



Innovation via Proxy – Benefits of Innovating through Spin-Offs

An Exploratory Case Study

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Executive Summary

This thesis explores how an established firm benefit from spinning off and innovate via proxy. Innovation via proxy refers to the benefits that the established firm experienced from the innovation activities of its spin-offs without actively participating in the innovation process. This study was conducted in the setting of a large media firm and six of its spin-off companies. The inductively generated findings are contextualized in the current literature on corporate spin-offs, open innovation and cooptation.

This thesis provides an extensive overview on the relationships and resulting benefits between the established firm, its spin-off companies, the media cluster that formed around the spin-offs and the customers of the spin-offs, respectively. The benefits for the established firm are found to be direct cost savings from implementation of the spin-off's products, reduced acquisition cost of the spin-off's products and financial gains from the ownership of the spin-offs through annual profits or through their increased valuation at the time of divestment. Additionally, established firm is benefiting from the product improvements and new product innovations that the spin-off generated in inbound open innovation activities with their customers. Contrasting earlier studies, it was found that the spin-offs experience difficulties in reintegrating these benefits in the process of innovation via proxy. The spin-offs benefit from the relationship with established firm through ownership governance and the relationship to established firm as a customer, allowing the spin-offs to test and showroom their products. Lastly, it is found that the spin-offs and other members of the media cluster that evolved around the spin-offs benefit from the cluster in the form of joint representation, their innovation activities and the emerging talent pool.

This thesis also developed an inductive model to identify conditions that are best suited to spin-off companies with an intention of benefiting from them and innovate via proxy. The conditions identified are that spin-offs should pursue non-core activities, products or services of the established firm's business, a complementary rather than competitive mindset and strong relationships between involved parties. These conditions also provide guidance and implications for managers involved in a setting with corporate spin-offs.

Preface

This thesis is written as a part of the Master of Science in Economics and Business Administration at the Norwegian School of Economics (NHH) where I am pursuing a specialization in Strategy and Management.

This thesis is an independent work which was conducted as a part of the ongoing joint research program between the Norwegian School of Economics and Samfunns- og næringslivsforskning (SNF) called RaCE. RaCE, which is an abbreviation for radical technology-driven change in established firms, is aimed at developing research-based knowledge on how established and well-performing firms may respond to and manage radical technology-driven change. My participation in this research program has greatly aided the research presented in this thesis and I very much appreciate their support.

I would like to thank my supervisor Professor Inger G. Stensaker in particular. She has been extremely helpful and supportive throughout the entire research process and has always provided valuable feedback, criticism, encouragement, and insights into my current state of the research process. The exchange has always been very positive and pleasant.

I would also like to thank the PhD student Justin Harlan who assisted me in the process of data collection. He also offered valuable insights and feedback in our discussions about the data collection and the analysis of the data.

Lastly, I would like to thank the participants in the interviews, who took valuable time out of their busy schedules to share insights from their work life with me. I highly appreciate their willingness to answer questions about their work life openly and honestly.

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1. Introduction

Many companies rely on their abilities to be innovative in order to create and sustain a competitive advantage (Urbancova, 2013). The way companies innovate has changed significantly over the past years. In the strategic management literature, this change of the innovation processes was described as opening up from a closed innovation model, focusing solely on internal research and development, towards a approach of open innovation (Chesbrough, 2003; Gassmann, 2006).

Open innovation is based on the assumption that companies benefit from opening up their boundaries to collaborate and exchange knowledge with external stakeholders, to leverage complementary assets and capabilities (Chesbrough, 2003; Randhawa, Wilden, Hohberger, 2016). The open innovation paradigm distinguishes three dimensions of this new form of inter-organizational relationships, aligned with the flows of exchanged knowledge: the outside-in (inbound) open innovation, inside-out (outbound) open innovation and a combined coupled process (Chesbrough & Bogers, 2014).

The largely influential research body on open innovation is evolving rapidly and most often focusing on inbound open innovation (Randhawa et al., 2016). It thus seems to be of interest for organizations to understand how they can directly benefit from collaboration with external stakeholders with regards to their innovation activities.

Harlan (2018) suggested that an established firm can also benefit from such innovation activities performed by its spin-offs without active participating in the innovation process. This thesis coins the term “innovation by proxy” for this indirect form of innovation and explores a case of an established firm that successfully spun off several companies. Additionally, this thesis investigates the benefits arising from the relationships between the established firm, its spin-offs, a media cluster that formed around the aforementioned two parties, and the customers of the spin-offs, within the framework open innovation. This qualitative exploratory case study thus examines the research question:

How can an established firm benefit from spinning off and innovate via proxy?

1.1 Disposition

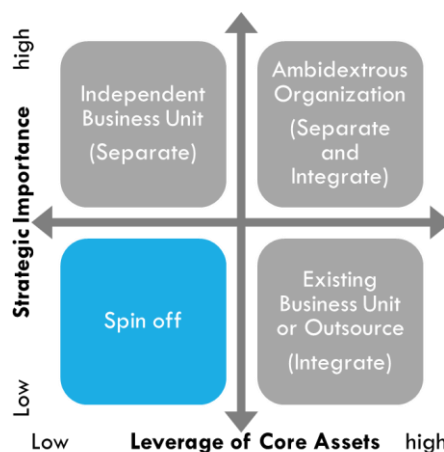
The structure of this thesis follows the research process. Firstly, the existing body of literature relevant to the process of spinning off and innovation by proxy, is reviewed. This includes an overview of the theory on corporate spin-offs, open innovation and cooptation. Next, the research setting is introduced to provide information on the background and context of the case study. Thereafter, the methodology used in the preparation of this thesis is presented, critically reviewing the strengths and weaknesses. In the subsequent section, the findings are specified and discussed in the context of the current research in strategy literature. This includes establishing relations of the findings to current research and outlining substantiations and contradictions. In a last step, the conclusions of this study are explained, including suggested future avenues within the research field and implications for managers and practitioners.

2. Theory

This section presents the theoretical background for this thesis reviewing existing literature relevant to the research question examined in this study. The theoretical foundation set in this chapter on Corporate Spin-Offs, Open Innovation and Coopetition will be referenced in the later parts of the thesis.

2.1 Corporate Spin-Off

Spin-offs are examined in various fields of strategy literature such as corporate venturing and corporate entrepreneurship but are considered under-researched (Agarwal, Echambadi, Franco, & Sarkar, 2004; Clarysse, Wright, & van de Velde, 2011; Narayanan, Yang, & Zahra, 2009). Corporate spin-offs are newly set up, separate legal companies derived from an established business (Agarwal et al., 2004). The established firm often has ownership of the



spun off venture and it is represented on the board of directors.

Figure 1: Strategic Intent for spinning off. Adapted from O'Reilly & Tushman, (2016)

According to O'Reilly & Tushman (2016) spin-offs are the best way of reconfiguring a firm's assets when the innovation is unimportant to the strategy of the core business and when the innovation does not benefit from the resources and capabilities a firm can provide.

Spin-offs are supported by the established firm's resources in the forms of employees, technological resources, knowledge base and financial capital (Ferriani, Garnsey, & Lorenzoni 2012). They also benefit from the social network of the established firm. Spin-offs are able to draw on the personal and corporate contacts of the established firm (Higgins & Gulati, 2003; Yli-Renko, Autio, & Sapienza, 2001). The connection to the established firm legitimizes the

spin-off in these relationship, which aids in the building of their own reputation as a company (Sahaym, 2013).

Spin-offs can gain imported knowledge from their customers, which in turn can be imported from the spin-off by the established firm (Hippel, 1988). Harlan (2018) found that when the innovations of the spin-offs meet the needs of the parent firm, the spin-offs do not face difficulties in bringing back the benefits of their innovations back into the established firm. The established firm can also benefit from the spin-off by losing the multi-directional focus of the established firm and the realignment of their resources with the core business, while the innovation is pursued autonomously (Ito & Rose, 1994; Seward & Walsh, 1996).

Spin-offs are also found to enable the formation of clusters (Garnsey & Heffernan, 2005; Keeble & Wilkinson, 2017). Garnsey & Heffernan (2005) find that the emergence of the cluster is related to serial spin-offs and is a driver of the creation of a specialized labour market.

2.2 Open Innovation

2.2.1 The open innovation paradigm

Open innovation is a paradigm first introduced by (Chesbrough, 2003) . His widely recognized framework proposed that firms should rethink and open up the boundaries of their innovation processes, to allow external organizations and individuals to participate. Adopting a process-based view, Chesbrough proposed that managing the purposive inflows and outflows of knowledge of an organization can enhance their innovativeness and eventually result in a competitive advantage (Chesbrough & Bogers, 2014).

The concept is concisely defined, and three different core processes, which are centric to a focal firm, can be differentiated. These are the outside-in process, also referred to as inbound open innovation, the inside-out process (outbound open innovation), and the coupled process (Enkel, Gassmann, & Chesbrough, 2009; West & Bogers, 2014).

The outside-in process refers to the sourcing of external knowledge through the integration of suppliers, customers and other stakeholders and knowledge bases. “The outside-in process reflects companies’ experience that the locus of knowledge creation does not necessarily equal the locus of innovation” (Enkel et al., 2009).

Opposite to this, the inside-out open innovation process refers to transferring internally developed knowledge towards the outside environment. Companies engaging in this process believe that their knowledge and innovation can be exploited faster and better outside of their organization (Enkel et al., 2009).

Representing a combination of the two processes presented before, the coupled process can best be described as co-creation (Enkel et al., 2009). Together with complementary partners, organizations use a combination of gaining external knowledge and bringing ideas to the market to develop and commercialize their knowledge and innovations.

Although the model of open innovation is firm centric, there are research streams adopting broader definitions of the concept in order to link open innovation to other related innovation phenomena such as users as innovators, innovation communities or open source software development (Bogers, Zobel, Afuah et al., 2017). Randhawa, Wilden, & Hohberger (2016) thus conclude that a more comprehensive understanding of open innovation needs to be developed.

Lichtenthaler (2008) found that predominantly large firms are engaging in open innovation activities, as they are able to facilitate the processes due to their large resource base. In line with Lichtenthaler (2008), Van de Vrande, Jong, Vanhaverbeke & Rochemont (2009) found that medium-sized and large firms are embracing open innovation to a larger extent than small and medium-sized enterprises (SMEs), such as corporate spin-offs. However, they found SMEs to be increasingly opening up their innovation activities to cope with their lack of internal resources.

