Linnæus University
Sweden

Master thesis

Acquisitions vs corporate-startup collaboration: corporations quest to be more innovative.

A case study on the advantages and disadvantages of startup acquisitions and startup collaboration

Author: Ludvig Andersson and Vera Vergeer
Supervisor: Soniya Billore
Examiner: Viktorija Kalonaityte
University: Linnaeus University
Term: Spring semester 2023
Subject: Innovation
Level: Master

Linnæus University

Sweden

Linnæus University
Sweden

Abstract

In recent years, startups have become frontrunners of innovation. Large corporations today are trying to keep up with startups but are falling behind due to long bureaucratic processes. In order to keep up with the startups, corporations collaborate with startups through accelerator programs and acquisitions. The purpose of this study is to understand the decision making process corporations go through when they decide to interact with startups to reach their innovation goals. The study has used a qualitative research approach in the form of a multiple case study to look into the decision making process of larger corporations. Three corporations of various sizes have been interviewed with a total of 5 respondents. The gathered empirical data was analyzed through inter organizational relationships, open innovation and a conceptual framework.

The empirical data in this research displayed that companies use a mixture of strategies, including internal R&D, acquiring startups and corporate-startup collaborations, to reach their innovation goals. These alternatives are evaluated based on factors such as financial gain, feasibility within the organization, and input from different stakeholders, including experts within the relevant fields. Companies are aware of the risks involved, but are willing to take in order to remain competitive, avoid losses and stay innovative. They furthermore tend to choose multiple alternatives to spread their chances for gaining innovative ideas, in order to avert loss and diminish sensitivity. Ultimately, the companies use startup collaborations to minimize losses when acquiring startups, to stay ahead of their competitors, and to help them remain innovative as they grow.

Key words

Corporate-startup collaboration, startup acquisition, innovation, decision making

Acknowledgments

We would like to thank the organizations that took their time to help us with our thesis. Without them it would not have been possible. We would also like to thank our examinator, Viktorija Kalonaityte and supervisor, Soniya Billore for giving us valuable feedback during the entire process. Lastly we would like to thank our thesis discussion group who has helped us with feedback and suggestions.

Table of Content

Appendices

Figures

1 Introduction

The introduction chapter introduces the topic of this research with a background and problem discussion. The background and problem discussion lead to a research purpose and research questions. Lastly, a research outline is given that summarizes the performed research and describes the upcoming chapters.

1.1 Background

In recent years, startups have become frontrunners of innovation (Bruse, Böhmer and Lindemann, 2016). The digital transformation, among others, has changed the industrial market (Kupp, Marval and Borchers, 2017). This transformation has made it easier for startups to compete with corporations. "*Startups are often able to develop and produce niche products at a significantly lower price because of the lack of legacy infrastructure and bureaucratic processes"* according to Kupp, Marval and Borchers (p. 47, 2017). Startups have even become more inclined to initiate innovation than slow-paced large corporations (Bruse, Böhmer and Lindemann, 2016; Urbaniec and Zur, 2020). The competitiveness of the markets has risen due to the new players. It has increased the necessity for companies to become more agile and innovative. Startups are often more agile than large corporations, while corporations have resources startups can only dream off (Weiblen and Chesbrough, 2015). Bruse, et al. (p.1, 2016) even state that "*the previous advantage of large research and development departments with an extensive financial background and much experience in the market that only a large company can offer, has less effect than before*". Additionally, corporates are having a harder time employing young talents as these talents now tend to join startups rather than big corporations (Kupp, Marval and Borchers, 2017).

The business approach of startups and corporations are distinctively different from each other but they both need and want what the other has (Weiblen and Chesbrough, 2015). Established corporations dedicate most of their time and resources to the exploitation of existing assets (Gutmann and Lang, 2022; Bruse, et al. 2016). This means that corporations focus on increasing production efficiency, standardization, routinization and cost reduction. A corporation's focus of serving existing customers and their needs with process optimization in order to make as much money as possible, makes innovation, reinventing the organization and creating new products or services a difficult task (Gutmman and Lang, 2022). Meanwhile startups focus mainly on exploration. Startups are often founded due to new products or services (Bruse, et al. 2016). Their main goal is to develop and market these innovative products through research, inventions and building of new capabilities. Once the startup is successful and growing, the attention is often switched toward exploitation and process optimization. The business approach is not the only difference between startups and corporations. They both have different resources. Large corporations often have scale, power, routines needed to run a proven business and capital (Weiblen and Chesbrough, 2015). Startups on the other hand have innovative ideas, new technology, organizational agility and freedom to take risks (Kohler, 2016). Combining the characteristics of corporations and startups can lead to innovation. Corporations reaching out to startups to either collaborate with them or acquire them has become a popular strategy for innovation (Weiblen and Chesbrough, 2015).

Mergers and acquisitions are a strategic tool to combine different organizations (Johnson et al., 2017). A merger is a type of collaboration in which two separate companies fuse together to form a new company (Johnson et al., 2017; Marcus and van Dam, 2019). Merging companies are often similar in size and have an equal status in the merge. They therefore decide together on the goals and processes of the newly formed company (Marcus and van Dam, 2019). During an acquisition, on the other hand, the two companies are not equal to each other. One company takes control of another company by purchasing a majority of the shares of the other company (Johnson et al., 2017). The acquired company is absorbed by the bigger company and conforms itself to the goals and objectives of the acquiring company (Marcus and van Dam, 2019). Corporations can use a merger and acquisition strategy to gain new market shares, increase products or services, gain new customers and resources, expand distribution channels and get access to new technology (Fridfinnsson & Stefansson, 2019). Mergers and acquisitions (M&A) are today a big part of companies' growth and securing market shares (Faulkner et al., 2012). M&A is, however, a complex method for market growth and achieving success (Papadakis and Thanos, 2010). M&A require a long time frame and a big initial investment. It is, therefore, mostly used by larger corporations. In 2019 Amazon, Facebook, Microsoft, Google, and Apple bought 21 smaller companies (Moraga-González et al., 2022).

Corporate-startup collaborations is a phenomenon where corporations work together with startups to create innovation. The ability of startups to understand new market knowledge about customers' expectations and industry trends, and identify innovative projects, is an attractive attribute for corporations to initiate corporate-startup collaborations (Urbaniec and Zur, 2020). An additional advantage of collaborating with startups rather than buying them is the lower level of investment and faster development of new products or services (Weiblen and Chesbrough, 2015). Corporates can make small investments in several startups, diversifying the risk of corporate investment in innovation and allowing to scan a variety of markets and business opportunities (Kupp, Marval and Borchers, 2017).

In summary, startups are innovative in nature (Bruse, Böhmer and Lindemann, 2016) while corporations are struggling to remain agile, innovative and attract young talents (Kupp, Marval and Borchers, 2017). Corporates and startups are furthermore distinctively different from each other, both in terms of business approaches and resources (Weiblen and Chesbrough, 2015). Combining the characteristics of corporations and startups can lead to innovation. Corporations reaching out to startups to either collaborate with them or acquire them has become a popular strategy for innovation (Weiblen and Chesbrough, 2015). Two strategies corporates can use to utilize the innovative nature of startups are mergers and acquisitions, and corporate-startup collaborations.

1.2 Problem Discussion

"*Innovation involves the conversion of new knowledge into a new product, process or service and the puting of this new product, process or service into actual commercial use."* (Johnson, et al., p.317 2017) Corporations want to be innovative because there is overwhelming evidence that innovation can cause significant payback for the company that implements innovative ideas in the design of their products, processes or services (Slack, Brandon-Jones and Johnston, 2016). Innovation can play a significant role in the existence and continuation of a company. The traditional approach of corporations to be innovative is to rely on the corporation's own internal resources and R&D departments (Johnson, et al., 2017). Corporations however are now also moving towards a more open form of innovation which can involve the deliberate import and export of knowledge by an organization in order to enhance its innovation (Johnson, et al., 2017). This can be done in several ways, of which interaction with startups is one of them.

When deciding on an innovation strategy, corporations do not only need to decide on interacting with startups to be more innovative. They also have to make decisions on how that interaction should look like. On the one hand, mergers and acquisitions have long been a popular strategy for corporations to extend their knowledge and acquire innovative ideas (Johnson, et al., 2017). On the other hand, the newer strategy of corporation-startup collaboration has gained popularity in more recent years (Bruse, Böhmer and Lindemann, 2016). Extensive research has been conducted into the phenomen mergers and acquisitions. Haucap, Rasch and Stiebale (2019), among others, investigate the increased merger wave and the effect it has had on the medical sector. Additionally, research into the effect mergers and acquisitions have on the firms directly involved has been performed by Ornaghi, 2009; Guadalupe, Kuzmina, Thomas, 2012; Bena, Li, 2014; and Szücs, 2014. There is however little research available on how mergers and acquisitions may affect innovation and the decision making process behind it.

Several articles are published on the phenomenon of corporate-startup collaboration by, among others, Gutmann and Lang (2022) who describe how the process of corporate collaboration with startups should be built up, from preparation all the way to outcome; Kupp, Marval and Borchers (2017) who look into corporate accelerators; Kohler (2016) who offers in his article a framework for understanding the design dimensions and identifies common patterns for designing effective corporate accelerators, and Weiblen and Chesbrough (2015) who looked into the different types of corporate-startup collaborations.

Thus existing literature focuses mainly on how corporate-startup collaborations should be designed and why corporations are attracted to corporate-startup collaborations. Moreover, there is a lot of research done into the field of mergers and acquisitions and why corporations are attracted to these methods.

Academic literature does not yet go into the decision-making process of choosing which interaction with a startup is most beneficial for corporations to reach their innovation goals, and what factors affect this decision making process. Weiblen and Chesbrough (p.88, 2015) mention that "*Executives in charge of corporate innovation are well advised to review their ways of working with startups and take them to the next level*". They underline the need for understanding the decision-making process of corporations.

To the best of the researchers' knowledge there is no literature available that compares both methods and looks into why corporations prefer one method over the other. No information could be found that guides corporations in their innovation process in which the knowledge from startups is utilized.

1.3 Purpose

The purpose of this study is to understand the decision making process corporations go through when they decide to interact with startups to reach their innovation goals. Part of this understanding is uncovering the challenges corporations might face in their efforts to interact with startups. The decision making process is not simply deciding on interacting with startups but also about the form of this interaction. The reasoning of corporations when choosing between acquiring startups or collaborating with startups is of significant importance within the decision making process.

This study will expand the already existing literature by researching the decision making process of corporations when they decide between acquisitions or corporate-startup collaborations as a strategy to be more innovative, as well as suggesting a framework for corporations that can help them to decide if they should use startup acquisitions or startup collaboration to reach their innovation goals. Thus the study has both a theoretical and practical component. The theoretical part involves the understanding of the two innovation strategies, acquisition and corporate-startup collaboration, and the development of a decision making model. The practical component of the research involves testing and improving the decision making model with a case study.

1.4 Research Question

- *What does the decision making process of corporations look like when deciding to engage with startups in order to be more innovative?*

1.5 Research Outline

The study will use a qualitative research approach in the form of a multiple case study in order to answer the research question mentioned above. Data has been collected with semi-structured interviews and from corporate websites, news articles and press releases . In the following chapters, a theoretical framework will establish the foundations of the research. This will help with understanding the topic and with the creation of interview questions. Thereafter a description of the methods applied will be given. Afterwards the collected data will be presented and analyzed. Lastly, the outcomes of the research are presented as well as a framework that can be used by corporations for future decision-making.

2 Theoretical Framework

The theoretical framework lays a theoretical foundation for this research. The chapter will give an overview of the existing literature on inter-organizational relations, rational decision-making , corporate acquisitions, and corporate-startup collaboration. This theoretical framework will be used to establish what theories exist and what the relationship is between them (Saunders, Lewis and Thornhill, 2019). The theoretical framework starts with explaining what corporate acquisitions and corporate-startup collaborations are. Thereupon, inter-organizational relationships are explored to see how acquisitions and collaborations might fit into those relations. Open innovation within inter-organisational relationships is discussed is discussed; this will be used later in the study to determine if this new way of creating innovative solutions influences corporations' decision-making process regarding interaction with startups. Lastly, decision-making theories are explained which can be used later in the study to understand the decision-making process of the researched corporations and its role in corporate-startup interactions.

2.1 Corporate Acquisitions

Mergers and acquisitions (M&A) as a term, covers everything from financial transactions between companies, consolidations, purchasing of assets, mergers, and acquisitions. Mergers and Acquisitions have different meanings and should not be used interchangeably (Ikhtiar, 2022). A merger is when two corporations, comparable in size, join forces to create a new organization. Instead of being two separate corporations, they function and act as one. An acquisition is when an organization buys another organization and takes it over completely.

2.1.1 Acquisition Incentives

Hubbard and Purcell (2001) provide an extensive explanation on the different incentives companies can have to use an acquisition strategy. They have sorted them into six categories, namely, market penetration, vertical expansion, financial synergies, new market entry, asset potential or synergy and economies of scale. These six categories were further explained by Schweiger and Very in 2003. Market penetration focuses on acquisitions that are undertaken by companies to gain a greater power within their market and increase their market shares. Vertical integration acquisitions increase distribution channels, technology, or control. The companies are within the same market and are usually similar to each other. Financial synergies are acquisitions that are made to improve profits and earnings through facility ownership and accounting variations (Schweiger & Very, 2003). The market entry focuses on entering new markets, either related or unrelated markets. Market entry could also be used to enter new countries, regions, or industries (Hubbard & Purcell, 2001). Asset potential or horizontal acquisitions focus on acquiring companies for their assets. Lastly, economies of scale acquisitions are made to optimize the earnings and profits by integrating the company or organization into the mother company (Schweiger & Very, 2003).

2.1.2 Acquisition Process

Acquiring a company entails a process that takes time and money and puts a lot of pressure on a company's management's ability to handle the newly created situation. The acquisition process can therefore be divided into two phases, the pre-acquisition phase and the post-acquisition phase (Gomes et al., 2013).

2.1.3 Pre-acquisition Phase

The pre-acquisition phase focuses on the decisions making that occurs and ensures the integration of two separate companies. The acquiring company needs to integrate the cultures, values, and processes of the acquired company into its own. The most important part of the pre-acquisition phase is to analyze, evaluate and understand if the potential corporation is a good fit for the buyer (Lasserre, 2003). Lasserre (2003) divided the pre-acquisition phase into three processes (as can be seen in figure 2-1), Value creation, Target Selection, and the Due diligence and valuation process.

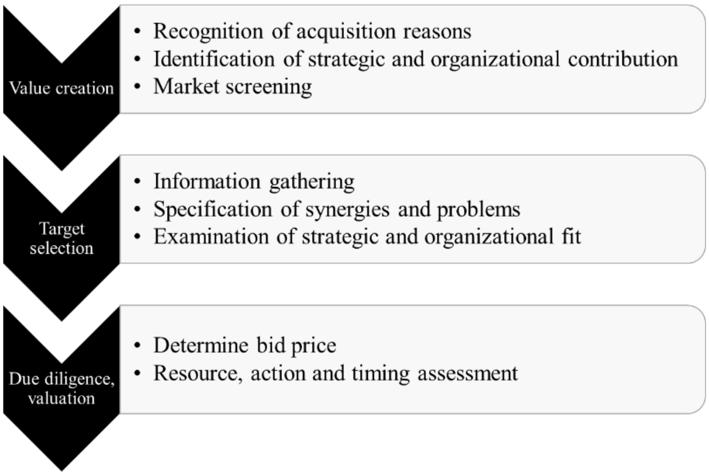

Figure 2-1 Phases of the pre-acquisition phase (Lasserre, 2003)

Value needs to be created for companies to perform a successful acquisition. Value can be created through acquisition for diversification, new technology, or markets. It is additionally important to understand the different strategies and the possible organizational contribution to the acquisition (Jemison & Sitkin, 1986). Lastly, when the acquisition reason and the identification of strategies are clear, a screening of the market is necessary to understand the different companies in the market that could be acquired (Hubbard & Purcell, 2001). Following these steps helps with understanding the purpose of the potential acquisition, which helps in the decision-making process and the integration phase (Jemison & Sitkin, 1986).

