

Innovation in Banking

An exploratory case study on the innovation investment decisions made by SR-Bank with a focus on comparing internal innovation development with the external innovation arm.

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Master's thesis in Business Innovation at

University of Stavanger

June 2021



Universitetet
i Stavanger



Universitetet
i Stavanger

UIS BUSINESS SCHOOL

MASTER'S THESIS

STUDY PROGRAM:

Master of Science in Business Administration

THESIS IS WRITTEN IN THE FOLLOWING
SPECIALIZATION/SUBJECT:

Business Innovation

IS THE ASSIGNMENT CONFIDENTIAL? **No**
(**NB!** Use the red form for confidential theses)

TITLE:

Innovation in Banking: An exploratory case study of SR-Bank with a focus on internal versus external innovation development.

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Acknowledgement

We would like to express our deep gratitude to Professor Ragnar Tveterås. Thank you for your guidance, wisdom, and time throughout the duration of this thesis. Your advice, critiques, and encouragement have been invaluable.

We would like to extend our immense gratitude to all the interviewees for their participation; Vidar Aksland for the generous help along every step of the thesis, as well as for helping us to develop the research question and for recounting the history of Finstart Nordic. Ramtin Matin for his generosity in spending multiple hours being interviewed, for his graciousness and his extremely insightful comments and insights. Sindre Mariero and Henry Vaage Iversen for their passionate participation, and the external view we were given on both SR-Bank and Finstart Nordic. Peter Molnar for the guidance and expertise from the perspective of a financial expert, as well as for pushing us to view the thesis in a different perspective. And lastly, the three anonymous employees for sharing their experience and thoughts on the innovation processes of SR-Bank, which contributed greatly to our perspective on the Employee-Driven Innovation analysis in the thesis.

Ashley would like to thank her family, partner, and loved ones for their support, love, and encouragement throughout her years of study and throughout the time spent writing the master thesis. I am inspired by you all every day and immensely grateful for everything you do.

Finally, Line would like to express her profound gratitude to her parents and her beloved partner for providing her with support and encouragement throughout the years of study, as well as through the process of writing the master thesis. Mikal Fuglestein, thank you for always backing and supporting me, I am forever grateful for everything you do for me. This accomplishment would not have been possible without any of you. Thank you!

Abstract

The purpose of this thesis is to answer the question *What is most beneficial for SR-Bank; to invest in external innovation and start-ups, or to focus on internal innovation development? Or is it a combination of both?*. This thesis evaluates SR-Banks innovation strategy, and focuses on the decisions SR-Bank has made when it comes to investing in their internal innovation lab and innovation team compared to their decisions to invest in innovations through Finstart Nordic. The literature and theories used in this thesis are focused on Innovation, Innovation Strategy, Employee-Driven Innovation, Open Innovation, McKinsey's Three Horizons of Growth, Maximizing Returns on Innovation, and Fintech. The empirical approach for the study, is an exploratory case study, which was conducted using the qualitative approach. A total of 9 semi-structured in-depth interviews form the basis of the collected primary data.

In the data analysis, we find for Employee-Driven Innovation (EDI) that there are improvements to be made in the second and third order, meaning that the management needs to systematize and formalize the innovation processes initiated by the employees (second order), as well as encourage the employees to participate (third order). To facilitate more EDI, the suggestion is to develop a new portal for employees to come up with innovative ideas, implement an open-door policy, inform the employees on new innovation processes earlier in the process, and encourage a larger visibility of those who work in the Strategy, Innovation and Development department. In regards to Open Innovation, the bank should use more of the inside-out type, by allowing externals, such as Finstart Nordic, to utilize their ideas. As for McKinsey's Three Horizons of Growth, the bank should continue to use their current strategy, meaning that Horizon One should be conducted internally, while Horizon Two and Horizon Three mainly should be conducted externally by FinStart Nordic. Here, Horizon One includes incremental innovation and maintaining the core of the business, Horizon Two includes nurturing current business or emerging business, while Horizon Three includes disruptive innovations or completely new business.

The thesis concludes that a combination of both internal innovation development and investment in external innovation and start-ups is the best solution. This combination allows SR-Bank to take advantage of lucrative investing opportunities with companies whose products align with the bank's needs. It also allows for an internal team to specialize in what they do, and remain committed to both designing the innovation strategy, which leads to what types of innovation start-ups the bank will invest in, and manage the Employee-Driven initiatives internally.

Contents

1	Introduction	1
1.1	Introduction and Background for Chosen Theme	1
1.2	Delimitation and Research Questions	1
1.3	List of Experts	2
1.4	The Structure of The Thesis	3
2	History and Introduction to SR-Bank, Finstart Nordic and Gründerhub	5
2.1	Background of SR-Bank	6
2.1.1	Innovation in SR-Bank from 2013 to 2020	7
2.2	Finstart Nordic	12
2.3	Gründerhub	13
3	Theoretical and Empirical Literature	15
3.1	Innovation	15
3.2	Innovation Strategy	17
3.2.1	Strategic Analysis	17
3.2.2	Strategic Selection	19
3.2.3	Strategic Implementation	19
3.2.4	Strategy at Different Levels	20
3.3	Employee-Driven Innovation	21
3.4	Open Innovation	23
3.4.1	Types of Open Innovation	24
3.5	The Three Horizons of Growth	26
3.5.1	The Three Horizons of Growth in the 21 st Century	27
3.6	Maximizing Returns on Innovation Investment	28
3.7	Fintech	30
4	Methodology	33
4.1	Research Strategy	33
4.2	Research Design	33
4.2.1	How Data is Collected	34
4.2.2	Interview Guide	34
4.2.3	Who is Interviewed and Why	35
4.3	Reliability	36
4.4	Validity	38

5 Findings, Analysis and Discussion	39
5.1 To what extent should SR-Bank use Employee-Driven Innovation as a part of their innovation strategy?	39
5.2 To what extent should SR-Bank use Open Innovation as a part of their innovation strategy?	46
5.3 Which of McKinsey’s Three Horizons of Growth should be used for internal innovation development, and which should be used for investing in external innovation and start-ups?	52
6 Conclusion	59
6.1 Conclusion	59
6.2 Future Work	61

List of Figures

1	Types of Innovation (Tidd & Bessant, 2014, p. 6)	16
2	Exploring innovation space (Tidd & Bessant, 2014, p. 27)	18
3	The Open Innovation Model (Chesbrough, 2012, p. 23)	25
4	The Three Horizons of Growth (Wright, 2018)	27

List of appendices

Appendix One: Interview guide Strategy, Innovation and Development department employee	70
Appendix Two: Interview guide Finstart Nordic companies	71
Appendix Three: Interview guide SR-lab leader	72
Appendix Four: Interview guide SR-Bank employees	73

1 Introduction

1.1 Introduction and Background for Chosen Theme

In the last decade, Norwegian banks have experienced changes in the technological demands from customers. The changing customer needs have resulted in banks innovating at a faster pace than before, and banks such as SpareBank 1 SR-Bank have chosen to outsource some of their innovations to external players. With this in mind, we set out to explore how innovation should be approached in SR-Bank.

In this thesis we will therefore investigate whether conducting innovation internally or externally is more beneficial for SR-Bank. The results will not be unambiguous or a general answer for all banks in Norway. The results may however, form an indication on how innovation can be solved in banks of similar structure as SR-Bank, meaning banks that have both an internal innovation team, as well as an external venture capital fund focused on investing in financial technology. As most banks possess similar knowledge and functions, the “internal” results may be similar for other Norwegian banks as well.

To investigate what it is that is most beneficial for SR-Bank, as well as to explore both internal and external options, theoretical and empirical literature on Innovation, Innovation Strategy, Employee-Driven Innovation, Open Innovation, Three Horizons of Growth, Maximizing Returns on Innovation, as well as Fintech, forms the basis of the research. The literature on these topics has been explored by several researchers before, but it has, by our knowledge, not been used together previously.

1.2 Delimitation and Research Questions

Through meetings with the representative from SR-Bank, namely Vidar Aksland, we explored different opportunities for research questions. Based on Aksland’s insights on what topics SR-Bank is currently grappling with, as well as what we found interesting, we devised the following research question;

What is most beneficial for SR-Bank; to invest in external innovation and start-ups, or to focus on internal innovation development? Or is it a combination of both?

In order to answer the research question, and explore both internal and external options, we have also derived the following sub-research questions;

1. *To what extent should SR-Bank use Employee-Driven Innovation as a part of their innovation strategy?*
2. *To what extent should SR-Bank use Open Innovation as a part of their innovation strategy?*
3. *Which of McKinsey's Three Horizons of Growth should be used for internal innovation development, and which should be used for investing in external innovation and start-ups?*

1.3 List of Experts

Throughout the writing of this thesis, our research has been enriched by the insights of, and interviews with, experts on; innovation, Fintech, Finstart Nordic, Gründerhub and SR-Bank. The interviews with the experts have helped us to gain an extensive understanding of the chosen topic.

Finstart Nordic and SR-Bank Expert

Ramtin Matin is the Lead Technological Strategist at SpareBank 1 SR-Bank. He has worked at SR-Bank since August 2017. From June 2020 through December 2020, he acted as interim CEO of one of the Finstart Nordic companies, WillowLabs.ai. Matin holds an executive MBA from Copenhagen Business school. His previous experience includes time spent at PwC and at SAS Institute in manager roles, and at Øresundsbron as a BICC Leader (Ramtin Matin, n.d.-a; Ramtin Matin, n.d.-b).

Justify Expert

Sindre Mariero is Co-Founder of Justify, one of the Finstart Nordic portfolio companies. Before founding Justify, Mariero worked at Simplify AS, X-Partner Stavanger AS, and NorDoc Services AS. His educational background includes time spent at Noroff Instituttet studying networking computing and security. After that he attended BI Norwegian Business School to attain a Bachelor of

Business Administration, Economics and Marketing. Finally he received a Bachelor degree in Business Administration and Management from Corvinus University of Budapest. Mariero has mostly worked with sales and marketing, and is currently responsible for market, economy and administration in Justify (Sindre Mariero, n.d.-a; Sindre Mariero, n.d.-b; S. Mariero, personal communication, 8th of April, 2021).

Boost.ai Expert

Henry Vaage Iversen is Co-Founder and COO in Boost.ai, one of the Finstart Nordic portfolio companies which has had the most notable success thus far, with a valuation of nearly two billion NOK in 2021. Before founding Boost.ai in 2016, Iversen had experience as business developer, controller and board member of inPed, as well as early experience from Ipark and Skagen Fondene. Iversen's educational background includes a bachelor degree within economics, as well as a master degree in strategy and management from the University of Stavanger (Ånestad, 2021; Henry Vaage Iversen, n.d.-a; Henry Vaage Iversen, n.d.-b).

SR-Lab and SR-Bank Expert

Vidar Aksland is the CEO of Finstart Nordic and the Head of Innovation and IT Development in SR-Bank. He is also currently a board member of Boost.ai, Just Financial, and Justify. Additionally, he acts as a chairman of the board of directors at Beaufort Solutions and MyRent AS. His work experience includes time at the Norwegian Armed Forces, where he was an officer for 15 years. In 2008 he went on to work for SR-Bank. From January 2017 to December 2018, Aksland was the head of the innovation lab at SR-Bank, SR-lab. He obtained his education from the Norwegian Military Academy where he studied strategy, management, international cooperation, leadership, crisis management, and operations planning. He then went on to BI Norwegian Business School where he obtained his Executive Master of Management (Vidar Aksland, n.d.-a; Vidar Aksland, n.d.-b).

1.4 The Structure of The Thesis

In order to answer the research questions, we will in chapter 2 start with a history and introduction to SR-Bank, Finstart Nordic and Gründerhub. In chap-

ter 3, we will introduce the theoretical framework, focusing on various ways of conducting and managing innovation using both internal resources, as well as external resources. In chapter 4, the empirical approach for the data collection will be presented.

Chapter 5 contains an analysis of the results. In this chapter, the findings from the interviews will be presented and analyzed using the three sub research questions. In chapter 6, we will come to a conclusion which is set to answer the chosen research question, while the "Future Work" section emphasises what future researchers can do in the future.

2 History and Introduction to SR-Bank, Finstart Nordic and Gründerhub

A bank can be defined as an institution where the key operation of the institution consists of granting loans, as well as taking care of the deposits of their clients (Freixas & Rochet, 2008). This means that the bank has three main sets of activities; providing the customers with services for payment, collecting and processing information, and finally, to transform the characteristics of the financial assets and debt (Navaretti, Calzolari, Mansilla-Fernández & Pozzolo, 2018).

Banks in Norway consist of savings banks, commercial banks, and branches of foreign banks. The SpareBank 1 alliance, which SR-Bank is a part of, is one of a few large bank alliances in Norway. The largest bank alliance to compare with the SpareBank 1 alliance is Eika Gruppen, which consists of 60 local Norwegian banks (Eika, n.d.).

On the entrepreneurial side, Norway has a very supportive infrastructure for innovation and entrepreneurship. Innovation Norway is a central government agency for facilitating, supporting, and financing new ideas and businesses. Banking innovations in Norway often come from entrepreneurs who have had support from personal finances, Innovation Norway, or a university, and other banks or alliances can invest in or buy the companies or their intellectual properties (Coleman, 2018). According to Henrik Müller-Hansen, one of Norway's prominent entrepreneurs and founder of the company Gelato,

Doing business on a global scale is part of our culture (...) Norway has a rich tradition of trading with nations all over the world. Its global outlook and effective trade agreements have enabled it to become one of the world's wealthiest nations (Coleman, 2018).