2.2.2 Customer Involvement

Forms of outside-in activities, which also have been framed as technology exploration (van de Vrande et al., 2009), include customer involvement. Customer involvement is used to inform the internal R&D process (Gassmann, 2006). Customers are not only passive innovation adopters, they develop innovations themselves, which then can be adopted by producers, that previously failed to provide fitting supply for the customer's needs (Hippel, 2006). Supplying firms can benefit from customer involvement by conducting proactive market research, providing tools to the customer to experiment with products of the supplier and evaluate learning from the general product development (van de Vrande et al., 2009). Activities of customer involvement include co-creation, lead users and user driven innovation.

Co-creation is referring to the joint value creation of a company in collaboration with a consumer (Prahalad & Ramaswamy, 2004). Problem definition and problem solving are performed jointly. Consumers and the company are involved in an active dialogue that allows them to co-construct the experience that is most meaningful to them (Prahalad & Ramaswamy, 2004). Other definitions locate co-creation in the context of new product development (Chesbrough & Schwartz, 2007; O'Hern & Rindfleisch, 2010). The basic principle however remains the same, customers are entailed in the collaborative process of creating a new product, technology or service. Piller & Ihl (2010) find three modes of customer involvement in the new product development process. The first mode is designing for customers after observing the customers, the second mode is designing a product together with the customer, providing him with several concepts that he can choose from, and lastly the third mode is design by customers, in which the customer is empowered to design the product, which is however ultimately transferred back to the company for purposes of exploitation.

Lead users are motivated customers that are expecting high benefits from a solution fitting to their needs and thus are motivated to innovate (Hippel, 2007). They experience needs that are general in the market, but anticipate them often ahead of the majority of the market. They have the skillset to develop a solution from their need (Hippel, 2007; O'Hern & Rindfleisch, 2010).

User innovation is closely related to lead users, who often are the customers involved in the processes and products that are focused in innovation. In user innovation, companies expect to foremost benefit themselves for their own internal use of the innovation (Hippel, 2007). They typically require some form of compensation for allowing other customers to benefit. Existing research often fails to recognize degree of innovativeness of user innovation (Bogers et al., 2010).

2.3 Coopetition

The concept of coopetition originates from the research field of game theory. It is most popularly defined as "a relationship simultaneously containing elements of both cooperation and competition" (Bengtsson & Kock, 1999). It was introduced into strategic management theory by (Nalebuff, 1996). Their book "Co-opetition" explains the concept using game theory as a plus-sum game in which actors can win without their direct rivals losing.

Although the underlying premise that coopetition refers to cooperation between competitors is generally agreed upon, the exact definition of the phenomenon remains unclear (Bengtsson & Kock, 2014). Definitions reach from a value-net around a firm's suppliers, customers, competitors and complementors, to cooperation between two directly competing firms, or coopetition between supply chains or networks (Bengtsson & Kock, 2014). The interaction of these conflicting logics of cooperation and competition, which can create tensions and destroy a coopetition relationship (Wilhelm, 2011), is recognized to be the defining feature of coopetition (Bengtsson, Eriksson, & Wincent, 2010; Bengtsson & Kock, 2014; Chen, 2008). Peng, Pike, Yang & Roos (2012) apply a definition of competitors cooperating in non-core business activities and find these interactions can be temporary fruitful.

Due to its diffuse definition, the coopetition framework is used in a variety of fields in organizational research and management research (Bengtsson & Kock, 2014). Additionally, diffusion in coopetition research is created by different levels of analysis. Prominently divided into the individual level, the intra-organizational level, inter-organizational level and network level (Bengtsson & Kock, 2014; Bouncken, Gast, Kraus, & Bogers, 2015; Dorn, Schweiger, & Albers, 2016). Previous studies have not yet taken a multi-level approach towards the concept of coopetition (Bengtsson & Kock, 2014). In the context of corporate spin-offs, the inter-firm level and the network level are most relevant. The organizational level, which is also commonly referred to as inter-firm level, covers firms competing in the same industry, at the same part of the value chain (Dorn et al., 2016). The studies investigating the network level incorporate both intra-network studies about competitive behaviour within a cooperative network (Gnyawali & Park, 2009) and inter-network studies researching the cooperative and competitive relationships between networks (Peng & Bourne, 2009).

There are various objectives that motivate firms to engage in a coopetition relationship. Bouncken et al. (2015) identified motives for coopetition: efficiency, development, innovation, market power, market exploration and internationalization. Within these groups of motives, reasons for engaging in coopetition are gaining access to and sharing resources and knowledge (Bengtsson & Kock, 1999), collaborating in R&D to develop (technical) innovations (Bengtsson & Kock, 2014; Bouncken, Clauß, & Friedrich, 2016; Walley, 2007), entering new markets (Gnyawali & Park, 2009), achieving economies of scale or economies of scope and reducing risk (Bouncken et al., 2015).

Coopetition is also researched in the context of innovation. Studies argue that inter-firm coopetition influences the innovation processes within a firm (Bengtsson & Kock, 2014). The most prominent studies attest a positive relationship between a firm's coopetition activities and its internal R&D (Huang & Yu, 2010), knowledge creation (Zhang, Shu, Jiang, & Malter, 2010), knowledge acquisition and knowledge transfer (Li, Liu, & Liu, 2011), which subsequently improves the overall innovativeness of the firm. In line with the forementioned studies, (Ritala, 2012) finds, that a coopetition strategy can improve a firm's innovation performance in market situations with high uncertainty by sharing risks and costs. Another nurturing factor for increased innovation performance is a low level of competition intensity.

Having reviewed the literature on the corporate spin-off mode, open innovation, coopetition and the interrelations of the forementioned aids in understanding how established firm could benefit from spinning off and innovate by proxy.

3. Research Setting

This section gives a brief overview of the setting of the thesis, covering the established firm, its spin-off companies and the general industry characteristics, summarizing each of the forementioned. It is providing context and information about the case, using both primary and secondary sources, that will be detailed further in the methodology section of this thesis.

3.1 Presentation of the Case

There have been previous studies in this research environment. Harlan (2018) for example studied how Established Firm could secure innovation via the corporate spin-off as a form of external ambidexterity. All data and company information has been fully anonymized to protect both informants and companies. Instead, pseudonyms are used to identify companies and key actors. However, to offer the greatest possible value to the readers, the pseudonyms used in this thesis are the same as in the research previously conducted by Harlan. The spin-offs presented in the following were selected to offer a comprehensive overview of the spin-off process that Established Firm used. Although their story of origin differs slightly from each other, the relationship with Established Firm in terms of innovation and benefits thereof is similar.

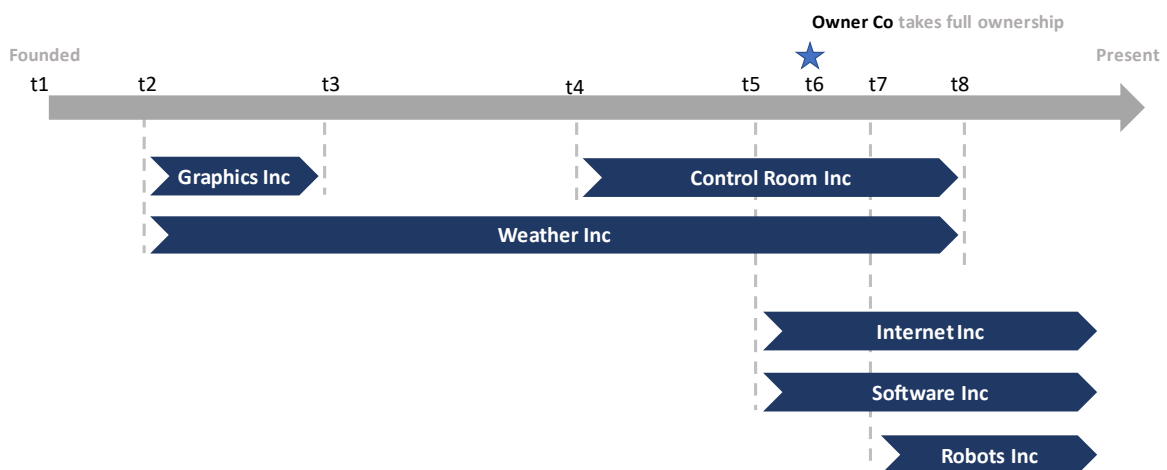


Figure 2: Timeline of the research setting, covering approximately 30 years. Adapted from Harlan (2018).

3.2 Industry Characteristics

The media industry and especially this section of the media industry is an interesting field of study, because competition and technology innovation are perceived and approached very industry specific. The whole industry is very relationship-based regarding all aspects of inter-company relations, ranging from sales processes to competing. The market is divided by country mostly, with a few major players dominating each individual market. However, there is only insignificant competition between companies from different regional markets. All actors in the industry know each other very well, having frequent exchanges at major trade shows, or during company visits. It is common within the industry that for example an American media company visits a newly erected studio in Scandinavia, and vice versa. Of course, not all regional markets are exactly alike, competition among media companies in the United States for example is fiercer than in Scandinavia. In general, companies in the industry agree that they compete on content only.

The industry characteristics described in the paragraph above are enabling for cooperation within the industry. Having set a clear focus on content creation as their core business, companies are frequently willing to collaborate on non-core activities such as distribution of content and technology innovation. The established firm introduced in the next section of the thesis is for example closely collaborating with its main regional competitor on content distribution.

The media industry in general and the studied sector of the industry in particular has experienced significant changes and innovations in the period studied, especially in the context of digitalization. This has led to numerous opportunities, such as new revenue streams, business models and so on. The industry is influenced by governmental decisions frequently. Those decisions can disrupt the industry and prompt changes in the operations of the media companies.

3.3 Established Firm

Established Firm is a large Scandinavian media company. It was set up to compete with the state media company, which previously was the only player in this market. As of today, the state media company is still the biggest competitor of Established Firm.

Although Established Firm is considered a private company opposing the state media company, its operations are influenced by the state. Aside from receiving significant annual amounts of money to maintain their operation, there also have been governmental restrictions in terms of the ownership structure. At the founding of Established Firm, it was mandated by the parliament that no owner could own more than a 20 percent stake of the company. In the first years, Established Firm was thus controlled by several large media companies mainly from Scandinavia. Once these restrictions were removed, Owner Co, who also previously had been a partial owner of Established Firm, took full control over Established Firm by acquiring 100 percent of the shares. The influence of the change of ownership on the culture at Established Firm and its relationship to the spin offs presented in this thesis is frequently discussed, yet not unanimously agreed on.

The number of spin-offs and the success of the forementioned make Established Firm an interesting and insightful case to examine. From the very start of its lifetime, Established Firm has generated many innovative technological solutions that subsequently became industry standards. Established Firm is the first customer of most of the start-ups presented in this thesis and continues to be a customer throughout. In this process Established Firm has significantly benefitted from the improved and innovated products and services of their spin-offs. The consistency in the ability to spot opportunities from their own needs and then successfully catering to its peers via spin-offs allows for an insightful case study on how companies can benefit from spinning off and innovate via proxy.

