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Innovation and M&A:
a study examining innovative capabilities post-acquisition

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Abstract
This study examines the impact of Mergers and Acquisitions on the innovative capabilities of firms. Given how trillions of dollars are invested in acquisitions every year, yet the failure rate of M&As remain at 70-90 percent, the topic is important to analyse. Furthermore, innovation and knowledge are two central motives for acquiring firms, and the failure rate therefore showcases a further need to evaluate why so many M&As fail. The study was carried out by conducting an innovation audit at six firms who have undergone an M&A where the interviews focused on three themes: innovation, motives and integration. The theme Innovation was used to deduce whether the innovative capabilities of the firms have changed or not. The following two themes, motives and integration, was used to better understand why the changes happened. Out of the six firms investigated, three showed positive effects of the M&A regarding innovative capabilities, two showed negative effects and one remained unchanged. The study found a strong link between motives and integration, and the interplay between the two factors ultimately resulted in a deterioration or improvement of the innovative capabilities. The result of the study showcases the need for careful consideration of compatibility before committing to an M&A, as innovation and success of the firm is highly dependent on the outcome of the M&A.

Keywords
Merger and Acquisition, Innovative capabilities, M&A, Innovation, Integration, Innovation audit, Motives for M&A

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1. Introduction

This study will examine and address how acquired firm's innovative capabilities are affected by a Merger and Acquisition (M&A). More specifically, the study will shine light on firms with high technological ability and firms who have shown innovative tendencies. With innovation and knowledge being a large motivator for M&A, a case can be made for evaluating the performance of the firm on the receiving end of the M&A. Are firms that are bought up for the sake of being innovative still innovative after the M&A? Therefore, the research question of the study is "*How are firms' innovative capabilities affected by an M&A?*".

Given how trillions of dollars are being invested into M&A worldwide (Statista, 2021), it is important to investigate the outcome of the M&A, especially in the context of results and expectations. M&A has become a common tool for gaining new knowledge, growth, and company development opportunities (Bauer et al., 2016), which makes the failure rate of 70-90 per cent (Christensen et al., 2011) an intriguing figure to investigate. The failure rate reflects what is expected of an M&A and the actual outcome, which showcases a large discrepancy in expected results and real results. This could further imply a mismatch between the reasoning behind the M&A and a realistic yield of an M&A. If the M&A were to fail with the intended purpose of the acquisition being gaining access to new knowledge, innovation and growth, not only has the acquiring firm lost the desired outcome of the M&A. They have also actively put themselves in a worse position than before the acquisition by losing a major investment. Furthermore, Christensen (2008) explains how innovation is necessary as a means for competition, as neglecting innovation ultimately leads to competitors surpassing incumbent firms. This in turn has resulted in innovation being a more common motivator for M&A (Grant, 2016). Therefore, if the M&A in any way limits the potential innovative capabilities of the acquired firm, the expectations of the M&A have not been reached. Ernst and Witt (2000) further pointed out how key personnel within the acquired firm often performed worse or quit as a result of the acquisition. A firm acquired for the sake of being innovative losing its key performers in innovation could therefore incline a decrease in innovative capabilities. This is why it is necessary to better understand how the M&A process affects the innovative capabilities of the firm, as this lays the foundation for the survival of both the acquirer and the acquired company. A failed M&A with innovation being the main motivator could, in other words, leave the acquiring company in a worse position than it was before.

To assess the innovative capabilities of an acquired firm, semi-structured interviews were held with respondents from acquired and acquiring firms. Since the answers are subjective, semi-structured interviews were appropriate which meant that the perceived innovative capabilities of the firm could be estimated in addition to how said capabilities have been affected by the M&A. This gives a chance for comparability between the capabilities of the company before and after the M&A. The results, which examine if the innovative capabilities have improved or not, have been investigated to find the cause that has an effect on the innovative capabilities of the company.

2. Theoretical framework

This chapter introduces the theories and literature that will be used throughout the thesis. First, the concept of Merger and Acquisition and Innovation will be explained, as these two concepts are central for the thesis. Following this, Change Management and Organizational Theory will be presented. The chapter then ends by introducing previous studies.

2.1 Merger and Acquisition

Merger, and Acquisition, (M&A) are two compounded concepts that refer to the unification of two firms, where *merger* is the process that links the firms together and *acquisition* is the transaction itself. Mergers can be defined as two separate entities, with assets, coming together to form a new single entity (Ghauri & Buckley, 2003). An acquisition occurs when one company purchases another, by making a bid for the acquisition's common stock at a fixed price per share (Grant, 2016). It is then up to the board to support or oppose the bid. Upon an accepted bid, the control of a company's assets is transferred to the acquirer who absorbs it, and the acquisition disappears (Ghauri & Buckley, 2003). The acquirer may remain as a single entity, but the assets now belong to another company. The concept of control is relevant in an M&A as firms can acquire parts of firms, and with a 51% share the acquirer has control. Despite whether a company has control or not, Ghauri and Buckley (2003) describe that in reality, it is always one party that has control over the company, even in the case of 50/50 deals. Deals can however be made in different ways. One way is by doing what Grant (2016) calls a friendly M&A. This is when the acquirer has presented a bid to the board, who later accepts the bid and becomes part of the acquirer. On the contrary, a Hostile M&A is a forced acquisition where the owners of the acquired company do not want to sell but are forced to, for a variety of reasons (Grant, 2016). In hostile takeovers, the acquirer tends to pay premium prices for the firms. While M&A can be friendly or hostile, there are also a few different categories of M&A. According to Grant (2016) some of the more common categories of M&A are horizontal, vertical, and conglomerate M&A. A horizontal M&A occurs when a company acquires a competitor, and thus widens its resources and business horizontally. Contrary to the horizontal M&A, a vertical M&A extends company resources downwards or upwards in the value chain. This happens when an M&A occurs between buyers and sellers, client suppliers or when value chain linkages are brought together (Grant, 2016). Both vertical and horizontal M&A occur between firms that have a connection by either being competitors or suppliers, and the firms are thus in the same line of business. Conglomerate M&As however occur between firms with unconnected businesses.

While there are different categories of M&A, there are also different motivations behind acquiring a new company. M&As have become an increasingly popular strategy for firms seeking to achieve their strategic objectives. There are a variety of motives behind an acquisition, such as growth opportunities, entry into new geographic markets, gaining a dominant market position, or consolidating the market (Grant, 2016). Firms want to develop by getting bigger and thus benefit from economies of scale. Other motives could include exploiting technology, acquiring knowledge, and patents. Such strategies focus on developing the company by adding assets and features by identifying resources that enable growth. Regardless, M&A´s about developing the company by absorbing resources of various kinds that adds a great deal of value to the acquirer. This results in value creation taking place by either cutting costs or increasing revenues (Christensen et al., 2011). Furthermore, according to Ghauri & Buckley (2003), the acquirer makes the assumption that they can get more value out of the acquisition than what the previous owners managed to achieve. The acquisition must not only perform better under the new management, but the acquirer must also manage to get so much added value that the acquisition is financially viable (Christensen et al., 2011). The acquiring company must, through the integration of the acquisition into its operations, enable the acquisition to develop to its unrealized potential and generate more profit than in its previous form. Empirical research using accounting data, conducted on performance and measured shareholders return shows that shareholders from the acquired firm are the biggest winner, and the acquiring firm's returns are, on average, either negative or insignificant from zero (Grant, 2016). The wrongful assumptions made by the acquirer regarding the potential outcome of the acquisition is considered one of the reasons why the acquisition is seen as a failure. However, in the unlisted environment consisting of private actors and multi-unit firms, firms succeed with their M&A to a greater extent (Ghauri & Buckley, 2003). This is derived from the fact that estimates of future income are more uncertain, however firms are better at identifying the potential for acquisitions in this environment.

Even though studies have determined that M&A tends to be seen as unsuccessful, acquisitions have not stopped but have maintained an upward trend and amount to $5,8 trillion in 2021 (Statista, 2021). One reason behind the continuously increasing number of M&As can be explained by the fact that it is appealing to top management, in particular to the CEO. The CEO has a desire to manage a big sized firm and can therefore become more focused on size rather than profit. The easiest and quickest way to grow is therefore through acquisitions and is well suited for CEOs with dreams of power (Grant, 2016). Furthermore, M&A activity within sectors is cyclical, meaning that M&A activity has recurring peaks of activity. This becomes a common occurrence when firms lack conviction about their strategy, which can create a herd mentality (ibid). If M&A activity in a sector increases, it is easy for other firms to abandon their existing strategy and start imitating the market leaders and acquiring firms. If firms resist acquisitions when the sector is under consolidation, they risk being left with the only unattractive company on the market (Grant, 2016). The fear of this happening is therefore another reason M&A continues to occur even though the success rate is so low. Moreover, in many cases managers promise that the M&A will lower their current cost. This requires the acquiring company to have high fixed costs where the acquisition empowers it to scale profitably. Successful ways of implementing such acquisitions are through implementing the attractive resources in the existing business model and decommissioning or selling the remaining resources. This arrangement allows for increased performance, and, through the concept of economies of scale, costs are driven down. The evaluation of whether potential resource acquisition will lower costs lies in how compatible the acquired resources are with the existing resources and processes. If the new products fit well into the product portfolio and sales processes, there is a high chance that costs will be reduced, and profitability figures will improve. However, if the acquisition is made in order to obtain synergy effects on administrative costs, the savings will usually only be marginal (Christensen, 2011)

2.2 Innovation

Innovation is one of those concepts that is very hard to define, yet many seem to have their own opinion of what innovation is. And that is perhaps where the issue lies, as innovation can mean so many different things to so many different people. However, to explain innovation, one of the most common definitions used is the one proposed by Schumpeter (1934) which consists of 5 components. The components are the following: 1. The introduction of a good product which is new to consumers or one of increased quality than was available in the past; 2. Methods of production, which are new to a brand of industry; 3. The opening of new markets; 4. The use of new sources of supply; 5. New forms of competition. While this definition is recognized and used by many in the academic world, there are still a multitude of definitions of innovation.