The next step is target selection and finding an acquisition that will give a financial or strategic value. To be able to make a well-analyzed decision, it is important to collect as much strategic information and financial data as possible (Hubbard & Purcell, 2001).

The last step is due diligence and valuation, which focuses on understanding the financial valuation and the worth of the acquisition (Lasserre, 2003). This process is time-consuming due to the analysis of the market, the financial aspects, and pro forma financial statements. This step should also take the resources and finances that need to be used for the integration process into account and understand how long the acquisition will take to integrate (Hubbard & Purcell, 2001).

2.1.4 Post-acquisition Phase

The post-acquisition phase focuses on increasing efficiency and understanding the capabilities of the acquisition. The post-acquisition phase can be divided into two processes (as can be seen in figure 2-2), integration and transitions (Lasserre, 2003).

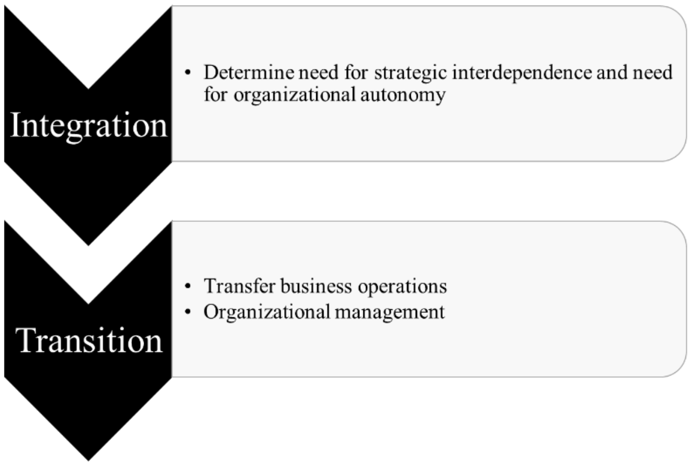

Figure 2-2 Phases of the post-acquisition phase (Lasserre, 2003)

Lasserre (2003) states that there must be strategic reasons to undertake an acquisition that creates value either through consolidation, extension to global markets, vertical integration, diversification, or with the aim to acquire new technology or markets. Further action, based on the reasons for engaging in an acquisition and the possible contributions an acquisition may have, is the need for screening the market for acquisition prospects (Hubbard & Purcell, 2001). These actions help management understand the purpose of the acquisition, which facilitates the decision-making process and acts as a foundation for the post-acquisition integration phase (Jemison & Sitkin, 1986).

The integration phase focuses on making the interaction between the two corporations effective and working. It is important to focus on properly integrating the organization into the values, strategic plan, and objectives (Christensen et al., 2011).

The transition is the last phase of the acquisition process and revolves around problem-solving and capability transfers. It is crucial for companies not to focus only on financial operations. Solely focusing on finances after the acquisition process often leads to misunderstandings (Haspeslagh & Jemison, 1991). It is important to consider the culture, the purpose, and the people working in the organization before big changes should be made Lasserre, 2003).

During the acquisition process, the buyer can spend too much money, which leads to pressure to see financial results. This often leads to hasty decisions and causes problems between the two parties. It is, therefore, crucial to focus on the transitional phase for a successful acquisition.

2.2 Corporate-startup Collaboration

Corporate-startup collaboration is a phenomenon where corporations work together with startups to create innovation. Corporations often use these collaborations to stay innovative. The ability of startups to understand customers' expectations and industry trends in new market, and identify innovative projects, is an attractive attribute for big corporations to initiate corporate-startup collaborations (Urbaniec and Zur, 2020). Moreover, startups are more agile than corporations and have less bureaucratic processes. Startups are thus able to develop and produce products faster and at a lower cost (Kupp et al., 2017). Additionally, collaborating with startups rather than buying them requires a lower level of investment and generates faster development of new products or services (Weiblen and Chesbrough, 2015). Corporates can make small investments in several startups, diversifying the risk of corporate investment in innovation and allowing them to scan a variety of markets and business opportunities (Kupp, et al. 2017).

Gutmann and Lang (2022) describe in their article how the process of corporate collaboration with startups should be built up, from preparation all the way to outcome. They describe the different phases of the process and highlight what should be taken into consideration when collaborating with startups and which steps need to be taken (see figure 2-3 for the different phases). The main outcome of their research is that preparation from the corporation is key. The corporation needs to have a clear view of what it wants to achieve with the corporate-startup collaboration.

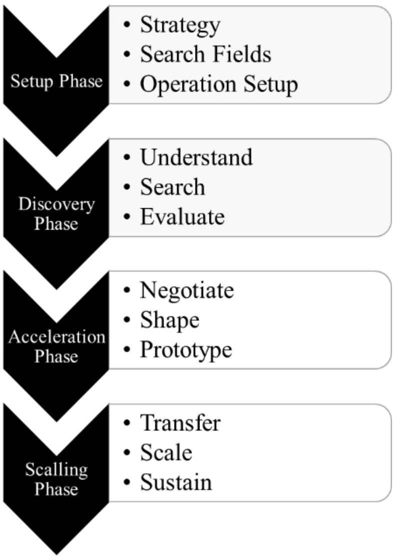

Figure 2-3 Phases of corporate-startup collaborations (Gutmann and Lang, 2022)

There are different types of corporate - startup collaborations such as:

- Corporation becomes distribution partner
- Corporate accelerators
- Corporate venture capital programs
- Corporation supports pilot project
- Corporation becomes startup customer
- Open innovation formats

2.2.1 Corporate Becomes Distribution Partner

Corporations and startups can work together in distributing new products. Corporations can offer the use of their distribution network to the startup (Kohler, 2016). Rather than working out a distribution network of their own, startups can offer their products through the corporation's network. This type of collaboration can also take the form of a platform, managed by a corporation, through which startups can sell their products (Weiblen and Chesbrough, 2015). The corporation, as the platform leader, can earn a percentage of the profit from every innovation that is sold on the platform.

2.2.2 Corporate Accelerators

Corporates often try to engage and collaborate with startups with the help of corporate accelerators. "*Corporate accelerators are company supported programs of limited duration that support cohorts of startups during the new venture process via mentoring, education and company specific resources*" (Kohler, p. 348, 2016). These corporate accelerators are by far the most common strategy corporations use when they want to collaborate with startups in order to be more innovative. These corporate accelerator programs are popular since corporations and startups generally do not operate in the same arena (Urbaniec and Zur, 2020). A corporate accelerator is furthermore an effective tool for corporations to get into contact with startups

2.2.3 Corporate Venture Capital Programs

Corporations can finance startups with corporate venture capital programs (Bruse et al., 2016). These programs have different forms where the corporation has different levels of influence in the startup. Corporate venture capital programs can also eventually lead to corporations acquiring the startup they have invested in (Weiblen and Chesbrough, 2015; Kohler, 2016). These corporate venture capital programs help startups to finance their developments and can provide them with credibility (Weiblen and Chesbrough, 2015). Investing in startups provides corporations on the other hand with access to new markets and innovations (Kohler, 2016).

2.2.4 Corporation Supports Pilot Project

Corporations can collaborate with startups through pilot projects. Here, corporations and startups work together to develop new products, explore market opportunities or solve business challenges (Kohler, 2016). These pilot projects can help corporations to save costs, reduce development time and take fewer risks in relation to its core business.

Corporate-startup collaborations, however, do come with a set of challenges as well. Urbaniec and Zur (2020) describe the collision of two different business models as a big challenge for corporate-startup collaborations. The mindset and habits of corporations are often very different from those of startups (Weiblen and Chesbrough, 2015). Corporations tend to avoid risk and are not very flexible or quick to action, whereas startups are known for their flexibility and quick decision making (Urbaniec and Zur, 2020). Unclarity of ownership is often named as a challenge in corporate-startup collaborations as well (Weiblen and Chesbrough, 2015; Kohler, 2016; Gutmann and Lang, 2022). It is important that clear agreements are made on ownership of the developed products or services before collaboration (Gutmann and Lang, 2022). Weiblen and Chesbrough (2015) describe several cases where the corporation claimed ownership over the outcomes of the collaboration. This inadvertently leads to startups being weary of participating in corporate-startup collaborations.

2.3 Inter-Organizational Relations

Companies are connected through inter-organizational relationships (Rossignoli & Ricciardi, 2014). The relations between organizations used to be purely transactional or hierarchical (Powell, 1987). Today relationships between organizations are more complex and could occur through franchises, networking, joint ventures, M&A, and collaborations. In order to understand the differences between the relationships, Lorange and Roos (1992) ordered relationships from pure market transactions to internal hierarchical structures.

This order is based on the degree of vertical integration within the company's relationship (see figure 2-4).

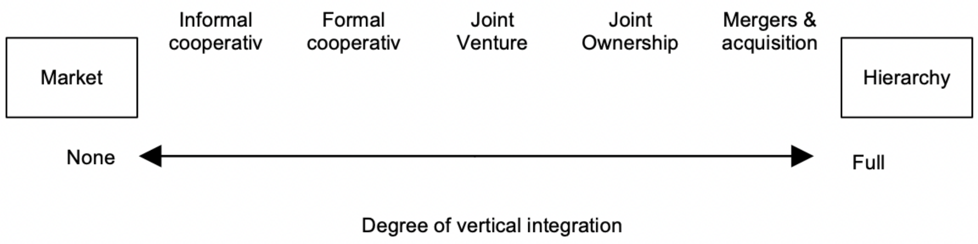

Figure 2-4 scale of vertical integration (Lorange and Roos, 1992)

At the end of the spectrum, with M&A, rules and the hierarchy in the relationship are at their peak and the organization collaboration is one-sided (Sydow et al., 2016). The further to the left of the figure companies are moving, the more equal the partners are, and the fewer responsibilities and commitments companies have to each other. Examples of collaborations could be market exchanges where the price is the factor that keeps the organizations in a partnership. The organization's relationships are seen as purely transactional. At full hierarchy, the relationship is arranged, and the commitment is based on more than just profits (Kaats and Opheij, 2014).

Lorange and Roos, (1992) further define inter-organization relationships as how dependent organizations are on each other (See figure 2-5 below) Low interdependence is based on informal relationships with low dependence between the organizations. The highest interdependency is where the partners depend on each other, which involves a much higher degree of participation (Lorange and Roos, 1992). In mergers and acquisitions, the interactions between the organizations require more integration and cooperation, which creates a bigger chance of conflict (Håkansson et al. 2003). The higher the interdependence, the more important it is to manage the organizations involved (Gustafsson & Magnusson, 2016).

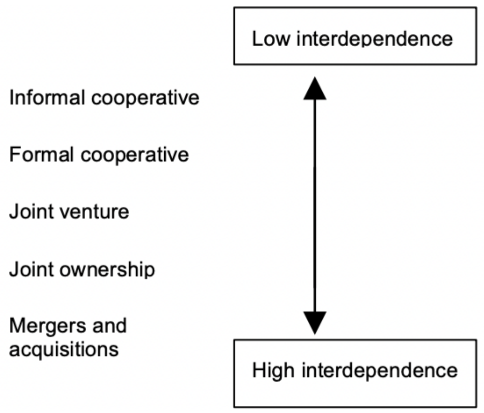

Figure 2-5 scale of interdependence (Lorange and Roos, 1992)

Inter-organizational relationships have been an increasing subject for practitioners and scholars, and the importance of managing inter-organizational relationships. Kaat and Opheji (2014) explain that in a world where networking and partnerships are becoming increasingly common, the importance of it being done correctly is vital. However, there is still no clear answer on how to manage relationships most efficient. Rossignoli and Ricciardi (2014) also argue that there is no correct way to manage relationships. Relationship management needs to be looked at through a long-term process. Arrangements and partnerships need to establish trust and have a relationship that facilitates innovation and increases efficiency (Rossignoli and Ricciardi 2014).

2.3.1 Open Innovation In Inter-organizational Relationships

Open innovation is connected with inter-organizational relationships as it looks at how organizations move from closed innovation to innovation with their surroundings and environment (Lichtenthaler, 2011). Closed innovation is when companies and organizations keep their innovation in-house and do not collaborate with their environment (Chesbrough 2003).

Open innovation was first presented as a term in Henry Chesbrough's book from 2003, and the concept has gained large popularity among researchers as well as used by companies (Huizingh, 2011). This is due to the fact that outsourcing and collaboration with different core competencies started to gain popularity among organizations (Huizingh, 2011). Organizations that work with innovation have their motivation increased within the organization (Wang & Tsai, 2014). With open innovation, the employees are encouraged to innovate more, leading to fewer barriers within the organization which creates an equal organization letting creativity flow. Open innovation is defined as "*Open Innovation is the use of purposive inflows and outflows of knowledge to accelerate internal innovation and expand the markets for external use of innovation, respectively*," by Chesbrough (p.7, 2003). Through the term, open innovation, practitioners and researchers have been able to use it as an umbrella term for innovation activities. Gassmann and Enkel (2004) further stated that open innovation could be looked at through three different approaches, outbound, inbound, and coupled open innovation. Outbound innovation is the introduction of ideas to the market to gain sales and profit through selling or transferring the ideas to external customers.

Inbound is creating relationships with other organizations, both customers and suppliers. It is also about gaining knowledge through different sources to improve the organization's innovation (Laursen & Salter, 2006).

Coupled innovation is using outbound and inbound innovation to gain external knowledge and relationships to improve and introduce new products and services (Enkel et al., 2009).

2.4 The Rational Decision-Making Process

The rational decision making model focuses on making decisions with data and certainty. The alternatives, outcomes, and criteria are being analyzed to make sure the chosen decision is the best (Towler, 2010).

Corporations' decision-making could be assumed to be rational, therefore the Schoenfeld (2011) rational model could be used to explain the decision-making within organizations. The process is divided into six different stages and steps that need to be followed (Schoenfeld, 2011) (See figure 2-6 below).

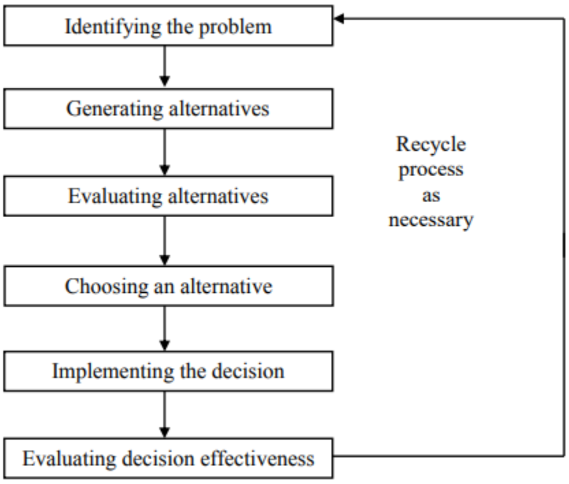

Figure 2-6 The rational decision making model (Schoenfeld, 2011)

2.4.1 Identifying The Problem

The first step is identifying the problem. Organizations work and exist to achieve certain goals, such as increasing profits, market shares, or offering better products/services. In order to identify a problem it is important to first have established goals and objectives in order to understand problems that could interfere with the goals. If the goals cannot be achieved, it becomes a problem that needs to be solved (Lunenburg, 2010). To identify problems it is crucial to understand and analyze external environments that could interfere with the goals (Verschaffel, 2011). Organizations need to scan their surroundings to understand and determine if they are progressing toward their goals, and if external factors interfere with achieving these goals. Lastly, analyzing and defining the problem to determine how important and how urgent it is to solve the problem (Lunenburg, 2010).