As this thesis focuses on the Norwegian savings bank SpareBank 1 SR-Bank, the following section will explain the history of SR-Bank, as well as the bank's work on innovation throughout the past eight years. Beyond this, we will go on to explain what Finstart Nordic is and how they operate, as well as what Gründerhub is.

2.1 Background of SR-Bank

SpareBank 1 SR-Bank has roots that go back to 1839, when the first bank which is now a member of SR-Bank was established in Egersund (SpareBank 1 SR-Bank, n.d.-a). In 1976 a total of 13 saving banks established Sparebanken Rogaland, which further became a part of the SpareBank 1 alliance in 1996. This is an alliance which by 2021 has branches all over Norway and consists of a total of 15 banks (SpareBank 1, n.d.).

SR-Bank has, as per February 2021, more than 36 branches reaching from Bergen in the west to Oslo in the east, resulting in the bank being the second largest Norwegian bank in Norway (SpareBank 1 SR-Bank, n.d.-b; Nestebank, n.d.). The headquarters are located at Bjergsted in Stavanger, and combined with its subsidiaries, SR-Bank has more than 1.250 employees. The CEO is Benedicte Schilbred Fasmer.

The vision of SR-Bank is to be the customers first choice (kundens førstevalg), while the purpose of the bank is to give power to growth and development (SpareBank 1 SR-Bank, n.d.-c). In order to give power to growth and development, and reach for the vision, one relevant aspect is the startup factory subsidiary, Finstart Nordic, which will be explained later in the thesis (SpareBank 1 SR-Bank, n.d.-d).

Some of the innovation at the bank is conducted through SpareBank 1 Utvikling, which aims to provide customers with even more digital opportunities through the digital platforms of the bank (SpareBank 1 SR-Bank, 2020). SpareBank 1 Utvikling works with the digital platforms of all of the SpareBank 1 banks, and its workforce consists mainly of web designers and software developers (SpareBank 1 Utvikling, n.d.).

SR-Bank is continually experimenting and testing new services to reach out to new and existing customers. The company creates interactions and services, which benefit customers, and society, through new products, competence, access to economic capital and innovative ideas. This is accomplished using an ecosystem consisting of commitment to internal innovation and development together with start-ups and investments in new companies (SpareBank 1 SR-Bank, 2020).

A major concern for the bank in the future will be to work continuously with digital transformation. Here, digitalisation is not the goal itself, but a tool to achieve effects on both the cost and income side of the business. Using technology and data, the company will develop new business models and business areas, both to preserve the relationship with the customers and the cash flow, but also to create new ones (SpareBank 1 SR-Bank, 2019).

2.1.1 Innovation in SR-Bank from 2013 to 2020

To understand how the bank has worked with innovation the last couple of years, the following section will go over information from the annual reports of SR-Bank from 2013 to 2020. The annual reports from 2011 and 2012 are not included, as they do not have any relevant content on innovation in the bank.

2013

As a result of changed customer needs, the mobile banking application for smartphones was launched in the summer of 2010. From 2010 to 2013, there was a large increase in the number of users of the application. By 2013 there were almost 60.000 customers using mobile banking. In 2013, the online space became one of the most important channels in the daily contact between the customers and the bank. Additionally, the customers of SR-Bank were, in 2013, among the foremost in using new digital services both nationally and internationally (SpareBank 1 SR-Bank, 2014).

In 2013, there was also a large focus on investing and making decisions based on the changed customer needs. Processes which previously were handled manually were made more efficient, resulting in less employees working with administrative tasks, and the customer advisors handling more customers compared to 2012 (SpareBank 1 SR-Bank, 2014).

2014

According to SR-Bank themselves, they have a culture which is open to change and improvement, which makes them prepared for the future. To follow through with this culture, there was a reduction of approximately 100 employees in 2013 and 2014. There was also however a restructure of the competence within the bank; 72 new employees possessing new and necessary competence were recruited, resulting in the bank being able to meet the changes in the environment

even better than before (SpareBank 1 SR-Bank, 2015).

In 2014, the digitalisation of several customer processes continued, and together with the rest of the SpareBank 1 alliance, the "watchbank" (klokkebank) was launched. The watchbank is a combination of the mobile banking application and smartwatch, and is an example of how the bank tries to connect with their customers using technological solutions. A new customer relationship management (CRM) system was nevertheless developed, making the bank better at identifying the needs of each customer (SpareBank 1 SR-Bank, 2015).

2015

In 2015, there was an even larger focus on efficiency and innovation. Questions such as "how can the bank do what they already do, but in new and better ways?", as well as "how can the bank use the competence and existing technology to do something new?", were the focus (SpareBank 1 SR-Bank, 2016).

SR-Bank became a member of the UN Global Compact in 2015. As a part of this program, there was an increased focus on participating in projects and programs which intended to stimulate start-ups and increase innovation in the western parts of Norway. One of these projects was the "Nye muligheter" project, which was a cooperation between Innovasjon Norge, Ipark, Næringsforeningen i Stavanger regionen, and SR-Bank (SpareBank 1 SR-Bank, 2016).

In 2015, Gründerhub was established, which is a program where entrepreneurs receive office space and guidance combined with necessary competence training, all for free. It is financed and operated by SpareBank 1 SR-Bank. A total of 13 entrepreneurs qualified for the project in 2015 (SpareBank 1 SR-Bank, 2016).

2016

In 2016, the customers of SR-Bank contacted the bank through digital channels more than ever before. On average, SR-Bank was in contact with their customers 3 million times each month, and mostly through the digital channels. This was an increase of 20 percent compared to 2015 (SpareBank 1 SR-Bank, 2017-a).

In 2016 SR-Bank started to use automated processes using artificial intelligence

(AI), and was one of the first financial institutions in Norway to do so. The first processes to be automatized with AI were mainly internal, manual and repetitive tasks. However, SR-Bank also developed a self-learning robotized process, which was used as a chat service for the customer service department of the bank. They were also the first Norwegian bank to do this. Until 2016, the online chat functions were manually operated, but due to the robotized process, the customer service department was able to improve the availability greatly. Out of the 55.000 inquiries the customer service department got each month in 2016, an increasing number of them were completed through the chat function (SpareBank 1 SR-Bank, 2017-a).

In April, the new CRM system was ready. SR-Bank nevertheless decided to establish a mCASH team, as a tool to increase the number of users and providers of mCASH (SpareBank 1 SR-Bank, 2017-a).

As a result of the increased use of automated processes using AI, the future work tasks for the employees of SR-Bank were, in 2016, assumed to change. This would nevertheless affect the future competency areas from which the bank decides to hire. According to their annual report of 2016, the most important competency areas for the future would be software development, analytics and innovation, combined with emotional intelligence and creativity, as well as a high customer competency (SpareBank 1 SR-Bank, 2017-a).

In December, the news about SR-Bank's new chatbot was released. A chatbot, which was meant to answer general customer service questions 24 hours a day on their webpage. This was the second generation robot in the concern, and according to SR-bank themselves, both robotization and digitalisation were two of the most important drivers for a continuous improvement of efficiency (SpareBank 1 SR-Bank, 2017-a).

2017

In order to further increase efficiency, give the customers a better experience, and increase sales, SR-Bank increased their investments in new technologies and competency education for their employees in 2017. This investment yielded results that same year, with the introduction of Vipps, increased availability through Banki, as well as through being the first bank in Norway to offer a dig-

ital solution for consent-based loan application (SpareBank 1 SR-Bank, 2017-b).

Based on the annual reports of SR-Bank, 2017 seems to be the year where innovation initiatives really accelerated. For example in January the chatbot Banki, which answers customer service questions, had its first days at work on the web page of SR-Bank (SpareBank 1 SR-Bank, 2018-b). Already in December the same year, Banki was able to help the customers check their balance, summarize transactions, as well as block visa cards (SpareBank 1 SR-Bank, 2018-a).

In February, the news about mCASH merging with Vipps came out. Here more than 100 banks got together to work on a common mobile payment solution. In the new Vipps company, the SpareBank 1 alliance became the second largest owner (SpareBank 1 SR-Bank, 2018-a).

In March, SR-Bank, Lyse and Smedvig got together trying to establish a national fund in the region of Stavanger. The intention of the fund was to strengthen the efforts around entrepreneurs and innovation in the south and western parts of Norway, as well as for the country as a whole (SpareBank 1 SR-Bank, 2018-a).

In April, news about SR-Bank becoming owner of the Fintech company Monner was released. Monner is supposed to become the first Norwegian digital platform for loan dissemination between individuals and small- and medium sized businesses. In May, the success of the Gründerhub nevertheless reached a new high, resulting in SR-Bank deciding to establish two new Gründerhubs; one in Bergen and one in Kristiansand (SpareBank 1 SR-Bank, 2018-a).

As a part of a changed strategy for SR-Investering AS, the name was changed to Finstart Nordic AS in September 2017. The goal of Finstart Nordic was to invest in the development of new ideas and companies within Fintech. It is a fully owned subsidiary of SR-Bank (SpareBank 1 SR-Bank, 2018-a).

2018

In January 2018, the operation of Finstart Nordic started. In 2018, the company reported earnings before taxes of 59,5 million NOK. This was a result of a positive growth of the securities in the portfolio (SpareBank 1 SR-Bank, 2019).

In 2018 the organization changed, and two new business areas were established; one for Customer Services and Marketing, and one for Strategy, Innovation and Development. This was a result of a desire to give more attention to innovation and development in the future, as well as making sure that the bank would become one of the best at developing new products and services. This, combined with a higher presence in the eastern parts of Norway, correct risk pricing of loans and cost control, would, according to SR-Bank ensure them a competitive position in the future (SpareBank 1 SR-Bank, 2019).

To provide the customers of the bank an even better experience, increase the efficiency further, as well as increase the sales, the bank invested even more in new technology and competence education for the employees in 2018. This resulted in for example, the merger between Vipps, BankAxept and Bank ID, and finally Banki. On the technology part, it resulted in Finstart Nordic (SpareBank 1 SR-Bank, 2018-b).

2019

In the first quarter of 2019, Finstart Nordic opened new offices in Oslo. In the second quarter, SR-Bank established itself as a bank for entrepreneurs through the Fintech company Monner. In the third quarter, SR-Bank entered a strategic partnership with the Finstart Nordic company Justify, in order to offer the private market customers legal services digitally. At the end of the year, Finstart Nordic reported earnings before taxes of 27,3 million NOK (SpareBank 1 SR-Bank, 2020).

To follow up on the eight sustainable development goals by the UN (Decent Work and Economic Growth), one of the goals for SR-Bank was to facilitate entrepreneurship, innovation, and the creation of new jobs. In 2019, this was facilitated through Gründerhub and Finstart Nordic (SpareBank 1 SR-Bank, 2020).

2020

The 12th of March 2020, Norway closed down. In the period after the 12th of March, SR-Bank got an average of 220 applications of interest-only periods daily. As a result of previous investments in technology and robotisation during

many years before, the bank managed to enable all of the inquiries from the customers in 2020. The automatized processes using AI did tasks which normally 50 FTEs would do (SpareBank 1 SR-Bank, 2021).

In the fourth quarter of 2020, the SpareBank 1 alliance and DNB got together and bought Uni Micro, which is one of the leading players within ERP- and economic systems. Through this alliance, the two banks pursued technological cooperation within accounting (SpareBank 1 SR-Bank, 2021).

In 2020 Finstart Nordic AS reported earnings before taxes of -113,1 million NOK. The deficit was a result of negative value changes in the investment portfolio from former SR-Investering AS, and additionally due to restructuring costs in 2020. The Finstart Nordic portfolio had a total decreased value of 66,4 million NOK. Still, the Fintech part of the portfolio showed positive development after the first stage of Covid-19, even though there was somewhat reduced growth, as well as a much more demanding market regarding the obtaining of external capital (SpareBank 1 SR-Bank, 2021).

2.2 Finstart Nordic

Finstart Nordic is a part of SR-Bank's innovation arm and invests in ambitious start-ups with the capacity to change the financial sector. They work closely with the portfolio companies to help them with development and scaling. Finstart Nordic intends to meet unmet needs and seek out market opportunities. Based on this, they work with new ventures from the earliest stages. The team is a blend of investment bankers, entrepreneurs, development experts and strategic thinkers. They believe in working closely with their ventures, and being available to help them as needed (Finstart, n.d.).

As previously explained, Finstart Nordic changed its name from SR-Investering to Finstart Nordic AS in September 2017, while the company's operations fully started in January 2018. The company is the SR-Bank group's innovation initiative, and has been established as an external area for innovation and development. The company shall invest in and/or establish companies that will operate with innovation work to develop new commercial products. This will help to develop the bank in a market where the banking business is to a greater extent exposed to competition from new players, partly as a result of changes

in framework conditions (SpareBank 1 SR-Bank, 2020).

By March 2021, the following companies are a part of Finstart Nordic (Finstart, n.d.);

1. MyRent - PropTech platform simplifying and digitizing property letting
2. Swiipe - Disrupting the e-commerce industry with one-click-buy technology
3. Boost.ai - Drastically improving customer service through AI-powered direct messaging
4. Harvest - Making modern investment solutions available to all
5. Justify - Digitizing the legal industry
6. Beaufort Solutions - On a mission to combat financial crimes
7. NORD.investments- An all-digital platform for smart investments
8. Monner - Helping Norwegian SMEs through growth-funding
9. Lucidtech - Revolutionizing the world of document automation

Out of these nine companies, Finstart Nordic and/or SR-Bank has acquired 13,208% ownership of Boost.ai, 16,919% ownership of Harvest, 13,651% ownership of Justify, 100% ownership of Beaufort Solutions and Monner, as well as 14,001% ownership of Lucidtech (Proff, n.d.-a; Proff, n.d.-b; Proff, n.d.-c; Proff, n.d.-d; Proff, n.d.-e; Proff, n.d.-f).