To enable a better understanding of the impact of different types of innovation, the concept is usually divided into different categories. Goffin and Mitchell (2017) expand on the work of Schumpeter (1934) and describes three degrees of innovation. The three degrees of innovation are *Incremental innovation*, *Breakthrough Innovation* and *Radical innovation*. Incremental innovation is described by Goffin and Mitchell (2017) as improvements of existing products, services, and processes. Incremental innovations are in other words small improvements of existing things, which in turn is a necessity for staying competitive. As described by Christensen (2008), an incumbent firm not making any improvements or incremental innovations will soon be passed by their competitors. The development of the incumbent firm remains stagnant in relation to their competitors, even if the means for improvements of the competitor only comes from incremental innovations. While the majority of the improvements within a firm come from incremental innovation, breakthrough innovation and radical innovation have the most impact. Goffin and Mitchell (2017) describe breakthrough and radical innovation as rare and difficult to develop, yet such innovations come with great results as the innovations generate growth by opening new markets, transforming markets, in addition to creating markets that previously did not exist. While such innovations generate growth for a company, the profitability of an innovation to the innovator depends on the value created by the innovation and the share of that value that the innovator is able to capture.

The term *regime of appropriability* is used to describe the conditions that influence the distribution of the value created by innovation (Grant, 2016). In a strong regime of appropriability, the innovator is able to capture a substantial share of that value. In a weak regime other parties derive most of the value. The regime of appropriability comprises four key components which determine the innovators ability to profit from innovation. Capturing the returns to innovation depends to a great extent on the ability to establish property rights in innovation, which is the first key component described by Grant (2016). The property rights then give rise to intellectual property. Examples of property rights are patents, copyrights, trademarks, and trade secrets. These are different legal protections for an innovation, which in turn helps a company keep their competitive advantage as it limits the possibilities for imitation from competitors (Grant, 2016). The downside of such property rights, is that using such intellectual property requires making information public. The second key component, tacitness and complexity of the technology, describes how easily an innovation can be imitated by a competitor without being protected by legal entities (Grant, 2016). Developing a technology that is very complex makes it harder for competitors to imitate even if there are no patents or any legal protection. The complex nature of the innovation in itself is enough for the competitors to have difficulties imitating the product or innovation. While tacitness and complexity of the technology provides a form of protection as it becomes more difficult for competitors to imitate the product, the protection does not last forever. Competitors will eventually figure out the complexity behind the innovation and will therefore be able to imitate the innovation. The time from development and launch of the innovation to the point where competitors catch up is called lead time and is the third key component described by Grant (2016). Lead time enables the company to further advance their innovation and development which in turn gives them the opportunity to maintain the lead they have on their competitors. The fourth key component described by Grant (2016) are complementary resources. Complementary resources are the resources required for developing a product, bringing it to market, servicing it, and so on. There are specialized and unspecialized complementary resources. Unspecialized resources give more power to the inventor as the inventor can get resources from a multitude of sources and thus choose the best alternative. Specialization, however, ties the innovator towards a specific supplier or company that holds the required resource, which shifts the power dynamic in favour of the company holding the resource (Grant, 2016).

2.3 Pentathlon Framework

The Innovation Pentathlon framework is a framework sprung from the need of a systematic way to encourage and manage innovation (Goffin & Mitchell, 2017). The framework consists of 5 areas in which a key topic is highlighted in each area. The framework is intended to encourage innovation by displaying a funnel that consists of idea generation, selection of ideas and lastly implementation. However, for the funnel to stay true to the direction of the company, innovation strategy is added to the framework as this reflects the goals, leadership and communication expressed by the company (Goffin & Mitchell, 2017). In addition to innovation strategy, an area called People, Culture and Organization is also added. These combined gives better opportunities for managing innovation, as the innovation strategy ensures the process is on path with the overall goals of the company, while the topic People, Culture and Organization enables leaders to reward innovative ideas, create an innovative culture and foster a structure that enhances and enables innovation.

Ideas generation

The key success factor for innovation is ideas. Kornish and Ulrich (2014) concluded that ideas matter, even if it can be hard to distinguish the quality of an idea. Gurtner and Reinhardt (2016), found that idea generation in an ambidextrous environment had a significant influence on new product development. Managers need to create an environment that allows and encourages creativity at individual and team level and need to make use of creativity techniques (Goffin & Mitchell, 2017). Ideas come from recognizing problems that when solved help customers greatly.

Selection

An effective process for selecting only the best ideas is necessary as the finite resources available for innovation projects need to be carefully divided across the most promising projects (Goffin and Mitchell, 2017). Here it is important to check that the portfolio of projects is balanced and in line with the company strategy. Kornish and Ulrich (2014) explain the value of idea selection by expressing how a good idea leads to a greater level of success. While the measurements of idea quality might be unclear and fuzzy at times, the authors conclude that idea quality predicts outcomes.

Implementation

The implementation phase should be aimed at quickly and efficiently developing new products and services, processes, or business models. Faster development times can be achieved by high functioning cross functional teams and prototyping. Commercialization is the last step in the implementation phase, and it is a crucial step as the market launch is very important for the success of the new product (Goffin & Mitchell, 2017).

Innovation strategy

To find a good innovation strategy, top management needs to assess current market trends and determine how these drive innovation in addition to finding threats and opportunities to act upon (Goffin & Mitchell, 2017). Management needs to communicate the role of innovation within the company, which in turn requires establishing a common language. Lastly, a way to assess innovation performance needs to be set in place.

People, Culture and organization

A culture of innovation needs to be created where employees are encouraged to continuously innovate and be encouraged to do so (Goffin & Mitchell, 2017). In addition, management must take an active role in coaching innovation teams and motivate talent and reinforce the innovation culture.

2.4 Innovative capabilities

Deciding upon and assessing innovative capabilities of a firm is a complex and difficult process. This is due to the many different ways of measuring innovative capabilities. Some of the most common ways of measuring innovative capabilities are found in economic figures as to see revenue gained from innovative activities (Goffin & Mitchell, 2017). Examples of this are looking at R&D expenditure as a percentage of sales revenues, number of patents, percentage of sales from new products and looking at the ratio between output to input. These methods of measuring innovative capabilities are easy to use, and the information required is often easy to find. Bauer et al., (2016) expands on the work of Ranft and Lord (2002) and Benner and Tushman (2003), and explains how the results of these measurements can be used as benchmarking tools as R&D expenditures are often compared between different firms, and number of patents can be seen as an indication of the level of knowledge within a company and can therefore be used as a motive for M&A. There are however limitations to these methods of measuring (Goffin & Mitchell, 2017). Looking at R&D expenditures measures input rather than output, and thus does not show results of said inputs. Patents measure inventions and not necessarily innovation. Patents also come in a range of value, which means that even though a company might have lots of patents, that does not have to reflect great value and innovative prowess. Instead, organizations need to select measures that track the input resources being invested to different types of innovation and monitor whether these are sufficient to match the innovation strategy chosen. Furthermore, organizations need to identify if the level of innovation output is strong enough compared to the strongest competitors and leading firms in other fields. In addition, the organizations need to determine whether the capacity for innovation is increasing. This requires not only measurement but also an assessment of the actions being taken to build capability.

2.5 Innovation audit

One of the better options for measuring and assessing innovative capabilities is by doing an innovative audit. Goffin and Mitchell (2017) explain how recent research has identified some key components of innovative capabilities to be the organization's network of contacts, and its ability to generate deep customer insights. To assess these factors, more is required than looking into R&D expenditure and patents. Instead, an innovation audit can be done. The innovation audit primarily focuses on the perception of the innovative capabilities an organization has from the viewpoint of its employees and managers (Goffin & Mitchell, 2017). While the answers are subjective, multiple answers from positions all over the company can help identify strengths and weaknesses. Björkdahl and Holmén (2016) defines an innovation audit as one that investigates and improves a firm's capabilities to innovate and perform innovative processes. Goffin and Mitchell (2017) further describe the aims of an innovation audit to first identify the strengths and weaknesses of an organization's innovative capabilities and its innovation processes; and second, collect ideas on how to make improvements.

While there are many ways to conduct innovation audits according to Hallgren (2009), Goffin and Mitchell (2016) propose a structure of the innovation audit that is based on the innovation pentathlon framework. This to find and understand in which area of the pentathlon framework the organization is weak or strong in. This way of conducting the audit therefore gives an inclination of where the majority of the future work towards improvements and learning lies. In addition to finding areas of weakness or strength, the audit based on the pentathlon also catches ideas for improvement (Goffin and Mitchell, 2017). These ideas can then be looped back into the company as a means for learning and improving the innovative capabilities of the firm. While finding strengths can be a good tool for endorsing different aspects of the organization, seeking out weaknesses is what allows new strengths to be created and come into play. Finding said weaknesses requires putting a focus towards problems, a strategy advocated by Björkdahl and Holmén (2016). Björkdahl and Holmén (2016) suggests that putting focus on innovation-related problems as the primary means for analysis results in new insights and knowledge. The underlying reasoning behind the focus towards innovation-related problems is the idea that when an idea is brought up to light, or resolved, new knowledge will be derived from the process. Hallgren (2009) found that employees used material from the innovation audit for inspiration, but also as a learning tool, emphasizing the possibilities for learning and acquiring new knowledge an innovation audit can bring.

2.6 Change Management

Christensen (2008) describes how organizations must transform themselves to meet constantly changing markets. Changes in organizations happen due to a number of reasons, for instance new competition, entrance into a new segment, declining results, or changes in the macro-outlook. Therefore, firms are faced with revolutionary changes such as reinventing their business model or making an acquisition to adapt to the prevailing market environment. A modern company needs to be dynamic in order to quickly adapt, meaning the business needs to be constantly under development (Christensen, 2008). When a company is acquired, a process begins in which the acquisition and its resources must be integrated within a new system, structure and into a new culture. Epstein (2004), expanding on Colvin and Selden (2003); Birkinshaw et, al (2000), has identified common problems in the integration process and presents five key drivers to a successful post-merger integration. Integration often requires many changes in a firm. Kotter (2007) has an eight-step model on how to face changes more successfully. The model proposed is based on human capital and how to unite the entire organization to work towards a set goal, how to deal with resistance, and to guarantee that lessons are learned to ensure that the new culture sticks within the organization. Given how the integration process after an M&A requires a lot of changes in terms of organization, procedures and ways of working, the model proposed by Kotter (2007) could be applied to the integration process. The framework created by Epstein (2004) could therefore be combined with Kotter's (2007) model to ensure a high functioning integration process, where change management plays a key role.