3.4 Graphics Inc

Graphics Inc is providing visual tools to media companies. Those graphic tools are software based, but Graphics Inc also provides hardware, consulting and installation and support for media production to its customers. Since Graphics Inc has been spun out, it has grown considerably in size, employing several hundred people in over two dozen international offices.

Graphics Inc is involved in many industry-leading innovation projects with its customers.

Graphics Inc has merged with several similar companies of its type in the years following the spin-off from Established Firm. The company went public at the local stock exchange a few

years later. However, a few years later Graphics Inc was merging into a private equity fund. Graphics Inc also bought Control Room Inc from Established Firm.

3.5 Control Room Inc

Control Room Inc is providing a digital automation system. The main benefit of this automation system is bringing down labour cost significantly. The workload that needed six to eight employees in the previous production setup can now be handled by one or two employees. Additional benefits are mainly quality improvements, the automation system is handling parts of the production better than humans are physically able to.

The initial technology was developed by one employee, who was given the time and resources to work on this project during his employment at Established Firm. The product development was boosted after some years of development by a production of Established Firm, which had a cost structure significantly dominated by labour cost, requiring employees to work in multiple shifts. The product that was later spun off into Control Room Inc was able to reduce this cost significantly. Subsequently, other media companies showed interest in the product and thus Control Room Inc was spun off. In this case, the initiators for the technology received some ownership in the company.

Having Established Firm as a showroom for their product was a significant advantage for Control Room Inc. Control Room Inc managed to secure prominent clients internationally in the early years and has been profitable from the very beginning, not requiring additional funding from Established Firm during their time of ownership. Established Firm had to pay for the product of Control Room Inc once they spun off.

An essential part of the digital automation system of Control Room Inc is the compatibility to the devices used in a control room. The value of the software increases with the number of devices it supports on the one hand, and with the number of production types it supports on the other hand. Customers were charged for the development of this compatibility. Later customers then got the additional value created with this development for free. The revenue stream of Control Room Inc consists of annual service charges in addition to the product sale.

Control Room Inc was later sold to Graphics Inc, the spin-off of Established Firm covered in the previous chapter. However, at the time of this sale, Graphics Inc was not owned by Established Firm anymore.

3.6 Weather Inc

Weather Inc is one of the earliest spin-offs of Established Firm. In need of differentiation from Established Firm's main competitor the weather services provided by Established Firm were innovated.

A group of driving employees involved in this innovation process saw an opportunity to offer these customized weather services to other media companies and other industries. Subsequently, Weather Inc was spun off of Established Firm. Today Weather Inc is providing weather service and other related services mainly for industrial clients, servicing media companies has evolved to be a smaller, less significant part of their business. As a consequence, Established Firm has divested from Weather Inc. Weather Inc is now owned by a private equity company. Weather Inc has grown considerably in size to a few hundred employees and is serving customers globally.

3.7 Internet Inc

Internet Inc develops solutions to provide the products of media companies online. It was spun off from an internal division of Established Firm that developed the solution for Established Firm's needs. The division still exists within Established Firm and is considered to be very successful. After taking some time to convince Established Firm to let them spin-off, even having set up plans for reintegration in the case of failure, Internet Inc is providing the same product to similar companies as Established Firm now.

Established Firm holds all ownership of Internet Inc. Employees that were essential in the development of the product internally and in forming the spin-off, were not given ownership although they fought for it intensely.

Renowned customers are convinced by the product of Internet Inc, which has also advanced its product offering since it left Established Firm. Internet Inc has grown substantially since it

left Established firm, but it has also struggled in the recent years and is considered one of the less successful spin-offs compared to the other spin-offs of established firm.

3.8 Software Inc

Software Inc started with delivering an internet service to Established firm, which was an idea developed by an employee of Established Firm. Established Firm had maintained an ownership of about 50 percent in the early phase of Software Inc.

Software Inc struggled with their initial product as other competitors created competing solutions with large investments. These products were superior of Software Inc's solution. Thus, Software Inc abandoned their product and explored other potential products in an extensive process of analysis. During this process, employees of Software Inc spent time at companies of Established Firm's type in different regional markets, to gain an understanding of their operational needs. Established Firm increased their ownership stake to above 80 percent during this time.

The final product was then first generated and developed with another firm of Established Firm's type. Software Inc is now creating a tool to facilitate workflows and logistics in large media companies, increasing the efficiency and production speed of media companies. As of today, Established Firm is not yet a customer of this new product, but intends to implement it in the future. Within the local media cluster, a firm led by former employees of Established Firm and its spin-offs, but without ownership of Established Firm, is developing a competing product.

3.9 Robots Inc

Robots Inc designs and builds physical robots to automate and improve the broadcast production, both in terms of quality and (labour) cost efficiency. Recently it also expanded into software products. Robots Inc is the latest technology spin-off of Established Firm.

Robots Inc was started by a former contractor of Established Firm, who had experience from working with the direct competitors of Established Firm as well. He was unable to secure funding to develop the product on his own and this reached out to Control Room Inc and Established Firm for investment. Established Firm agreed to set up the company with an initial

goal to develop robots for Established Firm's needs. Development of the robots proved to be harder than initially anticipated, which made the company struggle financially. After several rounds of additional funding from Established Firm and a government organization, Established Firm brought in the former CEO of Control Room Inc as new CEO. During the rounds of funding Established Firm increased its ownership from about one third of the company to over 90 percent. The initiator of the company, who consequently had to give up his shares due to the inability to match the funding for his stake, eventually left the company, in both roles of owner and employee.

In the past years Robots Inc struggled to acquire new customers for their hardware products and even discussed closing down the company. However, reorientation of the product strategy allowed Robots Inc to secure from a government organization and Established Firm during the covid crisis. The company is currently expanding their product line up with robot control software for their own and foreign robots, providing a more integrated solution. This is believed to ease the sales process and allow them to pursue a similar path as Control Room Inc, growing with and building their competitive advantage on compatibility of software products, in addition to their hardware excellence. The new approach also involves compatibility with the product of Control Room Inc.

3.10 Summary

As pointed out above, the research is set in the context of an established firm that generated a considerable number of spin-offs. Most of the spin-offs solutions were developed internally for established firms needs. These solutions are mostly process innovation solutions that provided advantage to established firms by improved efficiency and a reduced number of employees needed.

The spin-offs in accordance with O'Reilly & Tushman (2016), are providing products and services that are unrelated to the core business of the company and do not draw on the resources and capabilities of the parent firm. The initial products of the spin-offs are designed to cater companies that are similar to Established Firm, with some exceptions like Weather Inc. The spin-offs improved their products in collaboration with its acquired customers, which resemble Established Firm.

The media industry and the section of the media industry in which Established Firm operates in is fragmented into different regional markets. It is perceived as very relationship based and characterized by low competitive efforts of firms between those markets. Players in the section of the market exchange frequently and openly about their operations, including onsite visits of each other. In addition, companies are often involved in cooperation activities, most often unrelated to their core business. This also includes companies within one regional market.

4. Methodology

In this section of the paper, the methods used to provide an answer for the research question will be presented. Following the research process, the research design will be detailed, followed by descriptions of the data collection and the data analysis processes, and lastly the strength and weaknesses of the applied methods will be discussed in the research quality section.

4.1 Research Design

The research design is a roadmap of how the research question will be answered and how the research will be structured (Saunders, Lewis, & Thornhill, 2015). This section focuses on the methodological choices made to examine *how an established firm can benefit from spinning off and innovate via proxy*. Since the amount of research on this specific topic is very limited, this thesis uses a qualitative exploratory design. Applying this qualitative exploratory design allows to gather information, find explanations and to get an initial understanding, or adjust the current understanding of the phenomenon (Saunders et al., 2015). This thesis is a case study investigating an established firm and its spin-offs. Case studies are useful for finding underlying causes within the context of the investigated phenomenon (Saunders et al., 2015).

4.1.1 Research Approach

Deductive and inductive approaches are both used in this study. A deductive approach means existing theories are tested and developed, while an inductive approach on the other hand is used to understand the researched concept by analysing the collected data, enabling to find unexpected results that can add valuable insights to the research (Saunders et al., 2015). The research setting was selected deductively through findings from previous studies in the same research setting in the context of corporate spin-offs. The data was on the other hand approached inductively; the presented findings originated from within the data. Using the inductive approach is valid because the main goal of this thesis is to gain understanding, develop insights and construct theory, considering multiple possible explanations. The findings from the data are then subsequently matched and brought in relation to the existing body of literature and theories and frameworks within the body of current strategy literature. This process of cross-referencing, matching and linking of the findings to the established insights increases the validity of the research conducted (Bourgeois & Eisenhardt, 1988).

Research of this type typically starts with a surprising fact that cannot be explained through existing theories. It is then the objective of the research process to find possible explanations for the surprising phenomenon (Saunders et al., 2015). This research started with an established firm that was pursuing its innovations through the corporate spin-off mode. The unique component in this setting was that established firm seemed to have benefited from spinning off and the innovations the spin-offs produced. This indirect form of innovation is intriguing and new to the existing body of literature. The research question thus is aimed at investigating how and established firm could benefit from spinning of and innovate via proxy, which is a term coined to describe the indirect benefits experienced by the established firm. As the phenomenon is new, the exploratory research design is suitable to approach this topic. Inductive and deductive approaches allow the research process to be driven by the data, while at the same time adding valuable insights and theories from the existing body of literature relevant to the research question.

4.1.2 Research Objective and Strategy

This thesis aims to aid both practitioners and researchers in understanding how an established firm can benefit from spinning off and innovation by proxy.

As mentioned in the previous section, this study is qualitative. The collected data is non-numerical in the form of interviews, documents and publicly available information. The qualitative approach is fitting for this type of research where the objective is to gain new insights and study underexplored phenomena (Saunders et al., 2015). The collected data is utilized to gain understanding of how an established firm can benefit from innovation via proxy and innovate via proxy. To facilitate this, interviews with relevant employees and executives of multiple involved companies are conducted and supplemented by the secondary data collected.

A case study is a well-fitting research strategy to study a phenomenon within its real-life setting (Yin, 2011). Utilizing cases to construct theories is advantageous, because it provides context that can enhance the understanding of the qualitative data (Flyvbjerg, 2006). The context is on the other hand a limiting factor, as case studies are not representative outside of it (Eisenhardt & Graebner, 2007). The exploratory nature of this thesis lessens the impact of this limitation as this study aims at understanding the phenomenon rather than extracting it

from its context. Dubois & Gadde (2002) underline this approach by acknowledging that learning from one particular case can be considered a strength rather than a weakness.

