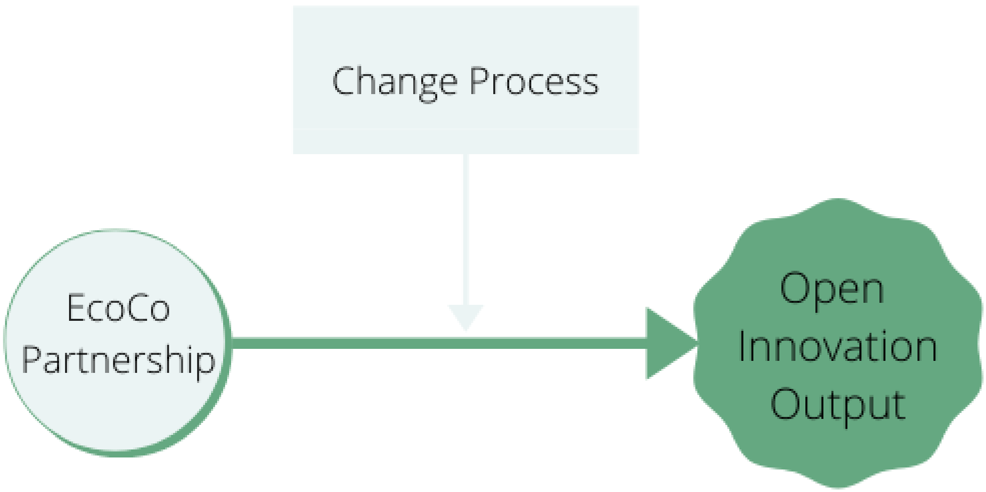



*Figure 10: This section will only discuss the independent and dependent variables, EcoCo Partnership and Open Innovation Output.*

### 5.1.1 The role of EcoCo

The partnership between EcoCo and NordicFin was developed and anchored within the top management at NordicFin. This gave the partnership a lot of attention within the organization, and special top management attention. EcoCo was given top tier status at NordicFin, alongside some of the world's largest conglomerates, which in itself demonstrates the importance NordicFin gave this partnership.

*We have several ones of those like Telenor, [EcoCo], Innovation Norway, Google, etc.*

- NordicFin, Partnership Dep.

EcoCo was NordicFin’s primary partner and confidant in all things startup related. NordicFin collaborates with numerous communities, companies and ecosystems in order to stay up to date with all the new emerging technologies. However, looking at what collaborations that actually have borne the most fruit the past decade, the partnership with EcoCo has by far been the most successful. The vast majority of all the collaboration with and investments in startups have been with startups that have affiliation with EcoCo. The partnership department has prioritized activities with EcoCo, as is evident by the following quote:

> *[EcoCo] is our top tier partner in the startup ecosystem, and the other ones are more... you could say it's almost like a listening post.*
>
> - NordicFin

When asked what makes the partnership with EcoCo so valuable, there is a general consensus amongst the informants that it is because it is the most organized collaboration. The activity brought forth as the effective way of sourcing startups is the accelerator. In fact, it almost seemed as though EcoCo and the accelerator are synonymous for several informants from NordicFin.

> *I think [EcoCo] is obviously the one which is most organized on behalf of the whole of [NordicFin].*
>
> - NordicFin, Corporate Banking

> *I would say that the accelerator´s the one of highest strategic importance, but we also have collaborations with [other startup ecosystems].*
>
> - NordicFin, Partnership dep.

> *But I think it's probably the accelerator that has created the most value.*
>
> - NordicFin, Investments

The accelerator is considered as such a valuable and successful initiative because it is such a concrete project that allows for a binding use of NordicFin’s resources in order to interact with the startup community. It is run by EcoCo, who are very skilled at accelerating innovation, and allows NordicFin to get to know several interesting startups and technologies more closely than they otherwise would have, because of the access granted to them by EcoCo.

*Well, we do the accelerator program, and that is the most important thing, and the reason why we do the accelerator program is two-sided. One of them is the corporate social responsibility that we want to help startups and keep that position because we also want to be a bank for startups. The other one is to explore collaboration and actually hands-on, get firsthand inside of relevant startups for us to work with and learn from, but also help them and hopefully can lead to a collaboration.*

- NordicFin, Partnership dep.

NordicFin mobilizes itself and opens up access to its resources for the accelerator. It is common to invite specialists within the organization when interviewing applicants for the accelerator. Those startups that are admitted onto the NordicFin's track receive a mentor within the organization that has relevant and specialized knowledge on a topic useful for the startup. It is common for that person to grant further access of NordicFin's resources.

*The companies that are part of the accelerator program have very broad and open access to the [NordicFin] organization during the program. And in some cases, they have access to it afterward as well.*

- NordicFin, Investment

*We use the accelerator program to in a professional way, explore collaboration with startups. It has a very high top management attention in [NordicFin] because of our team.*

- NordicFin, Partnership dep.

The startups' motivation for applying to partake in the accelerator is largely due to EcoCo's reputation of being the best ecosystem in Norway. EcoCo is the entity in charge of running the accelerator program and coaching the startups forward. They are experts in accelerating innovation and this attracts startups from far and wide.

*The [EcoCo] team and the ecosystem, they've been quite successful. It's a fairly large ecosystem and the partners and the companies, and they're quite good. (...) It was really a no brainer in all ways.*

- TechCo

*I think it was because [EcoCo] is considered to be the best in Norway, and [NordicFin] is a big bank. So, for a FinTech company to do a partnership or do an accelerator program with the best accelerator hosts and the largest bank in Norway's, it is sort of a no-brainer.*

- ServiceFinco

Partnering up with EcoCo has given NordicFin more credibility as a bank that is startup-friendly. It is made evident by the startups when asked if and why NordicFin has developed a good reputation within the startup ecosystem.

*I would say, probably the way they've been working with [EcoCo], partnering with them, and working a lot through them.*

- ServiceFinco

*I think [EcoCo] is a very good player that not only connects startups with corporates, but they also act as a part that can help the corporates work with startups in a flexible and in a fair way. They set expectations for the corporates, and they qualify the corporates. They have rules of engagement that they share with partners. I think they do a lot of good work in that regard.*

- TechCo

It seems as though the stamp of approval from a renowned startup ecosystem has added to NordicFin's brand equity. It is likely that NordicFin is aware of this as they invited EcoCo to rent office space at one of their locations. In the same way, EcoCo qualifies the startups to its partners. It gives the startups increased credibility.