Epstein (2004) and Beer and Eisenstat (2000), who expand on the work of Floyd and Woolridge (1992), found that for the integration to work, a well-articulated integration strategy needs to be in place. The description of the integration strategy should function as a communication channel and pinpoint that we are now a homogeneous organization. In strategy communication, Kotter (2007) highlights how important the integration is to the entire organization where everyone needs to cooperate and show commitment to this integration process. Epstein (2004) emphasizes how the integration should start in an early stage when decision making is new and the organizational structure has not fully formed yet, and possible constraints are yet to appear. Buchanan and Badham (2008) explain how, while strategizing, potential conflicts and balance of power in relationships must also be taken into account. By taking this into account at an early stage, proactive measures can be taken to avoid such problems. Epstein (2004) further explains how the integration strategy must fully include the employees and its customers. These are the keys to an integration being successful, hence their commitment and full dedication to the process is needed.

To succeed with an integration, a small team with ample resources need to be in place to provide support and guidance (Epstein, 2004). A strong integration team without enough resources could fail to execute on key initiatives or cut corners, which could be devastating for the quality of implementation (Beer & Eisenstat, 2000). Depending on if the entire company or a division is to change, it is the CEO or division manager who is the key person in the change (Kotter, 2007). Appointing a new manager can be beneficial in several ways as there is no previous history with other employees and thus any resistance can be bridged. A new manager also comes in with an open mind enabling the identification of hidden problems (Beer & Eisenstat, 2000). The integration team should consist of a senior manager, and others with certain expertise, partly for their understanding of the company but also to highlight the importance of successful integration (Epstein, 2004; Kotter, 2007). The main task of the integration teams is to look from the customers perspective and make sure they are not being negatively affected by the process, but even more importantly use feedback to set the organizational strategy. This team will have a defining role in the potential success of the change and the creation of a growing coalition of employees who strive in the same direction. Buchanan and Badham (2008) explain how for the coalition to have impact, it must consist of people internally or externally whom the organization respects and listens to, who are formal or informal leaders. This group must identify key stakeholders and convince them of their vision and how to change. A relationship with key persons helps in the work towards change to overcome resistance, which is common when organizations evolve.

Furthermore, having management and senior managers communicating is important in the integration process. What is communicated must provide security and strengthen the reason for the acquisition through a clearly stated vision (Epstein, 2004; Buchanan & Badham, 2008). The vision should not address financial objectives, instead it should explain the direction in which the company will move. This vision is something that takes shape during the first three to twelve months when the coalition discusses and analyses the situation. From the vision, a strategy to achieve the vision is also created. The rule of thumb is that the strategy and vision should be able to be explained during a 5-minute pitch and at the same time create an understanding and interest in the idea (Kotter, 2007). This showcases the need for a strategy and vision that is easily understandable, as a 5-minute pitch should be comprehensible for everyone. Vision communication needs to take place after the acquisition and during the integration process in order for it to take hold with employees and other stakeholders (Beer & Eisenstat, 2000). This is to reduce the anxiety that changes bring, which not only has an impact internally, but also externally (Epstein, 2004). The vision should not only be articulated and talked about by leaders at various meetings, it should also be communicated throughout the entire organization, at every opportunity given through newsletters, mail, and meetings.

Communication within the organization towards employees is, as previously mentioned, of utmost importance. The employees who join from the acquired company must immediately receive clear directives and assigned roles in order not to risk losing important knowledge. Roles must be well articulated, so that the employees understand what is expected and make the transition work seamlessly (Epstein, 2004). Clear communication must also be sought with customers to reduce their uncertainty about what this change means, and how they are affected. It is important to highlight positive aspects and explain how they will benefit from the changes (Epstein, 2004). By continuing to perform and making the transition seamless from their perspective, trust will be rebuilt. Good communication also helps with making the right decisions, in addition to increasing the speed of the integration. Quick decisions are required for the integration to achieve strategic goals as this favours stability and reduces uncertainty. It is however important to point out that quick decisions are not hasty decisions (Epstein, 2004). A successful transformation involves many people where new thinking is encouraged by employees testing themselves and expressing opinions. This generates creativity and forward thinking, but it is important that this happens within the limits of the vision. Conflicts can arise where employees refuse to embrace the vision and continue in old patterns. Such problems must immediately be addressed so that it does not escalate into a power struggle (Kotter, 2007). By confronting the risks that may potentially undermine the change, everything achieved so far would have been in vain.

To maintain speed in the integration, the planning of the milestones is important to achieve the final vision (Epstein, 2004). These milestones must be expressed as overall goals which are to be reached by the commitment of all employees. This creates the need for aligned measurement points, as this is a means for the integration to achieve its full potential. Epstein (2004) describes how misaligned goals counteract the aim of a united workforce during integration. To create a streamlined integration, goals and subgoals must be measured in addition to both processes and financial aspects. Another perspective that must be taken into consideration is the synergy effects and how these impact the potential results. Kotter (2007) further explains how milestones provide guidance that the changes are on the right path, and when a milestone is achieved, these should be celebrated as a reward. Without intermediate goals, employees risk losing faith in the process and risk falling into old patterns or switching sides and joining the ones opposing the change. When the changes begin to produce results, it is important to emphasize these to remove doubters and initial beliefs of those involved. In the process, managers must identify improvements, ensure that the interim goals are set, and give incentives to those who are involved and realize them. This in the form of promotions, rewards, and creating a culture of continuous improvements (Beer & Eisenstat, 2000). Although celebrating small wins is important, when getting closer to the goal, it is important not to celebrate too early. Even after the vision is fulfilled, there are many processes that need to be refined and calibrated. This opportunity should be used by good managers to continue improving the company (Kotter, 2007). The celebration of the big win causes the momentum to disappear and the forward-looking and positive spirit of change leads into everyday dullness. If employees feel that the end goal has been reached, there is a risk of becoming comfortable and returning to old "bad" processes and that the change disappears. Kotter (2007) has quantified the development and found that the most development occurs in year 5 during a 7-year period.

2.7 Organizational theory

Henry Mintzberg (1981) explains how organizational structures must be adapted to the core business of a company to generate success. The structure of the company must be matched with the operations and goals of the company, instead of being based on current trends of how organizations can be structured. The way a firm is organized determines its capacity for action according to Grant (2016). This further showcases the importance of developing a structure that enables one's organization to compete, rather than disabling and limiting the possibilities for taking action. Mintzberg (1981) describes how businesses need to find the right configuration to work efficiently, and thus succeed in pursuing their goals. An example of a configuration is the *machine bureaucracy* whose main characteristic is that coordination depends on the standardization of work. This creates a rigid structure with strong hierarchical tendencies. If a large law firm were to design their organization in accordance with the machine bureaucracy, they would lose efficiency and agility. This is due to the main strength in a law firm lying in the skills of their employees. The rigid structure and the hierarchy imposed by the machine bureaucracy configuration would limit the autonomy of the firm's employees, which in turn decreases their ability to do their job in the way they best see fit.

The configurations

The configurations proposed by Mintzberg (1981) are; the *simple structure*, the *machine bureaucracy*, the *professional bureaucracy*, the *divisionalized form*, and the *adhocracy* configuration. The configurations have different characteristics that make them suitable for different purposes. What dictates the difference between the configurations is how the coordination is achieved. Below is a brief explanation of the different configurations proposed by Mintzberg (1981).

Simple Structure

Simple structure is often associated with the entrepreneurial firm, as this is the most common simple structure. Simple structure is characterized by the main form of coordination being direct supervision from the CEO. There is little to no standardization in its behaviour, rendering supportive parts such as the techno-structure and support staff useless and unnecessary. This makes the structure lean which in turn creates flexibility. Due to the coordination of the organization being assigned to the CEO, there is a high degree of centralization in the firm. This is very suitable for simple innovation, as the flexibility and agility brought by the lean organization and the high degree of centralization enables the firm to shift directions quickly.

Machine bureaucracy

Machine bureaucracy is characterized by standardization of work and low-skilled, highly specialized work. The configuration requires a lot of administrative staff which increases the size of the techno-structure. There is a strong hierarchy in machine bureaucracy as there is a need to oversee specialized work of the operating core. This gives a top-down sense of coordination as the formal power is centred in the top. For the top managers to maintain control, the systems in a machine bureaucracy must be rather simple, which is why they are a common occurrence in mass producing firms.

Professional bureaucracy

Professional bureaucracy relies on standardization of skills rather than standardization of work. Power mostly resides within the professionals themselves instead of the top management. This results in a very decentralized organization, where decisions can be taken by the operating core without going through a process of getting permission from the top management. Professional bureaucracies work in stable yet complex environments. Complexity results in decentralization of decision-making, and stability ensures that professionals can carry out their standardized procedures. Standardized operations do however make adaptability hard, which makes the configuration less suitable for innovation.

The divisionalized form

Divisionalized form consists of a set of independent entities joined together by a loose administrative overlay. The structure in the divisionalized form is partial and not complete, superimposed on others. An organization divisionalizes mainly because of product lines being diversified. The meaning behind the divisionalizing is to create separate market-based units for each of the different product lines to grant autonomy for the divisions to run their own business.

This does not amount to decentralization as the heads of the divisions keep the majority of the power of decisions. For the top management to keep control over the organization and the divisions, performance control systems are often used, which inclines a standardization of output.

Adhocracy

Adhocracy has a very fluid structure in which power constantly shifts, coordination and control are by mutual adjustment through informal communication and interaction of competent experts. Similarly to professional bureaucracy, adhocracy relies on trained and specialized experts. However, in adhocracy experts have to work together to create new things instead of specialized procedures. For this to work, the coordination of the organization highly relies on mutual adjustment. Experts in adhocracy are dispersed throughout the organization. This in turn disperses the power unevenly within the organization which results in the power flowing to wherever there is a need for a decision to be taken. Since the power is so fluent, the otherwise rigid and clear distinctions between strategic apex and the rest of the organization is blurred. This leads to the strategy of the organization being continuously altered and developed. The fluent structure of adhocracy is what allows these types of organizations to work in both complex and dynamic environments, as this requires different types of expertise which the adhocracy can supply.