Considering the limited amount of literature on the phenomenon, a single case was chosen to illustrate possible benefits for an established firm from their spin-offs. Examining more cases would add the opportunity to test and replicate the findings. However, this is out of scope for this thesis. Flyvbjerg (2006) in addition states that a detailed analysis of a single case is more valuable than a superficial study of multiple cases. In the same regard, Dubois & Gadde (2002) suggest that focusing on a single case will improve the quality and the depth of the findings. The particular case was selected because it represents a critical example of a firm that has a persistent track-record of successful spin-offs. The number of spin-offs that involved in open innovation activities and their relationships with established firm make this case particularly intriguing. This allows for a diverse and detailed study of the different benefits the established firm can gain back from those spin-offs.

4.2 Data Collection

This section details how the data in this research was collected, coded and subsequently analysed. This study was conducted as part of the RaCE program at the Norwegian School of Economics. Justin Harlan, a PhD student at the Norwegian School of Economics conducted the interviews with me, which increases the reliability of the data. He was the contact person for the informants as he studied the research setting before and continues to study the environment through his PhD program.

4.2.1 Data Sources

This thesis uses both primary and secondary data sources. Utilization of multiple data sources strengthens the power of evidence and allows for triangulation, the cross-checking of evidence across multiple data sources (Saunders et al., 2015).

The primary data collected for this thesis consists of eight semi-structured interviews with executives and employees of both the established firm and its spin-offs. This allowed for a study of the phenomenon from different angles and mitigation of bias (Eisenhardt & Graebner, 2007). The interviews were conducted in late October and early November 2021.

The secondary data used consists of publicly available information such as published news articles, company websites, LinkedIn profiles and secondary data obtained during the interviews, such as notes and memos. Secondary data was used for triangulation and to extend the understanding of the primary data obtained during the interviews, which strengthens the trustworthiness of the discovered findings (Saunders et al., 2015). I was also given access to interviews previously conducted in this environment of the established firm and its spin-offs, which allowed me to gain a deeper understanding of the environment and allowed me to triangulate during the interviews and challenge informant's statements from the very beginning of the data collection process, since most of this information, especially on the history of spin-offs, is not publicly available. The secondary data collected is not discussed specifically in any section of this paper, it rather aids the understanding during the research process for interview preparation and drafting the interview guide that can be found in the appendix. In this thesis, secondary data is presented to inform readers about the research setting in chapter 3 and aid the discussion and conclusion sections in chapter 5 and 6.

4.2.2 Sample

This thesis used a purposive, non-probability theoretical sampling approach. Theoretical sampling an initial idea of where to sample, but not what to sample for. Participants are selected as the theory develops (Saunders et al., 2015). In theoretical sampling, the researcher selects participants and cases that are suitable for theory building within the studied topic.

Researchers need to be able to access relevant resources for meaningful data collection (Saunders et al., 2015). The PhD student Justin Harlan had already a key contact at one of the spin-offs. Further participants were located with the needs of the theory and storyline, which is in line with the theoretical sampling approach. Participants of the interviews were also helpful in accessing contacts suitable for this thesis.

According to (Saunders et al., 2015), in theoretical sampling, the sampling process can be ended once the researcher have a sufficient overview of the topic and additional interviews do not provide further insights and information. The term for this stage of the research process is theoretical saturation. To locate the point of theoretical saturation in the research process, the data analysis began early within the interview process. Once the participants were no longer able to add new insights and details to the common storyline that was reported from all of the

participants, it was determined that theoretical saturation had been achieved. The theoretical sampling was additionally assisted by the convergence of the responses of the participants.

Most of the informants had an employment history within the established firm and subsequently leading positions in the spin-offs. Many of the participants were involved in several of the spin-offs. Two participants also employed in companies within the local media cluster.

<u>Interview Participant</u>	<u>Business roles</u>
Informant 1	Media Cluster Firm (Chief Technology Officer), Graphics Inc (Technical Role), Control Room Inc (Technical Role), Established Firm (Technical Role)
Informant 2	Weather Inc (COO, before that Technical Role),
Informant 3	Weather Inc (Manager)
Informant 4	Graphics Inc (Chief Technology Officer), Established Firm (Technical Role)
Informant 5	Established Firm (Management Role)
Informant 6	Internet Inc (Chief Innovation Officer, before that Chief Technology Officer) Established Firm (Technical Role)
Informant 7	Media Cluster Investment Firm (Chief Executive Officer), Established Firm (Chief Technology Officer), Graphics Inc (Technical Role), Software Inc (Board Member) Internet Inc (Board Member)
Informant 8	Robots Inc (Chief Executive Officer), Control Room Inc (Chief Executive Officer), Established Firm (Manager, Consultant), Software Inc (Consultant), Robots Inc (Consultant), Internet Inc (Consultant)

Informant 9	Software Inc (Chief Executive Officer), Established Firm (Technical Role)
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Figure 3: The roles of the interview participants in the research setting

4.2.3 Qualitative Semi-Structured Interviews

In the collection of primary data, qualitative semi-structured interviews were conducted. Semi-structured interviews are a popular tool in exploratory research, because the possibility to ask follow-up questions aids the researcher in understanding and comprehending the complex phenomena studied, which increases the quality of the obtained data. Semi-structured interviewers with the opportunity to adjust their questions to the interview and interviewee, while at the same time still providing guidance to assure that all essential themes of the research are covered (Saunders et al., 2015). Additionally, new themes that have not yet been considered by the researcher but are relevant to the research topic, can be discovered and studied.

In line with Saunders (2015), an interview guide was created in the preparation of the interviews, which was then adapted during the interview depending on the flow of the conversations. The interview guide was also adapted during the interview process, since the understanding of the phenomenon was elevated. This allowed for clarification and further understanding of the studied phenomenon. The collection of secondary data was performed both during the preparation of the interviews and during the interview process. This ensured that the interviews were knowledgeable of the research setting and could ask meaningful follow-up questions. It also aided the efficiency of the interviews, as it established a base for a detailed investigation of the phenomenon. The participants were encouraged to speak freely and highlight matters that they felt are most relevant to the conversation. This was also facilitated by the questions, which were mostly open-ended.

4.2.4 Interview Schedule and Interview Process

The contacting of the interview participants was done by the PhD student that also took part in the interviews and intends to use the collected data for his own research as well. He also had relations to some of the participants through the research he conducted previously in this specific research setting. This pre-existing relationship lowered the threshold for participants to agree to an interview. As the number of valuable informants in this environment is small

due to the (initially) small company sizes, this relationship was very valuable. Informants were given information about the interview process, the use and anonymity of the data when contacted.

The interviews were conducted two-on-one, except for Informants 2 and 3, who were interviewed together in a two-on-two setting. Informants 1, 2, 3, 4 and 9 were interviewed at the offices of their respective firms. Informants 5, 6 and 7 were interviewed via video call, Informant 8 was interviewed at the campus of the Norwegian School of Economics. Each interview lasted approximately 60 to 90 minutes.

In preparation of the interviews research on the participants and their companies was conducted. This meant reviewing the previous research done in this setting as well as collecting and reviewing secondary data about the respective companies and personal profiles. All these preparations were also aiding in the preparation of the interview guide that can be found in the appendix.

At the beginning of each interview, participants were handed the consent form that can also be found in the appendix section. After offering an explanation and the opportunity to ask questions, the participants were asked to sign the consent form. The consent form was drafted by the RaCE program. It offers information about the program and about anonymization and usage of the data collected.

The first question participants were asked was to both introduce their personal career history and a short history of their company. At the end of their introductions in these historical fields, one of the question sets for either this thesis or the drafted studies the PhD student is pursuing was asked, depending on which set fit best to the conversation. The other sets of questions were then asked in the following. This flexible approach, which is in line with the usage of semi-structured interviews, increased the efficiency of the conversation by allowing topics and insights to be discussed whenever they arose, along the storyline that was proposed by the interview participant rather than the researchers. The set of questions asked for this thesis contained questions about the history of the company, their relationship to Established Firm, their products, their market environment and about the industry in general.

At the end of the interview the participants were given the opportunity to add what they thought would be of importance to the conversations of the interview that has been missing

from the questions out of ignorance or a lack of awareness. Lastly, participants were asked to refer other informants that could add insights to the discussed topics.

Directly after the interviews, the content was discussed between the researchers in a short debrief. The interviews were then transcribed verbatim.

4.3 Data Analysis

During the process of data analysis, clear guidelines were set for theoretical sampling, theoretical saturation, coding and constant comparison (Charmaz, 2006, 2014; Saunders et al., 2015). The data analysis is split in three stages: data preparation, initial data analysis and focused data analysis and coding. The data preparation and initial data analysis and coding were both started and used during the interview process, the focused coding was performed once the data collection and initial coding was finished.

4.3.1 Data Preparation

The interview recordings were transcribed entirely, word by word. As written pieces of text in contrast to spoken word in a conversation are lacking a way of conveying subtext, such as tone, laughter, sarcasm and non-verbal responses, such as hand gestures and signs, notes were added respectively. Adding this contextual information ensures that the intended meaning of the responses remains unaffected and incidents that could affect the intended meaning are captured (Saunders et al., 2015).

4.3.2 Initial Data Analysis and Coding

The analysis of the data began immediately once the first data was collected. The objective in the initial stage was to assist the further data collection in the interviews and improve the interview guide. During the interview process, notes were created during and after the interviews, which aided in the initial analysis of the data by capturing major themes and thus assisted in theory development (Saunders et al., 2015). In the process of data preparation, additional notes were created that assisted in the initial coding. The data was analysed in the order it was collected (Charmaz, 2006).

Once the data preparation of the interviews was complete, each interview was coded line-by-line. Coding in the context of qualitative research means assigning a summary or attributes

that describe the meaning in a recognizable way to the pieces of data (Saldaña, 2021). Following the guidelines for coding of Charmaz (2014), the data was labelled with notes relating the data to the conceptual development and theory building. The codes that were added to the data were mostly short summaries of the data. This initial coding process was performed both for the conducted interviews and for the previous interviews conducted in this research setting that were made available to me during the research process.

Researcher 1_24:51
How does the product evolve over time? Are you guys coming up with ideas or is it customer demand?