2.4.2 Generating Alternatives

The second step is to generate alternatives to the problem. As the problem is made clear in step one, the organization could start to generate alternatives to solve the problem. Information and data need to be collected to generate alternatives and understand their pros and cons (Schoenfeld, 2011). In the best of worlds, as many alternatives as possible should be generated. However, the alternatives generated and time spent on this stage needs to be determined by the problem. The more important the problem is, the more time needs to be spent generating alternatives (Zopounidis, 2011). It is furthermore important to look at the alternatives from a financial perspective. However, not all problems can be measured through purely financial aspects and organization's benefits that cannot be measured in financial terms need to be considered (Schoenfeld, 2011).

2.4.3 Evaluating Alternatives

The third step is to evaluate the different alternatives generated in the previous step. In order to evaluate the different alternatives three questions need to be answered (Grant, 2011).

1. Is the alternative feasible
2. Is it a satisfactory alternative
3. What impact will it have

The first step is to determine if it is possible to achieve and implement the alternative. The second question is about understanding to what extent the alternative solves the initial problem. Lastly, the most important step is to understand and address how the alternatives will impact people and personnel within the organization. One of the biggest reasons the decision-making process can fail is the lack of consideration when it comes to the personnel. (Hastie, 2010). Combining this stage of the rational decision-making process with the incremental decision-making process can therefore be useful. The incremental theory is related to the rational decision-making process (Etzioni, 1967). It focuses on making decisions through dividing the decision into smaller steps to guide through complex decision-making (Harris, 2016). It focuses more on organization and puts more weight on adapting to new information in the decision-making process than the rational decision-making theory does. The incremental decision-making process focuses on involving different stakeholders into the decision making, getting valuable feedback, and therefore making better decisions (Harris, 2016)

2.4.4 Choosing An Alternative

With the help of the information gathered from the previous step an alternative is chosen. The decision-making process can be a lengthy process which can cause financial liability. It is therefore important that choosing an alternative goes quickly but is simultaneously made with consideration of the collected data (Schoenfeld, 2011). The prospect theory can be useful in this stage to support choosing the most suitable alternative. This theory describes how four different elements influence the decision-making of companies.

The prospect theory was first developed by Kahneman and Tversky in 1979. The theory has since been established as one of best theories used to describe decision making under risk. In 2002 Kahneman received a Nobel prize within economics thanks to the prospect theory.

The theory focuses on four elements in the decision making process.

1. Reference dependence

   Individuals and companies base their outcomes depending on their reference point rather than their wealth. The reference points are their expectations and their current situation. Companies get more satisfaction if their reference point is lower than their wealth and larger dissatisfaction when the reference point is higher than their wealth.
2. Loss aversion

   Loss aversion focuses on the fact that people and companies are much more sensitive to losses than they are to gains. Kahneman states that for individuals losing 100 dollars is far worse than winning 110 dollars. The theory bases itself on individuals and companies often making decisions to avoid losing.
3. Diminishing sensitivity

   When facing a potential gain, individuals and companies tend to stick to the certain outcome. For example a 100% chance to win 100 dollars or 50% chance to win 200 most will choose 100 dollars. However when facing a loss, individuals and companies take more risks. If they face a

100% chance of losing 100 dollars or a 50% chance of losing 200 they prefer to take the risk to avoid losing. Companies tend to be less risk averse when it comes to gaining money, but take more risk when trying to prevent losses.

4. Probability Weighting

   Probability weighting refers to individuals and companies usually weighing low probability events higher and underestimating high probability events. Companies usually take risks to avoid a small chance of losing even if there is a low chance the loss will happen. The prospect theory therefore claims that decisions are not always made rationally by individuals or companies.

2.4.5 Implementing The Decision

To implement the decision five steps should be followed to ensure that the implementation is successful (Ahmed, 2011).

1. The alternative is clearly understood.
2. Encourage and promote acceptance of the alternative.
3. Provide enough resources to successfully implement the alternative.
4. Provide and establish a timeframe for the implementation.
5. Assign responsibilities.

2.4.6 Evaluating Decision Effectiveness

Lastly, the final step is to evaluate the effectiveness of the decision (Schoenfeld, 2011). Evaluation is crucial in the decision-making process since it is a repetitive process. It is important to understand what the decision accomplished and what could be done better (Lunenburg, 2010).

2.5 Synthesised Decision-Making Process

The created conceptual decision-making model as seen in figure 2-7 is built on the rational decision-making process but takes the incremental theory and the prospect theory into account to increase the theoretical foundation. This model analyzes and focuses further on evaluating alternatives and choosing an alternative. The incremental theory expands the rational model by involving stakeholders when evaluating the alternatives. Increasing the information gathered and therefore increasing the knowledge when evaluating the alternatives. The prospect theory goes deeper into understanding the decision making process when choosing an alternative. The theory furthermore goes deeper into the underlying problems when deciding about acquisition. As the theory explains, corporations often fear losses and therefore take bigger risks to prevent losses. The conceptual decision making tool gives a further overview of the decision making process than the rational decision-making model, enabling the authors to analyze the decision making process further. The conceptual model as seen in figure 2-7 will be used to analyze the empirical data.

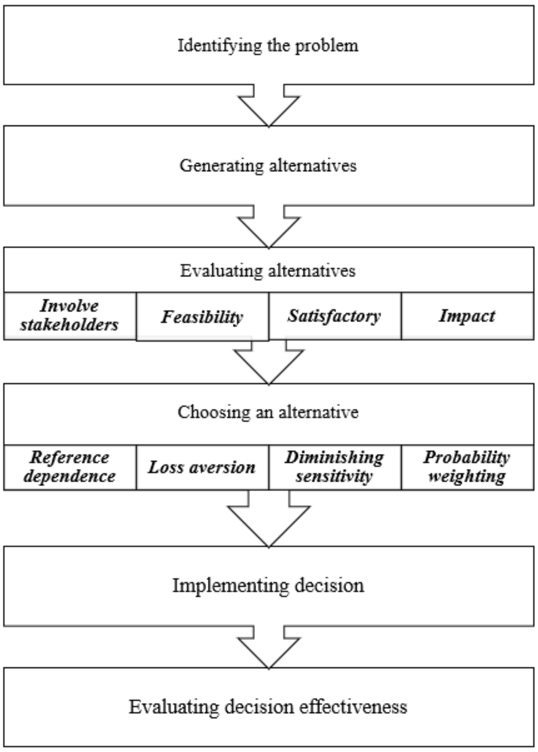

Figure 2-7 Conceptual model made by the authors

2.6 Theory Synthesis

In summary this theoretical framework discussed corporate acquisitions, corporate-startup collaborations, interorganizational relationship and decision making theories. Corporate acquisitions is the act of buying another organization and taking it over completely (Ikhtiar, 2022). There are six types of incentives for corporations to engage in acquisitions (Hubbard and Purcell, 2001). These are market penetration, vertical expansion, financial synergies, new market entry, asset potential or synergy and economies of scale. The acquisition process can be divided into two phases, the pre-acquisition phase and the post-acquisition phase (Gomes et al., 2013). Corporate-startup collaboration, on the other hand, is a phenomenon where corporations work together with startups to create innovation. These collaborations can have different forms i.e. corporation becomes distribution partner, corporate accelerators, corporate venture capital programs, corporations supports pilot projects, corporation becomes startup customer and open innovation formats. The type of interaction a corporation chooses to pursue with startups influences the inter-organizational relations. When using an acquisition strategy, rules and hierarchy in the relationship are at their peak and the organization's collaboration is one-sided (Sydow et al., 2016). The acquiring company rules the relationship and makes the major decisions. On the other hand, both startup and corporate are more equal during corporate-startup collaborations. This more equal relationship can help companies move from closed innovation to open innovation. With open innovation, the employees are encouraged to innovate more, leading to fewer barriers within the organization which creates an equal organization letting creativity flow (Wang and Tsai, 2014).

Lastly, a conceptual framework has been developed to analyze the decision making process when companies decide if they shall acquire or collaborate with a startup. This conceptual framework consists of six phases: identifying the problem, generating alternatives, evaluating alternatives, choosing an alternative, implementing decision and evaluating decision effectiveness. The incremental decision making theory has been integrated into the conceptual framework in the step evaluating alternatives. This means that companies should not only look at feasibility, satisfaction and impact during evaluation, but should also involve different stakeholders. Next to the incremental decision making theory, the prospect theory has been integrated as well. The prospect theory is part of the choosing alternative step and focuses on the four elements: reference dependence, loss aversion, diminishing sensitivity and probability weighting.

The theoretical framework will be compared to the empirical data in the analysis chapter.

3 Methodology

This chapter describes the methodology that is used for this research. The methodology consists of a research approach and research design which explain the overall aim and framework of the study. This is then followed by the data collection method and data analysis that explain how data was collected, which tools were used and how the data was then analyzed. Thereupon an explanation is given on how the researchers have maintained the scientific credibility of the study. Lastly, the ethical consideration used during the study and the delimitations of the study are given for an overview of what is included in the research and what is beyond the research scope.

3.1 Research Approach

There are three common research approaches, deductive, inductive, and abductive (Saunders, Lewis and Thornhill, 2019). The approach of a research is influenced by the use of theory: is the research concerned with theory testing or theory building? Additionally, the aim or purpose of the research has a significant impact on the chosen research approach. As the three, previously mentioned, approaches are used for different purposes. A deductive approach is used when designing a research strategy to test a theory (Saunders, Lewis and Thornhill, 2019). The study is based on the chosen theories and analyzed through them (Hyde, 2000). This approach develops a theory or hypothesis which is then subjected to rigorous testing to evaluate the developed theory (Saunders, Lewis and Thornhill, 2019). Data collection in this approach is used to evaluate hypotheses related to an existing theory (Bell, Bryman and Harley, 2022). The deductive theory is the dominant research approach in the natural sciences (Saunders, Lewis and Thornhill, 2019).

The inductive approach on the other hand focuses on the empirical material, and is based purely on the collected data (Gioia, Corley and Hamilton, 2013). This approach starts with collecting data to explore a phenomenon, which is then used to generate theory (Saunders, Lewis and Thornhill, 2019; Bell, Bryman and Harley, 2022). The data collection in this approach is used to explore a phenomenon, identify themes and patterns, and create a new theory. The deductive approach is a popular approach within the social sciences (Saunders, Lewis and Thornhill, 2019).

Lastly, the abductive research approach is a mix between inductive and deductive and uses elements of both (Bryman and Bell, 2017). Abductive research gathers new information and compares it with existing theories (Saunders, Lewis and Thornhill, 2019). The abductive approach can therefore validate knowledge by proving it through theories. To increase the quality of a study, it is important to analyze the empirical data with theory (Alvehus, 2019). This approach is used to generate or modify existing theories in order to build a new theory. Data is collected in this approach to explore a phenomenon, identify or explain themes and patterns. Which is then explained and possibly integrated into a conceptual framework. Finally, this new theory is then tested using evidence provided by existing data and newly collected data, and revised where necessary. The abductive approach is therefore often used by business and management researchers (Saunders, Lewis and Thornhill, 2019).

The research performed for this master thesis focuses on three known phenomena in the business literature, namely acquisitions, corporate-startup collaborations and decision making in organizations. As the aim for the research is to understand the decision making of a corporation regarding the choices between acquisitions and collaborations it was deemed appropriate to use an abductive approach. Existing literature will be analyzed and used, as well as empirical data in order to build a new theory or modify an existing theory. Furthermore, when research is conducted regarding human experiences and thoughts, it is important to analyze the information with an abductive approach to be able to make analyzed assumptions (Timmermans & Tavory, 2012).

3.2 Research Design

A research design describes the plan, structure and strategy of the research performed to answer the research questions (Krishnaswami and Satyaprasad, 2010). The design of this study is based on the research cycle as described by Adams, Khan and Raeside (2014). The research cycle consists of the steps: formulate the problem, research theory, collect data, analyze and model, assess reliability and validity, and report findings. The formulate stage focuses on understanding the problem or situation that will be researched. A theoretical framework is made after formulating the problem and establishing research questions (Adams et al., 2014). The formulation and theoretical framework of this research can be found in the Chapter 1 Introduction and Chapter 2 Theoretical framework. Data is collected after formulating the problem and establishing research questions (Adams et al, 2014). This data is then analyzed in order to answer the research questions. The collected data can, furthermore, also be used to create models that illustrate relations within the data. The outcome of the research can thereupon be assessed on reliability and validity. Adams et al. (2014) mention that in this stage the question "what alternative explanations are there for the findings" is often asked. Lastly the findings of the research should be reported.

3.2.1 Purpose Of The Research Design

Research design is influenced by the purpose of the study (Saunders, Lewis and Thornhill, 2019). As the purpose of this study is, to understand the decision making process corporations go through, when they decide to interact with startups to reach their innovation goals, it was deemed appropriate to perform a descripto-explanatory study which evaluates the decision making process of a corporation. A descripto-explanatory research design has elements of both descriptive research and explanatory research (Saunders, Lewis and Thornhill, 2019). As the purpose of descriptive research is to gain an accurate profile of events, persons or situations (Saunders, Lewis and Thornhill, 2019), it can be used to explain the relationships between variables.

It is especially fitting for this research since descriptions of persons and situations are used to explain the reasons for corporate decisions. Descriptive studies are often qualitative in nature since they review events, persons and situations (Saunders, Lewis and Thornhill, 2019). While explanatory studies can use both qualitative and quantitative methods based on the phenomena they aim to explain. The descripto-explanatory research design is a combination of descriptive and exploratory research and uses therefore often qualitative methods. This study will be qualitative in nature, since this research will have a descripto-explanatory research design.

3.2.2 Research Strategy

According to Saunders, Lewis and Thornhill (2019), a research strategy is the plan of how researchers will go about answering their research questions. The research strategy gives a framework that is used to collect and analyze data (Bell, Bryman and Harley, 2022). The aim of this study is to determine which decisions corporations can make in their pursuit of innovation. It was therefore decided to study corporations that currently or previously have sought the best way to be innovative with the help of startups. The research strategy thus is a case study. The decisions made by the case companies will be compared to literature to understand and evaluate the decision making process. This understanding of the decision making process is then used to suggest a framework for corporations that can help them in their decision making regarding the use of startup acquisitions or startup collaboration to reach innovation goals.

Case studies can be distinguished from other research strategies with its focus on a bounded situation or system, an entity with a purpose and functioning parts (Bryman and Bell, 2011). It is a detailed investigation into a topic or phenomenon within its real-life setting (Saunders, Lewis and Thornhill, 2019). The purpose of a case study is to thoroughly examine and analyze an individual, group, organization, association, change process or event (Denzin and Lincoln, 2011; Saunders, Lewis and Thornhill, 2019). Case studies serve as a useful tool when analyzing complex situations (Yin, 2018), and are particularly effective in identifying causes of problems and potential courses of action. Yin (2018) states that case studies can be used for both descriptive and exploratory studies, making it a good fit since this research has a descripto-explanatory research design. Furthermore, case studies are an often used research strategy in business and management research (Bell, Bryman and Harley, 2022).

This study adopts a multiple case study approach to investigate corporations, with a specific focus on their M&A department and their collaborations with startups. Saunders, Lewis and Thornhill (p. 198, 2019) note *"The rationale for using multiple cases focuses on whether findings can be replicated across cases. Cases will be carefully chosen on the basis that similar results are predicted to be produced from each one."* The multiple cases approach is chosen to create a stronger support for the development of a framework and provide a greater basis to generalize corporation's decision making processes.