*You know, they can give you an introduction, they give you sort of a stamp. If you're approved by [EcoCo], then you're probably worth talking to for investors or partners.*

- ServiceFinco

*It's very effective when it comes to use of our time than part of our team running around and trying to find the best startups and speaking to them individually; then, we can have [EcoCo] recommending companies to us.*

- NordicFin, Partnership dep.

EcoCo represents a very specific part of the startup ecosystem, namely tech startups. In focusing on this particular segment, they've become experts in this field and now attract the best of such startups. A very low percentage of applicants are admitted to their accelerator program and incubator. NordicFin is therefore given access to very a relevant, local ecosystem for technology-based open innovation. They have stringent selection criteria and do not accept competing startup into the ecosystem at the same time.

> *I'd say between 10 and 12% acceptance rate, meaning we screened around 450 to 500 companies every year.*

- EcoCo

> *We never have two companies that do exactly the same (...)*

- EcoCo

> *[EcoCo] is, of course, a very selected part of the startup world. They're into tech and special companies; the startup segment is much more than that.*

- NordicFin, Corporate Banking

The collaboration between EcoCo and NordicFin has evolved over time, especially having in mind that the partnership was entered before the innovation strategy was launched. As NordicFin decided to focus on innovation, EcoCo was a consultant that helped them navigate the ecosystem, i.e. how to invest in startup in a way that still allows them to grow, how to communicate and collaborate with the startup, and what kind of pitfalls are common for large established firms.

> *They kind of leaned a little bit on us because we knew innovation, and they were new to innovation. But over the last three and a half years, they hired a lot of great people that are great at innovation.*

- EcoCo

The mandate of EcoCo has since shifted, from being a general advisor on all things innovation related, especially with a focus on open innovation, to taking on an advisory role of what the stirring on the market are, technology-wise, and making introductions to what they believe are relevant startups. However, EcoCo is still a valuable player and contributes to shaping how NordicFin behaves when in contact with startups. One of the main the teaching point made by EcoCo to NordicFin on how to collaborate with startups was on the importance of adapting the procurement process to fit startups, and not use the standardized. NordicFin seems to have adhered to these recommendation, and it has paid off as their reputation amongst startups has bettered.

> *I would like everyone to follow our rules of engagement that we've established together with [EcoCo].*
>
> - NordicFin, Partnership dep.

> *We always try to tell them, "please don't think of this as a normal procurement, because they just use normal procurement principles in this process you will probably disqualify most of the companies here."*
>
> - EcoCo

> *A lot of larger corporations they follow this very rigid procurement process, and as a startup, you often are automatically disqualified because you don't have all of these routines, you don't have all of this, this and that, or certifications or whatnot. But [NordicFin] realizes that if we're going to cooperate with [the startup], then we need to be very solution-oriented and be realistic in terms of what we can expect on some of these things here.*
>
> - TechCo

### 5.1.2 Bottlenecks in Open Innovation Collaborations

Despite improvement in their image towards the startups, NordicFin is still considered a risk averse organization by its collaborators. They acknowledge that the risk aversion has reduced within recent years but do still consider NordicFin to be quite careful in how it communicates and makes decisions with external parties.

> *They're super risk-averse. One of the most risk-averse companies I've ever had to deal with.*

- ServiceFinco

NordicFin admits that when making decisions, it is important to consider the brand and reputation of the organization. And from the inside looking in, it seems as NordicFin is considered a fairly aligned organization.

*They're fairly aligned on how to do things, how to approach things, who does what and how you do it, and so on.*

- *EcoCo*

One informant, however, links their risk aversion with their appearance of alignment.

*They're quite aligned, but they're also extremely scared of giving your answers. So that's what makes them aligned.*

- *ServiceFinco*

The informants agree that the lengthy decision process within the NordicFin organization is what causes the most friction between the organizations and the startups it collaborates with. A lengthy decision process does not take into account that by the time the established has made a decision, the startup may no longer be in existence. This frustration was voiced especially by the partnership managers in EcoCo and NordicFin, as delays in decision making can oftentimes be detrimental for the startups.

*For the startup, it's us being very slow. Two weeks for a bank is nothing but two weeks for startup...*

- NordicFin, Partnership dep

*They're used to fairly long decision processes, some involving legal and procurement. The biggest friction point is the time it takes. Because for a large corporate, spending six months on purchase is nothing. For a company with nine months runway, if you spend six months of that with procurement of at the other end, it can be quite hard.*

*Things that might take a short time in our office, that might take five minutes to make a decision take a couple of years in [NordicFin], we have some differences there.*

- EcoCo

However, slow processes can sometimes be a mutual frustration. The established firm runs the risk of collaborating with a startup that does not have the necessary capacity required to accommodate the large firm. The early stage startups may lack financial and organizational resources to invest in building and scaling their business quickly. This may result in a mismatch of expectations when a startup has a customer like NordicFin that requires and relies on scalable and stable products that it can distribute to its consumers. This is especially difficult for risk averse organization that do not like jeopardizing their brand.

> *If you're going to do that with [NordicFin] as a brand, you have to do it with quality, with a capacity to distribute to a lot of corporates and these new clients at the same time. You have to have customer service, and you have to make sure that the technology actually is robust enough to serve the clients in the way you expect from a [NordicFin] product, if we could put it that way.*
>
> - *NordicFin, Corporate Banking*

One has to keep in mind that acquiring the startups is in of itself is not necessarily the end goal of this kind of innovation exploration. The innovation strategy NordicFin laid out focuses on collaborating with startups through partnerships, as well as taking minority stakes in early stage startups, as mentioned earlier. Infusing a lot of capital into these companies so that they can scale quicker is therefore not of interest to either parties. Neither of the informants in the startup ecosystem expressed a desire to be bought or dilatated by established firms, and rather expressed the need for freedom to grow at their own sustainable pace. This was further echoed by the EcoCo, who in their facilitation of the partnerships between corporates and startups, try to create a mutual understanding for the effect of large emissions into startups.