Informant 25:01
I would say that the most of that has been combination of really engaging with the customer, meaning getting them to tell you what they, how they work. And then you identify situations, which are things or ideas that in your mind, can improve what they're doing a lot. And, we live by the rule that you know that it's not exactly like that, but if we get something to work for [redacted] will work for 80% of the rest of the same operations. So you don't need to do a market... talk to every customer, if you understand, right, and you can live by that. And that we have done very consciously. So, we don't, I don't think we ever really got this specific idea from a customer. But you see the operation, and then said, "that looks really like something that can be easily improved." And then you shape an idea on that, and then you talk to them. "See, does this make sense for you? And, you know, would you like to see this?" And more often than not, the answer is yes. And then we go about it. And then historically, we've been very obsessed with doing the first version of a software together with a customer. And both to get it shaped right from the beginning and to get the stupidities out of it. And also to ensure that they actually put it on air. That they use it.

Researcher 1_26:51
Is that usually the same customer, or...?

Informant 26:54
It's changed over time, I mean, these days, we are a much larger organization. So it's much more processes than it used to be. But what I did, I used to run the, the, the whole R&D for most of the years until a couple of years back. And we were really driving the company. It wasn't product managers or so. And so I picked a few customers, which were smart enough, which I knew were able to implement something which is not off the shelf in the first version, and there to do it, and that are really going for it. So I had my favorite customers, you could say. Small, it's a small, small group of them, which I used extensively.

Researcher 1_27:50
Is [redacted] in that group?

Informant 27:53
I mean [redacted] was that in the very beginning

BM Bemd Müschenborn
Customer involvement

BM Bemd Müschenborn
Transferability of the innovation

BM Bemd Müschenborn
Observation rather than co-creation

BM Bemd Müschenborn
Product testing at the customer

BM Bemd Müschenborn
Customers were selected by their abilities

BM Bemd Müschenborn
Established firm was the first lead customer

Figure 4: Example of initial coding

4.3.3 Focused Data Analysis and Coding

Again following the approach of Charmaz (2014), focused coding was used to find out which of the initial codes would be most meaningful and determining for the creation of this thesis. The results of the initial coding phase were reviewed thoroughly and at the same time colour-coded to connect similar topics of the conversations visually. The data was then extracted into separate files according to the colour codes. The coded segments were then reorganized in three categories: Established Firm benefits, Spin-off benefits and Cluster benefits. In this process or reorganization several sub-themes were identified, that now build the structure of each of those three categories. In the whole process of focused coding, the research question

and the literature was always used for constant comparison and realignment of the coding process (Charmaz, 2014).

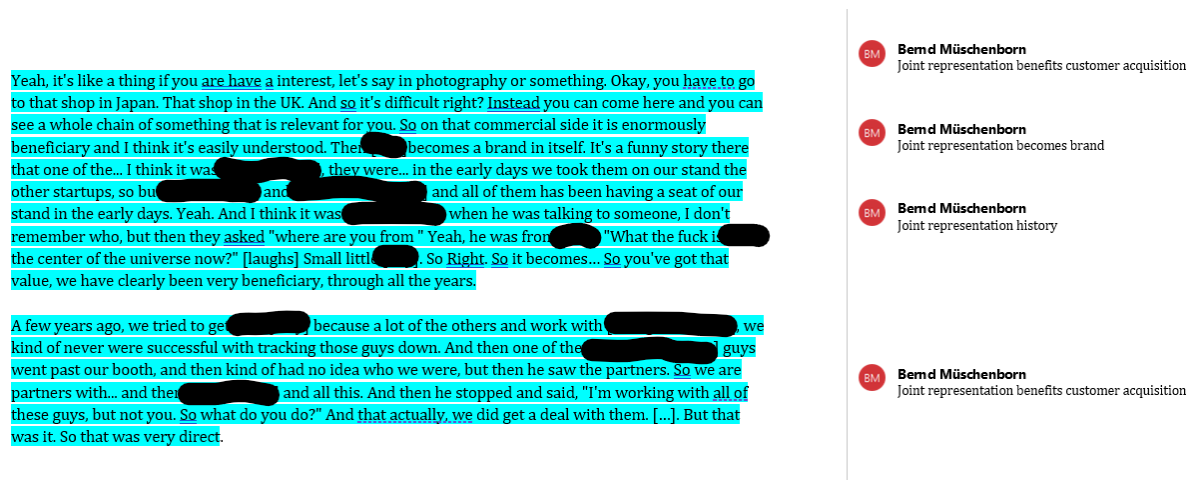


Figure 5: Example of focused coding

After completion of the focused coding, the findings were also transferred in a model, which is presented in the findings section to aid the reader in following the analysis and illustrate the relationships that were identified in this thesis. The findings of this research were then related to the current management literature. In this process, another model was constructed to illustrate the suggested conditions and enablers for an established firm to benefit from spinning off and innovation by proxy.

4.4 Research Quality

This section examines the overall quality of the research and trustworthiness of the findings by assessing the strengths and weaknesses of the selected research methods. In quantitative research, reliability and validity are most often used to assess the quality of research (Saunders et al., 2015). In qualitative research, which adopts a different paradigmatic view, these are often replaced by the more fitting construct of trustworthiness (Guba, 1981; Lincoln & Guba, 1985). Trustworthiness is measured through credibility, transferability, dependability and confirmability. Credibility is the plausibility of the findings, transferability refers to the extent of applicability of the findings in other settings, dependability assesses whether the findings could be recreated at other times, confirmability is used to determine if the researcher has remained impartial and thus not influenced the results by his views (Lincoln & Guba, 1985). Sinkovics, Penz & Ghauri (2008) find that the concept of trustworthiness is especially fitting

to qualitative data collected through interviews. Hence, this thesis adopts the concept of trustworthiness to assess the research quality.

4.4.1 Credibility

Several meetings with the supervisor of this thesis and the PhD student that also participated in the data collection process, offered useful feedback and guidance during the preparation of this thesis. In this process, the findings were also presented to other professors and students in the RaCE program, which offered an opportunity for review and valuable criticism.

As this thesis is covering not only the present relationships between the companies, but also their history and historical relationships with stakeholders of the companies, this research might be under the risk of cognitive biases, such as the hindsight bias. Due to the hindsight bias, interview participants might misjudge the probability of certain events, such as the probability of acquiring a customer, by evaluating the real outcome of the event, in this example of they managed to acquire the customer or not. Similarly, the retrospective review of events may lead to informants forgetting vital information or confuse the time and order of events. On the other hand, the interviewed individuals had time to reflect the events and their actions. This may also have led to more coherent provided by the individuals. In addition, it entails the opportunity of having information about the outcomes of the events, actions and processes from the past.

4.4.2 Transferability

Due to the qualitative exploratory research design, this thesis was not focusing on transferability in particular. Guba (1981) finds that in a qualitative case study generalizations are typically impeded by the fact that the interpretations and conclusions of events are usually tied to their respective context. This thesis thus explicitly presents the findings and interpretations in the context of the research setting. The extensiveness of the description of the research setting should aid researchers and practitioners in comparing the setting to other contexts in which the studied phenomenon might appear and assess the degree of transferability themselves. In the `Discussion` section there was an inductive model presented that aimed at identifying conditions which might foster the phenomenon. This model is an additional mean to readers to asses the transferability of the findings to their respective context.

4.4.3 Dependability

Dependability is the tendency of research to lead to stable results when repeated. It is thus the qualitative equivalent of the quantitative concept of reliability. It is also related to other validity components: If dependability is not achieved, credibility and transferability cannot be achieved either (Guba, 1981). This thesis is assisted in achieving dependability by outlining the research process in a detailed manner, allowing readers and other researchers to critically evaluate and follow the process (Guba, 1981). The methodology was also critically reviewed by my supervisor and during a master thesis presentation seminar within the RaCE program.

4.4.4 Confirmability

Research in general and this thesis in particular aims to deliver an objective depiction of the real world. One opposing threat to objectivity is the relationship of the researcher and the informant. If the relationship is very familiar, it can improve the quality of collected data, on the other hand it might result in bias (Lincoln & Guba, 1985). Thus, a main conflict in the qualitative interview process is finding the right balance between objectivity and intimacy. Particular caution throughout the research and interview process was exercised to mitigate this risk. At the same time, it is important to avoid bias from the interviewer through leading questions (Saunders et al., 2015).

Participants were informed about the procedure beforehand and given sufficient time to familiarize themselves with the process. To reduce or avoid the interviewee bias based on fear of insufficient confidentiality and anonymity, the consent form that was signed by all participants, was explained in detail before the interviews. The form was drafted by the FOCUS RaCE program and can be found in the 'Appendix' section. It is very likely that the interviewed individuals trusted the research process, as some of them were interviewed from the PhD student facilitating the interviews before. In addition, all of them were eager to recommend further informants to be interviewed in this research process.

4.4.5 Ethical Considerations

Research ethics are an essential basis throughout the entire research process. Negative impact on all parties affected by this thesis, such as the informants, other current or former employees

of the companies, other researchers within the research group, is to be avoided. The thesis is a permanent form of research, which highlights the importance of ethical considerations. Additionally, Researchers and practitioners might reference the thesis or follow advice presented here (Saunders et al., 2015). During the entire research process, there thus was an explicit focus on honesty, accuracy and transparency to all parties involved. Without these basic principles, the meaning and the impact of any research are devalued.

All participants were informed about the process in advance. To protect the participants, the research data has been anonymized, which means all names, dates and locations have been either fully removed or replaced by pseudonyms. The interviewees were given the opportunity to withdraw from the research process at any time. All non-anonymizable data such as audio and video recordings of the interviews will be deleted or handed over to the RaCE program after the completion of this thesis.

5. Findings

This section maps out the in-depth data analysis and the findings drawn thereof. Illustrative quotes are used to provide the most important insights from the findings, accompanied by interpretations derived from the data. Before the findings are provided in detail, a summary and a model are presented in order to provide a better overview of this section. As explained previously, to ensure the anonymity of informants, the quotes are presented unattributed.

5.1 Summary

The analysis of the interviews and of the secondary data revealed several interesting relationships between the companies. Between Established Firm supported the spin-offs with ownership governance through financing and support. In addition, Established Firm had the role of a customer, allowing the spin-offs to test and showroom their products within Established Firm's organization. Established Firm in return got financial gains from cost savings from the implementation of the spin-off products, cost savings in the acquisition costs of the spin-off products, operational profits of the spin-offs, and financial gains from divesting from the companies. Established Firm can also benefit from innovation by proxy. The spin-offs of Established Firm engage in innovation activities with their customers, developing new products and improvements of their existing products. Through its role as customer and parent of the spin-offs, Established Firm can adopt these product improvements and new product innovations. Established Firm is thus using the spin-offs as a proxy for innovation. The media cluster provides benefits to its actors by facilitating joint representation of the companies involved, thus becoming its own brand. It is also a platform for collaboration between the companies, grows the talent pool and facilitates the development of new start-ups.