The study employs an embedded case study design, which allows for targeted data collection from specific units or departments within the organization (Saunders, Lewis and Thornhill, 2019). This approach enables the researcher to gather data on the corporation's decision-making process regarding acquiring or collaborating with startups. Additionally, the study seeks to explore how larger corporations navigate the risks associated with competition and establish collaborative environments.

3.3 Sampling

As the study aims to investigate the decision-making process behind a large corporation regarding acquiring and collaborating with startups, strategic sampling is a suitable method. Strategic sampling is a tool used when there are specific requirements for the respondents (Alvehus, 2013). In this study, respondents were needed who work with the decision-making process of a corporation that interacts with startups, either via acquisition or collaborations.

A commonly used selection is convenience selection which focuses on gathering respondents by knowing them (Kallio et.al, 2016). It is of importance that the researchers do not let this type of selection affect the results of an interview and the data collected. A convenience selection was used to find corporations that work with startups. As the authors reached out to dozens of corporations, via e-mail, corporate websites and linkedin, without positive responses, the authors decided to contact acquaintances to get in touch with someone within their organizations. Contacting acquaintances led to three employees of corporations that were willing to be interviewed. Through snowball sampling, one employee asking another employee to participate in the research, two more interviews could be set up.

In this study, employees of three corporations have been interviewed. The three case companies were chosen because of their respective size. The first company is a global company and one of the larger companies in the world. It is an organization that has been around for more than 100 years. Interviews were conducted with employees from their Dutch and German offices. Company B is a large corporation and big within their field. However compared to Company A they are relatively small. Their headquarters is located in the Netherlands. Interviews were conducted with the CEO and innovation manager regarding their innovation and acquisition of startups strategies. Company C is a company with big funds due to large investors behind them. They have grown at a rapid pace in recent years due to their acquisitions. By interviewing Company A, B and C a deeper understanding is given on how corporations in various sizes look at collaboration with startups or acquiring them. In table 3-1 and overview is given of the different respondents and their functions.

Respondent	Company number	Function within the company
1	A	Business developer
2	A	Innovation manager
3	B	CEO
4	B	Innovation manager
5	C	New business development manager

Table 3-1 Overview of respondents and companies interviewed

Company A is one of the biggest companies within their field and has been for the last 50 years. Currently they have three different startup accelerator programs as well as multiple other startup collaborations. Each focuses on different products and technology. Respondent 1 was interviewed to understand how they work with startups and how the company tries to stay innovative. Respondent 2 was able to help gain a deeper insight into both the decision making process and the set up of startup collaboration programs.

Company B offers technologies that heavily rely on innovation. They see innovation as vital for their survival as a company. They therefore have a big R&D department and use startups to get new technologies. Respondent 3, the CEO of the companies was interviewed to gain data on the overall innovation strategies of the company as well as the company’s decision making processes. Respondent 4 was selected to gain more in depth knowledge on the company's interactions with startups.

Company C is a newly founded company based in Sweden. It has the resources of bigger corporations thanks to its large investors. In recent years, it acquired 19 companies making acquisitions their main tool for growth. The company was chosen to gain deeper insights into a corporation that uses acquisitions as a main tool for growth and to explore which tactics such a corporation uses for innovation. Respondent 5 was interviewed to collect data on how the corporation acquires companies but also how they today aim to transition from purely acquisition to a more collaborative environment with startups.

3.4 Data Collection Method

The main data collection method used in this study involves conducting semi-structured interviews. Further data, from corporate websites, news articles and press releases, is collected on the case study corporations to understand and describe the case studies. The Semi-structured interview is a qualitative data collection method (Bell, Bryman and Harley, 2022). Qualitative methods focus on subjective thoughts and feelings rather than objective facts, it emphasizes words rather than numbers (Bryman and Bell, 2017).

The three commonly used interview methods in academic research are structured, semi-structured and unstructured. Where the structured interviews are quantitative, and the semi-structured and unstructured interviews are almost always qualitative (Saunders, Lewis and Thornhill, 2019). An unstructured interview is typically conducted without much forethought or preparation, and does not involve an interview guide or pre-prepared questions (Bell, Bryman and Harley, 2022). A structured interview, on the other hand, uses a standardized interview guide that directs the interviewer's questions (Saunders, Lewis and Thornhill, 2019). However, this does not allow for follow-up questions. A semi-structured interview combines the benefits of both approaches by using an interview guide while also allowing the interviewer to ask follow-up questions to gather additional information from the respondent (Bryman and Bell, 2017). This type of interview is especially useful for uncovering subjective thoughts and experiences. In the present study, semi-structured interviews are used to investigate the perspectives of corporations regarding collaboration with, or acquisition of, startups. As the study aims to understand the reasoning and thoughts behind the decision-making process, semi-structured interviews have been used to gather information and understand the process and the respondent's experiences. To facilitate this approach, an interview guide has been developed.

3.4.1 Interview Guide

A semi-structured interview is often conducted with the help of a list of questions on fairly specific topics (Bell, Bryman and Harley, 2022). This list of questions is called an interview guide and is used as a guideline but doesn't restrict the interviewer to only asking the prepared questions (Bell, Bryman and Harley, 2022). An interview guide (see Appendix I) was created and used to ensure that the questions and quality of the semi-structured interview increased. When creating questions it is important to take the theoretical framework into consideration (Kvale and Brinkamnn, 2014). To create relevant interview questions, the theories, purpose and research question were taken into consideration when creating the interview guide. It is important to make the question open and broad to ensure that the respondent's own feelings and words are used (Robinson, 2014).

3.4.2 Pretesting

A pilot study is a preliminary research tool that enables researchers to conduct a test interview before undertaking the primary research (Bryman and Bell, 2017). The purpose of a pilot study is to evaluate the efficacy of the research methodology and interview questions, identify potential issues, and mitigate them before conducting the actual study. The use of a pilot study provides valuable insights into the strengths and weaknesses of the research design and enables researchers to make necessary adjustments to enhance the quality of the study (Bryman and Bell, 2017).

In this study, the researchers conducted a pilot study on the interview questions to ensure their relevance and comprehensibility. The pilot study was performed on an individual responsible for the acquisition of startups in a different company.

The interview guide started with more relaxed questions to introduce the respondents to the interview environment and make them more comfortable.

Creating a relaxed environment increases the quality of the interview since it can make a respondent feel more comfortable and make it easier to open up (Kvale & Brinkman, 2014). The interview questions from then on focus more on the research themes such as how the corporation acquires and works with startups. The interview guide had 25 questions divided into four different themes, innovation, acquisitions, startup collaboration, and lastly, the decision-making process. The interview guide functions as a guideline in order for the interview to be more open and encourage the respondents to freely express their thoughts and opinions. During each of the different themes, several followed up questions were asked to make sure as much information as possible was collected.

3.4.3 Interview Organization

A total of five interviews were conducted between the three case companies in order to achieve data saturation. However there is no clear answer to when data saturation is achieved (Bryman & Bell 2017). Kalio et. al, (2016) claim that at least five respondents need to be interviewed in qualitative research to achieve saturation. Saunders et al. (2019) claim that at least four respondents need to be interviewed when conducting a case study.

The interviews were scheduled and organized via e-mail and conducted with the help of the video calling software Microsoft Teams and Zoom. The use of video calling software can resemble face-to-face interviews but is more flexible and the convenience can encourage people to agree to be interviewed (Bell, Bryman and Harley, 2022). Video interviewing furthermore transcends geographical boundaries (Bell, Bryman and Harley, 2022), which made the interviews possible since the interviewees were located in a different country than the interviewers. Interview questions and the research's problem discussion were sent to the respondents in advance to inform them about the research topic and help them prepare for the interview. The possibility for respondents to prepare for an interview significantly increases the quality of the collected data, according to Saunders, Lewis and Thornhill (2019). The interviews were conducted with both researchers present but each with different tasks. One researcher acted as discussion leader while the other researcher took notes. Note taking has several advantages according to Saunders, Lewis and Thornhill (2019) such as: back up if audio recordings fail, can help maintain concentration, indicates to the interviewee that responses are of importance and help formulate points to summarize back to the interviewee. All interviews were conducted within the same time frame of 45 minutes to one hour, to not take up too much time of the respondent, but also to increase comparability between the collected data. Most interviews were recorded, with the permission of the interviewee, and transcribed. The interviewees from company B preferred to not be recorded, therefore the researchers only took notes during these interviews.

3.5 Data Analysis

The data from the interviews needs to be analyzed to form new knowledge and theory from it. Semi structured interviews generate rich and in-depth answers since interviewees are allowed to explain answers more in-depth and follow up questions are often asked (Bell, Bryman and Harley, 2022). A thematic analysis was deemed the most appropriate analysis method since this method focuses on studying the content of documents and the underlying meaning of what is discussed to identify themes or patterns (Saunders, Lewis and Thornhill, 2019; Bell, Bryman and Harley, 2022). Saunders, Lewis and Thornhill (2019) mention that thematic analysis is especially useful to comprehend large amounts of qualitative data, for integration of related data from different transcripts and notes, for identifying key themes or patterns from data, for producing thematic descriptions of data, for development and testing of explanations and theories, and to draw and verify conclusions.

3.5.1 Preparation Of The Data

The empirical data was collected during semi-structured interviews with the help of video recordings. In order to analyze this data, these recordings need to be transcribed, using a transcription tool. During a data cleaning process, the transcriptions were compared to the recordings and where needed corrected. The final documents with the transcriptions were anonymised and available for the interviewees to review.

3.5.2 Thematic Analysis

The analysis method used during this research is a thematic analysis. Therefore the significant amount of data needs to be separated and reduced into thematic categories. This was done by coding the transcriptions. Sources of codes can be terms used by interviewees, labels developed from data by the researcher and derived from existing theory and literature (Saunders, Lewis and Thornhill, 2019). Thereafter themes can be created from the transcriptions and codes. Bell, Bryman and Harley (2022) mention that themes can be found by looking for repetitions, metaphors and analogies, transitions, similarities and differences, linguistic connectors and theory related material. Coding and searching for themes, patterns and relationships can often overlap each other and is a fluid process within a thematic analysis (Saunders, Lewis and Thornhill, 2019). These thematic categories in this research were partially created from the theoretical framework as well as repetitions within the data, linguistics connectors and similarities and differences in how interviewees discussed topics.

3.6 Scientific Credibility

To increase the quality of the study and be able to contribute to research it is crucial to achieve credibility (Nowell et al., 2017). In order to establish credibility, transferability and authenticity the researchers have chosen to follow Lincoln and Guba’s guidelines and criteria to achieve credibility and authenticity. To achieve authenticity it is important that the respondents are comfortable and recognize the data presented (Lind, 2019). Therefore, the final documents with the transcriptions were available for the interviewees to review. The transcriptions are available to respondents to make sure that the information is correct and that the study does not present data that they might be uncomfortable with.

In order to achieve credibility and transferability the study has made sure that the choices within the study have been explained and argued for. This increases the trust towards the study as it gives reasoning behind the different choices made (Nowell et al,. 2017). Furthermore, this information can be used to replicate the study to verify the data or expand the study. Information on the interviewees regarding their professional roles have been given to ensure transferability. By giving this information the transferability of the study is increased and makes it possible to use this study for further research (Nowell et al., 2017).

3.7 Ethics

Research ethics principles have been followed to make respondents more comfortable and increase the quality of the interviews. It is important to establish credibility within the paper (Patel et.al, 2019). In this paper, the four research ethics principles by Vetenskapsrådet, (2002) have been followed to establish credibility and protect the respondents. The study has also taken the General Data Protection Regulation (GDPR) in mind and does not collect any personal information from the respondents. In order to collect the data properly, guidelines from Greene et.al, (2019) have been followed to ensure that Vetenskapsrådet and GDPR requirements are fulfilled.

The first ethical perspective is the treatment of personal information and data collection. Data has to be treated confidentiality and the collected information should not be distributed onward (Greene et.al, 2019). This increases interview quality as respondents can open up and be sure their information is not sent or used elsewhere (Vetenskapsrådet, 2002). The authors have chosen to keep the respondents anonymous to ensure the data is confidential. The second perspective is to inform the respondents of the purpose of the study, what the information will be used for, and the expected time frame for the interview. Before the interview was conducted, the respondents were informed of the time period and what the information collected from the interview will be used for.

The third perspective, the consent requirement, is to ensure the respondent feels safe and understands they have the right to decline to answer (Vetenskapsrådet, 2002). At the beginning of the interview, the respondents were informed that they were free to decline to answer questions and cancel the interview if they felt uncomfortable. The last perspective is the utilization requirement, to ensure that the information is only used for the study and that the information shall not be used afterward (Vetenskapsrådet, 2002). In order to ensure that the information will not be used after the study is finished, the collected data will be deleted.

3.8 Limitations And Delimitations

This paper aims to create a framework for corporations that can help them to decide between two different strategies to be more innovative. This framework will be made with the help of existing literature and a multiple case study. The case study looks at how and why the case companies decided to engage with startups in their intent to become more innovative.

The object of the study is to understand the decision making process of a corporation and to create a framework for corporations, therefore, this research will be performed from the perspective of corporations. The perspectives of startups will not be taken into account during this study. Thus, a study from the point of view of startups will be needed in the future. Additionally, research should be conducted into the added value of acquisitions and/or corporate-startup collaborations for both companies.

Due to time constraints, the decision was made to perform a multiple case study within the B2B sector. This means that the outcome of this research will be specific to the B2B sector. The outcome can only be generalized to a limited extent, hence further research will be needed in order to generalize the framework for multiple sectors. Moreover, conducting a follow-up study which tests the framework is advisable.

4 Empirical Data

This chapter gives an overview of the empirical data collected during the performed interviews. This data lays the foundation for the empirical part of the research. The data was collected via semi-structured interviews with five respondents from three different companies. These interviews lasted between 45 and 60 minutes and were divided into four different themes. The four themes are used in this chapter to give an overview of the collected data. These themes are innovation, acquiring companies, startup collaborations and decision making process. An overview of the interviewees is given below in table 4-1.

The empirical data will be used in the analysis chapter to form new knowledge and theory about decision making within corporations regarding innovation strategies and the role of startups within these strategies.

Respondent	Company number	Function within the company
1	A	Business developer
2	A	Innovation manager
3	B	CEO
4	B	Innovation manager
5	C	New business development manager

Table 4-1 Overview of respondents and companies interviewed

4.1 The Case Studies

During this research, empirical data was collected from three case studies. The first case company (called A in this research) is a global company with offices around the world. It is an organization that has been around for more than 100 years. Interviews were conducted with employees from their Dutch and German offices. They are named respondent 1 and 2 in this chapter. The company uses several tactics to remain innovative. These tactics can be divided into internal and external R&D. For the internal R&D, the company is organized in different business units, each containing, among other things, R&D departments. Secondly, the company also has an overarching R&D department which can be hired by one of the business units for development and innovation projects. The external R&D can be separated into three parts. One part is an external platform to get ideas from students in the form of open innovation challenges, hackathons and so on. The second part is M&A of companies, either startups or established companies. The last part is startup collaboration in several different forms.

Company B is a large corporation located in a western European country and big within their field. It is an organization that sees innovation as a vital part for the company and uses several strategies to remain innovative. The company uses two main tactics to remain innovative. The company has their own R&D department that is responsible for a big part of their innovation. However their main tool to get new technologies are acquisitions. Interviews were conducted with the CEO and innovation manager of the company. They are named respondent 3 and 4 in this chapter.

Company C a newly established company with focus on growing and gaining market shares. They have acquired 19 companies during the last year. They are interested in starting their own startup collaboration program in the near future. Today they collaborate with startups to help their own R&D and get a better understanding of potential acquisitions. An interview was performed with their new business development manager which is responsible for many of their acquisitions and scouting new startups. The interviewed person from company C will be named respondent 5 in the empirical chapter.