> *Because we really needed to speed up and build capacity and scale. In order to do that, it would actually mean more capital... this is later in the process... but it would mean more capital and more resources in [the startup], and they didn't want to expand their capital base because they didn't want to be diluted. So, the process took too much time, and it was delayed.*
>
> - *NordicFin, Corporate Banking*

> *Obviously, we develop "Do's and don'ts" and "How to invest and cooperate with smaller companies," also alongside the process with [the startup]. We learned actually*

*a lot from that process because you have to be aware that being an owner in a company is a different role from being a business partner or client, on the other hand.*

- *NordicFin, Corporate Banking*

### 5.1.3 Regulation and Innovation

Financial Services is a heavily regulated sector in Norway, this becomes a contributing, if not dependent variable for NordicFin's risk aversion. When asked how regulation affect NordicFin, the startup ecosystem believes it is what creates the risk aversion, as well as helps the organization coordinate its efforts.

*Yeah, of course, that's what makes them risk-averse. Also, that's what makes us a bit risk-averse because we'll always have to consider regulation. They have the compliance department, and then they have the risk department. And within each section, they also have compliance and risk departments. If you're going to get something done through [NordicFin], you have to stop by all these control posts, instead of just going to one or two control posts. You have to pass by five or six different departments, where all the people are super incentivized to say no. (...) That's due regulation, and obviously, because they're a large company, they can't have all their employees running around doing things uncoordinated.*

- *ServiceFinco*

Despite the fact that NordicFin in their new innovation strategy desired to venture outside of process innovation and explore other forms of innovation, it is harder to incorporate service innovation into the organization due to regulatory limitations. Product innovation and process innovation that complement NordicFin's existing portfolio of products and services is easier to integrate, hence making it easier for pure technology-providing startups to collaborate with NordicFin than service-proving startups.

*I think it's easier for [NordicFin] to collaborate with companies that provide some sort of technology. Definitely. Because the second you start providing a service, then you're in the regulatory space.*

- *ServiceFinco*

*Also, it doesn't, in any way, jeopardize their [NordicFin] banking license. I think with some of the other startups, the potential collaboration was more complicated from a regulatory perspective. Part of being a bank is not taking a lot of risk in that regard. I think the collaboration might have been different for those that are more… collaborations where the financial regulatory authorities would pay more attention.*

- *TechCo*

NordicFin themselves acknowledge the regulatory difficulties with collaborating with service-proving startups. This is echoed by numerous informants when asked why there is a scarcity of official partnership agreement with service-proving startups, despite NordicFin maintaining close relations with several. They do, however, maintain that despite the lack of formal agreement, the interest in exploring new technologies and markets remains.

*I remember that's an area which is very heavily regulated through MiFID.*

- NordicFin, Corporate Banking

*And the regulators in the Nordics have been quite suspicious or like quite hesitant, not suspicious but hesitant to this space, and they opened up within Norway… the Norwegian financial authorities have opened up the least compared to the other Nordic countries.*

- NordicFin, Investments

The regulatory landscape in Norway consequently poses large obstacles and barriers for entry for service-providing startups, especially within the fintech sphere. The difficulty of acquiring a banking license, entering official partnership agreements with established firm, as well as the cost of entry provide a landscape that caters to service innovation only within established firms, rather than a collaborative ecosystem were such innovation can be explored.

*Yeah, I would think so. The regulation we have in Norway is insane compared to other countries. It's sort of makes it impossible for financial institutions to collaborate on any scale. Especially for startups, that's quite harmful.*

- ServiceFinco

*Considering the regulations in Norway, that's quite damaging to startups, it's much easier for a bank to innovate than a startup.*

- ServiceFinco

*Or the fact that startups can't get the PSD2 license or if you're a startup like us are, your main expense is not technology, it's not paychecks or anything, it's legal fees. Because you have to interact with FSA, it's just so incredibly expensive to be in a heavily regulated industry, especially in Norway, where the FSA isn't used to working with startups. They're used to working with institutions that have two to four hundred lawyers on their payroll. Then you suddenly see an institution or organization with five employees in total. They don't take that seriously and don't change your approach. They would treat us as strictly and have the same demands for us as they would have from an institution with hundreds of lawyers and compliance teams.*

- ServiceFinco

Disruption within the industry by an emerging startup that provides a service is therefore not very likely. Disrupting your own industry is not likely in the interest of established firms, and this further enforces the status quo.

*I guess you need to partner up with the big institutions and have the big institutions backing you in order for it to happen or in order to succeed. Some financial services can always be or some FinTech can always succeed if you're in accounting or you are doing software within that sector or small nonregulated things. But as soon as you move into their regulated area, it's much tougher.*

- ServiceFinco

*I think one of the decisions that the management took at that time was that we are not going to establish something outside the bank; we are not going to disrupt ourselves.*

- NordicFin, Corporate Banking

## 5.2 Change and Innovation

This section will discuss the change process, its outcome on NordicFin's innovation capability and will take a holistic view on the effect the change process had on NordicFin's partnerships.

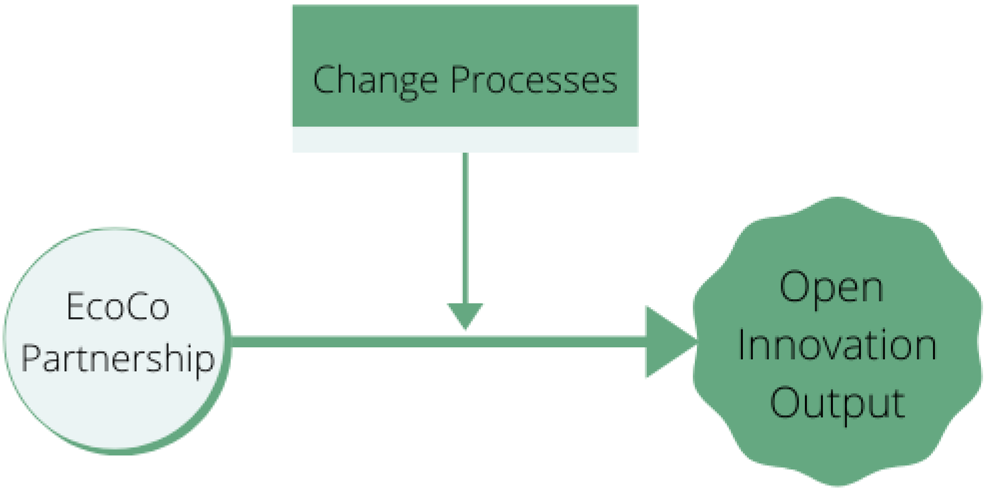



*Figure 11: This section will present findings concerning the entire conceptual framework.*

### 5.2.1 Building Innovation Capacity

NordicFin launched its latest strategy in 2017, following a significant restructuring, downsizing and centralization in the previous years. The new strategy brought forth a focus that was new to NordicFin, namely innovation. The motivation for this new focus was to create a new sense of urgency within the organization in order to think and act differently.