2.8 Organizational culture

Organizational culture relates to the shared values, principle, and attitudes that is created in, and characterized by a certain organization. The culture is the core ideology of the organization and is something that affects its performance and success. A strong culture gives employees an identity, creates a purpose, fosters teamwork and collaboration (Grant, 2016). It could even attract talents who want to be a part of a certain community (Ai & Tan, 2020). The benefits of a good organizational culture are numerous. However, a negative or toxic organizational culture can lead to poor performance (Beer and Nohria, 2000). A good and healthy organizational culture gives the employees the opportunity to use their skills and perform at the top of their ability. Creating and maintaining a positive organizational culture requires attention from both managers and employees (Grant, 2016). Furthermore, being an innovative organization is a high priority for established firms, leading to the need for creating an innovative culture. Fostering creativity and innovation is successfully done by giving employees plenty of freedom, flexibility and creating an entrepreneurial spirit (Grant, 2016). Buchanan and Badham (2008) further explain that to create an innovative culture, the culture employees operate within needs to be psychologically safe. Employees must feel that they can take risks without serious consequences, the organization must embrace those who take risks through support in the form of resources and incentives. Buchanan and Badham (2008) further explain that leaders within the organization should have a clear vision and strategy with a distribution of responsibility to the employees, to enthuse. In order to benefit from the organization's knowledge and create an innovative culture, collaborations must be encouraged, and open communication must prevail. Collaboration and communication promote the development of ideas where several employees with different expertise are involved and contribute to a better final product.

2.9 Previous Studies

M&As have been a popular strategy for firms seeking to expand their market share, increase their revenue, and gain access to new technologies and innovative capabilities (Christensen et, al 2011; Grimpe & Hussinger, 2014). However, there is a concern that M&A could harm a firm's ability to be innovative, as it may lead to the loss of key personnel, the disruption of existing processes, and a focus on short-term gains at the expense of long-term growth. This chapter will review previous studies on M&A and their impact on a firm's ability to keep its innovative capabilities.

M&A and Innovation

Research has shown that an M&A can have both positive and negative effects on a firm's ability to be innovative. Some studies suggest that an M&A can be a catalyst for innovation, as it allows firms to gain access to new technologies, special knowledge, and innovative capabilities that they may not have had otherwise. For example, a study by Zhao et al. (2019) found that an M&A can lead to an increase in innovation output in terms of introduction of new products and services. Furthermore, Yakob et al. (2018) found that positive lock-in effects that help firms stay on industrial and technological trajectories can be created by intertwining existing innovation capabilities of two firms. Yakob et al. (2018) also found in the same study that China Euro Vehicle Technologies (CEVT) managed to enhance global innovation capability synergies between two firms by leveraging the strength of both firms across regional spheres.

However, other studies suggest that M&As can lead to a decline in innovation. One reason for this is that an M&A can result in the loss of key personnel, who may leave the firm due to cultural differences (Grant, 2016; Björkman et al, 2007) or uncertainty about their role in the new organization (Epstein, 2004). This loss of employee know-how can have a significant impact on a firm's ability to innovate, as these individuals may have had a deep understanding of the firm's culture, work processes, and technologies. A study from Ernst and Vitt (2000), based on the studies made by Griliches (1990) and Walsh (1988), shows that key personnel in the acquired company perform worse after an M&A. They release fewer patents than before, where factors such as cultural differences and the size of the acquirer come into play. Ernst and Vitt (2000) explain further that key personnel tend to quit after an acquisition. Key people performed at their best when technological synergies occurred and were to be realized. On the other hand, Bauer et al. (2016) argues that human integration during an M&A is negatively associated with innovation outcome. Other studies demonstrate that changes to organizations and the integration of M&A may encounter resistance that prevents successful integration (Kotter, 2007). Additionally, M&A can result in the disruption of existing processes and the integration of different cultures, which can hinder a firm's ability to innovate.

3. Method

3.1 Research strategy and design

Abductive reasoning is suitable for this kind of study due to literature regarding the failure of M&A existing, yet room for additional input regarding the innovative capabilities of the firms involved is necessary. Given how innovation is a complex topic with many different subjective perspectives, a qualitative approach is the best. This in turn shows the importance of a qualitative approach, as this is the best way to get insight on this kind of information Bell et, al (2019). Furthermore, Gauri and Grönhaug (2010) argue that a qualitative approach can give deep insights and give explanations to a complex and unstructured topic. Given how the research question proposed requires deep knowledge of the perceived innovative capabilities of a firm, the fact that a qualitative approach is fitting can be decided. To examine the innovative capabilities and their potential changes after an M&A, a case study focused on M&A will be conducted with multiple firms as observations. Bell et, al (2019) defines a case study as a detailed and intensive analysis of a single case, where the focus is on a bounded situation or system. This means that a case could be a single organization, location, or person. However, Gerring (2007) argues that case study research may incorporate several cases. The distinction between cross-case study and case study comes from the degree of intensity that the number of cases can bring to the study. That is, less cases enable more intense research thus making it a case study. However, more cases decrease the intensity of research for each case which brands the study a cross-case study. For this reason, a case study is suitable for this type of project as it allows the study to go more in depth while still keeping the number of cases low. This is as a result of Bell et, al (2019) explanation of how a case is an object of interest in its own right, where the aim of the study is to provide an in-depth elucidation of it. In other words, conducting a case study allows for acknowledgement of the complexity of innovative processes in a company, and thus gives opportunity to examine and derive the various factors that cause the complexity of the subject. Furthermore, a case study also enables showcasing of the present reality in the business examined, as the complexity can be displayed to its full range, and not be narrowed down and made more simplistic. The results of the study will therefore have a more realistic and tangible character, which boosts both usefulness and opportunities for generalization within the niche of M&A in innovative firms.

3.2 Data Collection

The study made use of a qualitative approach and combined interviews with literature studies in data collection. A qualitative study is suitable as the report aims to explain how innovative capabilities are affected after an M&A by doing an innovation audit and identifying different explanations factors to the outcome. Primary data was collected through semi-structured interviews with six respondents displayed in figure 1, in order to access information that is not documented (Eriksson & Wiedersheim-Paul, 2014). Gaining access to the respondents' own experiences and interpretations of various situations gave the researchers the opportunity to find interesting angles to interpret and analyse to perceive innovative capabilities before and after an M&A. Such information is usually nothing firms make public, or outsiders can gain access to, which makes interviews a suitable approach. In order to answer the research question, finding the right respondents for interviews was necessary, and thus purposive sampling was carried out. The objective with the purposive sampling was to find firms that fulfilled the right requirements for the interviews to have the desired effect. Bell et al. (2019) describes the goal of purposive sampling as to sample cases or participants so that those sampled are relevant to the research question asked. The study made use of two levels of sampling, where the first level touched upon appropriate firms. The second level treated appropriate characteristics of the respondent. This meant finding innovative firms that had previously undergone an M&A, with employees available for interviews that had worked both before and after the M&A. The selection of firms was based on the firms showcasing either an innovative business model or the usage of innovative technologies. The desired characteristics of the respondents were someone with a holistic understanding of the firm with personnel responsibility in addition to having some relation to innovation in the workplace. This due to the study examining the effects of the M&A on a firm level. Thus, employees such as managers and superiors were sought after. By carrying out sampling based on desired characteristics of the firms, validity of the study could be increased due to the firms examined being aligned with the aim of the study. The reason behind interviewing both acquired and acquiring firms was to be able to delineate the impact of the M&A and derive the consequences to a common factor. In order to do this, both acquired and acquiring firms needed to be interviewed as both perspectives could shine light upon the same factors, which in turn enabled conclusions to be drawn. To emphasize reliability, several different respondents were interviewed without contact with each to ensure that the data becomes objective and generalizable. For a better view of the sampling process, see Table 1. Furthermore, the use of semi-structured interviews with a clear focus on the direction of the study was appropriate as the study's overall area of M&A is scientifically illuminated.

Name	Position	Date	Length
Buyer 1.	Manager responsible for M&A	29/3 -23	1 h 10 min
Buyer 2.	Manager responsible for M&A	31/3 -23	46 min
Seller 1.	Senior Developer	24/3 -23	54 min
Seller 2.	Senior Developer	6/4 -23	56 min
Seller 3.	CEO	31/3 -23	39 min
Seller 4.	Innovation Consultant	12/4 -23	1h 4 min

Table 1- Overview of sampling and interviews

3.3 Interviews

The interviews were based on a standardized interview-guide with specific themes and open-ended questions that were non-leading in order to not compromise the objectivity. It enabled the respondents to share their inner thoughts and the study received the most extensive answers possible. According to Bell et al. (2019), a semi-structured interview gives the interviewer the opportunity to ask follow-up questions and lead the conversation around selected areas, which was utilized on a few occasions to make answers clearer. Additionally, an interview-guide was created to obtain comparable answers, where great emphasis was placed on the sequence being followed, the same words being used, to reduce the risk that answers differed depending on the previous question or different choice of words. The interview guide can be found in Appendix B and Appendix C where the different themes are specified and categorized. Each interview was conducted with each firm individually as it was considered that conducting the interviews in a group would rather risk limiting the study in several ways and comes with the risk of missing individual input.

The interview guide was sent out to the respondents in advance to give them the opportunity to start thinking about the topic, think through their answers, and check facts they wanted to share. The disadvantage of this procedure is that the respondents are given the opportunity to answer in accordance with what is considered customary within their profession (Bell et al., 2019). The study prioritized getting deeper and more extensive answers with the aim of encouraging the respondents to feel comfortable during the interview. Furthermore, the interviews that were carried out was planned to take between 30-45 minutes to obtain relevant data, with possibilities for extending the interview. The planned time span was set with consideration to the interviewees not refusing the request due to time consumption. All interviews were recorded with the consent of the respondents, which gave the authors an opportunity to go back and listen to the material again, transcribe and analyse it more thoroughly. To make the interviews fruitful, the interview guide was based on the innovation pentathlon framework, innovation audit and change management. The interview guide was structured around the three themes: innovation, motives for M&A, and integration to create a good flow in the interview. This also more easily enabled categorizing the answers and helpful during coding. The recordings from the interviews were then transcribed manually. The benefit of manually transcribing is the familiarity of the material that comes with the transcript.

3.4 Collection of secondary data

The interviews were supplemented with secondary data, where a literature review was carried out as this adds more substance to the study (Alvehus, 2019). A review of existing literature on the subject, previously used methods and theories is important for researchers according to Bell et al., (2019). The literature review was linked to the research question, findings, and a discussion about previous knowledge. Connecting previous research with the results of the study strengthens credibility, by using several different perspectives. Secondary data was accompanied by academic research and interlinking literature in the specified area of study. The literature was collected in a systematic way, because the use of a systematic search method reduces the risk of being biased towards specific articles. Therefore, specific keywords were chosen to select relevant articles in an inclusive and exclusive manner. These keywords were ranked according to relevance in order to direct the search to the scope of the study. Furthermore, both general and specific search terms were used separately, which provided both a broader and a narrower search area to find relevant articles that contributed to the data collection. The secondary data was collected from several sources like Google scholar and WIPO in addition to company websites. Most of the selected literature were peer-reviewed articles, scientific reports and books in order to gain knowledge of different concepts, theoretical framework and strategy. The advantages of this were that the study benefits from greater depth and gives a more nuanced picture of where previous studies are in relation to this study. The general search terms found in Appendix D resulted in a large and broad data material. Therefore, more specific search words were introduced to reduce material which can be found in Appendix D.