2.3 Gründerhub

Gründerhub is one of SR-Bank's initiatives for creating the workplaces of the future. The first hub was established in Stavanger in 2015, and the program has, over the years, evolved to having a total of four hubs located in Stavanger, Bergen, Kristiansand and Oslo. Since 2015, more than 250 entrepreneurs have been educated, and almost 400 new jobs have been created (SpareBank 1 SR-Bank, n.d.-e).

The idea of Gründerhub is that everyone that has an entrepreneurial idea can

apply to join the program. The free program lasts for four months, and the participants get help from highly skilled facilitators, who have previous experience with helping star-tups, and relevant connections with the business community in the region. Companies such as Boost.ai and Justify both started their journey in the program (GründerAcademy, n.d.).

In April 2021, SR-Bank entered a cooperation with the innovation facilitators Validè, VIS, InnoventusSør and TheFactory for further development of the Gründerhub program. This led to the program changing its name from Gründerhub to Gründer Academy (InnoventusSør, 2021). The program will however be referred to as Gründerhub in this thesis, because of the time of the change.

3 Theoretical and Empirical Literature

To answer the research questions, the thesis applies theoretical and empirical literature such as general literature on innovation and innovation strategy, Employee-Driven Innovation, Open Innovation, McKinsey's Three Horizons of Growth, as well as literature on how to maximize returns on innovation, and literature on Fintech.

The general literature on innovation is included to gain an understanding of the definition of innovation, as well as its different types. Innovation strategy is covered, as a major part of the research questions involves which strategy SR-Bank is to use. To explore both internal and external innovation options for SR-Bank, Employee-Driven Innovation and Open Innovation are two relevant aspects to consider. To decide where SR-Bank is to put their resources, McKinsey's Three Horizons of Growth is also included. As SR-Bank works with Fintech companies through Finstart Nordic, we believe that it is important to have an understanding of how to maximize the returns on innovation, and to determine what Fintech is, which is why those two are included in the theoretical and empirical literature chapter.

3.1 Innovation

According to Tidd & Bessant (2014), innovation could be defined as a process where one creates value out of ideas. The word originates from the Latin word *innovare*, which can be translated to change. These changes occur over several directions, such as a change in the product or service the company is offering, changes in the way such offerings gets created and delivered, the market one offers the product or service to, and nevertheless the underlying models that defines how the company do what they do, as illustrated in Figure 1 below.

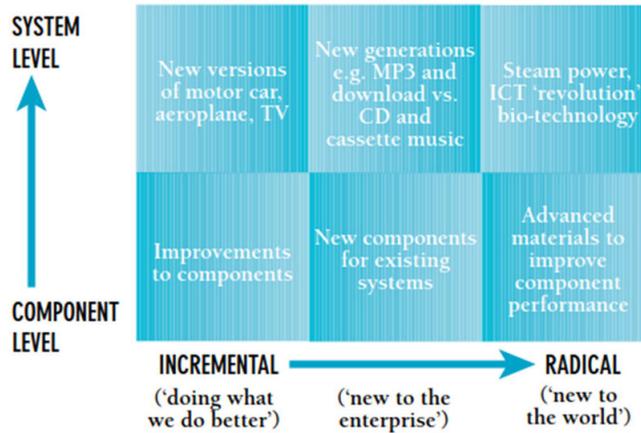


Figure 1: Types of Innovation (Tidd & Bessant, 2014, p. 6)

While looking at innovation and the novelty of the change, one often differentiates between *incremental improvements* and *radical changes*. While an incremental improvement could be to make a new flavour of a Coke, a great example of a radical change is the launch of Apple's first generation iPhone. What is common for all radical changes is that over time they may change the way customers both use and think about a product or service. When it comes to innovation, companies can therefore choose to either change a few components, or change the whole system (Tidd & Bessant, 2014).

Change is not the only aspect important for a new idea to be considered an innovation. The change needs to create some kind of value. Such value could either be a social or a commercial value, but the most important aspect is that the customers must find the innovation valuable, combined with a willingness to pay for it. This is what we mean by a product or service being adopted by the market (Tidd & Bessant, 2014).

Innovation has been an important part of economic growth since the eighteenth century, and its importance is not likely to decrease in the years to come. For companies to survive within a market, innovation is therefore an essential tool. If organizations do not change their offerings as well as how they create and deliver them, survival is hard. Companies must therefore integrate innovation into their culture, and use it as a strategic tool to reach its goals (Tidd & Bessant,

2014).

3.2 Innovation Strategy

One of the most central aspects related to effective management of innovation is a well formulated innovation strategy. One must know how innovation is going to help the company move forward, as well as where the innovation will move the company. The strategy will nevertheless be a useful tool to distribute the organisation's resources in the most beneficial way (Tidd & Bessant, 2014).

Even though the innovation strategy can be used as a roadmap for change, it is important to have in mind that one cannot predict the future. Innovations may fail, meaning that the product or service might not work, and in addition, there might not be a market for the innovation. One must therefore be open for change in the innovation strategy.

The innovation strategy is a great tool to use for sharing the vision of the future with other players that might be able to help the company on the journey. These players are for example, employees, investors and the board of the company.

According to Tidd & Bessant (2014, p. 22), an innovation strategy consists of the following three key steps;

- Strategic analysis - what could we do?
- Strategic selection - what are we going to do, and why?
- Strategic implementation - how are we going to make it happen?

3.2.1 Strategic Analysis

The first step of the innovation strategy involves an exploration of the innovation space, which means that one has to figure out where the company could innovate, and why it will be worth doing the innovation. This is the strategic analysis stage (Tidd & Bessant, 2014).

It is often helpful to start by exploring the current opportunities and threats which are present, and further figure out how likely these are to change in the

future. It is nevertheless important to keep in mind the surrounding players, such as customers, key suppliers, competitors, and the different markets.

One must however also keep in mind the resources within the organization; what the strengths and weaknesses of each of the resources are, as well as how they can be used to both build and sustain a possible competitive advantage (Tidd & Bessant, 2014).

After exploring the environment, one must answer where the company could innovate that would be advantageous for the business, as well as what kind of opportunities exist that can be used to create something one can capture value from.

One way to figure out where to innovate is by using the "innovation compass" illustrated in Figure 2. The compass maps the four dimensions, often named the 4Ps of innovation, which are Product, Process, Position and Paradigm. Each one of these 4Ps can be somewhere between incremental and radical innovations. The circle in the figure (the "innovation" circle) illustrates the company's potential innovation space (Tidd & Bessant, 2014).

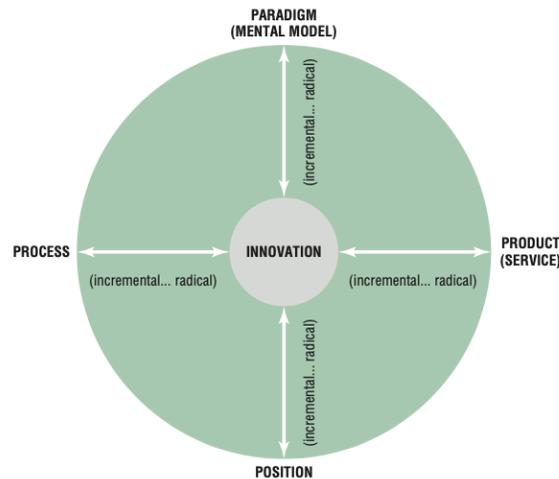


Figure 2: Exploring innovation space (Tidd & Bessant, 2014, p. 27)

Companies can use the model to map where its current innovation projects

are located, and further figure out where it could innovate in the future. It can nevertheless be used as a tool to figure out where the competitors are innovating, which further can be used to find unexplored innovation space (Tidd & Bessant, 2014).

3.2.2 Strategic Selection

The second step of the innovation strategy involves Strategic Selection. This involves figuring out what the opportunities for the company are, which of the opportunities the company wants to pursue, and why. As companies have scarce resources, it is necessary to spread the risk across portfolios of projects. Tools to help make these decisions are for example payback time, return on investment, or other tools which compare several dimensions of the projects (Tidd & Bessant, 2014).

It is however important to have in mind that one does not have a total free choice. There is to some extent a path dependency, meaning that the decisions are based on previous ones. There is often a resource-based view within the organization, leading to the organization using an inside-out view for suggestions on how to use its strengths to gain an advantage. The competencies can however be replaced by changes in the areas of expertise, which may result in destruction of the basis of competitiveness, but it can also be recomposed to improve the competitive position in the market (Tushman & Anderson, 1987).

3.2.3 Strategic Implementation

The third stage of the innovation strategy involves Strategic Implementation, which involves figuring out what resources the company might need, as well as how it will get a hold of such resources. It also involves thinking through who one might have to partner up with, as well as what type of difficulties one might have to face (Tidd & Bessant, 2014).

This is however not a simple and linear process. There will be several discussions regarding what to choose when arguing for certain options. This is, however, according to Tidd & Bessant (2014) the essence of innovation.

To avoid discussions, a simple project plan may be used as a tool. In the project plan one can map out the different activities which are necessary to do in order

to realize the innovation. The project plan can help the company to identify the resources needed, as well as highlight the possible troubles that might occur, helping the company to think through how they might be solved. Some tools also involve using the "what if...?" dimension to try to anticipate worst case scenarios, so that the company has plans for how to solve such scenarios (Tidd & Bessant, 2014).

3.2.4 Strategy at Different Levels

If a strategy is to work, all members of the organization need to understand the strategy, and nevertheless feel committed and comfortable with it. It is therefore important to both build and share a convincing vision, while also being open to allowing the employees to explore, raise concerns, come up with ideas, raise questions, as well as to listen to their suggestions (Tidd & Bessant, 2014).

The issue of sharing and communicating the strategy within the organization, might be a bit easier for smaller organizations, as they have fewer parties involved. In larger companies, it is important to make sure that the people in the organization understand and commit to the strategy. Either way, for a strategy to work, it is important to make sure it is not just exciting words, but that resources and support are put into it (Tidd & Bessant, 2014).

To communicate the innovation strategy in a clear and simple way is also important, as the overall direction is not solely set by the leaders. It often involves several smaller projects, meaning that there must be alignment between the leaders and the projects within the organization. Making sure that there is alignment, is therefore a critical part of the implementation of the strategy (Tidd & Bessant, 2014).

According to Tidd & Bessant (2014), there is large potential if one lets the employees contribute to incremental innovations in the areas of their expertise. It is therefore important that employees know and work for the common strategy. To make this a success, "policy deployment", which involves transferring the innovation strategy from the top-level to the other levels in the organization, while also allowing people in the other levels to make decisions - is quite useful. This makes the organization able to have a strategic focus where it can locate its small-scale activities within innovation.

Even though it might look easy to solely follow the process of strategic analysis, selection and implementation, it is not. One must not look at the innovation strategy process as simple and easy, but rather look at it as a process of incremental learning, exploring and probing, being open to constantly adjusting and refining the strategy (Tidd & Bessant, 2014; Teece, 2009).

3.3 Employee-Driven Innovation

If one uses a theoretical point of view, including the ordinary employees in decisions on innovation, makes perfect sense. One must however keep in mind that the process of participation needs to be governed, and that it might be hard to support the employees in a way that makes them realize their potential (Kesting & Ulhøi, 2010).

As the amount of skills and expertise among employees has increased, making workplaces more complex, the importance of human capital has increased. It is nowadays not only important with human capital at the top management level, but also for those further down in the hierarchy. In modern society, employees have a higher expectation of being able to realize their potential at the workplace, to develop and challenge their talent, as well as to be taken seriously as an organizational member (Kesting & Ulhøi, 2010).

What we have been explaining above, is termed Employee-Driven Innovation (EDI). Employee-Driven Innovation could be defined as innovation of products, processes or services, where the idea originates from one or more employees that are not assigned such tasks. EDI nevertheless implies that innovation can originate from any "ordinary" employee in the company, and from any department. The idea can emerge from managers, professionals and floor-workers (Kesting & Ulhøi, 2010).

The main idea of Employee-Driven Innovation, is the assumption that all employees in a company have hidden capabilities for innovation. The hidden capabilities can however be recognized, visible and exploited, which will benefit not only the employee, but also the company (Ford, 2001; Kesting & Ulhøi, 2010).

The Employee-Driven Innovation conceptualization came up as a result of a

desire to answer the question on how employees may become producers of innovation. In the search for an answer, researchers found out that employees that are learning at their job, both in terms of their expertise, new knowledge and problem-solving abilities, constitute the basic foundation for Employee-Driven Innovation (Høyrup, 2012).

In order for a workplace to foster EDI, aspects such as initiatives and autonomy from the employees, as well as the conditions and structure of their work are important tools. Employee's processes of both "(...) learning and innovation are closely interwoven and constitute preconditions of each other" (Høyrup, 2012, p. 4). It is nearly impossible to separate the two processes from each other, as the outcome of learning may be innovation.