4.2 Innovation

The collected data concerning innovation can be divided into three major components, i.e.. the importance of innovation for the company, the amount of attention that is paid to innovation within the company, and the tactics used by the company to be innovative.

Respondents from company A explained that innovation is of vital importance for their company. They therefore use several strategies to stay innovative and competitive within their business. They have entire departments in different countries working on innovation, as well as startup collaboration programs and acquisition strategies.

“The company has entire departments working on innovation.” - Respondent 1

“The company has a couple of cornerstones on innovation. So not only startup collaboration, one is internal r&d. So within, we are structured in different businesses, and each business has many different r&d departments and they do innovation. But we also have a central r&d department which is called technology so if you work at one of the businesses, you could hire someone from technology who does r&d for you. These guys are normally more research focused within the early phases of r&d. And they are basically there for hire. Then of course, we have different ways to do the external r&d. We also have an external platform to get ideas from students where we have challenges like open innovation, classic, open innovation approach, where we have different hackathons and so on. But to be fair, they only are a small part of our innovation activities. The main part is still internal r&d. And then we of course, have the way of buying companies. So doing m&a, and then last but not least at startup collaboration.” - Respondent 2

It was also mentioned that combining different strategies to be innovative was based on efficiency. The company noticed that demand for new technologies increased in the last few years.

"We just have a much higher demand on integrating new technologies and on accelerating our implementation of new technologies. That's more of a reason than trying to cut down on the expenses of R&D on the cost side. I think it's more on being more effective than on trying to reduce the cost of R&D." - Respondent 1

Respondents from company B named their ability to create innovative products, the key of their continued existence. They spend a lot of money and time on staying innovative as that is their biggest selling point in their market.

"Innovation is of the utmost importance for our company. Our company sets itself apart from competitors because of our innovative products. We offer new technologies that others in our field can't offer yet. I would say that our ability to offer new and innovative products is what ensures our existence." - Respondent 3

The respondents furthermore explained that their own R&D department is of considerable size and responsible for around 30% percent of new or improved products. Most of their innovation however, comes from acquisitions. Lastly, they use startup collaborations for innovation as well, but mostly as a tool for potential acquisitions.

"If I have to put a number on how our innovation is divided then I would say that around 30 percent comes from within the company, mostly R&D. But the majority still comes from acquiring startups or small companies that have created a new technology." - Respondent 4

Company C has only recently tried to be more innovative as they previously focused more on growing the company via acquisitions. The company has slightly changed their strategy a few years ago. They are now paying more attention to being innovative and investing more in innovation.

"Our strategy was, in the past, mostly focused on gaining market share. We used acquisitions to grow fast and expand our business."

"There has been a shift within the company the last few years to pay more attention to innovation. We have been working on expanding our R&D department and looking at new ways to be innovative so we can maintain our current market share." -Respondent 5

Company C talked about the innovation strategies they use to be innovative. The company has its own R&D department and has acquired startups in the past. Their acquisitions however focus more on market share than innovation. They don't have much experience in corporate-startup collaborations yet but are currently working on setting up such collaborations.

"I would say that most of our innovation comes from our own R&D department. We are lately looking at collaborating with startups to get more innovative ideas so we can expand the work of our R&D department." - Respondent 5

4.3 Acquiring Companies

The collected data concerning acquiring companies can be divided into three major components, ie. the motivation behind acquiring companies, how these acquisitions affect the corporation's innovation, and how much of those acquisitions are startups.

4.3.1 Motivation Behind Acquisitions

Several reasons to acquire companies were mentioned by interviewees, ie. increasing efficiency of the company's R&D department, acquiring new technologies and increasing market share. Increasing market share is for example the main reason for company C to acquire other companies.

Acquiring startups can increase the efficiency of a company's R&D. As mentioned by respondent 1, their organization sees benefits from acquiring startups as they have less structure. Therefore they can develop faster and think more outside the box.

“It is easier to acquire startups because then we are absorbing them into our organization. If it is a big purchase of a company with already hundreds of people working within that company, then it is much more difficult to integrate them into our organization.”-Respondent 1

However it was also mentioned by respondent 1 that one of the major reasons for acquisitions at company A is acquiring new technologies.

“I would say it's mostly about acquiring new technology and accelerating our r&d By implementing technology that has been developed by other companies who can maybe develop quicker or faster or can think more out of the box or if you technologies that we don't know because the development of technology is going so fast this last decade. We know what's going on but we do not have the resources to develop it ourselves.” - Respondent 1

Company B uses acquisitions as their main tool to get new technologies. This also means that they tend to take more risks. Startups can be a threat in their business since their main selling point is innovative products.

“The development of new technologies goes so much faster than a decade ago. Especially startups develop new technologies quicker than we can. Buying these startups and their new ideas and technologies is vital for us to maintain our position in the market.” - Respondent 4

“We do see the risk of acquisitions, but as we do more and more acquisitions we become more aware of how to minimize the risks. At a time two bad acquisitions happened around the same time. This made us think if we should be so aggressive with our acquisitions. We decided that we want to stay as the number one company in the field. We therefore take the risks to gain new products and market shares.” - Respondent 3

4.3.2 Effect On Innovation

Acquiring startups affects innovation greatly when the acquisition is based on acquiring new technologies. The effect is especially great for company B. They explained that the majority of their innovation comes from acquisitions.

"The majority still comes from acquiring startups or small companies that have created a new technology." - Respondent 4

Company A rarely acquires startups, they want more established companies with products/services ready. They focus on gaining market shares with their acquisitions.

"We often don't buy startups because when we do m&a, we want market share. So we want to buy ourselves into a certain market, which we don't have access to. Because for us, it's relatively interesting to get a foothold in the market and then sell our additional services or products we have." - Respondent 2

Company C however used acquisitions mostly to gain market share. For them, the effect on innovation was minimum.

"We used acquisitions to grow fast and expand our business. These acquisitions had very little to do with innovation. It sometimes would affect our innovation because we also bought up their products and operations. But I would say that overall it is insignificant." -Respondent 5

4.3.3 The Proportion Of Startups

Company A mostly acquires established companies or startups that have a proven business. They want to be certain of the value that the acquisition will bring them. This need for certainty can also mean that the company first collaborates with a startup, before they decide to acquire them.

"Normally we are working with more established startups when we purchase them. The startup needs to have a proven business. They have to have a stable

organization, stable product. That's the level of maturity needed from the startups before we consider purchasing." - Respondent 1

"*I would say that first we start collaborating with them, we need to know them better and we need to see if their technology really fits with our objectives"* - Respondent 1

"If we buy it, but it's not a startup anymore. We often don't buy startups because when we do M&A, we want market share. So we want to buy ourselves into a certain market, which we don't have access to. Because for us, it's relatively interesting to get a foothold in the market and then sell our additional services or products we have. So we do factory automation and if you get some whatever product or service that opens a new side of the factory automation market, then you get into new factories and you can of course sell other products or services we have so this is one of the main goals for M&A for us." -Respondent 2.

Company B however mentioned that they tend to take more risk when acquiring companies. They prefer to acquire startups since they develop new technologies quicker than they can themselves. Additionally, startups are easier to absorb into the company than already established companies, since startups are less bureaucratic.

"Startups are the ones that develop new technologies, the most in our industry. So most of our acquisitions are startups." - Respondent 3

"We are interested in their technologies, not necessarily the company. So startups are easier to absorb. They don't have that many rules, regulations and bureaucratic processes yet. Not like older and established companies have." - Respondent 4

Lastly, company C mentioned that they mainly acquire to increase their market share.

"The financial aspect is the most important for us when we acquire companies. We don't necessarily acquire them to be innovative. Market share is what we are interested in." - Respondent 5

4.4 Startup Collaboration

The collected data concerning startup collaborations can be divided into three major components, ie. the motivation behind collaborations, what these collaborations look like and how these collaborations affect the corporation's innovation.

4.4.1 Motivation Behind Collaborations

Company A mentions that there are five main reasons for them to collaborate with startups, buy external solutions to increase their own efficiency, close gaps in portofolio, keep up with new markets, gain potential customers and acquisitions.

"The very first step is scouting them and seeing if the technology is interesting for us. And the interests of technology can be interesting for two reasons. One is it can be potential customer which can use our technology and if we sell them early enough, if they're still in the development and the design phase or if they're in the scale of phase where they need to industrialize their proposition or their machines or and we can work together with them in very early stage and learn them how to work with our technology, then it can become potential goods customers. And if the technology is interesting enough, we also consider buying them."- Respondent 1

"First one is the venture client approach. This is basically where you buy external solutions. The main goal is to increase the efficiency of our factories. Or services. We have an internal goal of increasing efficiency of our factories each year by 7%. So we have to readapt and reinvent ourselves. This is, I would say, the main goal. The platform thing is similar to Amazon. It's to create a holistic portfolio, get revenue share, but also close gaps of the

offering. Then joined r&d is also relatively simple. Whenever we chase innovation fields that are relatively new, where we don't really have a foothold yet. Startups are often faster than us and we tend to partner with them to be able to keep up with the market. M&A, is normally if we want to build a new strategic field that's pretty young and if this has a huge leverage with our existing fields." - Respondent 2

Company B also sees the collaboration as a tool for acquisitions but also for potential customers.

"We prefer to collaborate with startups to understand how they operate for a potential acquisition, if they don't want to be acquired we work to involve our products in their manufacturing, making them customers." -Respondent 3

Company C names innovation and developing new technologies as their biggest motivation to collaborate with startups. They have grown significantly with the help of acquisitions and now want to increase their innovation activities.

"Lately we have been collaborating for our own innovation gain. If collaborating correctly both parties can get equally much out of it." - Respondent 5

"We are still trying to figure out how we can best collaborate with startups. We don't have big incubator and accelerator programs like other corporations have." -Respondent 5

"We are exploring these collaborations as a tool for our acquisitions now as well. Certainly because we have so much experience with acquisitions and want in the future, might want to use them for innovation purposes as well." - Respondent 5

Both company A and B see startups collaborations as a tool, company A uses it for potential partners and company B for acquisitions. They frequently mention the importance of collaboration with startups to understand how they operate and understand them better. Startup collaboration is an option to gain deeper insight into the startup. Lastly, company C collaborates mostly with startups to help their R&D department to become more innovative.

4.4.2 Types Of Collaboration

Company A currently has three different startup accelerator programs globally. These programs all serve a different geographic and field in which the corporation operates. They currently operate within 33 different fields and different kinds of collaborations.

"We have 33 of the search fields that we are partnering with, but we definitely want to ramp it up quite a bit"-Respondent 2

Company A has 30 different stages when it comes to collaborating with startups. However it could be narrowed down into three broad steps. The first phase is scouting.

"We have platforms. We use them to scout. We have a network of active scouts but we also go to trade fairs where we actively scout and the passive scouting is when they come to us. We have a small little website that we barely communicate with because it's really not that effective. The main part is we actively scout to find startups." - Respondent 2

The second step is to filter and see if they fit their requirements.

"We have clear boundaries, expectations, KPIs, that a startup has to have, then we create a long list of startups that fit these requirements. Then we shorten it down to normally not more than five startups, which we think are the best and then we screen these five startups with the technology experts within our field who initially created the search fields"-Respondent 5

The last step is meeting, validating and understanding if it is feasible and worth collaborating.

“And then we talk with the best one, maybe sometimes two, we start talking and then we set up meetings to identify if this really is a fit, how could the actual value proposition be if what they say online is actually true. And then often pre-validate if the proof of concept is possible. So we do some kind of proof of concept pilot, where we first validate the numbers. We send them data or they show the device to prove that this actually works. “ -Respondent 5

Company B mentions that there are several different stages of the collaboration. The first one is a workshop that invites several startups to get an understanding of the products/services.

“The collaboration depends on what stage we are in with the startup, during the first stage, we usually invite several startups and have more of a workshop day. They introduce their products/services and we get to know the company.” -Respondent 4

Their next step is to continue with the promising companies and work more closely with them, inviting them for private meetings and also sending workers from their startup collaborations program to help the startup.

“We then begin a closer collaboration with startups whose product we find promising. Inviting them to more personal interactions and also sending people from our organization over to their corporation and work together.” -Respondent 4

“Lastly our last step is when we are thinking about buying them, this makes it a quite hectic step as it involves evaluating, understanding the company and how we can absorb them. "-Respondent 4

Company C has no accelerator programs to collaborate with startups. They use more of an open innovation format where they work together to create new technologies. They also try to help startups with small investments and exchanging knowledge.

"We do not have the resources as bigger corporations to have big startups collaboration programs, however we collaborate with startups. The goal one day is to be able to have a larger startup collaboration program, as it draws more attention from startups and therefore increases our chances of acquiring new startups."-Respondent 5

"We value small collaborations more, where we help startups with their developments. Make small investments but mostly support them with knowledge. They might become customers in the future. On the other hand they help us with gaining more knowledge for our R&D department and help us to be more innovative."-Respondent 5

Companies A and B both have accelerator programs they use to collaborate with startups. Company B furthermore exchanges knowledge with startups via meetings and exchanging employees. Company C mentions that they one day want to have the startups programs to be able to reach out to more startups, increasing their chances of making new acquisitions. They are now, however, collaborating with startups on a smaller scale where they work together to develop new technologies. They try to exchange knowledge and sometimes make small investments.

4.4.3 Effect On Innovation

Company A mentions that startup collaborations have a positive effect on innovation, especially the culture.

"You're not as fast or your product isn't as good as the external ones. And then we partner with an external one. And this often is perceived as, as a failure for the internal r&d people because they couldn't manage to do it as good. Because in the end, the goal is to deliver the best product. So this is also where we have to do a lot of change. Because if someone perceives partnering as a win, it's way easier to partner and to be open minded. And I mean what has changed, we noticed over the past year that people are relatively more getting

more open and seeing this as an actual valid solution to do innovation." - Respondent 5

Respondent 4 explained that they are careful with taking too much innovation from startups collaboration, but it helps seeing problems from another perspective. Collaborating with startups helped company B also with gaining new customers. Since they can softly push their technologies as parts of the startups products or developments.

"The collaboration gives us motivation and could help us look at problems from another perspective. It also helps with gaining new customers. We help them with development using our products. We share our knowledge of our products so they can use them in their developments as well."-Respondent 4

"We are very careful to try to take too much inspiration from the startups, as we want startups to come to us. Having a bad reputation of stealing their products is devastating for the startups' collaborations. We much rather see the startup be successful as we either acquire them or offer funding for shares." -Respondent 4

Company A also mentions they fear of getting a bad reputation within the startup collaborations field. Both A and B mention the importance of a good reputation.

"I mean, it's not good for reputation of the company" Respondent 2

Company C explained that the collaborations helped them with innovation as well as gaining new customers. They mentioned that the collaborations lead to the development of new technologies.

"Collaborating with startups have helped our innovation tremendously, we have gained new customers and the collaborations helped us with the development of at least 2 new technologies. And we only started collaborating less than 5 years ago."-Respondent 5

4.5 Decision Making Process

The collected data concerning the decision making process of corporations can be divided into two major components, ie. the evaluation of alternatives and who the decision maker is.

4.5.1 Evaluate The Alternatives

When evaluating between collaboration and acquisition, company A mentions that startups collaborations are easier and safer. Startup collaboration also involves less people, as they only have to run the decision in their department.

"It's way way easier and way less money involved"-Respondent 2

"I mean, you don't have to you don't put so much money in. Startup ranges from maybe 10,000 euros to a quarter of a million euros. It's like a color book. If you're talking about m&a is 100s of millions"-Respondent 2

"You can't do m&a Without the CEO saying yes, but with startup collaborations we do it all the time."-Respondent 2

Company A evaluates the alternatives based on the value proposition it gives to the company.