3.5 Thematic Analysis

The qualitative data was subjectively interpreted with thematic analysis. This study made use of this concept described by Bell et al., (2019) by identifying themes and searching for key terms in a qualitative data analysis. Finding key concepts means that central aspects are explained in single words. However, the thematic analysis began by having the authors sit down individually and highlight interesting sentences from the material and then compare these. The separation reduces the risk of bias and increases credibility. Sentences were extracted and labelled in order to deduce which respondent said what and coded with a theme such as motives, innovation, integration. In the extracted sentences an associated sentence was included to ensure that the sentence was not taken out of context. Sentences were later placed under the respective themes, coded and categorized in colour see Appendix E. The first theme was regarded as a means toward assessing the innovative capabilities of the firm, in addition to evaluating whether the innovative capabilities have changed in any way as a result of the acquisition. The following two themes were then used as tools to better understand why there was or was not an impact on the innovative capabilities in relation to the acquisition. The different themes can be seen as partial answers to the overall research question, where additional coding categories help in the analysis. The strength of thematic analysis lies in the applicability and flexibility, in addition to the ease for outsiders to interpret the results. Weaknesses of the analysis include the extraction of sentences, which allows for comparability but also risks removing the context in which they were said. Without context the coder can create a hidden bias. This is counteracted in the study by both authors being involved in the coding process and with the different backgrounds of the authors, minimizes the risk of being bias. Respondents also received the transcription and the extracted sentences, which enabled them to correct possible misinterpretations.

3.6 Ethical considerations

When conducting the study, the ethical aspects that Bell et al., (2019) describe were taken into account. The aspects can be divided into four categories, where the first deals with the information requirement. The information requirement was fulfilled by the authors introducing themselves, giving a brief explanation of the purpose of the study, describing the role of the respondent in the study in addition to declaring that the report will be made public. This was done in the initial contact between the respondents and the authors. The consent requirement means ensuring that the respondents were aware that participation in the study was completely voluntary, and that they could cancel at any time. The assurance took place at the by email when the purpose of the study was explained. Later, when the interview guide was sent out, it was also ensured that questions that the respondents did not intend to answer could be left unanswered. The confidentiality and anonymity requirement addresses the requirement of treating the respondent's personal data with care and allowing anonymity if requested. The respondents were informed by email that personal data and company names could be anonymized if desired. This procedure was also repeated during the interview to ensure that the information had reached the audience. Furthermore, Bell et al., (2019) explain that the collected data should only be used for the study being carried out. The respondents were informed about this by explaining that it will only be used for the purpose of the study and will be published by Gothenburg University.

3.7 Delimitations

Due to the study being focused on the event of an M&A, and the events following the M&A, no discussion will be held regarding the work being done leading up to the M&A. What this means is that regular procedures leading up to an M&A such as due diligence, negotiation of price and firm scouting will be excluded from the study. The study will be examining the impact an M&A have on the innovative capabilities of firms and the procedures mentioned earlier do not, according to the authors, impact the innovative capabilities of the firms in such a way that it is relevant for the study to touch upon. Furthermore, mergers will not be covered in this study. This is due to empirical data showing that mergers account for a small number of M&As (Grant. 2016), in addition to mergers generally concerning large corporations. This ties into the study being focused on small- to medium sized firms, and only on firm level, and thus excludes larger firms. The study will only focus on firms located in Sweden and therefore only touch upon M&As in Sweden. This in turn excludes cross-border M&As.

4. Findings

Six interviews were held with six different firms. Four of the firms had been acquired by another firm, and the other two firms had at some point acquired another firm. The results of the study are reflected in how the interviews were structured. The interviews were structured in three themes, with the first being innovation, second being motives for acquisition and lastly integration. Following the themes of the interviews, the findings of the study will be presented in the same order.

4.1 Innovation

Name	Firm description	Organizational Structure before	Organizational Structure after	Time of Acquisition
B1.	Large Manufacturing firm	Divisionalized	Divisionalized	Recurring Acquisitions
B2.	Large Manufacturing firm	Machine Bureaucracy	Machine Bureaucracy	Recurring Acquisitions
S1.	Smaller Manufacturing firm	Simple structure	Divisionalized	Late 2010s
S2.	Smaller Manufacturing firm	Simple structure	Divisionalized	Late 2000s
S3.	Smaller Manufacturing firm	Simple structure	Machine bureaucracy	Early 2020s
S4.	Large consulting firm	Professional structure	Professional structure	Late 2010s

Table 2- Description of respondents

Out of the four interviews with the acquired firms, only one of them expressed how their innovative capabilities will be taking a turn for the better when compared to the innovative capabilities before the acquisition. The company in question is, however, still in the integration process, and there is therefore no hard evidence to support this claim. Although still being in the integration process, the respondent at the company explained how they traditionally have not been innovative due to their line of business, yet there are possibilities for increasing innovative output as a result of the acquisition.

> *"Now we enter the processes much earlier, where the idea is to find innovations that we can patent. You can file a patent for different reasons, partly because we have something unique that we want to protect, or because you have something you want to sell the rights to." S3*

The firm has undergone a vertical M&A. This means that the firm was a previous supplier to the acquirer and the M&A was done to shorten the supply chain. The respondent explained how the firm now can concentrate more on modularization, reusing solutions in addition to designing new solutions, which they see as a form of innovation. This was made possible by the vertical M&A, connecting the acquired firm with the acquiring firm on a higher level, which in turn enables the firm to see further into the future. Moreover, having the acquired firm more connected with the acquiring firm provides a more efficient way of working as multiple steps in the supplier-buyer relation now can be skipped. This allows for more time toward planning, R&D and innovation.

Although one of the four firm respondents explained how the possibilities for innovation are increasing as a result of the acquisition, two respondents expressed little to no change in innovative capabilities within their firms. Seller 4 (S4) declared they have become less innovative. Seller 1 (S1) and Seller 2 (S2) explained how they have implemented a model for innovation, the gateway-model, where S1 expressed how this has resulted in a more structured way of work in addition to enabling them to think twice about steps in their development processes. However, the respondent does not think that this has made the company more innovative than it was before.

> *"Not more than the formal part with the gateway model where we stop and think about whether there is something that needs to be patented at each gate. [...] You get a chance to think twice about whether it can be exploited in other fields and more generically." S1*

Yet, the company has filed more patents after the acquisition than before as a result of the implementation of the gateway model, although the respondent explained how the acquiring firm has a strategy where filing patents is a way of building moats. The gateway model forces them to consider if they have found anything worth patenting at every "gate-stop". This change in patent behaviour can be seen in the number of patents filed before and after the acquisition that happened in 2018, where S1 has filed 12 patents 2014-2018, and 15 patents 2018-2023 (WIPO, 2023). S2, who did not express any increase or change in innovative capabilities, explains how their development department got smaller as a result of the acquisition, with slower decision making as a result of becoming part of a larger organization. The respondent further explained how they have the technical capabilities to do incremental innovation by improving an existing product which would save costs yet does not receive the funding from the parent company to make the necessary investments. Seller 4 (S4), who expressed how their innovative capabilities have deteriorated, explained that being acquired meant they had to adapt to the acquirer's business model. Adapting to the acquirer meant risk-minimizing due to the business model prioritizing, which in turn did not leave any room for innovation.

All the respondents from the acquired firms had similar views on innovation, where problem solving was the main principle of their definition of innovation. However, none of the four acquired firms had or have a thoroughly described definition of innovation before or after the acquisition. Although the firms did not have clear definitions of innovation, they did reward innovative behaviour. S2 and S1 stated that employees can receive a bonus by filing a patent, and if said patent becomes accepted in more countries, the bonus becomes bigger. The respondent from S1 expressed an appreciation towards how the acquiring company has a formal approach to give its innovators a confirmation of a job well done, in the form of a reward tied to a patent. The respondents of S3 and S4 do not have any monetary rewards, but rather use acknowledgement and a pat on the back as rewards. The use of monetary compensation and acknowledgement from superiors can be seen as incentives towards increasing innovative output. The respondent from S1 further explained how brainstorming sessions are used as a means towards increasing innovation. The respondent stressed the importance of combining employees from different parts of the organization to enable a better exchange of views and ideas.

Contrary to the acquired firms, the acquiring firms had definitions of innovation. Buyer 2 (B2) defined innovation as having new knowledge meet new problems, as this is what results in new solutions and ideas.

> *"We usually say: when new knowledge meets new problems, to put it simply. We bring new knowledge into the company, and you have problems in the company that needs to be solved. You then apply the new knowledge to the problems. It is*

> *always necessary to gain new knowledge through acquisitions, education or by hiring new people." B2*

Buyer 1 (B1) claimed they have a definition of innovation, although the responder did not have it ready in mind. The responder did, however, explain how innovation is one of their core values, and how it is something important to the firm. Similar to the respondents of the acquired firms, the respondents of the acquirers personally defined innovation as problem solving. B1 and B2 explained how they use financial incentives as a means to promote innovation, as employees get bonuses from filing patents with the bonus increasing depending on the reach of the patent. B1 further explained how they highly value innovative behaviour and how it is used as a basis for performance evaluations and salary discussions. Similarly, the other acquiring company stressed how they also give bonuses as a result of patents, although the respondent conveyed how very few ideas result in patents in their line of business. Instead, they focus on acknowledgement of competence and praising their employees for innovative ideas due to them removing the financial compensation they had previously. To show appreciation of innovative ideas B2 hosts a ceremony where awards are handed out to the best ideas in addition to publishing it on their intra web. To further promote innovation, the firm hosts workshops and brainstorming sessions, making sure to give quick feedback regarding new ideas and their progress in the process. Lastly, B2 also has specific innovation champions that employees can turn to and talk about ideas. These innovation champions have a variety of connections within the firm and can therefore more reliably realize a good idea by connecting relevant people. B1 did a similar thing where different firms or employees in different divisions can be connected through their knowledge platform to share knowledge and create new things and generate new ideas. Both of the acquiring firms came up with this way of working by trial and error, and finding out what works the best and sticking to it.