As there has become an even larger focus on creating a relationship between the organization and the employees, organizations have started to find new drivers and resources of innovation within the organization, making it possible to use its full potential of innovation. This is where Employee-Driven Innovation comes in handy, as ordinary employees might have quite useful, but hidden, resources of innovation (Høyrup, 2012).

EDI can, according to Høyrup (2012) be considered an umbrella concept, as it covers several processes and issues of innovation. It can be used as a tool for any kind of "classic" innovations, such as product, process and service. The concept does however come up with something new, as Employee-Driven Innovation does not have to be a part of the organization's strategies or goals, and nevertheless is not something that can be controlled by the managers of the company. The goal is many times not an innovation (as the employee is not assigned such a task), but it results with an innovation as the central outcome.

Employee-Driven Innovation is often considered as a process beginning at the worker level. However, this is not the whole truth, as innovation in most cases is a social process involving several parts of the organization. Employee-Driven Innovation often starts at the "floor", but in order for the innovation to reach its best potential, there must be an interaction between several actors, such as for example managers and other employees, both within the same department and other departments. It is therefore hard to say that EDI is solely a bottom-up process. It is a process which may involve the management at some step of the

innovation.

To understand how one might apply Employee-Driven Innovation, one can, according to Price, Boud and Scheeres (2012), distinguish between three different orders of EDI; First order EDI, Second order EDI, and Third order EDI.

The first order EDI involves solely bottom-up processes. Here innovation arises from the bottom, where what the employee does at work is at focus. The employee comes up with new ideas to make their work day better, and the main idea is not to have innovation as an outcome. It does however result in innovation as the central outcome. Such innovations are subtle changes that might not get considered as an innovation within the organization, but the changes can however be substantial (Price et al., 2012).

The second order EDI is on the other hand a mix of both bottom-up and top-down processes. Here, the management aims at systematizing and formalizing those innovation processes considered significant and which are initiated by the employees themselves (Price et al., 2012).

The Third order EDI is solely a top-down process. Here, the managers invite the employees and encourage them to participate in the company's innovation processes. In other words, the management involves the employees into the process. Such processes might be for example developmental projects or project groups (Price et al., 2012).

Based on these three orders, it is clear that Employee-Driven Innovation can be used to cover several complex processes of innovation, in which one can relate to both a bottom-up/top-down point of view, as well as the formal-informal dimension. Employee-driven innovation can nevertheless be embedded into both working processes as well as within learning processes (Price et al., 2012; Høyrup, 2012).

3.4 Open Innovation

Open innovation can be defined as "(...)the use of purposive inflows and outflows of knowledge to accelerate internal innovation and expand the markets for external use of innovation, respectively" (Chesbrough, 2006, p. 1). It is the

contrary of the traditional vertical integration model, where the organization's R&D activities tend to lead to products that are developed internally and further distributed by the company themselves.

The open innovation paradigm assumes that companies both can and should use both external and internal ideas, as well as internal and external ways to reach the market. The paradigm also assumes that a company can use internal ideas and bring them to market using external channels. These external channels may not be related to the current business of the firm, but it may generate additional value for the company (Chesbrough, 2006).

According to Chesbrough (2012), this way of doing innovation is the future of open innovation. A future where companies will be more comprehensive, collaborate more, as well as engage themselves more with a larger variety of players. It "(...) has become a new paradigm for organizing innovation" (Chesbrough, 2012, p. 21).

3.4.1 Types of Open Innovation

While looking at the Open Innovation paradigm, there are two types of open innovation, outside-in and inside-out;

The outside-in type of the open innovation involves that an organization opens up its innovation processes and allows for several types of inputs and contributions from externals. This is the type of open innovation which has received the most attention (Chesbrough, 2012).

The inside-out type of open innovation does on the other hand require companies to allow the ideas that have not been used or those under-utilized - to be used by others within their business and business models. This type of open innovation has not been explored as much as the outside-in type of open innovation (Chesbrough, 2012).

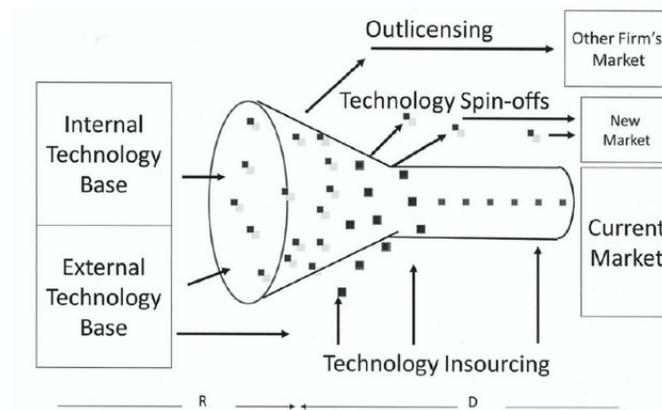


Figure 3: The Open Innovation Model (Chesbrough, 2012, p. 23)

By contrast to the closed innovation model, the open innovation model involves that projects can enter and exit at different steps and in different ways, as illustrated in Figure 3. Regarding the outside-in part of the model, companies can launch their projects using either external or internal sources of technology. Additionally, new technology may come into the process at different stages.

The inside-out part of the model will on the other hand involve that the project may get to the market in several different ways, like for example through a venture company or out licensing, combined with the use of the companies own marketing and sales channels. Chesbrough named the open innovation model "open", especially because there are several different ways for new innovations to flow in the process, as well as out to the market (Chesbrough, 2012).

The main advantage of using the open innovation model, as seen from the inside-out part of the model, is that it sees spillovers as an opportunity for the company to either expand the business model, or to use the technology in a different business model outside of the company. Spillovers are therefore not seen as a cost (Chesbrough, 2012).

The model nevertheless sees intellectual property as an asset that can bring new value to the current business model, and bring them into new ways of doing their business. It indicates that organizations should both sell their intellectual property if it does not apply to their business model, as well as buy intellectual property when the external intellectual property fits their business

model. As 70-90 percent of an organization's patents do not get used, this makes perfect sense (Chesbrough, 2012).

Even though open innovation at first was used as a model to orchestrate the sharing of internal innovation processes between two companies, it has changed a lot since 2003. Nowadays the understanding is that one can use open innovation in several steps of the innovation process, involving several different players. "Put simply, designing and managing innovation communities is going to become increasingly important to the future of open innovation" (Chesbrough, 2012, p. 26). The effectiveness of open innovation is not limited to solely a few selected companies. It is a process that makes the use of both external and internal knowledge more effective - in all types of organizations, not just a few selected ones.

3.5 The Three Horizons of Growth

The three horizons of growth is a model based on different research focusing on how companies sustain their growth. It focuses on how the companies are set to manage their current performance, while they maximize their future growth opportunities (McKinsey, 2009). This is illustrated using three different horizons where;

Horizon One represents innovation related to the company's current business model, as well as its core capabilities. It is related to the core business of the company. The focus within this horizon is to improve the company's performance in order to maximize the remaining value of the company (McKinsey, 2009).

Horizon Two is on the other hand related to extending the company's core business and capabilities to new markets, targets or customers. It includes pursuing start-ups that are likely to generate profits in the future, but that might require heavy investments today (McKinsey, 2009).

Horizon Three relates to the creation of genuinely new business. These are business ideas that might give profit in the future, and are nevertheless a response to disruptive opportunities in the market. It is all about creating new capabilities and business (Mckinsey, 2009).

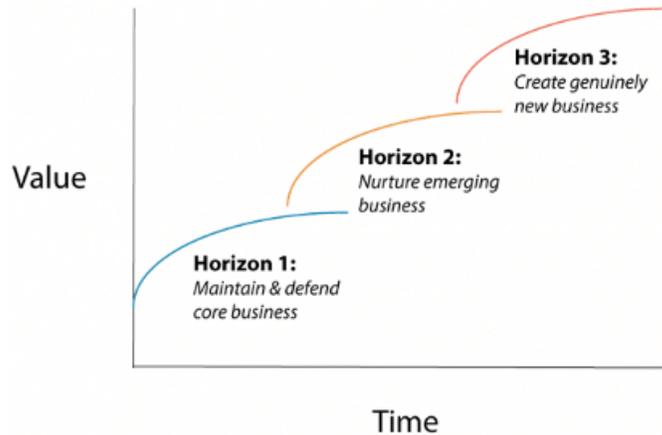


Figure 4: The Three Horizons of Growth (Wright, 2018)

According to Curry and Hodgson (2008), companies should manage their business using all three horizons simultaneously. The x-axis on Figure 4, is therefore not to be seen as at what time one should focus on each aspect of the horizons, but rather as a cycle illustrating how companies' movements are over time. The y-axis is on the other hand representing the value growth the companies might accomplish by using all three horizons at the same time.

It is however important to have in mind that each of the horizons requires different management, focus, goals, and tools (Blank, 2019). The companies must therefore also remember that there must be an allocation of the R&D resources and spendings, across all of the horizons.

3.5.1 The Three Horizons of Growth in the 21st Century

During the last decade, the Three Horizons of Growth model has evolved, and can nowadays be seen as a foundation for innovation strategies. There are however some "(...) fatal flaw[s](...)" involved if using the model as a tool for innovation, flaws that might result in companies lagging behind their competitors, which further might result in loss of market shares and pushing the company out of the market (Blank, 2019).

The largest aspect related to potential fatal flaws, is the time aspect. Managers

have often assigned a set time for each of the horizons, such as for example defining Horizon One as a new feature that has to be delivered within short time (three to 12 months), Horizon Two as extensions of the business model that has to be delivered within 24 to 36 months, while Horizon Three needs to be delivered within 36 to 72 months and involves disruptive innovation (Blank, 2019).

These are all ideas that according to Blank (2019) were accurate in the 20th century, but not in the 21st century. This is because disruptive ideas no longer take years to create, resulting in the time aspect no longer being accurate. Horizon Three ideas (disruptive) can nowadays be delivered at the same time and pace as Horizon One (expanding existing business) ideas.

The Three Horizons model can however be quite useful in the short term to decide what innovation initiatives one is to prioritize, even in the 21st century. There are nevertheless still some Horizon Three disruptions that take a long time to develop and deliver to the market, even though the pace is much higher than before. It is also important to have in mind that several disruptions can be implemented quite fast by using the existing Horizon One technologies in a new way in new business models (Blank, 2019).

3.6 Maximizing Returns on Innovation Investment

Innovation investing is a disciplined process that optimizes all innovation assets. Innovation assets can for example be people, brands, skills, competencies, and technology. In the paper "Maximizing Return on Innovation Investment", the authors ask the question "How does the level of business innovation investment really impact company growth and performance?" (Drake, Sakkab & Jonash, 2006, p.32). The researchers found that there is no broad correlation between the growth of a company and its innovation investment, and they suggest different ways to progress. The findings in this paper were that it is very difficult to determine the return on investment in innovation, and innovation benefits can be slow to develop. It was also emphasized that shifting R&D to the digital world is an important factor in maximizing returns on innovation investments, as it can cut down company timelines greatly. The research findings in the paper supported the belief that the key to successful innovation is to measure growth as a system as opposed to as an output of research. They claim although it is more difficult, it is much more rewarding to measure and manage innovation

investments broadly to drive growth in a company.

Although it may seem logical to assume that investment in innovation guarantees higher returns on average,

a recent Booz & Co. study of public companies representing almost 60% of global R&D expenditures found that above a certain minimal level, there is generally no correlation between R&D spending and financial metrics such as sales or profit growth (Kandybin, 2009, p. 53).

The author claims that how much you spend is less important than where you spend it. The strategy of tacit benchmarking does not seem to always outperform the companies that do not use this strategy. The example used is Apple who spends less than the industry average on R&D, and still comes out with revolutionary innovative and profitable products. The findings from this paper were that careful attention to important criteria is more important than how much is spent. The organic growth correlates with the return on innovation investment, and innovation spending is linked with financial performance (Kandybin, 2009).

According to Kuczarski & Shapiro (2000, p. 1), "A brand asset management study we conducted in 1994 showed that 44% of all managers measured their brand's value and felt that innovation success must be assessed if a company is to grow". The first step of measuring innovation is to identify objectives for measurement. The main objective of measuring innovation is to build upon and improve current products, services, and offerings. It is therefore important to analyze three key areas; process, portfolio, and performance. The first area, process, can be measured using either a tool called the stage-gate flow, or using innovation revenues per employee. Stage-gate flow includes tracking the quantity of product concepts at each stage(theoretically bad concepts are filtered out stage by stage) and therefore the company can "gain a sense of what stage-gate ratio is appropriate and dramatically decrease cycle time. The ratio can also determine the "too strict" and "too soft" filtering criteria" (Kuczarski & Shapiro, 2000, p. 1).

Innovation revenues per employee is the second process measurement tool. When it comes to portfolio measures, the mix in a company's portfolio is important,

as well as balancing expectations. The authors emphasize that for example, if a company chooses to have a portfolio filled with high risk and high reward investments they must also realize there will be expensive losses at times. Comparing past products, current products, and planned products for the near future can help a company understand their portfolio, and plan what is needed.

The final piece is performance. Most companies measure revenue, profit and share for their products, but there is more that one can do. One important part of measuring new product successes is to compare the revenue goal with the actual revenue, by doing this the company can analyze the accuracy of their projections for their products, therefore giving them more precise projections in the future. Finally, it is important to measure return on innovation, this requires sophisticated accounting but gives important measures on successes, failures, and overall direction (Kuczmariski & Shapiro, 2000).