"We are still trying to create way more value propositions at the moment"-Respondent 2

They also see collaboration as a way of improving their brand image. Respondent 2 mentioned that there are many well established companies that do startup collaboration and it is great for their image.

"If the outside world knows that we collaborate with a lot of cool startups it's also good for for our own brand image"-Respondent 2

Company B aims to involve experts when it comes to evaluating the alternatives.

"As a larger corporation we have the resources to involve a lot of different people with knowledge within the field. If we are looking at a specific new technology we usually also involve an expert within that field to gain a better understanding of its potential. We make many acquisitions and my coworkers are good at researching and understanding new technology and markets, but if they are supposed to learn it all, our acquisition process would take several year."-Respondent 3

When evaluating the alternatives company B takes a look at the financial, but most importantly how the new technology will affect the company. They also look at how easy it will be to absorb the startup.

"When we decide if to continue collaborating or acquiring them, we usually look at how these acquisitions will affect our technology and financials. We strive to gain new knowledge and technology as it could possibly be used within the entire company making us more effective. We also look at how easy the acquisitions are to absorb into our organization. That is why we like startups, they are easy to absorb since they are smaller and take less time. An acquisition of a larger corporation is not only more costly, it takes so much more time integrating it".-Respondent 3

Company B also takes potential threats into account when evaluating the alternatives.

"We also take into account the potential threat a startup has to our market shares. I would say that if we see a big potential risk we prioritize acquiring that corporation." -Respondent 4

Company B explains that they involve a third party to evaluate the startups.

"We look at the market ourselves and do a fair bit of research, but usually when acquiring a company there is usually a middle man. Like … for example, they make a financial analysis and determine the value of the company. Through this we could establish if an acquisition is feasible." -Respondent 4

Corporation C puts focus on the financial aspects and explains how they look at acquisitions from a financial perspective. They do try to be more innovative lately but their main incentive remains the financial aspects and gaining market share.

"We evaluate the alternatives to see if they're innovative and if it will be a financial gain. However, we are a company and we need to make financial decisions. Innovation is something we strive for and have become much more invested into the last couple of years, however it could be the best innovation in the world. If it is not profitable for us, we won't invest. When we acquire companies we want a low payback period, looking at roughly 5 years max. We therefore focus on startups or companies that could stand on their own and have products ready to sell."-Respondent 5

Company C claims that they rather choose to collaborate with companies to improve their own R&D department and maybe gaining new customers. Respondent 5 explained that they had some positive outcomes with startup collaborations and that they are now considering using it as a tool for acquisitions.

"Our main goal with collaborating is to be more innovative and gain customers. We don't want to invest too much into these collaborations. We need some certainty that we get something out of these collaborations. They helped our R&D department with the development of new products so that certainly helped our motivation for these collaborations."- Respondent 5

"But there has been a change lately in the company. We are now seriously discussing accelerator programs because we have seen in our collaborations that they can help us understand startups better. Which can be a useful tool for our acquisitions. And they helped us develop new products."-Respondent 5

4.5.2 Decision Maker

Company A says it depends on the purpose of the startup collaboration. And if it is an acquisition it is the CEO who makes the decision.

"So if we do the venture client one, it's the respective factory that wants to work with them. They're the boss. The R&D projects normally go further up. One below sea level is normally the case so it's not the CEO or CTO who does the decision making". -Respondent 2

Company B
"We are a larger corporation and acquisitions are a crucial part of R&D and for our innovation and increasing market shares, we therefore have our own department that handles acquisitions. They work together as a smaller group making the decision. At the end of the acquisition when the money needs to be transferred and the decision needs to be approved, more people are involved in different departments and usually the CEO and CFO."-Respondent 4

In company C the decision making process looks similar. When the acquisition needs to be approved more people get involved.

"We take our decision together, we are a smaller group who makes the decision. We usually have a person who looks at it from a financial perspective, and a couple that are more invested into the market to see if it's a good idea. When we know we want to buy the company we get more people involved, usually the higher management within the company." -Respondent 5

5 Analysis

The analysis chapter discusses the empirical findings and the theoretical constructs, and how they relate and influence the decision making model. The influence of innovation goals on the decision making process of corporations will be analyzed as well as how well the theoretical decision making model fits in the researched companies. The analysis method used during this research is a thematic analysis. Therefore the significant amount of data needs to be separated and reduced into thematic categories. This chapter is thematically divided into innovation, acquisitions, collaboration, decision making model, theoretical implications and managerial implications.

5.1 Innovation

Weiblen and Chesbrough (2015) state that companies need to become more agile and innovative due to the increased competitiveness of markets. Bruse, et al. (2016) furthermore explain that the large R&D departments and extensive financial background of corporations have less effect on innovation than before. The empirical data shows that companies recognise the statement from Weiblen and Chesbrough (2015) as it was mentioned that they see a much higher demand on integrating new technologies and on accelerating the implementation of new technologies.

"The development of new technologies goes so much faster than a decade ago. Especially startups develop new technologies quicker than we can." - Respondent 3

"We just have a much higher demand on integrating new technologies and on accelerating our implementation of new technologies." - Respondent 1

The data furthermore shows that the companies see a need to be innovative in order to stay relevant in the markets they operate in. Even though they all see the need to be innovative, they approach this innovation in a different way.

5.1.1 Innovation Methods And Inter-Organizational Relations

There were three options mentioned in the empirical data for companies to stay innovative i.e., investing in an R&D department, acquiring companies that developed a new technology and collaborating with startups. These options take different places on the vertical integration scale of interorganizational relations from Lorange and Roos (1992) (see figure 5-1). The further to the left of the figure companies are moving, the more equal the partners are, and the fewer responsibilities and commitments companies have to each other (Sydow et al., 2016). In mergers and acquisitions, the interactions between the organizations require more integration and cooperation, which creates a bigger chance of conflict (Håkansson et al. 2003).

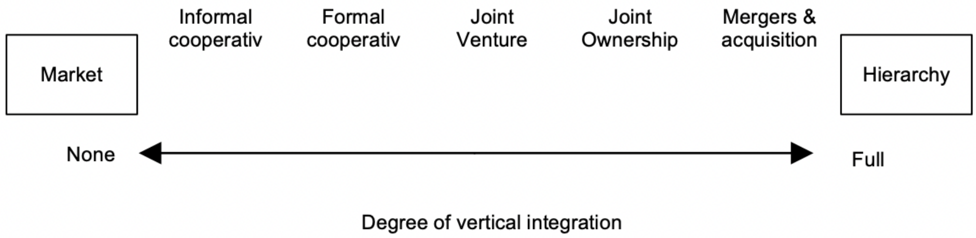

Figure 5-1 Scale of vertical integration (Lorange and Roos, 1992)

Company A mentions frequently throughout the interview the difference in responsibilities between M&A and startups collaborations. By having less responsibilities it gives the company more opportunities to act on itself. When working with an acquisition the CEO of the company needs to be involved. When collaborating with startups they are free to make their own decisions.

Both Company A and B mention how startups are easier to absorb and integrate to their organization. Integrating new corporations into their own is a process which they prefer to shorten.

"If it is a big purchase of a company with already hundreds of people working within that company, then it is much more difficult to integrate them into our organization. "Respondent 1

“That is why we like startups, they are easy to absorb since they are smaller and take less time. An acquisition of a larger corporation is not only more costly, it takes so much more time integrating it.” Respondent 4

Startup collaboration could be seen as a tool to help corporations move from a closed innovation to open innovation. Company A mentioned that startup collaborations helped them to use more open innovation. As mentioned by respondent 2, their R&D previously saw it as failure when working with external companies to achieve innovation.

“And this often is perceived as a failure for the internal r&d people because they couldn't manage to do it as good, but in the end it should also be perceived as a win right? Because if someone perceives partnering as a win, it's way easier to partner and to be open minded. And I mean what has changed, we noticed over the past year that people are relatively getting more open and seeing collaboration as an actual valid solution to do innovation.” - Respondent 2

5.1.2 Combination of Innovation Strategies

In the end, which strategy is used to be innovative differs between companies, however all companies use a combination of strategies. The combination of the strategies that the different case companies use can be seen in figures 5-2, 5-3 and 5-4. Combining these strategies is often based on efficiency. Using multiple ways of developing new technologies can increase the innovation outcomes.

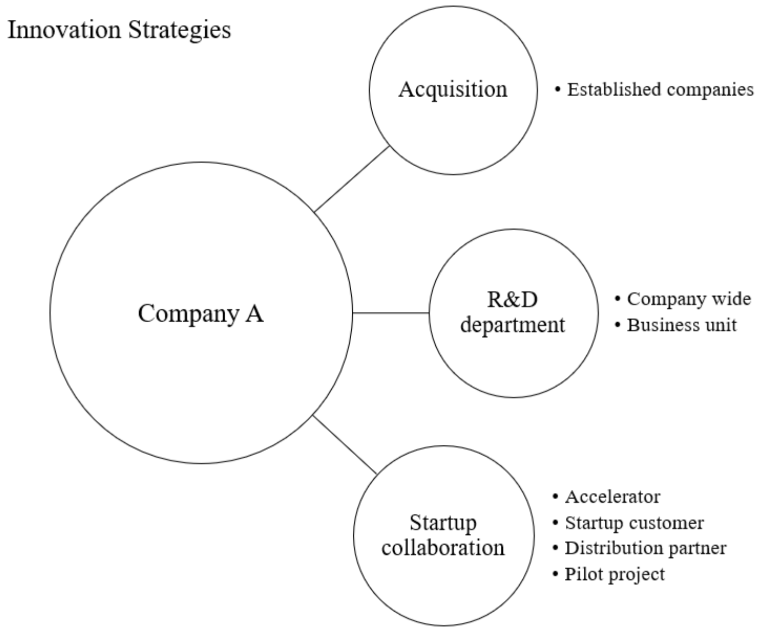

Figure 5-2 Innovation Strategies used by Company A

Company A has several different startup collaborations. They use accelerators, startup customers, distribution partners and pilot projects. They have a companywide R&D department and R&D departments per business unit. When Company A acquires companies they prefer more established companies that could stand on their own.

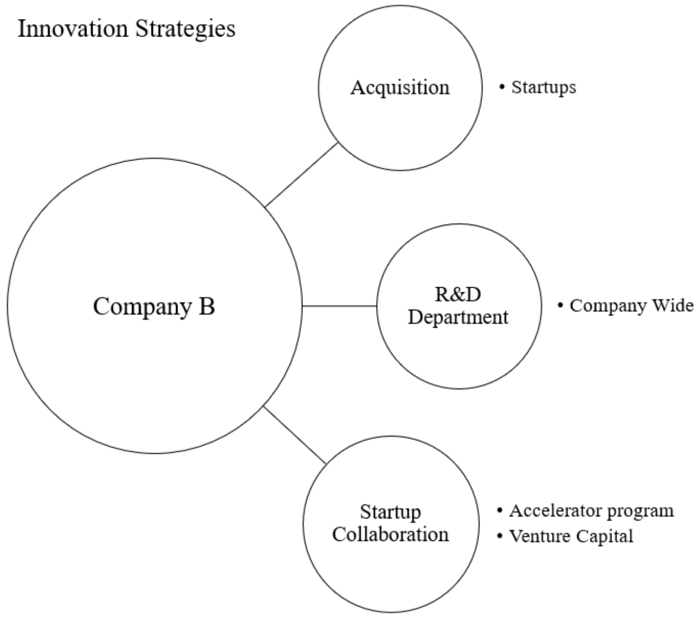

Figure 5-3 Innovation Strategies used by Company B

Company B has two startup collaborations programs, an accelerator program and a venture capital program. Their R&D department is companywide. Company B prefers to acquire startups as it is easier for them to absorb.

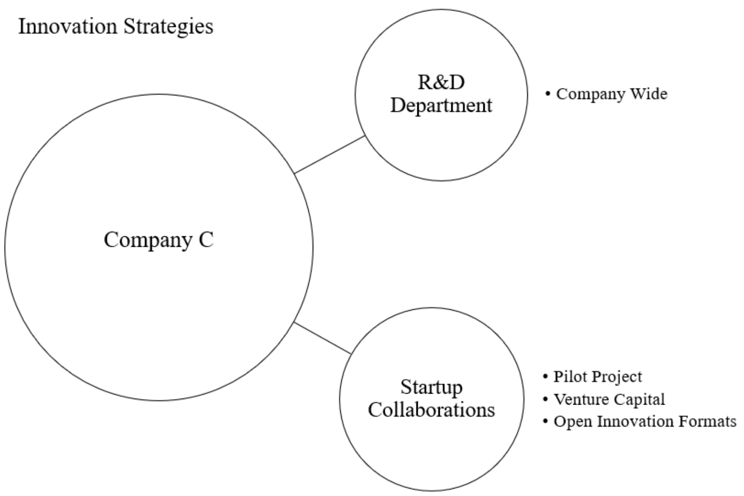

Figure 5-4 Innovation Strategies used by Company C

Company C currently collaborates with startups through pilot projects, venture capital and open innovation format. Their R&D department is companywide. Company C acquires many corporations, however they are not doing it for innovation gain but rather market shares and growth.

5.2 Acquisitions

Mergers and acquisitions are a strategic tool to combine different organizations (Johnson et al., 2017). During an acquisition the two companies are not equal to each other. One company takes control of another company by purchasing a majority of the shares of the other company (Johnson et al., 2017). The acquired company is absorbed by the bigger company and conforms itself to the goals and objectives of the acquiring company (Marcus and van Dam, 2019). Hubbard and Purcell (2001) provide an extensive explanation on the different incentives companies can have to use an acquisition strategy. They have sorted them into six categories, namely, market penetration, vertical expansion, financial synergies, new market entry, asset potential or synergy and economies of scale.

The empirical data shows that all interviewed companies have used acquisitions in the past. Several reasons were mentioned for these acquisitions, such as increasing market share (market penetration), increasing the efficiency of the company's R&D department (asset potential) and acquiring new technologies (vertical integration). An overview for the acquisition motivations are given in table 5-1.

Company	**Reason for acquisition**	**Types of companies acquired**
Company A	Acquiring new technologies Market share	Established companies Occasionally startups
Company B	Acquiring new technologies	Startups
Company C	Market share	Startups

Table 5-1 Overview of acquisition motivations

Two out of the three companies used acquisitions mainly for innovation purposes while the other company used acquisitions as a way to increase their market share and grow the company. At least one company mentioned that acquisitions were their main source for getting new technologies.

It was furthermore shown in the empirical data that the companies preferred more established startups and medium sized companies for their acquisitions. The companies want to see that the companies they acquire have a proven business and stable product. The companies, on the other hand, should still be small enough to easily absorb, avoiding established rules, regulations and bureaucratic processes.

"Normally we are working with more established startups when we purchase them. The startup needs to have a proven business. They have to have a stable organization, stable product. That's the level of maturity needed from the startups before we consider purchasing." - Respondent 1

5.3 Collaboration

Urbaniec and Zur (2020) mention that corporate-startup collaborations are used by corporations to stay innovative. Especially the agility and ability to develop products faster and at a lower cost is an interesting characteristic of startups (Kupp et al., 2017). Weiblen and Chesbrough (2015) further argue that collaborating with startups rather than buying them requires a lower level of investment and generates faster development of innovative ideas. The case companies recognise these statements from Weiblen and Chesbrough (2105)

"Collaborating with startups have helped our innovation tremendously, we have gained new customers and the collaborations helped us with the development of at least 2 new technologies. And we only started collaborating less than 5 years ago."-Respondent 5

"I mean, you don't have to put so much money in. Startup ranges from maybe 10,000 euros to a quarter of a million euros. It's like a color book. If you're talking about m&a is 100s of millions" - Respondent 2

Literature furthermore describes six different types of corporate-startup collaborations, i.e. corporation becomes distribution partner, corporate accelerators, corporate venture capital programs, corporation supports pilot project, corporation becomes startup customer and open innovation formats. The empirical data shows that corporate accelerators are popular among the researched companies. Table 5-2 shows an overview of the different types of startup collaboration the companies engage in. Two out of the three interviewed companies have an accelerator program and the third company is planning on setting up such a program. The companies furthermore collaborated with startups by exchanging knowledge, coaching and small investments.