5.2 Model

The model shown below is illustrated to give an overview of the complex relations found during this study. It illustrates the relations between the companies discussed in this study and how innovation by proxy is created.

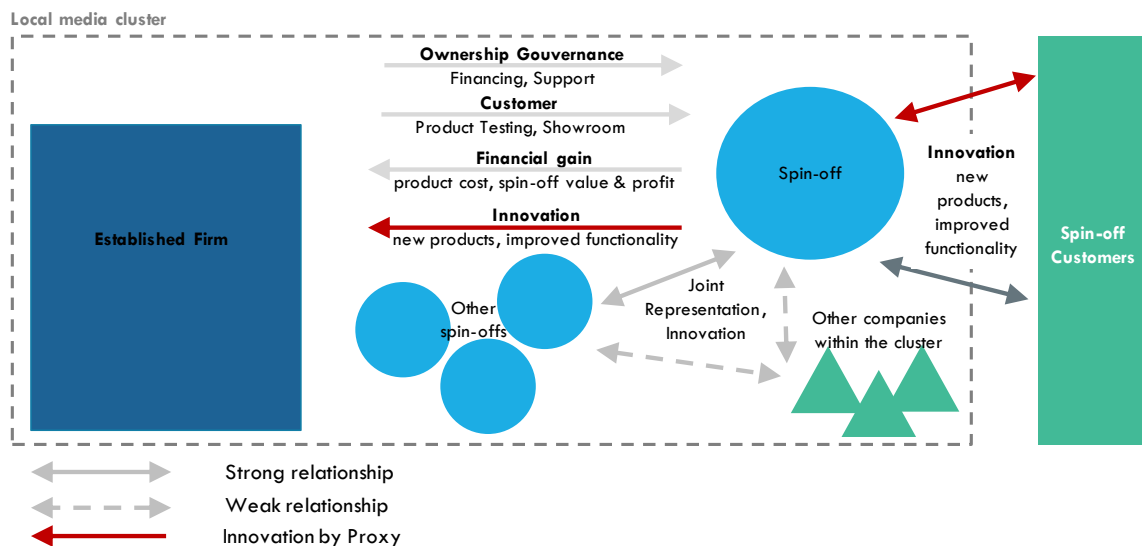


Figure 6: Model of the findings

5.3 Established Firm Benefits: What Established Firm gets

Established Firm benefitted from their relationship in two ways: cost savings and financial gains and innovation by proxy. Cost savings and financial gains were achieved through product implementation, cost savings on products, financial gains from the operational activities of the spin-offs and from divesting from the spin-offs. Innovation by

5.3.1 Cost Savings and Financial Gain

The cost savings related to the products are direct benefits of using the product of the spin-offs.

Cost Saving by product implementation

The first way Established Firm saved costs is by implementing the products of the spin-offs. Most products of the spin-offs improve the efficiency of the operation of media companies by bringing down labour cost or improving processes. These cost savings were intended before spinning off, and in some cases the motivation to even develop the solutions.

If you want to put all the resources into one company, it's going to be really expensive. And to compete in the marketplace, you can't... basically, we had to look at various potentials to do this as cheaply as possible. And that's one of the reasons, we had to provide, we had to find production methods, which were cheaper than the ones we could find in the industry. That's one reason.

[Established Firm] decided to start this... this [product] and they could only afford that, if they could bring the cost down of the technical crew. Yeah. Tried without first, and then the board said no, you have to bring it down.

Which, which kind of [...] makes innovation out of desperation a very interesting perspective. Meaning that they couldn't afford these systems, so they had to do it differently. They had to find better solutions.

Cost Saving on Products

Through their relationship as a parent firm to the spin-offs, Established Firm is able to realise cost savings on the products they acquire from the spin-offs.

They get it for free.

At least at first after they sold it to [Graphics Inc]. They made a deal with getting for free for, I can't remember how much, seven years.

However, in some cases, they use the product payment as a way of moving budgets within their organization. It is also a way of supporting the spin-off.

It's not for free, because they do pay a license. So when they had a lifetime plan and they paid an additional license, but it's all their money, right? It just kind of moving budgets throughout the organization, but it never leaves [Owner Co], or it never leaves [Established Firm].

Many participants stated that in their opinion, Established Firm should get better offers than other customers. Some former employees of Established Firm that moved out to the spin-offs even fought within the spin-offs to have Established Firm keep those cost savings.

The basic model is there in some fashion with some modifications on there, but I've been trying to fight for that. Every time that someone wants to change that. But they're close to getting,... I mean, they're paying more in support.

Financial Gains from Ownership and Divesting

There were also direct financial benefits related to Established Firm's ownership of the spin-offs. Those resulted both from the spin-offs being profitable and from their increased valuation due to growth.

The need for financial support varied between the spin-offs. Some of the spin-offs did not need financial support at all. Through the period of ownership, Established Firm benefited from the operations of the spin-offs by bagging their profits.

we have never got any money from [Established Firm]. It was running itself, with we did never get below zero

In addition, this turned out to be a very successful company that was generating a lot of cash, so they also got dividend, the yearly dividend, which was significant.

As the spin-offs grow, they increase their value. Exiting the spin-offs was generating significant financial gains for Established Firm.

Yeah. And then they got all the money of course. Maybe I think they got at least 250 million [Kroner] when they sold it to, which was of course significant. Yeah. But even they would have gotten much, much more if they...., I think that you can say in so many situations in life, right, shouldn't have sold at that point in time. So I think to us, they sold at the right point. So they did get a very significant payback in Financials.

5.3.2 Innovation by Proxy

Established Firm was able to benefit from the innovations that the spin-offs generated in their interactions with their customers and partners. Established Firm was not actively participating in the process but got the improvements indirectly through its spin-offs. Thus, the spin-offs are a proxy for Established Firm to innovate.

Motivation

Because innovation by proxy seems counter-intuitive in a competitive business environment, this section provides some evidence why it was possible for the spin-offs to collaborate even with competitors of Established Firm.

Companies in this section of the media industry have a clear focus of competing on content, but are very open regarding the technology they run to support it. There is frequent exchange about adopted technological solutions, even among competitors.

But there's never competition when it comes to technical decisions. When [competitor of Established Firm] have some equipment, and we had some equipment, then we might have some common equipment and so on, but when it comes to technical decisions, and we don't... I don't think that in the [section of the media industry] world that you think of yourself as competitors. It's just "how's your solution, your solution? [to media company], can we see your solution [to other media company]?"

This was also a motivation for Established Firm to spin-off. Providing the technology to competitors is not an issue, because it is not part of their core business. They intended to gain from innovation by proxy from the beginning. The products and technology are being developed further in the relationship between the spin-off and its customers, but Established Firm eventually gets these improvements back as well.

It's not called core business, we've provided the solution which [Established Firm] needs, why not test the market as well. And if the market adopts technology, it will bring value to [Established Firm], because it will be developed with more views on how to further develop the technology. So it's been a good trip for us.

And having more customers on the technology will support the technology which we use. So it's going to be more stable and it's going to be better for [Established Firm] have more customers on a technology than being the only one. If you decide that you just build legacy and you have to you have to support the technology or you have to do it on your own money, you can't really get money from the market to support the same technology. I think it's a good idea for [Established Firm] to say that technology is not where we compete, we compete, of course, on use of technology. And we try to be efficient in using technology.

It started out making things....being efficient, and then... or creating a possibility to create new revenue streams. And realizing it's not our core business, our core business is content. So why not just try and get it robust, securing long term delivery to [Established Firm], but from an external company.

They adopt an outside-in view in open innovation terms even before spinning off. Established Firm acknowledged that external organizations are also a valuable source of innovation.

Because it's not only it's, of course, not only just sharing costs, but also the idea that all the greatest ideas doesn't necessarily only come from [Established Firm], there are other companies with some great ideas that kind of can benefit from that as well.

Major concerns in the process of spinning off were losing internal capabilities. Established Firm set a focus on keeping relevant competencies for their own use of technology inhouse.

And of course, you have to keep, you have to be aware that you keep enough competence inside of [Established Firm], to be a good... to be a customer with demands. And if you sell out all your technology competence, then you're gonna have a problem, right?

Customer Involvement: Innovation in the spin-offs

The first customers of the spin-offs are used to test and develop their ideas. The customers are aware that they are part of the development process, since the spin-offs specifically frame their work as R&D.

Yeah. I mean, at least from our business, if you think you can have an idea and you're just working with it in isolation, and then your chance of success is that slim, I would say. You have an idea, you know exactly what it is. But you're wrong. Right? So you get that adjustment. "Oh, I didn't think about that". by having them as a close part of it. In many ways, I put that in first customers, I categorized as R&D not delivery... and it's a highly efficient way as long as it's true that what you do will work for the other [media companies].

The feedback from those interactions with customers is vital in the development of new products for the spin-offs. Being a distinct entity from Established Firm allowed for more interaction with customers, hence resulting in more feedback.

So our kind of the thought was that if we spin it out, then we can operate more freely, we can talk to a lot more customers and getting that feedback. And I think that we have succeeded in that and they have products we probably wouldn't have created inside [Established Firm].

The customers of the spin-offs typically had special requirements, which meant that the spin-offs had to develop their product accordingly. Spin-offs with software products were improved with each additional customer. The value of the product is increased by its compatibility with hardware. Initial customers were paying for the development of the compatibility, other

customers, including Established Firm, could benefit from this without contributions to this development.

Yeah, they were here because they have special requirements.

Yeah, but [Control Room Inc] grows with those because they have other types of equipment. And then, we made the drivers for this equipment, but then we had these drivers for later projects. So it grew with the... and what we did was that we if they want something special built, the customer pays for it. So and I think that saved a lot. [Graphics Inc] doesn't do that we don't do that today, but I think actually it was good. When especially [customer] came on board, then they had some equipment, that we need to interface to, and I said that's fine. But we need to be paid for it.

So, it was the first time pay for the first mover and then we used this for free for the next one who needed that integration.

The interaction with customers also prompted the development of entirely new features of the spin-offs products. The initial product of the spin-offs is a minimum viable version, which is then continuously improved in its features and compatibility in the interaction with customers, similar to user innovation.

They have, of course, new features and so on. [...]

You can say we should take the basics, that might be a skeleton for what it became. And if you say I made the basics, the skeleton, which were a few features in it. Then all the other features comes from customers requests. Yeah, I think put it that way. Maybe not all of them but at some point we just develop features for customers. So it's not our ideas, it came from customers.