3.7 Fintech

Fintech is the merger of technology into financial processes, products, business models or services. It refers to softwares and technologies that businesses use to provide automation and improved services. An example of financial technology would be the integration of financial services into a phone application in order to do tasks such as being able to transfer funds from accounts (Schueffel, 2017).

Both start-ups and large financial institutions are involved with the development, innovation and integration of Fintech. According to Omreng and Gjendem (2017), within the traditional banking functions Asset Management, Financing, Authentication and Payments, there are nine segments of Fintech, namely innovative savings management, automated investment advice, crowdlending, crowdfunding, digital neobanks, alternative authentication services, alternative payment methods, cryptocurrency, and credit scoring services .

When one thinks about Fintech, the size of a country's population, and how often that population uses banking services are both highly relevant to how many customers are in a bank's potential customer base.

World Bank statistics show that in high-income OECD countries, the average penetration of financial services is 97%. Here, the financial services market is highly saturated, giving very little room

to increase the customer base other than through the population growth rate (Omreng & Gjendem, 2017, p. 17).

Omreng and Gjendem's findings in this thesis were that "(...) the key drivers behind the rapid growth of the Fintech market [are] changing consumer preferences and technology innovation" (Omreng & Gjendem, 2017, p. 2).

Interestingly, start-ups in the Fintech area have recently begun to be able to encroach on the bank's position. They have been able to do this by refining and optimizing specific pieces of the bank's offerings and value chains. They are then able to offer more precisely and rapidly what the consumer needs and wants. As stated by Omreng & Gjendem (2017, p. 11), "as Fintech development increases in quality and proliferation, so does its potential of fundamentally changing banking as we know it".

According to Navaretti et al.(2018), Fintech companies improve the competition within the financial markets, offer services which traditional financial institutions do less effectively, or might not even do at all, as well as improve the amount of users of such services. Regarding the key values the banks offer, Fintech companies will however not replace most of these values. Fintech will instead contribute to making banking more efficient. Still, the banks are perfectly able to adopt new technological innovations, as well as do what they already do in a new way - themselves. Fintech can make access to financial services easier, as well as be able to facilitate new players entering the market as competitors. Fintech nevertheless provides new ways of doing entrepreneurship. The banks that are currently present in the market need to react, face the rising competition, as well as adopt new strategies in order to survive in the market.

As banking involves offering several homogeneous products, where there are heterogeneous customers and a competitive parity, it is to some extent important to have in mind the disruptive effects of new entrants in the market. Entrants such as for example Skype gained 40% of the international market for calls within less than ten years, while Amazon disrupted the market for booksellers and retailers. Both these examples show that the mix of lower costs and higher efficiency combined with new or even better services and products, completely disrupted the market, and those that did not follow, got outcompeted. Even though the examples do not fit the financial industry precisely, it shows how

important it is to have in mind and follow up on new entrants with new digital innovations, in order to avoid the possible disruptive effects that might occur (Navaretti et al., 2018).

4 Methodology

The purpose of this chapter is to describe the choice of method we have used to illuminate our chosen research question, design and strategy. We will also clarify how we proceeded in the interviews, as well as present the reliability and validity.

4.1 Research Strategy

The social science method deals with how one should proceed in order to gather information about the social reality, how the connections should be analyzed, as well as what those connections and information can tell us about social conditions and processes. Academics distinguish between qualitative and quantitative approaches, where a quantitative approach mainly concerns the prevalence of a phenomenon, and a qualitative approach studies human phenomena and meanings, as well as which variables affect each other. What determines the choice of method is mainly what one wants to research, in other words it is determined by the research question which is set for the study (Johannessen, Christoffersen & Tufte, 2011).

Because the findings for this study are expressed qualitatively, the collected results give non-standardised data which requires classification into categories, and the analysis will be conducted using conceptualisation, a qualitative approach was chosen (Saunders, Lewis & Thornhill, 2009).

The qualitative approach was chosen as there has been very little research on innovation within SR-Bank, and because the study requires openness and flexibility (Thagaard, 2009). The use of this approach allowed those interviewed to speak broadly about the research issue, providing us a wider perspective on their thoughts, as well as allowing us as researchers to make sense out of the answers provided by the respondents.

4.2 Research Design

The research design is the overall structure of the research, and considers what one wants to research, as well as who (Befring, 2002). It is the plan one creates for how to face the problem, and comes after the research problem has been formulated (Befring, 2002).

The research design chosen for this thesis, is an exploratory case study, which was conducted using the qualitative approach. A total of 9 in-depth interviews form the basis of the primary data collected, and the findings will be integrated into the analysis and discussion in chapter 5.

The aim of the study is to provide a better understanding of how SR-Bank should work with innovation, and where they should place their resources. The intent is to figure out if the way it is solved now is the most beneficial, or if there is a better way to solve it.

To answer the research question, those interviewed consisted of both respondents belonging to SR-Bank, and respondents belonging to Finstart Nordic. Additionally one of the interviewees is a professor. To gain an understanding of how the employees of the bank feel that they can participate in the innovation processes of the bank, three of the interviews were conducted with employees working as customer advisors in SR-Bank.

4.2.1 How Data is Collected

The data for this project was gathered from a series of interviews. The interviews were conducted over video calls, recorded, and transcribed. We created a code for our interviews using the deductive coding approach to best analyze the data. Because the thesis was conducted with the assistance of SR-Bank, we were able to directly contact the CEO of Finstart Nordic along with other actors directly related to the topic for the in-depth interviews.

4.2.2 Interview Guide

The interview guide was created based on the chosen literature and theories from the literature section of this thesis, and the research questions. We created semi-structured interview guides, where the topics were outlined with questions related to each of the topics. The interviews were non-standardized.

The semi-structured interview type was chosen, as we wanted to allow the interviewees to express their opinions and experiences freely, as well as to follow up on interesting parts of their interviews. We found it useful as several of the interviewees answered some of the questions before they were even asked,

giving us the opportunity to ask follow up questions on their answers. The full interview guides can be found in Appendix One to Appendix Four

4.2.3 Who is Interviewed and Why

We interviewed respondents associated with the Strategy, Innovation and Development department at SR-Bank, one professor from the University of Stavanger, three SR-Bank employees working as customer advisors, and two respondents from the companies within the Finstart Nordic portfolio. By having a variation of interviewees, we believe that we have achieved a variation of relevant dimensions for the case study (Seawright & Gerring, 2008). The interviewees are carefully chosen based on their job and role in the specific companies, both by the researchers, as well as the contact person in SR-Bank, Ramtin Matin.

Two of the respondents were related to the Finstart Nordic portfolio, namely Henry Vaage Iversen from Boost.ai and Sindre Mariero from Justify. These two companies were chosen as they have experienced success, as well as because they have been a part of Finstart Nordic and SR-Bank for quite a while, compared to the rest of the Finstart Nordic portfolio. Both of the companies have also started their journey through Gründerhub. The two interviewees were chosen as they are both co-founders of their respective companies. As one of the goals of the thesis was to figure out whether or not SR-Bank should invest in external Fintech companies, we found these two companies to be the best to interview.

Regarding the respondents working at SR-Bank, we interviewed two employees belonging to the Strategy, Innovation and Development department, namely Ramtin Matin and Vidar Aksland. Three other employees of the bank were also interviewed, but are kept anonymous and will be referred to as *Employee 1*, *Employee 2* and *Employee 3*.

Ramtin Matin was chosen, as it was recommended to us that we speak with him by Vidar Aksland. He was also chosen because he is involved with innovation at SR-Bank, and with some of the companies at Finstart Nordic. A total of two interviews was conducted with Matin; one to get an overview of innovation at SR-Bank, and one to get a deeper insight into the chosen literature.

Vidar Aksland is one of the interviewed experts as he was one of the few people

that facilitated the internal innovation lab, SR-lab, at SR-Bank, and he was also one of those participating in closing it down. Aksland is nevertheless chosen as he is the CEO of Finstart Nordic, and head of innovation and IT-Development in SR-Bank.

To gain a better overview of banking and innovation in Norway, professor Peter Molnar was also interviewed. As Molnar has expertise areas within finance, we believe that his participation gave us a new perspective, and an overview of the prospect of investing in Fintech.

While transcribing the interviews, we chose to use the "intelligent verbatim transcription and translation" level of transcription. This means that we have omitted unnecessary words, such as "uhmm", "hmm", "ehhh", as well as laughter and pauses that occurred during the interviews. Words and sentences that did not seem relevant for the cause are also removed, as well as there has been some light editing to correct some of the sentences. We believe that by using this level of transcription, we have made the quotes more readable, as well as more relevant for the thesis.

4.3 Reliability

While considering the credibility of scientific research, it is important to look at the reliability. Reliability refers to the degree to which one can rely on the results from the research, and whether other researchers would find or reveal similar information (Easterby-Smith, Thorpe & Jackson, 2008; Silverman, 2007). The main reason for discussing the reliability is to reduce the possibility of errors occurring to a minimum, so that the research is as precise and reliable as possible (Befring, 2002).

Reliability is in general easier to measure if one uses a quantitative method, compared to a qualitative method. This is because when one uses a qualitative method, information is often a bit less orderly, and in addition the researchers are the ones responsible for interpretation of the data. It therefore gets more difficult to trace the documentation for the collected data (Johannessen et al., 2011).

As there is some lack of standardisation in the interviews conducted in this

thesis, it might lead to some concerns about the reliability (Easterby-Smith et al., 2008). The following biases has therefore been considered;

The first bias is related to the interviewer and its behavior, namely interviewer bias (Saunders et al., 2009). To reduce the risk of such bias, most of the questions were asked by the same researcher. We have strived to keep the same tone and body language throughout the entirety of the interviews, as well as to avoid unnecessary questions and comments that might have led to the interviewee feeling imposed to follow our beliefs. We are under the impression that we have developed trust from the interviewees, as well as that they see us as credible.

The second bias we have considered is the response bias, which might be caused by the interviewees perception about the interviewer, but it does not always necessarily have to be related (Saunders et al., 2009). To reduce the risk of such bias, all of the interviewees were informed before the interviews about what the purpose of the interview was, as well as what topics we were planning to cover throughout the interview. Even though there was to some extent an unstructured exploration of some of the themes, all of the interviewees knew what topics we wanted to cover and explore. We therefore believe that each of the interviewees has responded as truthfully as possible. It is however important to have in mind that all of the interviewees could, to some extent, have an interest in making themselves and the company they are representing look as good as possible. Being aware of this possible bias, has made us a bit more critical to their answers, and contradictory statements have been checked before used in the analysis and discussion.

The third bias related to the reliability which is considered, is the nature of the individuals who have agreed to participate in the thesis (Saunders et al., 2009). As the interviews required 30-60 minutes, we knew that it could be hard to recruit the individuals we wanted to participate. To avoid this bias, and make sure we obtained data from those we wanted to speak with, we allowed the individuals of interest to set at what time they wanted the interview. As some did not have more than 30 minutes, we reduced the amount of general questions, and focused more on their expert areas. We believe that by using this approach, we have gotten in contact with the right people, and also on their pretenses.

4.4 Validity

The second central concept while looking at the credibility of scientific research, is validity. Validity refers to how well one manages to measure what one is intended to measure or investigate, as well as to what extent the researcher is able to gain access to the interviewees knowledge (Silverman, 2001; Saunders et al., 2009).

As a tool to gain access to the knowledge of the interviewees, one of the interviews was conducted in Norwegian. As Norwegian is the mother tongue of most of the respondents, we decided to have the interview with one of the Finstart Nordic portfolio companies in Norwegian. This was to test if we were to get more information, as compared to doing it in English. The other participants got the opportunity to choose between Norwegian and English as the language of the interview. As all of the respondents had a high level of language skills in English, we are under the impression that having the interview in the interviewees second language was not an obstacle for gaining access to their knowledge. Those that got the option, all chose to conduct it in English.

For qualitative interview studies, such as this study, there is often likely to be some issues regarding the generalisability of the findings (Saunders et al., 2009). To decrease the likelihood of lack of generalisability, we clarified the questions that seemed unclear for the participants, and asked open ended questions which were relevant and well researched. The interviewees got time to fully expand on the questions, and we aimed at asking relevant follow up questions. The meanings of the answers have been probed, and we have aimed at discussing the different topics from various different angles.

This subject and case study has not had previous research done. We therefore found that a deeper understanding of the topic was necessary before statistical generalizations could be made. That being said, semi structured interviews, like the ones we used, cannot be used to make statistical generalizations about the entire banking environment in Norway (Yin, 2003; Saunders et al., 2009).

5 Findings, Analysis and Discussion

In this chapter we will combine the findings from the interviews with the theoretical framework. This is done to check if there is any causality between empirics and literature. The main idea of the chapter is to connect the findings from the interviews with our research questions and the chosen literature.

Before the analysis and discussion, the data collected through the interviews was organized using the theoretical and empirical literature, as well as through using the main research question and the sub-research questions. The intention of doing such was to provide a better structured and intuitive understanding of the findings from the interviews. As this thesis aims to provide an answer to the question; what is most beneficial for SR-Bank, to invest in external innovation and start-ups, or to focus on internal innovation development, or if it is a combination of both, we decided that such a structure worked the best.

5.1 To what extent should SR-Bank use Employee-Driven Innovation as a part of their innovation strategy?

As stated by Kesting & Ulhøi (2010), Employee-Driven Innovation is innovation of processes, services, or products, where the idea originates from employees that are not set to work with innovation. It implies that all employees have hidden capabilities for innovation. Even though it often starts with the employees working at the "floor", it is not solely a bottom-up process, as for the innovation to reach its best potential, several actors within the organization need to participate.