4.2 Motives

The acquiring firms stated how innovation is one of the main motives behind them acquiring firms. Furthermore, they explained how they find the employees at the acquired firm the most important asset as that is where the knowledge is, given that the reasoning behind the acquisition is innovation. One of the respondents exemplified this by saying how acquiring a company without being able to keep the personnel just results in them acquiring a very expensive building. Without the employees the desired knowledge and innovative capabilities of the acquired firm are lost, which ultimately makes it a bad deal. B2 did however explain how they have previously done acquisitions based on economies of scale, acquiring competitors, or entering new market segments. B1 also explained how they acquire firms for the sake of entering new markets or gaining access to new products that they find profitable. When asked why M&A often fails, the two respondents gave two different views on the topic. B2 stressed how not managing to utilize the value of the acquired company to grow is a dominant driver towards M&As failing. This is due to acquiring firms that are similar to the acquiring company, but not producing exactly the same product which in turn only results in producing more of similar products yet with difficult integration, and thus does nothing to further improve the existing company. The respondent explained how the basis for the acquisition needs to come from new unique knowledge in the acquired company that then can be incorporated in the acquiring company, and only then will the acquisition be truly successful. The respondent from B1 argued that trying to integrate too fast, micromanaging and purchasing dysfunctional firms are the main drivers of M&A failure. This due to too fast of an integration and micromanaging often leads to losses in personnel at the acquired company. The respondent also stressed how they are not a "company-aid" who acquires dying firms to help them get back on their feet, as the respondent sees this as a dysfunctional strategy for M&A.

"We rarely acquire firms with bad performance, we are not business doctors. Instead we acquire firms that are doing well. As long as their performance is good, we are satisfied and do not disturb them. If their performance starts declining, we get involved and try to contribute with something that can turn around the decline." B1

Instead, stable firms that have proven their success are their main targets when it came to scouting for potential acquisitions. This also ties into the argument of not micromanaging or committing to large changes in the acquired company, as this is less necessary if the acquired company is doing fine on their own.

B1 described how it is necessary for the acquired company to realize the value of being acquired by themselves. This means that the positive effects of the acquisition cannot be forced upon the acquired company, instead the employees must get the sense of what good might come from the acquisition by themselves, as this creates incentives to proceed rather than resistance. To enable this, the acquired firm must be introduced to new resources, find synergy effects and understand what opportunities the acquisition brings. The respondent further explained how there often is a strong company culture at the acquired firm, and how there often is a sense of belonging and pride within the company. Forcing the company to become something else than they were before can therefore cause resentment and negative emotions related to the acquisition, which in turn results in the employees quitting.

These arguments provided by the responders of B2 and B1 are agreed upon by the respondents from the acquired firms. The respondent from S2 argued that company culture and changes are two main factors causing M&A to fail. If employees enjoy working at a company due to the culture at the firm, doing anything to change said culture will result in employees quitting or changing jobs. This is connected to doing large changes at the acquired company. The respondent argued that if the firm is doing well and is functioning, committing to changes is unnecessary and will only result in worsening the firm and having employees quit. Similarly, to what was said by the respondent at B2, the respondent at S2 stressed the need for considering whether the product portfolios of the acquirer and acquired company are compatible. If not, the products will not be utilized to their full potential and further development of existing products will be hindered, limiting potential growth. The respondent at S2 further described another risk which is corporate inertia. When acquired by a larger company, the decision-making process inevitably becomes longer due to the organization becoming larger. This can in turn result in losses for both the acquired and acquiring firms as development and necessary decisions slow down, where the lack of speed results in falling behind your competitors. Contrary to the beliefs of the respondent at S2 regarding how culture is a crucial factor for the success of an M&A, the respondent at Seller 4 (S4) found it less impactful. The respondent reflected on his own experiences and found that differentiating company cultures was not an issue, as many employees were interested and curious about new ways of working. The respondent instead argued that the main issue for M&A failing was a mismatch between the business model and operational model. This means that the operational model of the acquired firm is not compatible with the business model of the acquiring firm, which in turn led to employees not being able to work in the ways necessary to deliver what was promised.

4.3 Integration

S1, S2 and Seller 3 (S3) agreed that the acquirers saw the integration as a long-term process. This as the acquirers wanted to keep the acquisitions autonomous and emphasized not to change a functioning organization. The fact that the acquirers acquired well-functioning firms that achieved good results with a proven business model is a factor in keeping the acquisitions autonomous and letting them continue to develop in the same way after the acquisition. The integration process of S4 could be described as an onboarding process, meaning after the initial activities where personnel get together to form a homogeneous group, a fast transition into the acquirer's system took place. Furthermore, opinions were divided whether there was a pronounced integration strategy or not. Respondents S1, S3 and S2 had it explained to them that they were acquired because of their market positions, skills and because they had well-functioning businesses. However, S2 stated how they were acquired due to being a competitor to the acquiring firm. In S1's case, the parent company made it clear that S1 knew its own business best and the acquirers explained what resources the group possessed and were made available. In the S3 acquisition, their parent company emphasized that they were very keen to maintain the autonomy of S3 and chose to keep S3 as a separate division within the parent company. S1 and S3 were acquired with the integration strategy of keeping the firms autonomous but with the acquiring firm offering resources that were not previously available. S2 had a difficult time remembering any specific integration strategy, which might have been caused by the acquisition happening 10 years ago. The respondent further stated that there was a multitude of managers working with integration. In S4's case there was no stated integration strategy, they were just to be integrated into existing systems. The acquiring firms B1 and B2 claimed that they worked more according to a structured process. B1 has a requirement that after 100 days the financial systems must be in place. Furthermore, during the first year their toolbox for knowledge sharing must be in use and the acquired firm must start using the same working methods as the rest of the corporate group.

Both acquirers particularly emphasized the importance of explaining the vision of the acquisition, to overcome the anxiety employees may feel during major changes.

> *"In these types of events, there is no such thing as too much communication. This is always applicable in a company when it comes to communicating a strategy and so forth. In this case, it is super important to have a close dialogue and check the mood with the managers at least once a week. [...] The idea was*

also to show the final products and understand why the employees are so important in our value chain.” B2

In order for the integration to proceed as smoothly as possible, B1 and B2 explained how managers were appointed solely working with the integration. It differed slightly between S1, S3, and S2, where the first two explained that they had a contact person who coordinated everything. S2, however, became more integrated into different divisions where their development department became integrated with the acquirers and HR with HR, finance with finance, during which processes they had separate integration managers. B1 and B2 explained how they always appoint a project manager who is responsible for the integration, and depending on the size of the acquisition, more people are included, and in the case of B2 even from higher positions within the company. As previously mentioned, acquirers B1 and B2 placed great importance on communicating the vision during the acquisition. Despite this, neither S2 nor S1 could recall any direct vision being conveyed. S3, which is at the beginning of their integration phase, has a clear vision of what the acquirer wants out of the acquisition. In S4's case, the respondent expressed a feeling of indifference towards the vision conveyed, as it was the “standard” vision of 1+1 becoming 3, and not something that corresponds more concretely to what the acquisition will result in. Furthermore, all respondents agreed that interim goals were set, with everyone pointing out that the financial departments had the hardest time, where everything must be in place at a fast pace. The goals differ slightly between the firms as S1 had a 3-year plan, S3 a 1-year plan and S2 a 5-year plan. S2 were fully integrated after 6-7 years. The respondent from S4 explained that no concrete goals were conveyed in such a way that the employees understood them and complied with them. Instead, the employees focused on the negative aspects of the integration, such as their work becoming harder to do.

The acquirers B1 and B2 had clear objectives for what they want the acquisitions to achieve in the integration, but no fixed dates for when the objectives must be met. All respondents expressed that there was some concern in the firms when they were acquired. In accordance with this, S2 stated that there was concern, although the staff were generally positive about being acquired where the attractiveness of the new employers was an important factor. The fact that being acquired creates a concern is something that the acquiring B1 and B2 have identified through their own observations and through learned knowledge, meaning that they worked actively towards bridging this. To reduce anxiety at the acquired firm, the acquiring firms highlight the reason for the acquisition and convey the vision as to show how there will be no major changes and how the reasoning behind the acquisition is to keep their knowledge and skills due to the employees being a crucial part of the success of the acquisition. B1 explained how they give references to previous acquisitions where the employees are welcome to contact people who explain how they experienced the process, all to reassure the employees it will turn out well.

> *"There is a lot of concern in the firms that we are evaluating, and it is something that we are actively working to mitigate. We use previous acquisitions as references and ask current acquisitions to talk to them in order to see that it is not so dangerous to be bought out, it comes with a lot of positive things. You get a new suit which means you can play in slightly different arenas." B1*

B1 and B2 explained further how they work to identify key people in acquisitions where they make an extra effort to keep them in the firm. It is done through positive words, salary increases, contracts, and if they are previous owners earn outs clause are included in the acquisition. In S1, S2 and S4, key personnel have left after the acquisition was completed. In S4's case, almost the entire workforce chose to apply to other firms and in some cases had to leave, which has been a consequence of the M&A not being successful. However, the only company that felt that the integration is fully completed is S2. The last thing that happened was that S2' organization number was removed and is now fully integrated, which was done 10 years after the acquisition. The other acquired respondents mentioned that gradual changes are still occurring. B1 stressed that they consider the integration to be over after about 3 years.

5. Analysis

5.1 Assessment of Innovative capabilities

Goffin and Mitchell (2017) introduced the innovation pentathlon framework as a systematic way to encourage and manage innovation. The innovation pentathlon framework comprises 5 key areas that touch upon different aspects of innovation. When applying the innovation pentathlon framework to the different firms, it is possible to evaluate whether the innovative capabilities of the firm have changed due to the acquisition. Both S1 and S2 have implemented the gateway-model as a result of the acquisition. There are however contradictory statements regarding the impact of the model, where S1 stated how it has enabled them to file more patents than before the acquisition. S1 further explained how the acquisition has brought more structured ways of work, which possibly could be a result of the gateway-model. The respondent further highlighted how the gateway model has forced them to think twice about each idea during each of the gates in the model. This to evaluate whether they have created something unique worth patenting or not, in addition to assessing if the idea is worth proceeding with or not. This further ties into what Goffin and Mitchell (2017) said about idea generation were selecting only the best ideas is necessary to allocate resources to only promising projects. Kornish and Ulrich (2014) found that good ideas lead to greater levels of success. The improved ways of working with idea selection could have further consequences as there can be better possibilities for commercialization due to quality assurance brought by the gateway model during the development phase, which in turn showcases an improvement in the implementation aspect of the innovation pentathlon model. The innovative capabilities of S1 should ultimately be considered as improved post the acquisition.