The interaction with customers differs between spin-offs. As seen in previous quotes, some customers requested features and functionality directly. Another approach the spin-offs had was observing the operation of the customer and then making suggestions to improve their operation.

I would say that the most of that has been combination of really engaging with the customer, meaning getting them to tell you what they, how they work. And then you identify situations, which are things or ideas that in your mind, can improve what they're doing a lot. And, we live by the rule that you know that it's not exactly like that, but if we get something to work for [major media company], it will work for 80% of the rest of the same operations. So you don't need to do a market... talk to every customer, if you understand, right, and you can live by that. And that we have done very consciously. So, we don't, I don't think we ever really got this specific idea from a customer. But you see the operation, and then said, "that looks really like something that can be easily improved." And then you shape a idea on that, and then you talk to them. "See, does this make sense for you? And, you know, would you like to see this?" And more often than not, the answer is yes. And then we go about it. And then historically, we've been very obsessed with doing the first version of a software together with a customer. And both to get it shaped right from the beginning and to get the stupidities out of it. And also to ensure that they actually put it on air. That they use it.

The spin-offs conciously formed a group of customers that they closely worked with on their innovation projects. These customers were used to test the products and improve them in subsequent iterations. These customers adopted the lead user role that Established Firm had in developing the initial product of the spin-offs.

And so I picked a few customers, which were smart enough, which I knew were able to implement something which is not off the shelf in the first version, and there to do it, and that are really going for it. So I had my favorite customers, you could say. Small, it's a small, small group of them, which I used extensively.

I mean [Established Firm] was that in the very beginning.

Established Firm itself did retrieve itself from this relationship with the spin-offs. They are less willing to collaborate closely with the spin-offs in their innovation process. The spin-offs on the other hand are making efforts to maintain this relationship with Established Firm.

Yeah, less and less you can easily say. Yeah. So the, I mean, without it, we would, of course not have existed in one way or the other. And very important, they used everything we made extensively. But we also were smart, I think to have an agreement with [Established Firm], which was such that they didn't have to pay for the software. And the reason for that was that I didn't want to have thresholds for getting new, fresh software that they would have to go to ask for a budget and all that stuff, because I desperately needed them to use it, right? To get it on air and get it used.

The other customers of the spin-offs are concerned about the interaction of the ownership relationship and the customer relationship with Established Firm. This has also led to an erosion of the collaboration in product development between Established Firm and its spin-

offs. The relationship as an owner of the spin-offs is not taken into account into the relationship as a customer to the spin-offs.

We get the same questions from every customer. And every potential customer is kind of "Okay, you are owned by one of your customers. But that means that they get the priority, they are prioritized, and you only do work for them. And we are kind of a second class customer in that sense." And it's become quite quickly that, yes, they do own us, but they are also just a customer. So for us, they are customers, of course, they are neighbors, we talk to them frequently, but we look at them as a customer, we of course, are very eager to have them using everything we have, so they can be a kind of a reference customer, really showcase what it is.

But it's the same thing, they also treat us as a vendor. Because on a board level, they own us. And then there would be the owner, and then they're not a customer, and they kind of... but when you get down in kind of if you're working in a IT department in the sports or news, we are just another vendor. They kind of... and that's not their job to see that. If I buy this, then yes, it's all [Owner Co] money, but still they have their budget and yeah, and they make their demands. So they are just as tough as any other customer. Yeah. So basically, yeah, we have a customer-supplier relationship.

In some cases, due to the neglectance of the ownership relationship in the customer relationship, spin-offs were not able to benefit from product testing and showrooming at Established Firm. However, they were successful in developing and co-creating their initial product with customers they acquired.

[Established Firm] also but they were just in a moving process at that time. So actually, actually we started out a small project at [Established Firm] but they, they had so much focusing on the movement of the building. So we needed to go out in the world, focusing out in the world. So that was the reason for that. So and then our first customer was actually [a foreign customer]. That was now four years ago. Yeah, four years ago. And that was actually into an innovation project they have[...], they were into some innovation.

Bringing back the benefits

Established Firm benefits from other customers of its spin-offs adopting the technology they already implemented. The spin-offs are a mean of sharing the development cost and further develop their technology.

But I mean, to quantify that is going to be difficult, but I mean, it's it gives you more robust product delivery, because I mean, you have more revenues to support the costs of the company. So basically [Established Firm] is more supported by the fact that the technology is viable for many years without us taking all the costs of development or support. So Yeah, you share the support, costs of support and all that stuff.

The customers of the spin-offs are following the same approach that Established Firm had when spinning off. They are willing to share the products they developed and implemented with Established Firm's spin-offs with other customers of the spin-offs. The motivation behind this also aligns with Established Firm's motivation to spin-off, namely further development of the products. They then benefit as a user of the technology, because they innovate by proxy via Established Firm's spin-off.

Yeah, absolutely. Yeah. So for instance one of the main revenue products. That's another one, after some years, we did make a product that went into an existing category. Which is like retro programming. I kind of hate it. But, that category is so big that... what is true is that you have to do so much work upfront before you could go out with it, but that was done very close with CNN, for instance. So I at one point... and they paid for development. We did go to that discussion about "what rights do you think you should have? Since you're so deeply involved in that?" And I still know the guy who told me that? "No, we don't want to have any rights. We don't want to have any exclusivity. Because we don't want to be the only one with this product. That's going to be a problem, we want many do use it so it develops."

The spin-offs are eager to have Established Firm adopt their products. However, reintegration of the product improvements into Established Firm's operations has been increasingly difficult over time. As mentioned previously, Established Firm has disconnected the relationship of ownership of the spin-offs with the relationship as a customer, making it increasingly difficult for the spin-offs to bring their product improvements back to Established Firm.

It took some time before they started using [Control Room Inc]. But they did it on the [product]. And then everybody else did it on their [other product], and they started to use it on the [other product] as well. So it took some time. But it is, it was, difficult to get in, until people well, they were used to sit with each equipment. [...] It's a big change for people at that time that well, you can do that, all that from a PC. So, they didn't believe that. Because the [section of the media industry] is very conservative. Especially in the US. You cannot touch this is... You need to be of that Union to touch it.

Well, I think, of course, we're not going to buy even though we spun off a company, it doesn't mean they have exclusive rights to deliver to [Established Firm]. Eventually, we are going to look at other other technologies as well, suppliers of technology.

So I don't think that [Established Firm] would be very welcoming to not even the companies it build that if you ask [Internet Inc] and [Software Inc] that where [Established Firm] owns over 90% 100%, they would say that [Established Firm] is a very difficult customer to work with, because you're on the outside of [Established Firm].

However, adopting the technology of the spin-offs has improved their competitive situation sustainably.

They did win the game about looking much better than the competition. And it was 10 times as efficient as they had been so that, and they easily got that label, which I think they still have that they're really in the forefront of the visuals.

Gaining Status

With the spin-offs spreading the technology of Established Firm in the market, Established Firm has gained reputation in the media industry. This has positively affected their relations with other players in the industry.

They're proud. I mean, if you're getting [major media company] visiting, whoa, I mean, for news guys, that's sort of like, hey! So [...] that works all the way.

And they got the pride, which has, I think, been important for the employees at [Established Firm]. Say, that when they're out visiting [major media company] themselves, and so on. "Oh, you're from [Established Firm]!" So then they rightfully enjoy that? I think.

5.4 Spin-Off Benefits: What the Spin-Offs get

This section examines the benefits the spin-offs experience from their relationship with Established Firm. How the interactions of the spin-offs with each other are beneficial will be examined in the section covering the cluster benefits. Established Firm is part of the media cluster, but due to its role as a parent to the spin-offs the interactions between Established Firm and spin-offs are distinct, thus the relationship is investigated on its own. The benefits that the spin-offs experience from the interaction can be divided into two dimensions, in line with the two roles that Established Firm has to the spin-offs. First, the ownership relationship is presented, secondly, benefits from having Established Firm as a customer are detailed.

5.4.1 Ownership Gouvernance

Established Firm provided gouvernance to the spin-offs through installing some of their current and former employees.

There came in a CEO, who was also employed at [Established Firm].

Ownership relationship

In their role as an owner, Established Firm rarely interfered with the operations of the spin-offs, but secured stability through funding at the same time. This allowed the spin-offs to pursue their projects and ideas in whichever way they saw fit.

They did it very differently. Cost control. Did that happen? No. Really have fun. Right? Do it you should basically have fun when you work with these things. Right? That's the pure idea. And that from fun and happy people, it's coming a lot out of innovation and new things, new ideas. That was basically the drive that over those first years, until... also, when I started it was like that. We got the opportunity five people in "Come on, we believe in the story." It wasn't super much qualification of that case, really. I basically said we have a super big network. We know energy already very well. I have other ideas to be engaged in renewable energies. Let's just start. That was basically the rationale, right? Three people then from [Weather Inc] interviewing me, I said, "trust me, I have good people that start this office up "and fine. "I need also some shares to do this so that we can I mean, be part of the evolution." And that was also fine. And this lasted one until private equity was coming.

In other cases, however, this autonomy of the spin-offs led to inefficiency. In some spin-offs, employees were not given shares of the company, which prevented them from adopting an entrepreneurial mindset. The approach of low supervision and control of the operations then led to a lack of efficiency and talent loss.

In my opinion, that's one of those things they should have done differently. Because in the spin-out, nobody really has... It's just a company. Everybody's just getting salaries. And there's no, you don't get that sense "If they've spun us out, and then the first had gotten shares, like the others, then, probably think so, Would I progress differently?" Because then we actually, instead of, "well, this is just somebody else's money." Yeah. And they probably see that now as well. Yeah, it's weird. We talked a lot about this over the last 10 years. Why it's not like that. And yeah, I don't know what the motivation was. But I think it's also a Nordic thing. If this was a US company, this is how you will set it up. Okay, then the guys going out, they would get this stake and then now we are sure that this will kind of they have their own motivation for really... the thing is kind of "Why should we give anything of our company? it's ours. We have built this and you get a good salary. Why should you?" It's a very Nordic thing. It's not.... Shares are seldom given out like that.

Other spin-offs experienced Established Firm as an owner in a different way, focusing on financial targets, but not on the operational decisions.

They are, of course, as a normal board pushing, you know, financial... but not the direction directly on the product. And the prioritization there.

As Established Firm is a media company, a lack of competence and international connection as an owner was also voiced by the participants. Established Firm was not able to aid the development of the start-ups with large investments, that they might have wanted or needed.