> *We had started innovation in many ways (...) but we saw very clearly unless we really communicated to the organization that we had a burning platform and really had to do large changes; we would not survive as an institution if you look longer term. I think the most important thing with the strategy was to really have gained pace on the digital front and on the innovation arena.*
>
> - NordicFin, Corporate Banking

Incoming regulation and the disruptive nature of new technologies in recent years made the management wary of what was to come, and whether or not they would be able to keep up and stay relevant. NordicFin feared it would lose not only its interface with their customers, but also would become obsolete if they moved to slow in adapting new technologies.

> *The external world was changing so fast and the digital enabler of all the technology becoming much more of an enabler for new innovation. And unless we were going in that new product, new venture direction, we would become a dinosaur before we knew it.*
>
> - NordicFin, Corporate Banking
>
> *I think the largest risk was losing to be the interface with the clients. (...) The risk of being just a supplier of raw materials in a way. Just be the supplier of money and services, but actually having all the interface with another player. That we were just underlying, providing the services. I think that was the biggest fear.*
>
> - NordicFin, Corporate Banking

This fear drove NordicFin towards becoming a more tech savvy institution that could and would deliver good, innovative solutions to its customers. In order to fulfill on the promise of being a bank for the future, the institution needed to mobilize its employees and get them onboard for this new change and they chose to do so in a grand way. The launch of the new strategy was therefore a huge event where an overwhelming majority of the institution's employees all were present and took place in the "rebirth" of the institution.

> *[The CEO] gathered the whole bank, of course, not the all the ones from overseas, but still 80-90% of the bank in one place like a kickoff for the whole thing. That was the signal that this is something for all of us. That was an activity that you actually did across the organization.*
>
> - NordicFin, Corporate Banking

In mobilizing for the new strategy, the organization was yet again restructured. Among changes in this restructuring, a very own innovation division was established, as well as a partnership department within that division. The Mergers and Acquisitions department was spun out into its separate investment daughter company and its mandate also shifted from being a department that focused mainly on financial and economic goals, to more strategic goals with a heavy emphasis on innovation. The department was given some hundred million

NOK to invest and take small stakes in early stage startups. New innovation initiatives were established within the organization and a very own internal methodology on how to innovate was created. The organization also focused a lot of its resources in recruiting new talent and having those aid the change that was needed in order to succeed.

> *That's when [NordicFin] kind of pushed the button on doing innovation in a more structured way. They hired people; they set up a physical location down at their office.*
>
> - EcoCo

> *There was an increasing focus on hiring more different skillsets and more technology-savvy skills than before compared to purely financial.*
>
> - NordicFin, Corporate Banking

> *Also, there was a large hiring of new resources, really large hiring.*
>
> - NordicFin, Corporate Banking

In changing their hiring strategy, there were also able to change how they worked within the departments, merging operational areas more with IT and technology. The different divisions within banking now had IT functions was a part of their division. Instead of those resources having to be outsourced when needed, they were a part of the operations and the decision making processes. The constant change also kept people on their toes, making them more change ready and the organization more agile.

> *But we also have re-orgs all the time, so people know that changes are coming all the time.*
>
> - NordicFin, Partnership dep.

The innovation focus within the organization had previously been purely process innovation, where the main goals was to improve processes. This shifted when the new strategy was launched, and the organization become more open and welcoming of product and service innovation. The organization understood that being a contemporary bank meant delivering great user experiences. In this, one of departments had ambitions of creating a one-stop-shop type platform for its customers, which would allow them to integrate and include third-party applications, with the purpose of creating ease of use for their customers.

With the establishment of the new daughter company and the partnership department, NordicFin was able to take a new approach towards open innovation. The partnership department focused on creating relevant external partnerships in order to better scout and find new companies and technologies. The daughter company had a similar way of working, hence a lot of collaboration between the two. These two departments, along with all other entities who work with innovation at NordicFin were given the mandate to professionalize how the organization works with innovation, as well as increase the innovation speed at the organization. However, given that the daughter company was able to invest small stakes in early stage companies, the organization as a whole is given a unique way of exploring new technologies closely with limited risk, given the small ownership stake they acquire in the startups they invested in. A lot of resources were used in order to set the organization up in such a way where they could find and collaborate with the most exciting startups. A significant portion of the newly recruited talent were therefore placed in teams that scout and sense in the market for new, exciting companies.

> *The group or the teams that were dedicated to the smallest companies, actually there is where you got the most talented people in the bank or the young, talented people in the bank to work.*

- NordicFin, Corporate Banking

The efforts of NordicFin seemed to have affected their reputation within the startup community, as NordicFin is now described as an innovative and startup-friendly company. NordicFin has made an effort to be visible within the startup ecosystem and position themselves as a bank for entrepreneurs.

> *I guess the sense that they're superstar friendly. That's a part of their strategy, being quite startup-friendly. That manifests itself throughout the organization.*

- ServiceFinco

> *I still think [NordicFin] is a good partner for startups. Yes, I do, actually.*

- EcoCo

### 5.2.2 Ineffeciencies Caused By Change And Risk Aversion

As one of the informants is quoted to have said, with the launch of the new strategy, NordicFin really "pushed the button on innovation". With that, numerous innovation initiatives were launched almost simultaneously. Although some restructuring was done, the restructuring was manly done to facilitate increased innovation within the organization. The result of this, however, was a somewhat lack of coherence for innovation initiatives within the organization. When the strategy was launched, cross functional teams were made in order for people from different parts of the organization to discuss and be aware of innovation initiatives, processes, ambitions and problems that different divisions had. However, it seemed as though the effort of sharing knowledge and collaborating cross divisions failed at times. For instance, corporate banking was divided into two segments and divisions in NordicFin. For this reason, when both of these different divisions were to redeveloped their credit process, the organization had two different ongoing projects for the same process instead of collaborating. The desire for being a self-sufficient division that does not lag behind competing divisions created inefficiencies.