S2 did not highlight any of the benefits expressed by S1. The firm instead explained how there are issues in the implementation phase brought by organizational changes. Mintzberg (1981) explained how the simple structure is suitable for innovation due to its agile and flexible nature. Similarly, the respondent at S2 expressed how the firm was more flexible and agile before the acquisition which meant that decision making was much quicker. The firm now belongs to a larger corporation where decision making takes much longer time. S2 now suffers in the implementation phase, described by Goffin and Mitchell (2017) as a phase aimed at developing new products, processes or business models. S2's lack of strength in the implementation phase is due to loss of workforce, lack of autonomy and slow decisions from their acquirers. While the firm still showcases potential for being innovative by having plans ready for developing new products and improvements on existing products, their lack of autonomy keeps them from expressing said innovative capabilities. Furthermore, the lack of autonomy has impacted on the development of new and already existing products by disabling the firm from hiring necessary workforce. Although the firm shows signs of innovative capacity, the existing barriers hindering the expression of said innovation render the capacity less impactful, ultimately causing the innovative capabilities to be lower than before the acquisition.

In a similar sense, the innovative capabilities of S4 have worsened since becoming part of the acquirer's organization. Applying the innovation pentathlon model to the acquirer is hard due to the firm not working with innovation in the sense that the organization itself wants to be innovative. The business model of the acquirer is heavily leaned towards minimizing risk and by having such a business model, innovation is not a good fit. This due to the firm wanting clear solutions and transgressing into solutions that require uncertainty in the form of not knowing the outcome of said project is undesirable. Contrary to this, the respondent at S4 stated how the firm can deliver innovation by using solutions created by new innovative products by acquiring the latest technology. This in turn could be seen as incremental innovation following the description provided by Goffin and Mitchell (2017), as acquiring and making use of the latest technology in fact is an improvement of existing services and products. However, the firm is not inherently innovative as the solutions and services the firm offer and dependent on the innovativeness of other firms for said offer to work. The acquired firm was, however, innovative in the sense that they worked with management consulting, where there were expectations that something new would come out of the work they did. Similarly, to S4, S3 does not necessarily work with innovation as their main form of business comes in the shape of order-based projects. Instead, they work towards fulfilling the customers' requirements. However, S3 will have better opportunities towards being innovative in accordance with the innovation pentathlon framework. Given how the implementation stage in the innovation pentathlon framework deals with development, the potential towards modularization stated by S3 should be seen as an improvement as this will lead to faster development. The modularization will also enable the firm to reuse solutions for many different purposes which is a form of innovation in itself given the definition of incremental innovation provided by Goffin & Mitchell (2017). The acquisition will also have an impact on idea generation as the modularization will free up time in addition to S3 being able to see more of the future demand. Foresight brings the ability for appropriate modularization as solutions for further issues can be addressed due to new insights in the production processes at acquirer. Therefore, the innovative capabilities of S3 have a high probability of improving due to the acquisition.

Both B1 and B2 explained how they acquire businesses for the sake of gaining new knowledge. This as a means towards increasing innovation output, as in the case for B2, new knowledge plays a central role in their definition of innovation. B1 on the other hand has a “knowledge center” where new knowledge is collected and shared throughout the organization, making the benefits of the acquisition available for all parts of the organization. The strategies of both firms tie into the innovation pentathlon framework in multiple ways. B2 works with having workshops and brainstorming sessions that are meant to foster innovation. Introducing a new party with new knowledge to this should ultimately lead to new knowledge being combined with already existing knowledge, trying to solve new problems which follows B2s definition of innovation. The workshops and brainstorming are held to create an innovative culture and promote innovation, which is necessary for idea generation according to the innovation pentathlon framework (Goffin & Mitchell, 2017). Grant (2016) further explained that to foster innovation, an entrepreneurial spirit has to be created by allowing creativity and freedom of thought. B2 pushes this by rewarding innovative behaviour in the form of having a ceremony where prizes are awarded for the best ideas, which ties into what Buchanan and Badham (2008) said is necessary regarding creating incentives for innovation. Similar types of incentives can be found at B1, where employees can receive a bonus by filing a patent. To create a culture where innovation is celebrated, B1 has innovation as a basis for employee evaluations where innovative behaviour can be used as an argument for increased salary. This gives employees further incentives to be continuously innovative, and thus creates a culture of innovation which ties into what Goffin and Mitchell (2017) said about people, culture, and organization in the innovation pentathlon framework. It can therefore be concluded that the innovative capabilities of the firms improve in relation to the acquisitions. This is due to them enabling further innovation by sharing the knowledge acquired through the acquisition throughout the entire organization, reaping the benefits of the acquired firm to improve the firm.

5.2 Derivation of change

Given how the innovative capabilities have changed in the firms, the question still remains why the innovative capabilities have been affected in the way they did. This requires further examination of the factors that have caused the innovative capabilities to become worse, better, or unchanged.

5.2.1 Loss of Key Personnel

Ernst and Vitt (2000) found that key personnel in the acquired company perform worse after an M&A. This in turn could potentially lead to key personnel quitting the company, which is something that has happened in the two firms where the innovative capabilities have been worsened as a result of the acquisition. Key personnel quitting in turn leads to a huge loss of knowledge as for employees to be considered key personnel, they must bring something special to the company. Such abilities could be related to innovative behaviour, such as being prominent in idea generation, product development or overall business improvement. Losing such capabilities could therefore have a strong impact on the success of the firm. The respondent at S4 explained how almost all the employees quit as a result of the acquisition which could be the reason why the innovative capabilities worsened at the firm. Although the respondent explained how the business model and operative model were not compatible, losing almost all the employees at a firm will definitely have consequences on the success of the firm.

Similar to S4, there was loss of personnel at S2, albeit not as extreme. S2 had loss of key personnel as the CEO left the firm shortly after the acquisition in addition to loss of personnel in the development department. The losses at the development department further decreased the pace in the development which led to losing competitive advantages. Further personnel left the firms due to disagreements with new managers regarding how to run the business. Kotter (2007) described how M&A can result in the disruption of existing processes, which is what happened at S2. However, there were also losses of key personnel at S1. Interestingly enough, the innovative capabilities of S1 have increased as a result of the acquisition. The respondent at S1 explained how key personnel left 2-3 years after the acquisition. This, while not clear, was most probably due to the acquirer identifying key personnel who the firm wanted to keep and therefore signed a contract of a pay-out. There were also personnel that left without having a buyout. This inclines that there could be further issues within the firm than what was expressed.

5.2.2 Integration and Autonomy

However, the contradictory results of the two firms with similar circumstances showcases a discrepancy that must be untangled. This discrepancy could potentially be a result of different aspects, such as motives for acquisition or the integration of the acquisition. Looking at the integration, it is evident that S2 has been integrated more strongly to their acquirer than S1. This could be a factor of time, as S2 was acquired in the late 2000s and S1 in the late 2010s. S2 has therefore been integrated for a longer period of time and has since gradually lost more and more autonomy. S1 on the other hand has been integrated for a shorter period, which in turn has led to less loss in autonomy then S2. This is evident when comparing the organizational changes undergone at the two firms, where S2 stressed how they have lost the ability to make their own decisions. S1 on the other hand expressed no such concerns. Furthermore, looking at the integration process itself there are differences. S2 explained how there was a large turnover of integration managers, while S1 once again experienced no such issues.

Both Epstein (2004) and Kotter (2007) highlighted the need for consistent communication when committing to integration and change management. This is to create coherence in what message and vision is conveyed with the changes that are meant to be done. Switching managers often could therefore disrupt communication of vision, which in turn can lead to a loss of commitment towards the changes from the employees. This was demonstrated at S2 as the respondent expressed a loss of commitment and engagement after the acquisition, even though S2 indicated appreciation towards their acquirer before the acquisition. Ai and Tan (2020) found that a good organizational culture can attract talents who want to be part of the community. The fact that S2 showed a positive attitude towards being acquired, and loss of commitment after the acquisition showcases that something went wrong during the acquisition. Beer and Eisenstat (2000) further pointed out the need to communicate the stated vision at all times and at all levels through the organization, which could in turn be hindered by a rapid switching of integration managers. The importance of conveying a vision is shared with the acquiring respondents of the interviews, as the two firms B1 and B2 highlighted it as an important aspect of their integration strategy. The respondents explained how conveying a vision helps reduce anxiety at the acquired firm, in addition to motivating the employees at the acquired firm to see positively on the acquisition by explaining how it will affect them. This is in accordance with what Epstein (2004) says about vision, as he stresses the need for a clear vision due to the vision explaining in which direction the firm will move to get the new employees onboard with the acquisition. Beer and Eisenstat (2000) explained that vision communication needs to take place after the acquisition and during the integration to take hold with the employees. B2 and B1 do these exact things, as both firms send people to the acquired firm to convey what will happen next. B2 also invited the employees to their facility to show them around and welcome them. Although there is a widespread agreement of the importance of conveying a vision among acquirers, neither S2 nor S1 could recall any specific vision being conveyed to them. While S3 found the vision to be a helpful tool during their integration process, S4 on the other hand felt indifferent towards the vision conveyed to them which resulted in the vision not bearing any weight. Kotter (2007) explained how conflicts can arise when employees refuse to embrace the vision, which can be seen in S4 as almost all of workforce left the firm. Kotter (2007) further highlighted how such problems must immediately be addressed to de-escalate the situation, which is something the management of S4 could have opted to do. The fact that neither S2 nor S1 had any vision conveyed, yet with differentiating results in innovative capabilities, showcases how the vision was not the defining factor towards changes in innovative capabilities in their case. Instead, other factors must be considered.