To figure out to what extent it is possible to use more EDI, and to what extent it is being used by now, questions related to the topic were asked to all of the respondents of both SR-Bank and Finstart Nordic.

When asked the question "to what extent should SR-Bank use Employee-Driven Innovation as part of their innovation strategy?", Ramtin Matin responded;

To a greater extent I believe we should do that. Again, we have small initiatives as you mentioned the "idebanken", which I think works very poorly, it is more a type of "we should change the title of the e-mail that we sent out". But having this in a more formal

way where for instance we try to gather and collect ideas, is what I would believe is a much more fruitful way of doing it (R. Matin, personal communication, 3rd of May 2021).

Matin's opinion was also supported by Sindre Mariero, which stated that

The problem is probably, from my perspective, that SR-Bank isolates themselves by having solely a few people in the bank actually working with innovation. So, I believe that SR-Bank's job is to figure out how to facilitate, such that people get to feel that they participate in further development (S. Mariero, personal communication, 8th of April 2021, our own translation).

Henry Vaage Iversen illustrated the use of EDI saying that

If it doesn't take that much time off the organization to actually handle that innovation, I think it makes sense. They typically have their own teams to do these things, so it's not like they have "ordinary employees" in that sense. It is more like you have ordinary employees, but they're in an innovation team which works out these ideas. Especially in banks things are so slow, they don't move fast at all, so it's kind of like a big boat, so you need to have some speed boats on the side as well if you want to do like "quick innovation" (H.V. Iversen, personal communication, 10th of May 2021).

On the question "Do you allow people working in the other departments of the bank to come up with ideas for new innovations or things you should improve?", Vidar Aksland responded

Yes, we have had different levels of handling innovation ideas in the company. We had this "Idebanken" for a while. It didn't work because it was very, very small suggestions of improvements, it was more daily innovation. But we did run a cross-functional innovation team looking into innovation ideas, sorting out the different ideas, giving them priority, a short assessment. So, we had the whole board of innovation ideas, but unfortunately we didn't have the capacity to do it too much at the same time, so we very soon entered into development projects and the people who were supposed to work with the different ideas came into this project on delivery basis, and

then it stopped up for a while. So we still have a lot of ideas, but we don't have the capacity to fulfill them (V. Aksland, personal communication, 22nd of April 2021).

Common for both Matin, Mariero and Aksland was the opinion that there must be some "ordinary" employees having ideas on new innovations. As stated by Matin

I haven't spoken to all of them, but among 1.200 employees I would say that there must be someone who has good ideas, or an idea they want to try out. It's hard to say exactly what that might be, but I definitely think that there's someone who has something they would like to try out (R. Matin, personal communication, 3rd of May 2021).

Mariero therefore believes that the job for those working at the Strategy, Innovation and Development departments, is to facilitate, as stated

I believe that those leading innovation in companies such as SR-Bank, their job is to facilitate, not to come up with the answers themselves. It is to figure out how to bring the good ideas out, and nevertheless learning people to dare to ask the stupid questions (S. Mariero, personal communication, 8th of April 2021, our own translation).

To figure out to what extent the employees of SR-Bank believed that SR-Bank was using EDI, both Employee 1, Employee 2 and Employee 3 were asked the question "To what extent do you feel that you can participate in the innovation processes of the bank?". Here, Employee 1 responded

like the daily kinds of innovations, so I feel like that's like continuously and like in every meeting we could ask if there's something we want to change, if there is something new that could be essential for the firm. So, I think they're really good at asking all the employees, and I also think that since SR-Bank has one firm that has all the SpareBank 1 banks that does all the development for the banks, and it's like a tough process to get through ideas, but if you have ideas you can get them through if you like start by your own, and then you apply to them and they then make the bigger innovations (Employee 1, personal communication, 10th of May 2021).

Employee 1s answer differentiated a lot from the answers from Employee 2 and Employee 3, who both stated that they did not feel they could participate to a large extent in the innovation processes of the bank. The response from Employee 2 was

not too much. Sometimes we do get questions regarding the processes and the systems that we're using, just so we can say our opinion, but nothing more than that, and it's not too often. So it's mostly to evaluate the systems and technologies that we're using now, not so much that we can participate in developing and coming up with new ideas. I suppose you can ask for it, but I feel like they don't give us that much to say about it (Employee 2, personal communication, 14th of May 2021),

while the response from Employee 3 was

to be honest I have no idea. I've never been told how I can participate. I have worked both at the customer center and at one of the branches, and at neither of the places anyone told me how I could participate. They however said that for example if there's something wrong, or something that needs to be changed on the website, for example, I can contact someone at SpareBank 1 Utvikling, but I wouldn't consider that as an innovation. So to be honest I don't feel that I can participate (Employee 3, personal communication, 14th of May 2021).

To follow up on the question on participation, the employees were asked "If you have an innovative idea, do you know how you can realize it within the bank, who to talk to and where to report it?". Also on this question, the response of Employee 1 varied from those of Employee 2 and 3. While Employee 1 responded

yeah, like smaller innovations, we always talk to our leaders and their leaders take it further, or we have like some contact people that work with innovations, or that is like a key partner or a key person that has a direct contact to the people that actually are making the innovations. So I feel like it is easy, if you have an idea you know who to talk to right away, if you have an idea, like that's really good. And I feel like everyone in the bank knows these types of people that can get the job done, and we have like a page called Innsikt, where

all the employees can see everything, and often it is like people write their ideas and the innovation people like write “do you have any ideas for anything”, and like people can share their ideas and stuff they have worked with on themselves and stuff like that, so I think it’s really good (Employee 1, personal communication, 10th of May 2021).

Employee 2 on the other hand responded

I don’t think I know a specific person or way to report it, but I think I easily could have figured it out. But for now, I wouldn’t exactly know who to talk to, to come directly to, the source kind of. It would depend on what kind of topic it was as well (Employee 2, personal communication, 14th of May 2021),

while Employee 3 said

not really. I haven’t been there more than three to four months at once. I don’t really know who to talk to. I know that I can kind of Google it on "Innsikt", but often when you contact someone, it’s often leaders, and they say "no, you need to contact this person or that person", So no (Employee 3, personal communication, 14th of May 2021).

Even though Employee 1, 2 and 3 had contradicting thoughts on how EDI is facilitated in the bank by now, all of them agreed that the bank should use more EDI in the future, as well as that there are some unexplored ideas amongst the workers of the bank. Employee 2, who often teaches new employees, stated that *they* wanted to include how to participate in the innovation processes of the bank in the teaching of new employees. Beforehand, one part must however be told; who to talk to, and where to report it, as it is unclear for both Employee 2 and 3 where they should do such. Employee 1 on the other hand stated that *they* knew both where to report it, as well as who to talk to. To ease "the first step", both Employee 2 and Employee 3 wanted a new solution, resulting in ideas not solely being talked "(...) about in between us and not taken any further" (Employee 2, personal communication, 14th of May 2021).

To decide *To what extent should SR-Bank use Employee-Driven Innovation as a part of their innovation strategy?*, one can use Price et al.’s three orders of EDI.

As previously stated, the First Order is solely bottom-up processes, and the innovations are very subtle and are often not considered as an innovation within the company. The Second Order is on the other hand a mix of bottom-up and top-down processes, where the management of the company tries to systematize and formalize the innovation processes that are initiated by the employees. The Third Order is solely a top-down process where the management encourages the employees to participate (Price et al., 2012).

Based on the interview with especially Employee 1, but also Employee 2 and Employee 3, SR-Bank seems to be good at using the first order of EDI. Employee 1 referred a lot to "smaller innovations", and Employee 2 and Employee 3 expressed that they could come up with ideas for "smaller changes" to make their work day better.

Both the three employees, as well as Vidar Aksland and Ramtin Matin mentioned Idebanken as a previous option where the employees of the bank could suggest new innovations, but as it mostly resulted in "(...) very very small suggestions of improvement", meaning incremental innovation, it has since been discontinued (V. Aksland, personal communication, 22nd of April 2021). Some of the innovations however became substantial, as it resulted in a much easier workday for several of the employees, such as the idea of the digital bank switch form (Employee 1, personal communication, 10th of May 2021).

The main idea of Idebanken could be categorized as a second order EDI, as it was a tool that management created in order to systematize and formalize the innovation processes of the employees. Even though Idebanken did not result in being the best option for encouraging the employees to express their innovative ideas, we believe that a new option is missing in the bank today. Both Employee 2 and Employee 3 expressed that they thought "(...) it would be great if we were encouraged to be more active towards this, and to have kind of a platform where we can go and talk about ideas and everything" (Employee 2, personal communication, 14th of May 2021). An "open door policy", or a larger visibility of who to talk to if one has an innovative idea, could also be an option if a new platform similar to Idebanken is not an option. It is however important to also learn from previous experience, meaning that the management needs to set their definition of what one can consider as an innovative suggestion, and what does not fall under the definition and support the innovation strategy.

Regarding the third order EDI, especially Employee 2 communicated that it would be a great idea to involve the employees of the bank even more in the current innovation processes of the bank "(...) because it's like employees all over the bank, we work with so many different things and customers and systems and everything" (Employee 2, personal communication, 14th of May 2021). Employee 3 mentioned Justify's offering of the "Fremtidsfullmakt" (future power of attorney letter), where several customers were asking if there was an option, but the employee had to say no. A few months later Justify launched it, and it was available for all customers of SR-Bank. This is just one out of several examples that illustrates why the third order EDI needs to be used more in the bank. The employees must not be informed about every new innovation process, but those that tend to affect their workday should be expressed earlier in the process. This could therefore improve the innovation processes, as several of the employees might have ideas on what would benefit both themselves, as well as the customers.

Even though the literature on EDI states that Employee-Driven Innovation does not have to be a part of the organization's strategies or goals, and that it cannot be controlled by the managers of the company, we believe that it should to some extent play a role in the strategy of SR-Bank. As stated by Tidd & Bessant (2014), there is large potential in letting the employees participate in the innovation processes, especially within their expertise areas. Firstly, it is however important that SR-Bank expresses the strategy of the company as understandable as possible, so that all of the employees know what the strategy is and what they are going to work against.

Based on what has been discussed above, SR-Bank is good at using the first order of EDI, but needs a greater focus on the second and third order, as this thesis has determined through the strategic analysis step. There are of course different options for how to use more of the second and third order, but the strategic selection step should look at options such as either to develop a new platform, have an "open door policy", or encourage a larger visibility of who works in the Strategy, Innovation and Development department. The strategic implementation stage therefore involves figuring out what resources the bank will need to facilitate more EDI within the bank.

It is clear that there are people possessing knowledge within the organization that want to participate in the innovation processes of the bank. This is highlighted by both the participants from the Finstart Nordic companies, as well as through the three employees, and through the participants from the management of the strategy, innovation and development department. The desire of employees to be involved in innovation within their company is also supported by literature in the field.

SR-Bank should therefore use more Employee-Driven Innovation as a part of their innovation strategy. Even though they are adept at using the First Order of EDI, they should focus even more on facilitating the Second and Third Order, while also continuing the good work in the First Order. Even though the goal from the employees side is not always an innovation, it can result with innovation being the central outcome, supporting the strategy of the bank.

5.2 To what extent should SR-Bank use Open Innovation as a part of their innovation strategy?

As stated by Chesbrough (2006;2012), open innovation involves organizations using both external and internal ideas, as well as external and internal methods of reaching the market. It implies that companies can use their own internal ideas, but bring them to the market using external channels. Chesbrough also differentiates between the outside-in and inside-out types of open innovation. While the outside-in type involves that the organization opens up its innovation processes for externals to participate, the inside-out involves that the company allows external players to use their ideas within the external players business and business model.

To figure out to what extent open innovation is being used in SR-Bank today, questions related to the topic were asked and discussed with both Ramtin Matin and Vidar Aksland from SR-Bank, as well as Sindre Mariero and Henry Vaage Iversen from the Finstart Nordic portfolio companies Justify and Boost.ai.

Until 2018 SR-Bank had its own internal innovation lab, SR-lab. The intention of the lab was to develop more innovative products and services internally in the bank. Within SR-lab ideas such as a chatbot was developed, as stated by Aksland;

Actually SR-lab had the first prototype on building a chatbot and trying to see how that could impact the call center, but we didn't have the resources to build a chatbot, so we challenged Boost.ai to do that, which they have done very good as you probably have seen, so that has been a very good journey (V. Aksland, personal communication, 22nd of April 2021).

The collaboration between SR-Bank and Boost.ai started after Boost.ai became a part of Gründerhub. SR-Bank saw the potential of the representatives belonging to Boost.ai, and allowed them to have an extended stay in the programme (H.V. Iversen, personal communication, 10th of May 2021). Boost.ai further developed the chatbot for SR-Bank, Banki. This was a result of SR-Bank using the inside-out type of open innovation, as SR-Bank allowed Boost.ai to use their original prototype and idea of a chatbot to further make their own business. This was further highlighted by Henry Vaage Iversen when responding to the question "would you define what you did with SR-bank and Banki as open innovation?", stating that

Yes, that would be the definition of open innovation. At that time we started kind of coding the lines based on their data. So they kind of gave us data, some direction of the problem they wanted to have solved, but not exactly how we were going to solve the problem. And then we went a lot of back and forth with them in order to come up with the product we did in the end. So yeah (H.V. Iversen, personal communication, 10th of May 2021).