> *Now, you have two different large projects, and they could have profited much more of collaborating.*
>
> - NordicFin, Corporate Banking

As the years went by, a lot of the newly hired talent started leaving NordicFin after being employed only for a few years. A number of these newly hired talents managed NordicFin's relations with external parties. This had economic downfalls in the sense that these were expensive hires and left the organization without transferring valuable knowledge and know-how about the external partners back into the NordicFin organization. But also in the sense where it caused a lot of discontinuity. That intensified the lack of coherence in innovation initiatives and strategy. The discontinuity is further elevated by the constant reorganizations within the organization and affects the relationship NordicFin has with its partners. For NordicFin to be able to seize the right opportunities and really access the best and most relevant startups, both the partnership department as well as EcoCo need to have a clear understanding of what the different business areas are focusing on, in order to connect them with the most relevant startups. Yet, the constant reorganizations and brain drain by new talent creates a moving target, making the job of matching the organization with startups even more difficult.

*We also gather the strategy from all the parts of the banks that are relevant, and we do our own strategy, and we do strategic reviews all the time because things happen and change very fast.*

- NordicFin, Partnership dep.

*They've done two restructurings since we started working with them. That always, of course, changes, because suddenly the people you've been in contact with, they're working in different departments and they don't have the same responsibilities, and you have to start from scratch. That's obviously a problem.*

- ServiceFinco

The lack of coherence was also persistent in regard to collaborations with the startups. One of the startups that NordicFin has a close relationship with offers somewhat of a competing service to one NordicFin's services. Despite the close collaboration and relationship between the established firm and the startup, there is no formal agreement between the two. However, when asked about if NordicFin talks about the services provided by the startup to their customers, there was no consensus between the informants if they do or not. The informants all agreed that the investment in said startup was wise in order for NordicFin to explore the new market and technology closely. However, due to regulatory issues, as well as fear of tarnishing the reputation of NordicFin, some informants were apprehensive as to whether or not they could recommend the startups' services to their own customers.

*You could very easily see a scenario whereby we had a project that was launched into [that] market, which probably went belly up or didn't succeed in any way. Of course, you would very easily put all blame on a bad project on [NordicFin], so for us, it became difficult to actually risk the retail brand or reputation to do that part.*

- NordicFin, Corporate Banking

*They would probably tip them about us and tell them, "You can go to [startup] instead of going to another bank."*

- ServiceFinco

Impending changes in government regulation was part of what triggered the new strategy. PSD2, The Revised Payment Services Directive, in particular was viewed upon as a looming threat to existing and established firms within the banking and financial industry. And the startup ecosystem could sense it. The need to be able to innovate was therefore acute and inspired NordicFin to increase its innovation capacity quickly, especially within payments.

> *Very much also driven by regulatory changes that forced the change to happen or accelerates to change, to put it that way. What I'm thinking of is the PSD2, whereby all payment information has to be shared between old banks and non-banks actually on the same level, which means that you can build totally new solutions. You can see new players coming in with a totally different set up to deliver very interesting solutions to the clients for the payment area.*
>
> - NordicFin, Corporate Banking
>
> *Payment was, of course, the big one and it was all building up to PSD2 coming in, of course. Payment and then also deposits, losing deposit, losing margins.*
>
> - NordicFin, Corporate Banking
>
> *If I were to speculate, then one thing that you could speculate is that PSD2 has really put on the agenda that the banks are seriously risking the contact point with their consumers, if they don't take banking experience seriously.*
>
> - TechCo

However, as described earlier, there is a discrepancy between the expectation of what was to come and what actually came. Less changed occurred and significantly fewer new actors than expected have entered the market to now.

> *I don't think PSD2 has changed a lot yet. At least if you look at what was projected as a result, and what is the result.*
>
> - EcoCo

There is a consensus amongst the informants that the Financial Supervisory Authority (FSA) and the regulatory bodies in the Nordics in generally are less liberal than those of other European and Western economies. This poses the question of whether or not the regulation encourages the emergence of new innovation, technologies and companies, or actually favors established firms.

*The funny thing about this PSD2 that there are no startups in Norway that have a PSD2 license.*

- ServiceFinco

*There are only two institutions in Norway that have this type of license. They've gotten it after... they are quite large institutions with billions in assets. I guess they sort of pay the insurance company in some other way.*

- ServiceFinco

There also seems to be a tendency on focusing a lot of resources on building all new solutions inhouse in good economic times and focusing on building good external relations and a sustainable surrounding ecosystem in bad times. The current innovation strategy does not offer clear guidelines as to when innovation should be pursued through collaboration, through investment, acquisitions, or when internal, closed innovation is best suited.

*And when I came back, then the oil price had dropped, there had been really a contraction in the economy here (...) we need to look at [things] differently and really open up and try to invite in other companies, also with some technology edge that would be interesting for us to also cooperate with them.*

- NordicFin, Corporate Banking

*If they at some point prefer to do all the innovation themselves, that's not necessarily healthy for the full ecosystem, if you will. Because buying from or even buying companies, smaller companies that make solutions that compete with or complete, are good.*

- EcoCo

*I think, maybe [NordicFin] has been in the "We do everything" business in the past.*

- TechCo

Overall, there is a consensus amongst the informants that NordicFin overinvested in innovation efforts and that some were not very focused initiatives in the early years of the new strategy. Future possible profitability from the innovation initiatives is still in the future, and in the present, it is hard to tell what NordicFin will actually benefit from.

> *We did too much, too many people, too much resources in one go and ended up maybe by overinvesting in a phase where we didn't really know what to invest in, but time will show. That's very an overall observation*.
>
> - NordicFin, Corporate Banking

> *Then after I think was about two years, we had this "we said this two years ago, where are we now compared to what we expected?" We revisited our own participation. In some areas, it had gone faster than we thought, but in many [other areas] would have been less change in that period of time than we expected.*
>
> - NordicFin, Corporate Banking

# 6. Discussion

*This section presents an analytical discussion of the findings in relation to existing literature. The discussion is twofold, first examining the open innovation through partnership, thereafter the considering the moderating variable that the change process represents.*

## 6.1 Obtaining Dynamic Capabilities for Open Innovation

This part of the discussion examines *how an established firm can achieve technology-based innovation by partnering with a startup ecosystem*. The literature highlights a hub and spoke model for ecosystems (Jacobies et al, 2018) and although its implied that the hub is a large corporation with the spokes being surrounding suppliers for the hub's product, the hub is in this thesis view upon as the gatekeeper, herein EcoCo. EcoCo is a highly qualified and renowned actor within the startup ecosystem and manages is very own successful closed startup ecosystem for Norwegian, tech companies. Jacobies et al (2018) argue that ecosystems are designed and cite modularity as a critical success factor. As the findings show, EcoCo does not admit competing companies into its programs at once, as their view is that competing companies can harm the ecosystem, this can be considered comparable to supermodularity. Given the demand and popularity of services they offer, EcoCo is in a unique position to choose from the very best tech startups and help each of those thrive without the worry of competition within the ecosystem. As EcoCo also has a select few corporate partners, one can view the ecosystem they manage as a closed ecosystem. EcoCo has clearly defined rules of engagement but does not strictly enforce them as they trust the members of the ecosystem to abide by them.