Company	**Reason for startup collaborations**	**Types of collaborations**
Company A	Acquiring new technologies	Accelerator Become startup customer Distribution partner Pilot project
Company B	Innovation Tool for acquisitions	Accelerator Venture capital
Company C	Innovation Support R&D	Venture capital Open innovation formats

Table 5-2 Overview of types of collaborations

It was often mentioned that the companies see collaborations as a tool to determine which companies to acquire and keep track of new technologies within the market. Using collaborations as a tool to determine which companies to acquire can be connected to the pre-acquisition phase as described in the theoretical framework. The pre-acquisition phase focuses on the decisions making that occurs and ensures the integration of two separate companies (Lasserre, 2003). The acquiring company needs to integrate the cultures, values, and processes of the acquired company into its own. The most important part of the pre-acquisition phase is to analyze, evaluate and understand if the potential corporation is a good fit for the buyer (Lasserre, 2003). To be able to make a well-analyzed decision, it is important to collect as much strategic information and financial data as possible (Hubbard &

Purcell, 2001). Startup collaborations are an opportunity for companies to collect information and use that information in their evaluation process.

"We are exploring these collaborations as a tool for our acquisitions now as well. Certainly because we have so much experience with acquisitions and want in the future, might want to use them for innovation purposes as well." - Respondent 5

Gaining the startup as a customer was another motivation that was mentioned by the companies. However they saw it more as an additional gain than as a main motivator.

5.4 Decision Making Model

The proposed decision making model is constructed with the help of Schoenfeld's (2011) rational decision making model, the incremental decision-making process and the prospect theory. This proposed decision making model consists of six steps and eight underlying steps (see figure 5-5)

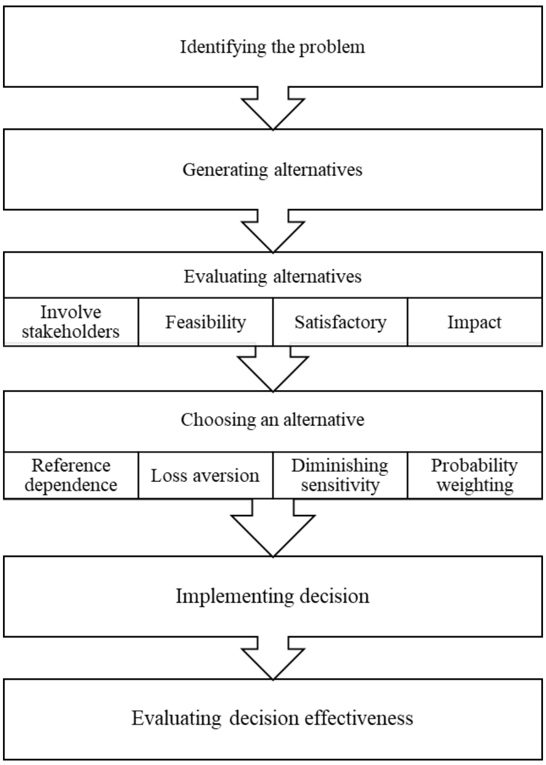

Figure 5-5 Proposed decision making model created by the authors

As mentioned in the purpose, the aim of this study is to understand the decision making process corporations go through when they decide to interact with startups to reach their innovation goals. Therefore the first two steps of this decision making model can already be filled in. The corporations in this research have identified their need to be innovative in order to remain competitive.

"Innovation is of the utmost importance for our company. Our company sets itself apart from competitors because of our innovative products. We offer new technologies that others in our field can't offer yet. I would say that our ability to offer new and innovative products is what ensures our existence." - Respondent 3

This study furthermore concentrates on the alternatives to reach these innovation goals i.e. internal R&D, acquiring startups and corporate-startup collaborations. The theoretical framework indicates that alternatives should be evaluated in order to choose the best alternative. However the empirical data showed that all case companies use a mixture of strategies to reach their innovation goals.

5.4.1 Evaluating Alternatives

The empirical data showed that the companies use different ways of evaluating alternatives as indicated in the theoretical framework. Company A makes use of several tactics to evaluate possible startups to collaborate with, which includes platforms, scouts, websites and tech fairs. When it comes to evaluating the alternatives both company B and C claim that they are using different stakeholders to evaluate the alternatives. When acquiring companies it is often outside of their field. In order to minimize risk and get a better understanding the companies rely on involving different stakeholders to make a more informed decision.

"As a larger corporation we have the resources to involve a lot of different people with knowledge within the field. If we are looking at a specific new

technology we usually also involve an expert within that field to gain a better understanding of its potential.” .-Respondent 3

A big part of evaluating the alternatives is to make sure it is a feasible option. In the empirical data it is shown that one of the more important reasons for companies when evaluating is to make sure it fits within the organization.

The empirical data shows that the companies are aware of the risk of acquisitions. They do however still take the risk to not lose market shares. As the prospect theory proposes that when facing a loss, greater risk is taken. Company B stated that they want to stay as the leader within their industry and therefore are willing to take more risks.

“We look at the market ourselves and do a fair bit of research, but usually when acquiring a company there is usually a middle man. Like … for example, they make a financial analysis and determine the value of the company. Through this we could establish if an acquisition is feasible.” -Respondent 4

5.4.2 Choosing an Alternative

When choosing between the alternatives to be innovative, companies can be influenced by four different elements according to the theory. These elements, reference dependence; loss aversion; diminishing sensitivity and probability weighting, are described in the prospect theory from Kaneman and Tversky (1979). The empirical data showed that the companies are hesitant to choose one single way to reach their innovation goals. They all implemented a mixture of strategies to be innovative. This indicates that companies try to avert loss, and diminish sensitivity. However, the empirical data did not show signs of reference dependence and probability weighting. All companies choose multiple alternatives to spread their changes for gaining innovative ideas.

“We just have a much higher demand on integrating new technologies and on accelerating our implementation of new technologies. That's more of a reason than trying to cut down on the expenses of R&D on the cost side. I think it's

more on being more effective than on trying to reduce the cost of R&D." - Respondent 1

Company A noticed that competitors had already set up multiple accelerator programs in order to collaborate with startups.

"The big companies have big departments .The big ones started five or six years ago with a startup collaboration. We tried but it didn't work. And now we're ramping this up again and it's getting received very well." - Respondent 2

Company B uses startup collaborations to minimize losses when acquiring startups. They experienced two bad mergers in the past and fear making the same decision. Therefore they use it as a tool to learn more about the startups.

"We do see the risk of acquisitions, but as we do more and more acquisitions we become more aware of how to minimize the risks. At a time two bad acquisitions happened around the same time. This made us think if we should be so aggressive with our acquisitions. We decided that we want to stay as the number one company in the field. We therefore take the risks to gain new products and market shares." – Respondent 3

Company C fears as they have grown, not to be innovative. They therefore see collaborations as a tool to help them be innovative. Through Venture capital and Open innovation formats.

If a company chose to acquire a corporation it is a more time consuming and relegated process. All three companies explained that the CEO needs to be involved when the decision is made regarding the acquisitions. Startup collaboration however is less restricted and the companies usually make the decision within their departments. This leads to the implementation of startups collaborations being easier than acquisitions as it requires less people involved, is less time consuming and costly. When acquiring a corporation there is also a big focus on the integration process. Mentioned by Company B they preferred startups as they are easier to absorb into the organization.

All three of the companies interviewed have been evaluating their acquisitions and collaborations. It is shown that acquisitions need to be easily absorbed by the organization in order to be effective. The companies mentioned frequently how they have learnt from their mistakes and today are much more experienced in acquisitions and startup collaborations.

5.5 Theoretical Implications

Both theoretical and empirical data have shown that companies see a need to be innovative in order to stay relevant in the markets they operate in. Companies however approach this innovation in different ways. Three strategies were mentioned throughout this research that can be implemented by companies to stay innovative i.e., investing in an R&D department, acquiring companies that developed a new technology and collaborating with startups. The empirical data showed that corporations do not really choose between the available innovation strategies. Which strategies are used to be innovative differs between companies, however all researched companies used a combination of strategies. Combining these strategies is often based on efficiency and risk aversion, since using multiple ways of developing new technologies can increase the innovation outcomes. We therefore propose the following framework (see figure 5-6) as a decision making tool for corporations that want to engage with startups in order to be more innovative.

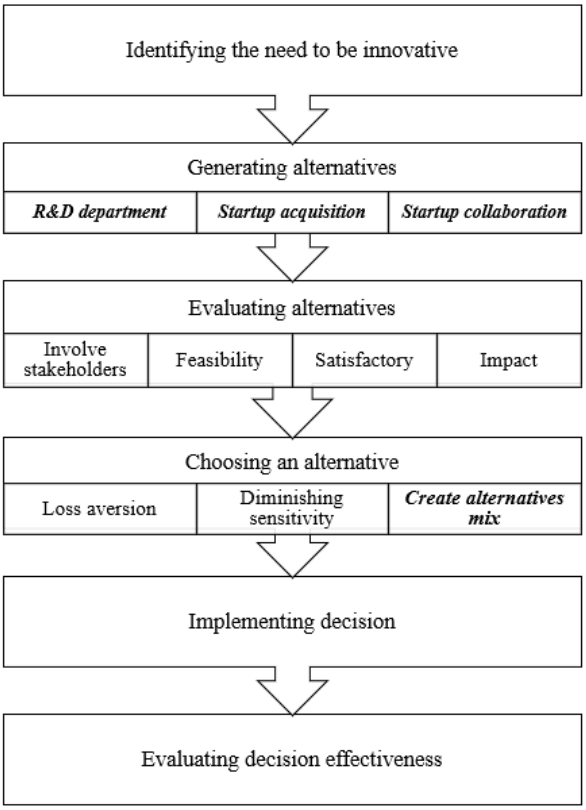

Figure 5-6 Final proposed decision making framework created by the authors

The first step is to identify the need to be innovative. Secondly corporations need to generate alternatives. The existing strategies for corporations to be innovative are, setting up a R&D department, acquiring startups that have developed new technologies and engaging in corporate-startup collaborations. Thereafter the generated alternatives need to be evaluated in order to determine which strategy may fit the company best and to make a well informed decision. Corporations use different stakeholders to evaluate the alternatives. These stakeholders inform the corporations on risks and advantages of the different alternatives. Furthermore, the corporations need to ask themselves if the alternatives are feasible, if the alternative leads to satisfactory results and what the impacts are of the different alternatives. When all the alternatives are evaluated and assessed, the best suited alternatives can be chosen.

Choosing an alternative is often based on loss aversion and diminishing of sensitivity. This means that companies take the risk of a strategy into consideration when choosing an alternative and try to diminish sensitivity by sticking to the certain outcome. Furthermore companies are hesitant to choose one single way to reach their innovation goals and often choose a mix of alternatives. By choosing a mix of alternatives the companies increase the chances of being innovative and spread the risks.

The implementation of the different alternatives differs between the various strategies. If a company chose to acquire a corporation it is a more time consuming and relegated process since multiple decision makers are involved. Startup collaboration however is less restricted and the companies usually make the decision within their departments. This leads to the implementation of startups collaborations being easier than acquisitions as it requires less people involved, is less time consuming and costly. When acquiring a corporation there is also a big focus on the integration process.

Lastly, corporations need to evaluate the effectiveness of the decision they have made. It is of importance to the corporations to understand what the decisions have accomplished and what could have been done better. With evaluations, corporations can learn from their mistakes, but can also determine which of the chosen strategies in their alternatives mix has been the most effective.

5.6 Managerial Implications

This research implies that engaging with startups to be more innovative is not as simple as choosing between acquisition or collaboration. In figure 5-7 a step-by-step plan is given to help manager in their quest to be more innovative with the help of startups. The plan shows which actions have to be taken in order to create an innovation strategy that works best for the company and utilizes the innovative properties of startups.

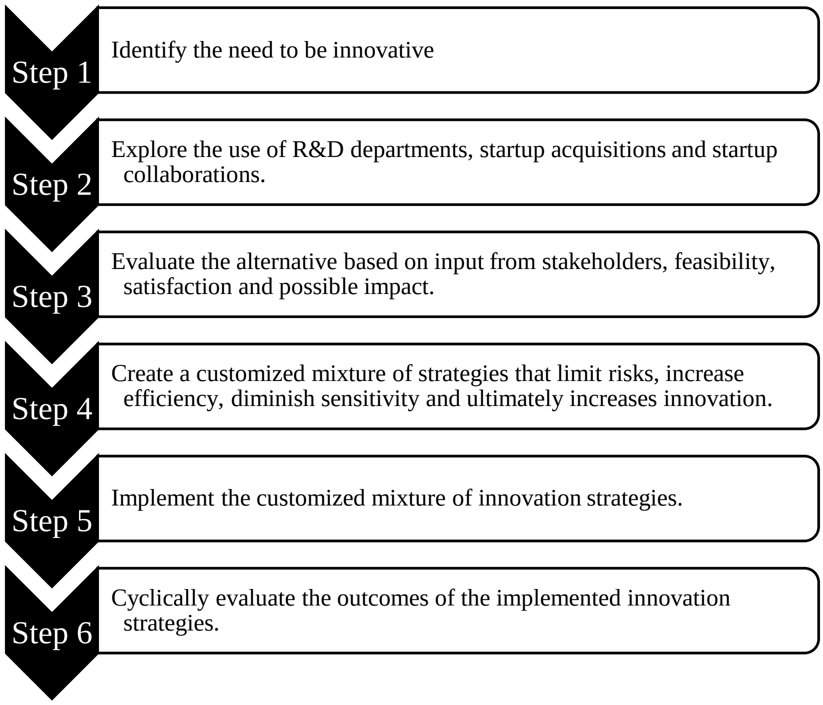

Figure 5-7 Step-by-step plan to implement innovation strategies, created by the authors

The data collected has shown that companies can be innovative with the help of R&D departments, startup acquisitions and corporate-startup collaborations. In order to choose a fitting strategy, companies need to evaluate the alternatives based on input from stakeholders, feasibility, satisfaction and possible impact. It is furthermore advisable that companies create a mix of innovation strategies and not simply choose either an R&D, acquisitions or corporate-startup collaboration strategy. With the creation of a customized mixture of strategies, a company can limit risks, increase efficiency and diminish sensitivity. Lastly, it is of importance that companies evaluate their strategy mix regularly to determine how effective the strategies are at generating innovation.

6 Conclusion

This research showed that corporations feel a need to be innovative in order to keep up with the increasingly competitive environment created by an increasing amount of startups. They must acquire new technologies and improve their R&D to stay competitive and minimize losses. All companies understand that innovation is crucial, however they approach staying innovative differently. The theoretical part of this research explored corporate acquisitions, corporate-startup collaborations, interorganizational relationships and decision making within corporations. In the empirical data, various methods were identified to achieve innovation such as R&D departments, M&A and startups collaborations. The researched companies use a mixture of the identified innovation strategies in order to be more effective and increase their chances of innovative success. Rather to see the innovation strategy as opposites which one needs to choose between, these companies combine them into one strategy. Startup collaboration furthermore, can be seen as a tool for acquisitions, getting new partners and accelerating new technologies. The empirical data furthermore showed that companies prefer to acquire corporations that are more established and could stand on their own. The company wants the startups to have a stable product and a proven business. However, the acquired companies should preferably still be small, since it makes the process of absorbing them into the organization easier. Some companies see collaboration as a way to identify potential acquisitions, partnerships and technologies. It helps them to understand the startup better, to gather strategic and financial information for the pre-acquisitions phase. The collaboration can also be seen as a tool to share knowledge and expertise between the two parties.