Throughout the interviews, we have not found any other proof, besides the collaboration with Boost.ai, that the inside-out part of open innovation has previously been used in the bank. If one were to look at the outside-in part of open innovation, there are however some examples, such as the "Boligassistenten".

The idea of Boligassistenten originated from SR-lab, and became a collaboration between SR-Bank and EiendomsMegler 1. In the process of the development, customer insights were also used. Even though EiendomsMegler 1 is a part of the SR-Bank group, the company is located outside of the business model of SR-Bank, and the collaboration of the Boligassistenten can therefore be seen as an outside-in type of open innovation. The idea originated in SR-lab, but

further elevated to be a process of open innovation using both customers and real estate agents, as well as employees possessing various knowledge internal to SR-bank (V. Aksland, personal communication, 22nd of April 2021).

According to Sindre Mariero (personal communication, 8th of April 2021), to test new products and services together with the customers before it gets launched to the market, is a great tool in order to make a good product. This was also supported by Ramtin Matin, stating that "Yes, we usually do that, and we have done that with the "Boligassistenten" and some other services as well. So I think it's a very good idea and a good way to get feedback from the market" (R. Matin, personal communication, 3rd of May 2021).

Other examples of customers being included in the early stages of the innovation process, is the "elderly bank". As stated by Vidar Aksland;

We were working on a bank for elderly people. We identified that some of the elderly people didn't manage to use the internet bank and the mobile bank. They felt it was too complex, so to meet the customer needs, we made a prototype on a "stripped down" mobile bank, which was really simple to use. The feedback from the target group was superb. Despite expectations from the customer testing and of high interest from the specific, but small segment, we had to cancel the project because a full scale launch of the solution had potential to attract other segments as well, because it was a very simple solution with fewer upselling opportunities, there was a possibility that the solution built to help one group, actually could lead to lost revenue from a larger group of customers. The early stage prototype brought up a very good discussion between the board of directors; is this the right decision to take with the perspective from today's business, or should we take the decision on a corporate level with a longer perspective? The conclusion was that we need to take these decisions on a corporate level, because sometimes we need to disrupt the existing business. So that was kind of a governing rule when we entered into Finstart Nordic, that we need a strategic perspective on what we're willing to do, because sometimes we will have to disrupt the existing business to create new business opportunities (V. Aksland, personal communication, 22nd of April 2021).

In other words, the fact that the "elderly bank" solution was so simple, made it hard for SR-Bank to obtain more upselling opportunities. This leads us to the venture capital arm, Finstart Nordic, in which both Justify and Boost.ai is a part of. In Finstart Nordic the portfolio companies are able to create business which might disrupt the existing business of the bank.

Justify's offering of legal services online, can also be seen as an outside-in part of open innovation used by SR-Bank through Finstart Nordic. Common with Boost.ai, Justify got the opportunity to join Finstart Nordic after their stay at Gründerhub. Throughout the stay at Gründerhub, the representatives from SR-Bank expressed their ideas of what would benefit the bank, as well as Justify, which resulted in Justify modifying their business idea, and starting to offer legal services, such as an online will. The collaboration benefited both, as stated by Mariero

The customer has a need to settle these things, but they don't trust Justify, because no one has heard of Justify, and the bank can't do it themselves, because the bank isn't allowed to do legal consulting. The bank got satisfied customers, and Justify got trust from the customer. And that solved a problem that we could not have solved separately (S. Mariero, personal communication, 8th of April 2021, our own translation).

In the example of Justify, SR-Bank's idea and insight on their own customers' needs for legal consulting, resulted in an open innovation collaboration, which benefited both companies. Justify is also using open innovation as a part of their business model, meaning that they allow externals, such as employees of SR-Bank and customers, to come up with new ideas for further development of the company (S. Mariero, personal communication, 8th of April 2021).

Once Justify launched the future power of attorney letter, which was a result of insights from SR-Bank employees, there were other effects, such as customers who previously did not have BankID, suddenly going to the bank and signing the BankID agreement. These customers solely got BankID because they wanted the future power of attorney letter, resulting in "(...) the bank getting to onboard these people which has refrained from getting BankID and does not have online banking. Finally they start to use it, and that is because there is a service which is relevant for them" (S. Mariero, personal communication, 8th of

April 2021, our own translation).

So, "To what extent should SR-Bank use open innovation as a part of their innovation strategy?". As stated throughout this analysis and discussion, SR-Bank uses open innovation to some extent already. They have, however, mostly used the outside-in part of open innovation, meaning that they have allowed externals to participate in their internal innovation processes. According to Ramtin Matin,

there's a lot of interesting ideas when it comes to open innovation which we could leverage. But again part of the north star, if we knew what we wanted to do, it would be much easier to choose the tools to realize what we want to do (R. Matin, personal communication, 3rd of May 2021).

We believe that there is a large opportunity for the bank to explore more of the inside-out part of open innovation, such as how they did with Boost.ai. As previously explained, there were several good ideas that came out of Idebanken that the bank did not have enough resources to follow up on. We therefore believe that there needs to be a more clear innovation strategy for how to follow up on these ideas, in order to foster more open innovation.

Even though the main idea of Gründerhub is not to "run innovation for the corporate, it's more about taking a position in the society, helping start-ups to build their own units and then company", we do believe that it is important to follow up on the start-ups in Gründerhub as well (V. Aksland, personal communication, 22nd of April 2021). Both Boost.ai and Justify started their journey in Gründerhub before they became a part of Finstart Nordic. The main idea of the hub should still be to facilitate more workplaces in Norway, but we do believe that other Fintech companies relevant for the bank might enter the program in the future. It is therefore important that the facilitators of Gründerhub also report to the management of Finstart Nordic if there are any start-ups that seem to be relevant for further investments.

We would define the use of Finstart Nordic as a tool for open innovation for both SR-Bank, and the portfolio companies. Finstart Nordic allows the portfolio companies to challenge the existing business practices and the routines of the bank. The portfolio companies are external to the bank, and are to some

extent allowed to explore innovative ideas that began internally in the bank. The collaboration between Boost.ai and SR-Bank is probably the best example of how open innovation has been solved, but we believe that the inside-out part of open innovation should be used to a greater extent with Finstart Nordic.

As argued in the analysis and discussion on Employee-Driven Innovation, one option for facilitating more EDI is to create a new platform similar to Idebanken. We believe that by allowing the Finstart Nordic portfolio companies to use the ideas in their business models, the ideas can be seen as resources and opportunities for SR-Bank as opposed to additional costs.

So, in order for SR-Bank to use more of the inside-out part of open innovation, the strategic implementation stage of the innovation strategy involves unused ideas originating from the employees of SR-Bank, being explored even more using the Finstart Nordic portfolio companies. The fact that Boost.ai has been such a huge success, and that they are now expanding to countries such as America, the UK, Germany, and the Benelux, also highlights why SR-Bank should test the inside-out part of open innovation further (H.V. Iversen, personal communication, 10th of May 2021).

To summarize, SR-Bank should use open innovation to a greater extent as a part of their innovation strategy. We believe that they are good at using the outside-in part, using both customers and Finstart Nordic. The bank should however focus even more on the inside-out part of the open innovation. Allowing current or new Finstart Nordic companies to use the ideas originating from employees of the bank is a great tool to further use this part of open innovation, without risking clever ideas getting thrown away due to a lack of resources in the bank. To foster more open innovation, Finstart Nordic is essential, and as stated by Sindre Mariero

SR-Bank is good at very much of the traditional banking business, but I believe it is dangerous for the bank to move into revolutionizing everything themselves. But such as in the collaboration with Finstart, finding players which have a driving force within a relevant area for the bank, and collaborating with them, I believe they can succeed greatly with. You don't necessarily have to create it yourself (S. Mariero, personal communication, 8th of April 2021, our own

translation).

5.3 Which of McKinsey's Three Horizons of Growth should be used for internal innovation development, and which should be used for investing in external innovation and start-ups?

According to McKinsey's Three Horizons of Growth model, Horizon One is to maintain the core business, Horizon Two is to nurture emerging business, and Horizon Three is to create genuinely new business (Mckinsey, 2009). According to Ramtin Matin (personal communication, 2nd of February 2021), Horizon One and Two can both be conducted internally within the bank, whereas Horizon Three is best done externally, by Finstart Nordic. This aligns with the current strategy at SR-Bank, and is also highlighted by Sindre Mariero.

Through the interviews and via the annual reports, it has become clear that the current innovation strategy of SR-Bank combines a small internal innovation team with a fund, managed through Finstart Nordic, which finds innovative start-ups and invests or acquires them in order to make lucrative investments, but also to incorporate the innovations into the bank. Incremental innovations are mainly done through SpareBank 1 Utvikling and the internal innovation team.

A general business development innovation would be an example of a Horizon One innovation. The main task of the internal innovation team is, as put by Ramtin Matin, "to support the two business units of the private retail market and the corporate market in succeeding in their value proposition overall" (R. Matin, personal communication, 2nd of February 2021). This aligns well with what Horizon One would consist of. The development of the new CRM system, as stated through the annual reports, is also a result of a Horizon One innovation, where the performance of the company was drastically improved.

An example of a Horizon Two innovation would be Justify, which is partially owned by SR-Bank. With Justify, the customer can create a testament, cohabitation agreement, or a future power of attorney letter, through their mobile device. As previously stated, the offering of Justify's services made customers who previously did not have a BankID, get it, solely because they wanted Jus-

tify's services. Justify solved a problem which SR-Bank had been trying to solve for many years, making them the first Norwegian bank to offer legal services through online banking (S. Mariero, personal communication, 8th of April 2021).

In general, the activities of Finstart Nordic could also be an example of Horizon Two innovations. Even though the idea of Finstart Nordic is to create genuinely new business, some businesses they invest in will not always fit into Horizon Three. Finstart Nordic could therefore be placed in between Horizon Two and Horizon Three. Horizon Two also includes extending core business to new markets or customers, which is a part of the responsibilities of the internal innovation team and of SpareBank 1 Utvikling.

Regarding Horizon Three innovations, the Finstart Nordic company Monner is a great example. Monner is fully owned by SR-Bank, and has created genuinely new business for SR-Bank, as SR-Bank now offers comprehensive services for start-ups through Monner. The market of start-ups is a market which SR-Bank previously did not reach. Another example of a Horizon Three innovation, is mCASH, which merged with Vipps in 2017. Through Vipps, SR-Bank, together with the other banks, created a new business, where the customers could transfer money for free through a mobile application. Another innovation that could be considered a Horizon Three innovation, would be Boost.ai's chatbot, as it was a result of disruptive opportunities in the market, and the collaboration has resulted in SR-Bank possessing new capabilities.

According to Matin, it would be difficult for Employee-Driven Innovation to work in Horizon Three of the McKinsey Model. He does not believe it would be easy for them to create completely new businesses given the restraints there are in the organization. He claimed

it's much easier for us to work within defending our core business. For instance if we wanted to launch a new Visa Card, it is very easy for us to do that because that is our core business. We could just launch a new Visa Card that tracks all your carbon footprints or something. It's relatively easy compared to Horizon Three. So to the question if we do that in SR-Bank, yes we do a lot I would argue. Leading the processes and making sure we nurture the process, we're very good at that. We do some Horizon Two, nurturing emerging

business or adjacent areas. Horizon Three we kind of realized that's not going to work, we can't do that, so we created Finstart Nordic to do that. Because we want people from the outside to help us create new business (R. Matin, personal communication, 2nd of February 2021).

His commentary on the subject was that there was a best case scenario and balance between the external and internal innovation management options in relation to the three horizons of growth.

When speaking about the reason that Horizon Three works for external partners like Finstart Nordic, Ramtin Matin stated it was because

the Finstart companies, they're not handcuffed in the same way that we are in in the bank, because we need to comply with rules and regulations, we have a big machinery that we need to take into account when we produce new products or services, which obviously creates a inherent complexity on how we can create stuff or make new innovations. But the Finstart companies I believe are a bit more free when it comes to developing products and services, which is also why the established incumbent banks go in that direction by creating venture capital funds and stuff like that (R. Matin, personal communication, 3rd of May 2021).

When describing how the internal culture relates to why the horizons are carried out the way they are, it appears to be related to the management of SR-Bank, as stated by Matin

I can't just go to the board of directors and ask for 10 million kroner because I'm not going to get that. But if I start my own company saying I'm going to do the new AI stuff, then it's easier for me to go out and find the capital to do that (R. Matin, personal communication, 2nd of February 2021).

Matin also made points about Horizon Three, and how due to its disruptive nature, its relationship with the core business and external collaborators is unique. About this, he stated

you could say that the external innovation, the way that it is today is mostly completely disruptive innovations. So, the further you go

from the core business, the more disruptive it gets. And inherently it becomes what we do in Finstart Nordic, while day-to-day innovations is what we do internally in SR-Bank. But I think it's important to also understand that these are not mutually exclusive (R. Matin, personal communication, 3rd of May 2021).

In the literature section on Maximizing Returns on Innovation Investments we addressed the concept that not all investment in innovation pays off directly or fruititiously, and that the management of such investments is critical. We also pointed to papers that claimed that it is very difficult to determine what the return will be in innovation investments. This is an important group of concepts and theories in relation to the questions surrounding SR-Bank, and their decisions, as it highlights that the decisions surrounding innovation investment are extremely individual and personal to the investment individual.

When we interviewed the interviewees we touched on how SR-Bank maximizes their return on innovation investment, and makes those decisions. It turns out it is closely related to the Three Horizons of Growth model, and the belief that the closer to the core of the business; the better internal innovation is, and the more radical; the better external innovation is.