Assimilating the arguments, one can argue that some of EcoCo's success can be accredited to supermodularity. They do not admit competing startups, and therefore do not have competition within the ecosystem as the members all have different desired states and end goals in mind, as Adner (2017) argued was a criteria for successful ecosystems. Furthermore, the modular architecture of their ecosystem makes it easy for them to match the different corporate partners with startups, provided that they know what the corporate partners are in of. Their rules of engagement require the corporate partners to know fairly well what their intent on collaborating with startups is, and through their communication with EcoCo, the corporate partners are educated in how to interact with startups in order to achieve successful collaborations.

### 6.1.1 Sensing

In relating the startup ecosystem to dynamic capabilities, Teece (2020) argues that open innovation can enhance a firm's dynamic capabilities. However, prior to the launch of Strategy III, NordicFin had no relevant sensing capabilities. The findings show that in the early years after NordicFin committed to investing in innovation, they leaned quite heavily on EcoCo. In this, they outsourced part of the sensing capability to EcoCo. Open innovation at its core is about the deliberate transfer of knowledge across company borders (Bogers, Chesbrough and Moedas, 2018), consider this, it is evident that it is possible to have this include the sensing capability as sensing refers to the ability to detect, process and assimilate new knowledge (Teece et al, 2016). Teece (2020) argues that the recognizing external know-how opportunities is an essential part of sensing, an ability NordicFin initially did not possess. Meyer and Stensaker (2006) name hiring experts and permanent employees with the capabilities the company needs as a way build sustainable capacity. By outsourcing the sensing capability to EcoCo and hiring new employees who are skilled at working with innovation, NordicFin was able to build its sensing capability by learning from EcoCo and passing the sensing capability along to its newly hired innovation-capable employees.

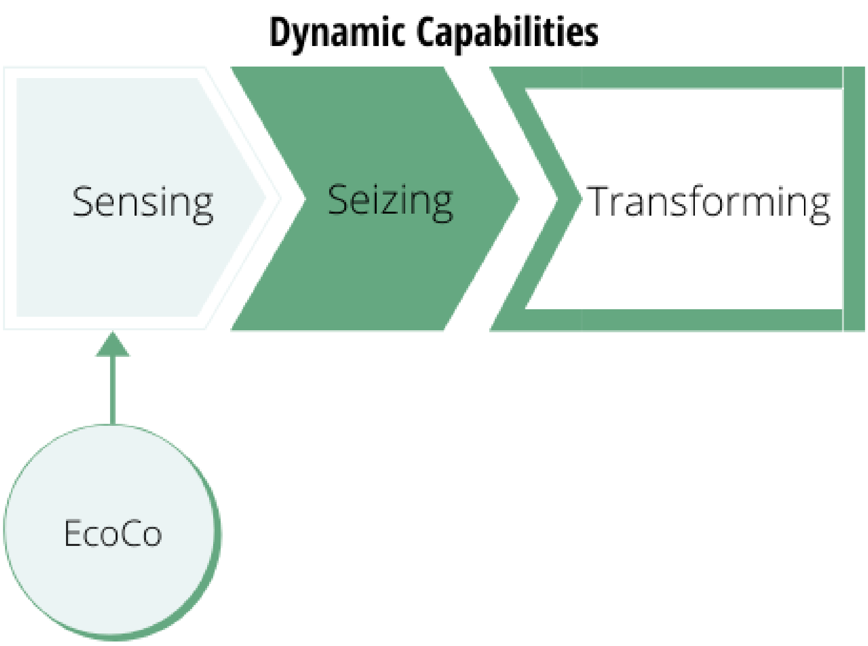



*Figure 12: Illustration of how an organization can outsource dynamic capabilities. Based on model by Teece et al (2016).*

Teece (2020) further highlights learning from external sources of know-how as the other vital part of sensing. The partnership between EcoCo and Nordicfin was given top management attention, as was the accelerator. Because of this NordicFin was able to extract knowledge and learn from not only EcoCo, but also the members of its ecosystem. EcoCo is clearly an expert at recognizing external sources of know-how and maintains a quality ecosystem, where NordicFin can easily further access relevant know-how from a select few external sources, due to the modularity of EcoCo. The accelerator draws resources from all over the NordicFin organization, this allows the various parts of the organization take part in learning from external sources of know-how. For instance, an IT security specialist who is invited to an interview for an accelerator application that provides an IT security product and then set to mentor said startup will be able to access external know-how that would otherwise be difficult to access. The accelerator commits NordicFin to devote its resources to learning from external sources of know-how for a few months every year through its open innovation initiative, thus annually strengthening the sensing capability and making it more wide-spread as the years go by. Kapetaniou and Lee (2018) point out that importance of geographical proximity in an open innovation setting. Although they argue that new firms benefit from domestic open innovation as they easily can access the resources of the incumbent, one can also argue that through the startups accessing the incumbent's resources, the organization is offered a unique opportunity to interact with the startups and learn from them.

### 6.1.2 Seizing

When viewing open innovation through the lens of the dynamic capability framework, Teece (2020) highlights agile decision-making when an external source of know-how is identified. As made evident through the findings, time lags in decision making remains one of the main bottlenecks in the collaboration between NordicFin and the startup community, and one of the most consequent of the part of the startups. However, as the accelerator is given top management attention, the decision-making process is somewhat fast-tracked than what would be possible elsewise. Furthermore, in acknowledging that NordicFin is a risk averse organization, it is probable that all things equal, it is easier to make fast and agile decisions on providers of product innovations rather than service innovations. As Nijissen, Hillebrand, Verme and Kemp (2006) found in their research, the informants from the startup ecosystem who provide products to NordicFin concur that the divisions with strong research and design divisions are much more inclined to deliver quick answer and enter agreements faster than the rest of the organization. Service innovations require greater top management discussion as they more likely can threaten the current business model. As mentioned previously, disruption in the industry by an emerging service providing startup is unlikely, the same does not apply to large incumbents in other industries. As was pointed out in the findings, the only two companies with a PSD2 license in Norway are two large corporations. Therefore, sensing for the stirrings that may not immediately lead to clear combinatory activities is very important in order to stay competitive in case of new entrants in the market through product innovation.