A decision making model was created with the help of several theories. The empirical data confirmed that corporations use different ways of evaluating alternatives when making decisions regarding innovation, as previously described in the theoretical framework. They involve external stakeholders to gather more information to make more informed decisions, ask themselves if the alternatives are feasible, lead to satisfactory results and what the impacts are of the different alternatives. When all the alternatives are evaluated and assessed, the best suited alternatives can be chosen. The empirical data furthermore confirmed that the decision making process is influenced by a fear of losing. The organizations fear not being innovative as startups today have less regulations and bureaucratic procedures, making it easier for them to innovate. These organizations therefore take risks to stay innovative and divide those risks through startup collaborations and acquisitions. When choosing alternatives, companies tend to create a mixture of strategies This indicates that companies try to avert loss and diminish sensitivity. Choosing multiple strategies to gain innovation spreads companies' chances of gaining innovative ideas.

In summary, the empirical data in this research displayed that companies use a mixture of strategies, including internal R&D, acquiring startups and corporate-startup collaborations, to reach their innovation goals. These alternatives are evaluated based on factors such as financial gain, feasibility within the organization, and input from different stakeholders, including experts within the relevant fields. Companies are aware of the risks involved, but are willing to take those risks in order to remain competitive, avoid losses and stay innovative. They furthermore tend to choose multiple alternatives to spread their chances for gaining innovative ideas, in order to avert loss and diminish sensitivity. Ultimately, the companies use startup collaborations to minimize losses when acquiring startups, to stay ahead of their competitors, and to help them remain innovative as they grow.

6.1 Future Research

Future research could be conducted from the perspective of startups. The interviewed organizations took for granted that the startups want to collaborate with them due to their resources and the potential to partner with them. In order to gain a deeper understanding regarding the process between the corporate-startup collaboration, the perspective of the startup needs to be further researched. How does the collaboration benefit startups and why do they want to collaborate with larger corporations?

The interviewed organizations claim that their main goal is to increase their innovation. However it remains unknown how much innovation they actually get from the startup collaborations. Future research could therefore look into how much innovation is actually gained from the collaboration and acquisitions. It could also explore if the new technologies get adopted and widely used by the corporation. Are the corporations acquiring for technology gain or acquiring to get rid of competitors?

Lastly, as this study presents a theoretical framework of the decision making process a follow up study could be made to test the theoretical framework. This to further explore the process between startups collaborations and acquisitions.

7 Reference List

Adams, J., Khan, H.T.A. and Raeside, R. (2014). *Research methods for business and social science students*. 2nd ed. Los Angeles: Sage.

Bell, E., Bryman, A. and Harley, B. (2022). *Business Research Methods.* 6th ed. Oxford: Oxford University Press.

Bruse, F., Böhmer, A. and Lindemann, U. (2016). Cooperation between large companies and start-ups: the access to drive disruptive innovation. In: *Proceedings of NordDesign 2016*. Trondheim, pp.115–125.

Bryman, A. and Bell, E. (2017). *Företagsekonomiska forskningsmetoder*. Stockholm: Liber.

Chesbrough, H.W. (2003). *Open innovation : the new imperative for creating and profiting from technology*. Boston, Mass.: Harvard Business School Press.

Christensen, C., Horn, M. and Caldera, L. (2011). *Disrupting College: How Disruptive Innovation Can Deliver Quality and Affordability to Postsecondary Education*. [online] Available at: https://www.researchgate.net/publication/257926217_Disrupting_College_How_Disruptive_Innovation_Can_Deliver_Quality_and_Affordability_to_Postsecondary_Education_httpgooglogr5r.

Denzin, N.K. and Lincoln, Y.S. (2011). *The SAGE Handbook of Qualitative Research*. [online] *Google Books*. SAGE. Available at: https://books.google.se/books?hl=en&lr=&id=AIRpMHgBYqIC&oi=fnd&pg=PA301&dq=case+study&ots=kpGRDGhyff&sig=TlvqzuvlYVTJDqsvikMVS5Rggww&redir_esc=y#v=onepage&q=case%20study&f=false [Accessed 2 Mar. 2023].

Enkel, E., Gassmann, O. and Chesbrough, H. (2009). Open R&D and open innovation: exploring the phenomenon. *R&D Management*, 39(4), pp.311–316. doi:https://doi.org/10.1111/j.1467-9310.2009.00570.x.

Etzioni, A. (1967). MixedScanning: A 'Third' Approach to DecisionMaking. *Public Administration Review*, [online] 27(5), pp.385–392. doi:https://doi.org/10.2307/973394.

Faulkner, D., Teerikangas, S. and Jospeh, R.J. (2012). *The Handbook of Mergers and Acquisitions*. Oxford University Press. doi:https://doi.org/10.1093/acprof:oso/9780199601462.001.0001.

Fridfinnsson, F. and Stefansson, S. (2019). *Startup Collaboration as a Part of Corporate Innovation A Qualitative Study on Icelandic Corporations* . [online] Available at: https://www.diva-portal.org/smash/get/diva2:1328412/FULLTEXT01.pdf.

Gadde, L.-E., Huemer, L. and Håkansson, H. (2003). Strategizing in industrial networks. *Industrial Marketing Management*, 32(5), pp.357–364. doi:https://doi.org/10.1016/s0019-8501(03)00009-9.

Gassmann, O. and Enkel, E. (2004). *Towards a Theory of Open Innovation: Three Core Process Archetypes*. [online] Available at: https://www.researchgate.net/publication/36384702_Towards_a_Theory_of_Open_Innovation_Three_Core_Process_Archetypes.

Gioia, D.A., Corley, K.G. and Hamilton, A.L. (2013). Seeking qualitative rigor in inductive research. *Organizational Research Methods*, 16(1), pp.15–31. doi:https://doi.org/10.1177/1094428112452151.

Gomes, E., Angwin, D.N., Weber, Y. and Yedidia Tarba, S. (2012). Critical Success Factors through the Mergers and Acquisitions Process: Revealing Pre- and Post-M&A Connections for Improved Performance. *Thunderbird International Business Review*, 55(1), pp.13–35. doi:https://doi.org/10.1002/tie.21521.

Greene, T., Shmueli, G., Ray, S. and Fell, J. (2019). Adjusting to the GDPR: The Impact on Data Scientists and Behavioral Researchers. *Big Data*. doi:https://doi.org/10.1089/big.2018.0176.

Gustafsson, O. and Magnusson, J. (2016). *INTER-ORGANIZATIONAL COLLABORATION - IN THEORY AND PRACTICE: Based on a multiple-case study in the automotive industry*. [online] Available at: https://publications.lib.chalmers.se/records/fulltext/238220/238220.pdf.

Gutmann, T. and Lang, C. (2022). Unlocking the Magic of Corporate-Startup Collaboration: How to Make It Work. *IEEE Engineering Management Review*, 50(2), pp.19–25. doi:https://doi.org/10.1109/emr.2022.3158490.

Harris, G. (2016). Incremental Theory of Decisionmaking. *Global Encyclopedia of Public Administration, Public Policy, and Governance*, pp.1–5. doi:https://doi.org/10.1007/978-3-319-31816-5_2996-1.

Haucap, J., Rasch, A. and Stiebale, J. (2019). How mergers affect innovation: Theory and evidence. *International Journal of Industrial Organization*, [online] 63, pp.283–325. doi:https://doi.org/10.1016/j.ijindorg.2018.10.003.

Hubbard, N. and Purcell, J. (2001). Managing employee expectations during acquisitions. *Human Resource Management Journal*, 11(2), pp.17–33. doi:https://doi.org/10.1111/j.1748-8583.2001.tb00036.x.

Huizingh, E.K.R.E. (2011). Open innovation: State of the art and future perspectives. *Technovation*, [online] 31(1), pp.2–9. doi:https://doi.org/10.1016/j.technovation.2010.10.002.

Hyde, K.F. (2000). Recognising Deductive Processes in Qualitative Research. *Qualitative Market Research: an International Journal*, [online] 3(2), pp.82–90. Available at: https://www.emerald.com/insight/content/doi/10.1108/13522750010322089/full/html.

Ikhtiar Alam, S. (2022). *Mergers and Acquisitions (M&A)*.

Jemison, D.B. and Sitkin, S.B. (1986). Corporate Acquisitions: A Process Perspective. *The Academy of Management Review*, 11(1), p.145. doi:https://doi.org/10.2307/258337.

Johan Alvehus (2019). *Skriva uppsats med kvalitativ metod : en handbok*. Stockholm: Liber.

Johnson, G., Scholes, K., Angwin, D., Regnér, P. and Whittington, R. (2017). *Exploring Strategy*. 11th ed. Harlow: Pearson.

Kaats, E. and Wilfrid Opheij (2014). *Creating Conditions for Promising Collaboration : Alliances, Networks, Chains, Strategic Partnerships*. Berlin, Heidelberg: Springer Berlin Heidelberg.

Kohler, T. (2016). Corporate accelerators: Building bridges between corporations and startups. *Business Horizons*, 59(3), pp.347–357. doi:https://doi.org/10.1016/j.bushor.2016.01.008.

Krishnaswami, O.R. and Satyaprasad, B.G. (2010). *Business Research Methods*. 1st ed. New Delhi: Himalaya Publishing House.

Kupp, M., Marval, M. and Borchers, P. (2017). Corporate accelerators: fostering innovation while bringing together startups and large firms. *Journal of Business Strategy*, 38(6), pp.47–53. doi:https://doi.org/10.1108/jbs-12-2016-0145.

Lasserre, P. (2003). *Global Strategic Management*. Bloomsbury Publishing.

Laursen, K. and Salter, A. (2006). Open for innovation: the role of openness in explaining innovation performance among U.K. manufacturing firms. *Strategic Management Journal*, [online] 27(2), pp.131–150. doi:https://doi.org/10.1002/smj.507.

Lichtenthaler, U. (2011). Open Innovation: Past Research, Current Debates, and Future Directions. *Academy of Management Perspectives,* [online] 25(1), pp.75–93. Available at: http://www.jstor.org/stable/23045037 [Accessed 14 Feb. 2023].

Lunenburg, F.C. (2010). *The decision making process*. [online] Available at: http://nationalforum.com/Electronic%20Journal%20Volumes/Lunenburg,%20Fred%20C.%20The%20Decision%20Making%20Process%20NFEASJ%20V27%20N4%202010.pdf.

Marcus, J. and van Dam, N. (2019). *Handbook Organisation and Management : a Practical Approach*. 4th ed. Groningen: Noordhoff Uitgevers.

Moraga-González, J.L., Motchenkova, E. and Nevrekar, S. (2022). Mergers and innovation portfolios. *The RAND Journal of Economics*, 53(4), pp.641–677. doi:https://doi.org/10.1111/1756-2171.12426.

Papadakis, V. and Thanos, I. (2010). *Research on strategic decisions: taking stock and looking ahead*. [online] Available at: https://www.researchgate.net/publication/293756028_Papadakis_VM_Thanos_IC_and_Barwise_P_2010_Research_on_strategic_decisions_taking_stock_and_looking_ahead_In_Nutt_PC_and_Wilson_DC_eds_Handbook_of_Decision_Making_John_Wiley_Chichester_UK_pp_31-70_ISBN.

Powell, W.W. (1987). Hybrid Organizational Arrangements: New Form or Transitional Development? *California Management Review*, 30(1), pp.67–87. doi:https://doi.org/10.2307/41165267.

Rossignoli, C. and Ricciardi, F. (2014). *Inter-Organizational Relationships : Towards a Dynamic Model for Understanding Business Network Performance*. Cham: Springer International Publishing : Imprint : Springer.

Saunders, M., Lewis, P. and Thornhill, A. (2019). *Research Methods for Business Students*. 8th ed. Harlow: Pearson Education Limited.

Schweiger, D.M. and Very, P. (2003). Creating value through merger and acquisition integration. *Advances in Mergers & Acquisitions*, pp.1–26. doi:https://doi.org/10.1016/s1479-361x(03)02002-7.

Slack, N., Brandon-Jones, A. and Johnston, R. (2016). *Operations management*. 8th ed. Harlow, England: Pearson.

Stefansson, S. and Friðfinnsson, F. (2019). *Startup Collaboration as a Part of Corporate Innovation: A Qualitative Study on Icelandic Corporations*. [online] Available at: http://www.diva-portal.org/smash/record.jsf?pid=diva2%3A1328412&dswid=2213.

Sydow, J., Schüßler, E. and Müller-Seitz, G. (2016). Managing Inter-organizational Relations. *Managing Inter-Organizational Relations*, pp.3–24. doi:https://doi.org/10.1007/978-1-137-37003-7_1.

Timmermans, S. and Tavory, I. (2012). Theory Construction in Qualitative Research. *Sociological Theory*, 30(3), pp.167–186. doi:https://doi.org/10.1177/0735275112457914.

Urbaniec, M. and Żur, A. (2021). Business model innovation in corporate entrepreneurship: exploratory insights from corporate accelerators. *International Entrepreneurship and Management Journal*, 17, pp.865–888. doi:https://doi.org/10.1007/s11365-020-00646-1.

Vetenskapsrådet (2002). *Forskningsetiska principer inom humanistisk-samhällsvetenskaplig forskning*. [online] Available at: https://www.vr.se/download/18.68c009f71769c7698a41df/1610103120390/Forskningsetiska_principer_VR_2002.pdf.

Wang, Y.-H. and Tsai, C.-F. (2014). *The Relationship between Brand Image and Purchase Intention: Evidence from Award Winning Mutual Funds*. [online] papers.ssrn.com. Available at: https://ssrn.com/abstract=2322833.

Weiblen, T. and Chesbrough, H.W. (2015). Engaging with Startups to Enhance Corporate Innovation. *California Management Review*, 57(2), pp.66–90. doi:https://doi.org/10.1525/cmr.2015.57.2.66.

Appendix 1

Interview guide

We have chosen to take ethical principles into consideration when writing our thesis. Therefore, the corporation will be anonymous, as well as the respondents.

Innovation

- How does *the corporation* usually try to achieve innovation?
- Which tactics does the *corporation* use to be innovative?
- What percentage / portion of *the corporation's* actions/operations is focused on innovation?
- How important is innovation for *the corporation*?

Acquiring companies

- How often does *the corporation* acquire companies?
- What are the motivations behind acquiring companies?
- Does *the corporation* acquire companies for innovation purposes?
- If no, what are the reasons for that?
- If yes, what are the reasons for that?
- If yes, how long does the acquiring process take?
- How do acquisitions of startups affect *the corporation's* innovation?

Startup collaboration

- Has *the corporation* ever considered working together with startups to be more innovative?
- With how many startups is *the corporation* currently working with?
- What were the reasons behind choosing to collaborate with startups?
- What does a *corporation*- startup collaboration look like?
- What does *the corporation* want to achieve with these collaborations?
- What forms of collaboration does *the corporation* use?
- How does startup collaboration affect *the corporation's* innovation?

Decision making process

- Where in the organization are decisions made regarding innovation tactics?
- Where in the organization are decisions made regarding startup interactions?
- How long does it usually take from idea to implementing said idea?
- What does *the corporation's* decision-making process look like when deciding if *the corporation* is going to collaborate with a startup?
- What does *the corporation's* decision-making process look like when deciding if *the corporation* is going to acquire a startup?
- What affects the decision making process when deciding to use a different approach to be innovative?