On the other side of the scenario are the portfolio companies which must also make decisions about which investments to accept, and what type of partner they would like to have. When Henry Vaage Iversen from Boost.ai was asked why they chose to have SR-Bank as an investor, he said;

I think the reason we said yes to SR-Bank is because they are a regional bank. If they were DNB we would probably say no, but since SR-Bank is not competing directly with that many banks I think it was ok for us to do that. But obviously we needed the money in the early days, so getting the seed funding was obviously crucial for us to hire more people, but it was also kind of a consideration in terms of having one of your clients and then also a bank as the owner. So it wasn't a straightforward decision, but it was a good decision obviously in the end, but it was not an easy decision (H. V. Iversen, personal communication, 10th of May 2021).

Henry Vaage Iversen's response was also supported by Sindre Mariero, who stated;

we said yes, because it wasn't SR-Bank. There were other players in which was interested, investing companies, typically banks such as SR-Bank or DNB, and that type of players. Finstart stands out quite a bit, and David Baum, who was the leader then, was very clear that they aren't the bank. They put our interests before the interests of the bank, while they also have a goal that the investments should benefit the bank as well. That means that we must deliver something that is relevant for the bank, or the customers of the bank, but it is the interest of Justify that comes first. The fact that we should grow, not firmly lock ourselves to solely cooperating with SR-Bank, for example, we wanted to have an openness, so that we could deliver our services to all the banks in Norway, and there is no veto or conflict of interest between us and the investors on that, and that was important for us (S. Mariero, personal communication, 8th of April 2021, our own translation).

By using Finstart Nordic, SR-Bank has been able to create some distance between themselves and the portfolio, allowing the portfolio companies to grow further in Horizon Three of the Three Horizons of Growth Model. Both our company contacts had similar experiences and reasons.

As described in the earlier part of this thesis, SR-Bank previously had an internal innovation lab. At that time most innovation was done internally. According to Vidar Aksland

they [the board of directors] started strategic research by themselves with some universities in the US, MIT for example, and they also visited some VCs, venture capital units in Germany and the UK and saw how we could succeed with a combination of venture capital and start-up factory unit. So we decided to take down, or close down the lab and start up Finstart Nordic as a combined operation of investment unit and a start up factory (V. Aksland, personal communication, 22nd of April 2021).

When these steps were taken, the bank reevaluated and repositioned the innovation unit and its goals to what they are now, which fit into the Horizon One of the Three Horizons of Growth model;

the innovation unit was then positioned more as an internal innova-

tion unit with less disruptive technology closer to the business units to try to develop strategic value in combination with the business units. So it's still an innovation unit, but not only working on the radical side of innovation, more closer to the business (V. Aksland, personal communication, 22nd of April 2021).

So, "Which of McKinsey's Three Horizons of Growth should be used for internal innovation development, and which should be used for investing in external innovation and start-ups?". As illustrated in the analysis above, SR-Bank has worked in the different horizons of the Three Horizons of Growth model at different times throughout their history. They have maximized their productivity in the structure they currently follow, which we have categorized here as an internal innovation team that works close to the business within Horizon One, which is maintaining the core business; and Finstart Nordic as an external innovation arm that works within Horizon Two and Three.

Horizon Two is the area with the most overlap. The call for high capital investment that Horizon Two tends to call for, lends itself to be more likely to be outsourced to Finstart Nordic. The time periods usually associated with the horizons may also be an aspect to why this current dynamic works. The Finstart Nordic portfolio companies are given more autonomy, and that can come with more time to work on new business, whereas the internal team projects have average timelines of about 6 months, which aligns with Horizon One (R. Matin, personal communication, 3rd of May 2021). That being said, as shown in the literature section, the difference in timelines between the Horizons is getting smaller and smaller. This is therefore a minor reason, yet still valid.

In the discussion on Open Innovation, the example of the elderly bank was touched upon. In that scenario, the product was not brought to the market, as SR-Bank saw that the product had no upselling opportunities. This is an example of why, although the internal innovation team can bring value in many ways, such as being closests to the business and customer needs, the exterior partners can operate more freely with the need to create profit for the bank, but also for the product itself to be successful. This also highlights why it is important that Horizon Two and Three innovations should, to some extent, be done using external start-ups.

As stated in the discussion on Employee-Driven Innovation, SR-Bank did not have enough time and resources to follow up on all the ideas from Idebanken, and the suggestion was therefore to follow up on some of the ideas through Finstart Nordic. The ideas related to Horizon One were however to some extent used more. The suggestion on following up the employees ideas through Finstart Nordic, therefore also highlights why Horizon Two and Horizon Three is best done externally, while Horizon One can be done internally.

If the way of using Employee-Driven Innovation at SR-Bank continues to be governed as it currently is, these horizons are placed correctly to the model and what the team's capabilities are. However if the bank ever wanted to change the use of EDI to include more radical innovations from employees, this would shift both teams into Horizon Two and Three areas. One of the arguments against this would be that Horizon One is still very important and absolutely necessary, and hiring people to specialize in the horizon and work close to the business is efficient. It could also be said that the internal team guides what happens in Horizon Two or Three when they notice gaps. In addition the bank would need to use many additional resources to begin to pursue employees' suggestions on Horizon Three ideas, which would be very costly.

The suggestion for SR-Bank is therefore to use Horizon One almost entirely for internal innovation development, and through SpareBank 1 Utvikling. To make a better use of the ideas originating from the employees, it is essential that Horizon Two is a combination of investment in external innovation and start-ups and internal innovation development. Horizon Three is on the other hand best used through external start-ups, as one can therefore avoid path dependence.

6 Conclusion

6.1 Conclusion

In this thesis, the goal has been to study, evaluate, and determine *What is most beneficial for SR-Bank; to invest in external innovation and start-ups, or to focus on internal innovation development? Or is it a combination of both?*. To assess this, interviews with relevant subjects and pertinent theoretical and empirical literature have been utilized and analyzed.

In regards to the first sub-research question, *To what extent should SR-Bank use Employee-Driven Innovation as a part of their innovation strategy?*, we found that SR-Bank is adept at using the first order of EDI, but that there are improvements that can be made within the second and third order. The suggestion was therefore to develop a new portal for employees to come up with innovative ideas, establish an open-door policy, inform the employees on new innovation processes earlier in the process (if possible), and encourage a larger visibility of those who work in the Strategy, Innovation and Development department to the rest of the employees. To summarize, SR-Bank should therefore use Employee-Driven Innovation to a greater extent as a part of their innovation strategy.

In regards to the second sub research question, *To what extent should SR-Bank use Open Innovation as a part of their innovation strategy?*, we argued that the bank should use more of the inside-out type of open innovation. They are already quite skillful at using the outside-in type of open innovation, but should, to a greater extent, use the internal ideas originating from EDI to collaborate with external partners. By using the inside-out type of open innovation to a greater extent, the resources put into the ideas originating from EDI, will therefore not be seen as spillovers.

In the third sub research question, *Which of McKinsey's Three Horizons of Growth should be used for internal innovation development, and which should be used for investing in external innovation and start-ups?*, we evaluated the current strategies at the bank, and showed where they conduct different parts of their innovation process according to the Three Horizons of Growth model. As previously stated, Horizon one includes incremental innovation and maintain-

ing the core of the business, Horizon Two includes nurturing current business or emerging business, while Horizon Three includes disruptive innovations or completely new business.

The firm takes the approach to conduct Horizon One type innovations internally, Horizon Three externally, and Horizon Two as a mixture of both. Although we, in the Employee-Driven Innovation section, recommended an enhanced process for encouraging and implementing innovation for internal employees; overall, this strategy aligns with our recommendations, and optimizes the investment that SR-Bank makes in innovation. This strategy allows the teams internally to specialize, and the external Finstart Nordic companies to take necessary freedoms and risks. The conclusion is therefore that SR-Bank should use Horizon One for internal innovation development, Horizon Three for investment in external innovation and start-ups, and Horizon Two as a combination of both.

Overall, we would argue that SR-Bank needs to collaborate with external Fintech companies, using open innovation. These companies can be used as a tool in the strategic analysis step to figure out where to innovate. This is supported by the strategic selection step, as one then spreads the risk across different projects, and there are thus several opportunities to explore in the Fintech environment. With regards to the strategic implementation step, we believe that the resources needed for new innovations are within the company beforehand, but to get a hold of the resources, EDI needs to be implemented at a greater extent.

As discussed in the literature section on Fintech, it is a field where banks can find ways to benefit from the Fintech start-ups that would otherwise be seen as competitors to some extent. SR-Bank has found such a symbiotic relationship with their investments in Fintech, and we believe they are a good example of how banks can handle Fintech start-ups and customers who expect the latest technology.

A combination of investing internally and externally is optimal for SR-Bank. This combination allows them to take advantage of lucrative investing opportunities with companies whose products align with the bank's needs. It also allows for an internal team to specialize in what they do, and remain committed to both designing the innovation strategy, which leads to what types of start-ups

the bank will invest in, and manage the Employee-Driven initiatives internally. This strategy also gives those working externally on the innovations that the bank is passionate about, the autonomy and freedom needed to be innovative. Additionally, there are financial incentives. When the bank invests externally there is a plan that the investments will make a return.

In summary, our research found that the combination of both investing in external innovation and start-ups, in addition to investing in internal innovation development, is optimal. However, there is a hierarchy of importance and necessity which is based on budget and resources. Although the venture capital model might have had higher financial returns compared to the internal innovation lab in the SR-Bank case, it does not have the internal relationships within the corporate which are necessary, and that can be found in the internal innovation team of the bank. The conclusion based on the case study, is therefore that a combination of both internal and external innovation development is the most beneficial for SR-Bank.

6.2 Future Work

A major deficiency of this data set is that it is applicable to a specific period of time, and over years would have to be built upon to stay relevant. A second weakness of the study would be that a larger quantity of interviews and data would be superior, however given our time frame, we gathered and analyzed the data we found most relevant for one specific case study focusing on SR-Bank. We limited our study to one bank in order to have a focus. However, if given more time, future researchers could expand upon this study to include other banks. In-depth research across many banks could uncover recommendations for the banking industry and innovation strategies. Future research could also include categorizing at which point a budget is large enough to warrant a venture capital arm in addition to an internal innovation arm, as opposed to solely focusing on the internal innovation development.

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Appendix One: Interview guide Strategy, Innovation and Development department employee

- What is your role at SR-Bank?
- Could you tell us a bit about the department as a whole, and its goals?
- What type of knowledge would you say that your department possess?
- Do you think that the knowledge that your department possess varies from the other departments of the bank? If so, what is the difference?
- How much do you invest in your own R&D?
- How do you feel that you can participate in the innovation processes of the bank?
- What would be a time frame from conception of an idea to implementation?
- How do you view your involvement with Finstart Nordic?
- How would you compare the innovations that your department has been leading, as opposed to the Finstart Nordic companies' innovations?
- Is there an open environment that encourages innovation and participation in SR-Bank?
- Are there any gaps in which innovation could be fostered? If so, what is missing?
- Do you think that there are any unexplored innovation ideas among the other employees of the bank that does not work within your department?
- To what extent should SR-Bank use Employee-Driven Innovation as part of their innovation strategy?"
- Do you have any thoughts about what other than "Idebanken" that could foster more Employee-Driven Innovation?
- Do you think that there are any other unexplored innovation possibilities for the bank, besides what is internal to the bank?
- Do you think you should include the customers more in the innovation processes of the bank?

Appendix Two: Interview guide Finstart Nordic companies

- Explain the history and development of your company. How far along were you when you joined Gründerhub, and further Finstart Nordic?
- What type of knowledge did the original team have?
- What made you agree to have SR-Bank as an investor as opposed to other investors?
- Do you think you would have agreed to join Finstart Nordic and have SR-Bank as an investor if they would not have allowed you to sell your product/service to others?
- Do you feel like being a part of a collaborative benefits you in any way?
- How "hands on" has SR-Bank been?
- Do you allow external players in the market to participate in the innovation processes? Players such as for example competitors or customers.
- Do you have any experience of external partners participating in the innovation process?
- How does your product/service benefit SR-Bank?
- Where would you be if you hadn't been a part of SR-Bank and Finstart Nordic?
- Do you think SR-Bank could have come up with the innovations from Finstart Nordic themselves? Why, why not?
- To what extent do you think SR-Bank should use Employee-Driven Innovation as part of their innovation strategy?

Appendix Three: Interview guide SR-lab leader

- Could you start by explaining your role at SR-Bank?
- Could you describe the innovation lab, SR-lab?
- Why did the lab start, and when?
- What was your role at SR-lab?
- What came out of SR-lab?
- Were there any innovations which were a result of ideas originating from any of the employees? If so, did they work at the strategy, innovation and development department, or any other department?
- Did you allow external players in the market to participate in the innovation processes? Players such as for example competitors or customers.
- Why did the lab close, and when?
- Do you think Finstart Nordic is the best solution for replacing the innovation lab?

Appendix Four: Interview guide SR-Bank employees

- What is your definition of innovation?
- To what extent do you feel that you can participate in the innovation processes of the bank?
- If you have an innovative idea, do you know how you can realise it within the bank? Who you need to talk to or where you should report it.
- To what extent do you think SR-Bank should use more Employee-Driven Innovation?
- Have you ever seen a fellow employee's idea get elevated to the point of implementation?
- What do you think would be a better way to foster more Employee-Driven Innovation, instead of Idebanken?