Initiating combinatory activities is the second part of the seizing capability. This part is heavily linked to agile decision-making and to some extent dependent on it. It is difficult to plan further combinatory activities without a clear decision on how the two companies are supposed to proceed. However, NordicFin has successfully managed to maintain and keep close relations, often initiating combinatory activities without formal agreements. As the findings show, the startups often tour the NordicFin organization, telling employees about their company and even take part in the training of new employees through a placement program. NordicFin is therefore able to take advantage of its new network without necessarily committing to the startup fully. The startups themselves are in return able to access NordicFin’s resources without needing a formal agreement to limit this, hence NordicFin facilitating an environment for inside-out innovation as well.

As it is still early days of Strategy III, NordicFin has yet to properly adopt hybrid business models. As of now, it seems as though the regulatory environment still favors large incumbents, therefore, there is at the moment no immediate sense of urgency for NordicFin to develop new business models. This and the organization’s own risk aversion explain why the focus has been entirely of providing better user experiences for their existing services, rather than sourcing new services and business models.

### 6.1.3 Transforming

Last of the dynamic capabilities is transforming. Within this capability is selecting governance mode for external linkage and integrating internal external knowledge. There was great consensus amongst the informant that NordicFin still has a long way to go before creating a coherent and clear innovation strategy that permeates the organization. The established daughter company that invests in startups is one very clear governance mode, that in of itself also has a clear process. However, getting to the stage where investment is on the table follows a less coherent path. For the lack of internal coherence on innovation strategy, integrating internal and external knowledge is therefore not an aspect of open innovation that NordicFin has a clear strategy on either. However, it seems to be on the agenda to develop a guideline that can aid the company in future.

## 6.2 Managing change to facilitate innovation

This section discusses *how an ongoing change process can affect an open innovation collaboration*.

### 6.2.1 The Change Process

As mentioned by the informants in the findings section, NordicFin mobilized its resources in order to build change capacity, change capabilities and engage its employees when executing Strategy III.

Two instruments highlighted by Meyer and Stensaker (2006) in creating sustainable change capacity is recruiting experts and permanent employees with desirable capabilities. NordicFin utilized both of these instruments and as discussed earlier, they both likely strengthened NordicFin’s sensing capability. However, when viewing the use of these instruments from a sustainable capacity perspective, the result is not conclusively positive. A significant amount of the new hires were recruited by the newly established divisions and departments. For instance, nearly all of the employees in the partnership department have only worked at NordicFin for a couple of years. Unfortunately for NordicFin, a significant amount of these new hires left quickly after starting, as is mentioned by one of the informants. In turn, the organization was only able to build fragile change capacity, rather than sustainable change capacity. This further affected the organizations ability to learn from external partners as it risked the newly found knowledge on know-how to be lost if the employees possessing that new knowledge left the company without properly transferring the knowledge back into the organization.

For the launch of the new strategy, all employees were invited to take part in the dawn of this new era for NordicFin. This was, as one of the respondents mentioned, to demonstrate that this change was for everyone. In further examining how the organization was mobilized for Strategy III, can utilize some aspects of the cultural web. For instance, symbols were heavily used as part of this strategy. The organization developed a new corporate visual identity, changing their mission and redesigning the company logo alongside the launch. A new organizational structure was developed, where a very own innovation division was created and a new daughter company established, as explained in the research setting section of this thesis. In the innovation division, partnership department was established with the purpose of accelerating and professionalizing innovation. New routines and rituals were established to create better synergies between the departments, and the was an increased focus on working more agile. One last part of the cultural web worth highlighting is stories. NordicFin mobilized its resources to change its narrative. It no longer wanted to be only a bank but wanted in many was to act as technology company and contribute to shaping the landscape it operated in by being a bank of the future. These initiatives were not only meant to cause a stirring within the organization, but also signal to the external environment that NordicFin was entering a new dawn and was open for business in a different way that previously.

NordicFin had ambitions of becoming more agile and needed therefore to build change capabilities. Stensaker and Meyer (2012) argue that constant change can make an organization more agile and build change capabilities. As one the informants stated, the NordicFin employees are used to constant re-organizations and have come to expect it, likely as a result of three major strategy changes within one decade. The constant change has indeed increased the organization's change capability and made it more agile. To some extent, one can argue that the constant presence of startups within the NordicFin organization acts as a way to inform the employees of what solutions exist outside their business and how the markets, they operate in can suddenly change. However, the constant change does create some internal incoherence and causes confusion for the startups as they feel they have to start all over again whenever a new change is implemented. This also occurs if the startups' contact people suddenly leave organization. The combinatory activities initiated with the startup ecosystem may there seemingly hang in the balance when there is a persistence of change initiatives being launched.

# 7. Conclusion

The objective of this thesis was to gain insight into what mechanisms aid established firms in achieving innovation and value creation when collaborating with smaller, less established actors. In order to achieve this objective, a qualitative, embedded single case study was conducted. Seven semi-structured interviews with informants from NordicFin, EcoCo, TechCo and ServiceFinco were conducted and analyzed together with secondary data for the purpose of gaining in-depth knowledge of the tools that can be utilized increase the probability of success in open innovation settings.

Theory on open innovation and dynamic capabilities was reviewed to ensure greater understanding of the findings made. As the established firm in this case study was in an ongoing change process, change literature was examined in order to gain deeper understanding on the effect change has on innovation capabilities.

The findings revealed that closed startup ecosystems can at easier ensure quality, which benefits both the startups and the corporates as matching between the two is somewhat easier, provided that there is an activity where the established firm can get to know and explore the startups better over time. Change makes large, established firms more agile. However, slow processes, poor internal and external communication, regulation within the financial sector and risk aversion are bottlenecks in collaborations between large and small companies.