5.2.3 Motives for Acquisition

When looking at motives for the acquisitions it is apparent that S1 was acquired with the intention of gaining access to a new market, whereas S2 was acquired due to being a competitor to the acquiring company. The differences in motives behind the acquisition is reflected in the integration strategies behind each of the firms. As stated earlier, S1 was acquired with the intention of gaining access to a new market. This in turn allowed the acquirer to minimize integration, as the firm was fully functioning on its own and no further synergy effects were desired. Since the market was completely new to the acquiring firm, little to no changes needed to be done except formalities such as integrating financial systems. On the contrary, S2 was acquired due to being a competitor of their acquirer, who had tried to outcompete S2 for a long time. This in turn means that acquirer had different firms active in the same market as S2, which inclined a need for a stronger integration when finally acquired. However, the issue at hand was that the products manufactured and sold by S2 were not compatible with the ones sold by the acquirer. This resulted in a stronger and more aggressive integration, as synergy effects had to be achieved by force. Ghauri and Buckley (2003) described how wrongful assumptions made by the acquiring firm regarding the potential outcome of the acquisition are considered a reason why many acquisitions fail. This is reflected in the case of S2 where the assumptions regarding potential outcome of the acquisition are misaligned with the actual outcome. Given how the innovative capabilities of S2 have worsened since the acquisition, the desired outcome of the acquisition has not been met.

The differences in the extent of the integration can be seen in how long it took for the integration to be finished. S1 stated how they felt fully integrated by the 3-year mark. S2 however explained that they were not fully integrated until after 6 or 7 years. The more extensive integration at S2 included a larger organizational change as S2 has gradually been losing autonomy. This as decision making has become slower and slower, with less decisions for S2 to make on their own. The results of this are S2 being unable to replace lost personnel, not being granted necessary funds for new product development and denied permission to undergo product improvements. Grant (2016) explained that how a firm is organized determines its capacity for action. In the cases of S2 and S4, how the firms are organized has made the firms less capable of necessary action as there are many improvements that could be done, yet that are hindered by the organizational structure. Contrary to S2 and S4, S1 is less affected by the organizational structure of its acquirer as the firm was given more autonomy. This in turn has led to S1 being able to make more independent and quick decisions, leading to a more extensive expression of innovative capabilities.

6. Conclusion

The aim of this study is to examine and address how M&A affects the innovative capabilities of firms. This was to contribute to the existing literature of the topic, in addition to understanding why so many M&A fail. To fulfil the purpose of the study, the following research question was presented; *"How are firms' innovative capabilities affected by an M&A?"*. The study found that the innovative capabilities of the firms examined were affected to various degrees by the M&A when assessed in accordance with the innovation pentathlon framework proposed by Goffin and Mitchell (2017). The results can be broken down into two aspects, with the first being motives for the M&A. Motives for the M&A set the basis for whether the acquired firm will be able to be continuously innovative or not. This is due to the motive deciding how strongly the firm will be integrated. The findings of the study tie into the theory proposed by Ghauri and Buckley (2003) where the acquirer making wrongful assumptions regarding the potential outcome of the acquisition is considered one of the reasons why the acquisition is seen as a failure. The findings of the study showed that acquiring a competitor meant that the necessary integration was more extensive than when acquiring a firm with the motive of gaining access to a new market. Given how the innovative capabilities decreased as a result of the more extensive integration, a discrepancy in assumptions of the acquisition and the real outcome could be identified. While there is nothing wrong with acquiring a competitor per se, the compatibility of the products is of great importance for the success of the integration, and thus the innovative capabilities of the firm. This leads us to the other aspect, which is integration. The study found that integration played a key role in the success of the M&A, as too strong integration resulted in loss of autonomy. Similar to what Ernst and Vitt (2000) say about key personnel leaving as a result of M&A, the loss of autonomy led to key employees quitting and decision making slowing down. The corporate inertia experienced can be explained by the configurations described by Mintzberg (1981) where switching from a simple structure to a more rigid configuration naturally brings longer chains of command. Furthermore, execution of the integration is of great importance as having strong communication, goals and not being rash are key success factors. However, maintaining knowledge and autonomy within the acquired firm ultimately plays the biggest role in the success of the M&A and in nurturing the innovative capabilities in the firm. These two aspects play a major role in how the innovative capabilities of the firm will be affected by the M&A. While efforts made towards innovation at firm level, such as financial incentives, brainstorming and workshops, undeniably are good for the innovativeness of the firm, the study has not found evidence of such activities playing a major role in keeping innovative capabilities in an M&A setting. This is due to activities meant to foster innovation being carried out at all firms examined, yet with conflicting results regarding innovative capabilities after the M&A.

6.1 Practical implications

The analysis and conclusion demonstrate how motives and integration are two important aspects of an M&A, and how these two together create the conditions for innovative capabilities to develop. The practical contribution this qualitative study brings is to highlight various important factors to consider when making an acquisition, especially if the company possesses an innovative ability that it wants to retain. What this means is that firms that express a desire to acquire another firm must thoroughly consider the motives behind the acquisition, as acquiring a firm with the wrong motives will result in a worsening of innovative capabilities. Given how the integration reflects the motive, a plan for a successful integration must be presented as well. Moreover, checking whether the resources of the firm and the potential acquisition are compatible or not is of utmost importance. This due to non-compatible resources often resulting in a lack of synergy effects, which could be forcefully obtained, although at the price of losing innovative capabilities.

6.2 Theoretical Implication

Given the result of the study this thesis contributes to the theoretical literature by analysing the connection between innovation and M&A. Ernst and Vitt (2000) found that key personnel performed worse after an M&A and often left the firm as a result of the M&A. This study made use of theory proposed by Ernst and Vitt (2000), although by focusing on firm level. The study therefore contributes to the theoretical literature by expanding on the work of Ernst and Vitt (2000) by highlighting a different perspective of the same issue by shifting focus from individuals to firm level. In a similar sense to Epstein (2004) and Grant (2016), the study emphasized finding the reason behind M&A failure regarding innovative capabilities. However, by shifting the attention to the contrast between motives for acquisition, new discoveries could be found. The thesis contributes to the existing literature by showcasing how the contrast in motives for acquisition altered the outcome of an M&A in regard to innovative capabilities.

6.3 Method discussion

Given the result of the study, other ways of proceeding could have been done to bypass the limitations of the study. Measures that could have been done is for instance enlargement of the sample size. This to receive a result with a higher degree of generalizability due to a higher number of participants representing a larger population. Furthermore, a more quantitative approach could have been used by using more quantitative data to strengthen the result. An entirely quantitative study could have been done, however due to the difficulty of measuring innovation, such a study was not found appropriate. Moreover, focus could have been put on only one innovative industry to get more insights on the innovativeness of that particular industry in relation to M&A. Additionally, interviews could have been held in person for the interviewers to see the body language of the respondents. This to get a better opinion of how the respondent truly feels about their answer, as it is easier to detect such details in person than it is online.

6.4 Future research

Following this study, interesting fields to further examine could be conducting a case study following a firm throughout the entire M&A process. This to see more closely how motives for acquisition and integration are connected. Additionally, it would be interesting to follow key employees at the acquired firm to see reactions and potential changes in innovative behaviour. Furthermore, a similar study to this one could be conducted although with focus on cross border M&A. This to see greater differences in culture and how this affects the result. Additionally, to examine and rate M&A with the price as a factor towards success would be of high interest as to see when a M&A financially viable or not. This by putting the price in relation to the outcome of the M&A.

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8. Appendix

Appendix A

Name	Position	Date	Length
Buyer 1.	Manager responsible for M&A	29/3 -23	1 h 10 min
Buyer 2.	Manager responsible for M&A	31/3 -23	46 min
Seller 1.	Senior Developer	24/3 -23	54 min
Seller 2.	Senior Developer	6/4 -23	56 min
Seller 3.	CEO	31/3 -23	39 min
Seller 4.	Innovation Consultant	12/4 -23	1h 4 min

Appendix B

Interview guide I

Acquired Company

What is your role at company x?

How long have you worked at company x?

Theme: Innovation

What is innovation to you?

Do you have a definition of innovation that is shared throughout the organization? Has it changed over time?

In what way do you work to promote innovation?

How have innovation processes changed over time?

How do you work with idea generation in product development?

Do you reward innovative behaviour?

In what way would you say your innovative capabilities have changed since the acquisition?

Theme: Motives for Acquisition

Why do you think you were acquired by y?

Your M&A were successful but many acquisitions tend to be seen as failures, do you have any idea why?

What were your expectations on the M&A? What were your initial thoughts? Which were the biggest challenges?

What is your opinion about the M&A?

In what way did the acquisition affect your company?

Theme: Integration

How did the integration process proceed?

Were there any stated strategies for the integration?

Did a special group work with the integration process, and if, which were involved?

Were the employees positive towards the acquisition? Were there any personnel that quit?

Was there any vision that was stated throughout the process? How was this communicated?

Were there any specific goals related to the integration?

Has the integration process been finished?

If you had to go through it all again, is there anything you would change?

Appendix C

Interview guide II

Acquiring Company

What is your role at company x?

How long have you worked at company x?

Theme: Innovation

What is innovation to you?

Do you have a definition of innovation that is shared throughout the organization? Has it changed over time?

In what way do you work to promote innovation?

How have innovation processes changed over time?

How do you work with idea generation in product development?

Do you reward innovative behavior?

In what way would you say your innovative capabilities have changed since the acquisition?

Theme: Motives for Acquisition

What do you consider before an M&A?

Your M&A were successful but many acquisitions tend to be seen as failures, do you have any idea why?

What were your expectations on the M&A?

Does the acquisition bring any changes?

Does the acquisition have any impact on the acquired firm?

Does the acquired firm ever get restructured?

Theme: Integration

Are there any stated strategies for the integration?

Is there a standardized integration process?

Did a special group work with the integration process, and if, which were involved?

Was there any vision that was stated throughout the process? How was this communicated?

Were there any specific goals related to the integration?

Do you face any resistance due to the acquisition? Were there any personnel that quit?

Has the integration process been finished?

What is usually the biggest challenge with the acquisition?

Appendix D.

General search words	**Specific search words**
Merger and Acquisition, Innovation, M&A, Organizational Structure,	M&A failure, Integration in M&A, Motives for M&A, Innovative Capabilities and M&A, Assessing innovativeness

Appendix E.

Promoting innovation	Teamwork, gateway-modell, brainstoming-sessions, acknowledgement, financial incentives	Innovation tends to develop in some projects, more active work towards innovation will come through the acquistion	Gateway-model, financial incentives,	Business model does not necessarily promote innovation, yet innovative solutions can be delivered as long as risk is avoided
change in innovative capabilities	Formally only by the introduction of the gateway-model, increase in patents	Will have better opportunities for innovation as a result of the acquisition	Less money towards development yet increased turnover	Worsened due to business model not allowing innovation and rather focuses on risk minimization