Modularity in ecosystems can aid produce a healthy, collaborative environment, and will alleviate the matching process between the startups and established firms. By applying open innovation principles to the dynamic capabilities' framework, an established firm can outsource parts of the sensing capability to a successful startup ecosystem as it develops its own sensing capabilities. In seizing opportunities, agile decision making is easier when the opportunity at hand is a product innovation. Disruption within the financial industry by a service-providing startup is unlikely in Norway. The threat of disruption from incumbents in other industries is more eminent, therefore, sensing and initiating combinatory activities with startups providing products and services is of high strategic value.

Change is a double edged sword for open innovation collaborations. It increases the organization's change capabilities and makes it more agile. On the other hand, it creates only short term change capacity and complicates internal and external communication, which is especially unfortunate as agile decision-making is of the utmost importance in an open innovation setting.

These finding can aid managers in established firms, seeking to explore innovation outside their organization navigate the open innovation landscape, and hopefully chose a mode that works for their organization.

Exploring contemporary human resource practices and open innovation is identified as an interesting future research topic, as well as utilizing outsourcing as a way to strengthen a company's dynamic capabilities.

Lastly, there are several limitation in this study. One is the rarity of the startup ecosystem as described here. The startup ecosystem designed to fit into the surrounding environment, and therefore, uniquely Nordic if not uniquely Norwegian. Culture can therefore limit the transferability of the findings. Second, it examines the relationship of an established firm and a closed startup ecosystem, and subsequent relations of that collaboration. It is possible to form relations with startups that are affiliated to an ecosystem without forming relations with the ecosystem itself, however, this thesis argues that there is unique value in forming relations with the ecosystem itself.

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# 8. Appendix

## 8.1 Interview Guide

| Theme | # | Interview Questions |
|---|---|---|
| Interviewee background and intro | 1.1. | What is your function in the company and what has been your previous work experience? |
| | 1.2. | How many people work in your unit and what is their background? |
| Corporate venturing mechanisms | 2.1. | Can you give me a history of the corporate venturing programs and the development of structures, goals, and strategies? [change?] |
| | 2.2. | Why did the corporation start the startup engagement? Who initiated the program? |
| | 2.3. | If I talk to the CEO, or any BU head, how would they define the success of the mechanisms? |
| Corporate innovation strategy | 3.1. | What is your strategy in terms of investment: focus on deal sourcing or a different objective? |
| | 3.2. | How do you leverage the synergies from different mechanisms? Can you give us an example? |
| Strategy of focus mechanism | 4.1. | How does that mechanism's strategy process look like and who is involved in creating this strategy? |

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| | 4.2. | Do search fields represent the current needs of the business units or are they based on hypotheses of the future? What is the strategic logic: exploring vs. exploiting? |
| Organizational Structure | 5.1.<br><br>5.2.<br><br>5.3. | Can you give me an overview of how this mechanism is organized and works?<br><br>Where in the organization is your position embedded in and to which other units and key employees is it linked to? To whom do you and your colleagues report to?<br><br>How is the interaction between the different programs? How formalized are the interactions? |
| Corporate autonomy and legitimacy | 6.1.<br><br>6.2.<br><br>6.3. | This mechanism connects corporate and entrepreneurial actors. How do you ensure legitimacy in both worlds?<br><br>Are there any conflicts with this? If yes, how do you overcome these conflicts?<br><br>How do you communicate the venturing projects to other employees? |
| Partnership | 7.1.<br><br>7.2. | Could you tell me about the history of the partnership between the established firm and the startup ecosystem and how it has evolved over the course of the last decade?<br><br>What activities and initiatives have been created as a result of this partnership? Which one of those initiatives would you say have been the most effective? Why? |

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| | 7.3. | How would you evaluate this collaboration? |
| BU interaction | 8.1. | How do you get the buy-ins from the business units and how are they structured? |
| | 8.2. | Can you give me an overview on the interaction between startups and BUs? How formalized are these interactions? |
| Investment and program process | 9.1. | Do you have an overall standardized process for the deal-flow generation and due diligence? Who is involved? |
| | 9.2. | Which communication channels and informational content are most relevant during the selection stage of investments? |
| | 9.3. | What evaluation criteria do you have? How do you evaluate strategic returns? |
| | 9.4. | How is the investment/selection decision-making process set up, and who is involved? [authority] What are difficulties in the decision-making process? |
| | 9.5. | How do you embed employees in the startup collaboration process? Can you give us one example? |
| Value-added service | 10.1. | What do you do after the investment/selection to add value? How do you investigate? |

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| | 10.2.<br><br>10.3.<br><br>10.4. | Which value-added services are then provided by the corporate venturing unit, which by the BUs?<br><br>How do you interact with startups?<br><br>How do you organize the access to other organizations and people for the involved parties in this mechanism? Do you have some kind of CRM? |
| Capability Transfer | 11.1. | What capabilities and knowledge do you believe has been brought back into the corporate from the startups and vice versa? |
| Closing | 12.1.<br><br>12.2.<br><br>12.3. | What have been your biggest learnings collaborating with startups/corporate?<br><br>If you were the CEO, what would you change in terms of the structure and purpose, in order to advance the mechanism? What would be the next evolutionary step for you?<br><br>Is there anything else you would like to share, e.g. internal or external CVC presentations? |

## 8.2 Informed consent form – FOCUS research program

**NHH Norwegian School of Economics**

The FOCUS-program is a collaboration between NHH Norwegian School of Economics and Norwegian-based multinational firms. One goal of the research program is to develop knowledge on the topics of international integration, managing knowledge workers, dynamic control systems and change capacity.

We invite you to participate in an interview lasting ….  hours. The interview will be recorded and notes will be taken during the interview. The interview will then be transcribed. Any information that could identify individuals will be removed (eg your name). Only persons participating in the interviews will have access to material that can identity informants.

Participating in the project is voluntary. You can withdraw at any time. The researchers in the FOCUS program will have access to the transcribed interviews, and they have signed confidentiality agreements. In some cases a follow-up study will be carried out. If so, you will receive new information and a new invitation to participate.

The data will be used for research, i.e. production of scientific articles and reports.

By signing this form you consent to participate in the study. If you have any questions regarding this invitation, or you wish to be informed about the results of the study, please contact me at the address below.

Kind regards,

Joy Mutoloki
NHH
E-mail
Phone:

Informed consent form:

I have received written information and I am willing to participate in this study.

Signature …………………………………. Phone number ……………………………..

Printed

name…………………………………………………………………………………