The other one, as you asked, is should we have other investors? I think so, too, because when it's only [Established Firm] and [Software Inc], you don't have that. Nobody there really has worked globally. They don't have anybody that opens the doors into other markets that... we don't have, if we had another is an industrial investor or an investor that has done this previously, they would have helped and open other doors. And we've seen that with competitors, that's kind of started at the same time and have gotten gone ahead because this also... We can't ask [Established Firm] for \$200 million [Kroner] for investment, because that's not what they do. So I think also, previously [...] we should have gone out into the market and found other investors.

The support through ownership might have varied over time. Some of the participants also voiced concern over a lack of support from Established Firm in contrast to earlier spin-offs.

But I think this was different before at [Established Firm]. Because, you know, I was responsible for other things. And there was more, you know, we were more, I think we were more eager to help these guys in the companies.

Divestment

Established Firm's strategy as an owner is to eventually divest from the spin-offs.

Yeah. At that time they saw we can't add anything more to this company. And the company we own, do more and more things to many, many, many others. And rarely other media companies, right? Yeah. So I think they saw also at their owner position, which they had, it was like, I think in the start 80 or 90%, or somewhere, they sold gradually things out. And at one point, they didn't see that they could add anything more as owner, as the majority owner of things, right? Because we were moving away to other things. And we're more attractive in other industries than... yeah, yeah. So it is also a natural development, I think, also for [Established Firm]. And they could certainly use that, that majority still than to force things back, etc. They didn't try. They saw, hey, there's so many other good things happening [...] So we can't any longer hold you back from doing that. And sold to then private equity.

It was also suggested that there was a shift in the way Established Firm governed the spin-offs, resulting from a change in their own ownership structure. Their new owner has a eternity-perspective on ownership and a focus on technology, whereas Established Firm previously had a strategy of eventually divesting from the spin-off companies, as those are unrelated to their core business of content creation.

[Owner Co] is owned by a foundation, right? Yes. That's not the reason. I'm just trying to... just saying that they have had a view of long term ownership in everything they invest in, and [Established Firm], when they bought [Established Firm] from... became a 100% owner [...]. They also looked into how to develop further [Established Firm], of course, and looked at media spin offs as one of... perhaps it could be a long term investment, if you look at [Software Inc], perhaps it should be a long term, forever investment, because if they could do that would be great. So it shifted a bit by the ownership activity to more long term, eternity in ownership model. "Media" as the CEO of [Owner Co] said, "media is technology." which I agree with, but I mean, it's still content, which is the core. So then we decided to invest more in [Software Inc]. So it was never, for a period, it was never a discussion of eventually exiting the company, it was more to do with ownership for long term. I think that's basically if you look at the other companies we've exited, if you have a share in the company, as long as it's mostly owned by one owner, unless there's an exit, it's not necessarily a good position to be in. locked in by a big owner, right. So I look most of the discussions have been around the exit clauses. And if we've had discussions, it's been about the exit clauses where perhaps some of the founders want to have an exit regulated, and [Established Firm] said "Why? We don't want to sell. We'll keep this company."

The new strategy of long-term ownership is discussed controversially among participants. They agree on Established Firm having a focus on their core business of creating content, which leads to attention for the spin-offs. Eventually, this is further evidence of the point presented earlier, the lack of an entrepreneurial mindset.

Yeah. And I think, nobody knows, but I think that if [Internet Inc] had been sold 5, 6, 7 years ago, they would be in a very different position now. Because it's sort of a, you drive a company, but the company doesn't have to think that much about money, because it's just, it just comes from the mother all the time, no matter what we do. And the management from [Established Firm] sides is always a second priority. I mean, their motivation on a daily basis is to run [Established Firm] and then we have to deal with that [Internet Inc]. Yeah. I just don't think at all that that's a way to do it. So in hindsight.... But I mean, we were actually quite happy with [Established Firm] selling us at that early point.

5.4.2 Product Testing and Showroom

This section is about Established Firm as a customer. The main benefit spin-offs get from their relationship with Established Firm is having a first demanding customer. Established Firm provides an opportunity to develop, test and showcase the products of the spin-offs before and after they spun off. This is vital to them in the early phase, as most customers in the industry want to see the product in a real life scenario before adopting it.

So how we can test we are innovation we can use, we can test our technology and prove that it's worthy of the way you can use it and then the market can... the company can take it out into the market using [Established Firm] as an innovation lab and also as a proof of concept.

Using Established Firm as a showroom benefited the start-ups directly in acquiring even major firms within the industry as customers very early on in their development.

So the fact that we say, such a small startup could get [major media company] and [major media company 2] and these guys to buy it, I mean, is it's only because they saw it in operation at [Established Firm]. Otherwise they would never have taken a chance on buying from a strange [country of origin] company. So the benefit of that is enormous. I mean, and quite essential, which is something we should talk about later in the discussion on the role of [Established Firm]. But so they came visiting. And then there's this other beautiful thing in that industry, of course, is that everybody in the [country of major media company] and elsewhere, saw what [major media company] is doing? Oh, and then what [major media company 2] is doing. So the need for traditional marketing is not really there, as you would expect it in many industries, right? The trade shows became also quickly very important, but the most important part was the others that were using it and that we got those significant names.

I mean, the most important is, that they came visiting right, that's a key element.

It was me and [Established Firm] and then the [product] started in [year] and went on air with it. And at the same time, in [country], they made [the same product], actually, they were one year before. But they have, they have run one year with traditional way without automation. And then they saw that it would work with automation. And they were looking for automation at that time. And they saw that it could work with automation, and you could bring the cost a lot down.

Due to the cooperative nature of the industry, spin-offs could also use other customers as a showroom for their product.

Yes, but then we have the log of having [customer A, customer B, customer C] so we have good places to invite people.

... if somebody would really like to come to [Established Firm] and see it at [Established Firm], as [customer D] was at [Established Firm]. And then, [customer E] wanted to see other sites. We didn't have that many other sites. So it was good to just put [them] to [customer A] because [customer A] were quite new at that time. So we suggested that they go to [customer A], and we knew those people from [customer A], and they actually did some sales work for us.

That has never been a problem. But actually, when you ask it this is a good question, but we have been having showrooms all over. And people like to show, I think they like to show what they have bought. Because, well, when you decide, even though it's a bad decision, but if you decide to do something, you're proud of this. So they want you to show others: well, this is how we're doing it.

Established Firm has become less important as a showroom to the spin-offs over time. Although they develop close relationships with other customers, they still would prefer if Established Firm continued to provide support in the form of being a demanding customer and showroom.

No, they are not. And, and the annoying thing is that they should. [...] I will always say that getting your first customer... [...] for the startups getting a first customer is the most vital point in their development part. That one first customer and that's the role which [Established Firm] had, right? It was crucial, and the other stations for us later has been in the same line.

5.5 Cluster Benefits: Shared Benefits for all Actors

Most of the spin-offs of Established Firm are located in the same location in the same city as Established Firm. The spin-offs prompted the creation of a media cluster in this city, which was also supported by government agencies. Actors within this cluster are however not limited to Established Firm and its spin-offs. Other media companies, start-up companies and investment firms are involved in the cluster. Some of the start-ups were developed and founded within the cluster, some of them as direct competitors to Established Firm's spin-offs. The formation of this cluster has aided all involved parties by providing joint presentation and creating a local talent pool. The creation of the media cluster was a formalization of processes and benefits that were happening between the spin-offs of Established Firm and in addition, it allowed for participation of other external parties unrelated to Established Firm.

I would say [Established Firm] was the media cluster before it developed into a bigger cluster with more participants, [Established Firm] was the cluster. Yeah. And the innovation from connecting technology to people who work with content, then providing solutions which are efficient and nobody's seen before. It's come from that kind of... so [Established Firm] was the cluster I think the competencies of technicians and storytellers are always going to be unique. Because there's a lot of creativity in between technicians and storytellers, I think. So I think basically, it's been a cultural thing. and [Established Firm] was the media cluster, that's turned into a bigger cluster with [Established Firm] still as a main player inside of it. I'm happy to see that more companies are really joined and seeing the value and try to stay in the same place. And once people meet and talk, magic happens.

5.5.1 Joint Representation

Joint representation means that the companies are performing sales and marketing activities together. This was happening from the very beginning of the early spin-offs of Established Firm. One common form of this joint representation is sharing a booth at one of the tradeshows that are a vital for customer acquisition and relationship building within the industry.

I didn't know the guy who was in charge at [foreign media company] at that time, but I met him at [a tradeshow] in [year], when it was decided that we should do [Control Room Inc].

So, yeah, so it first time it came through relations from actually I was... I was at a [Graphics Inc] show at this tradeshow.

Yeah, it's people that we.... we have mapped on the on the booth on [trade show].... maybe. Yeah, we got some names.... because before we changed it there, had a small stand in also at [Graphics Inc].

In the early days, we were... we were actually at the booths at the exhibitions.

Especially the smaller spin-offs or start-ups benefit from this joint representation by reflecting some of the reputation of the other companies on themselves and by concealing their true company size or stage of development, to appear more trustworthy.

You get some when visiting but you're also able to take these guys over to [employee of spin-off] or to [Control Room Inc] and so on. And it's like you're looking so much bigger than you really are. And you're getting this and so that was always a huge benefit. And also the way that [Internet Inc] could get early... one of the ways that [Internet Inc] could get early customers and [Control Room Inc] and so on for that played in a good....

In addition, convincing potential customers to visit onsite is easier, because there are so many relevant companies to their business, making a trip more meaningful. Customers know about the media cluster, which has become a brand itself, along with the city it developed in.

Yeah, it's like a thing if you are have a interest, let's say in photography or something. Okay, you have to go to that shop in Japan. That shop in the UK. And so it's difficult right? Instead you can come here and you can see a whole chain of something that is relevant for you. So on that commercial side it is enormously beneficiary and I think it's easily understood. Then [city] becomes a brand in itself. It's a funny story there that one of the... I think it was [Software Inc], they were... in the early days we took them on our stand the other start-ups, so but [Internet Inc] and [Control Room Inc] and all of them has been having a seat of our stand in the early days. Yeah. And I think it was [Software Inc] when he was talking to someone, I don't remember who, but then they asked "where are you from?" Yeah, he was from [city]. "What the fuck is [city] the centre of the universe now?" [laughs] Small little [city]. So Right. So it becomes... So you've got that value, we have clearly been very beneficiary, through all the years.

And, you know, when you're from there, you are growing a bit, because you're a bit bigger than being a small business in your own. And if there was not a [local media cluster], and the knowledge about the [Graphics Inc] and all the other things we have used also in our presentation, you know, we have used the other companies spun out of [Established Firm], to make us a bit bigger.

Potential customers are therefore actively interested in companies and their products emerging from the media cluster.

A few years ago, we tried to get [foreign media company] because a lot of the others and work with [foreign media company], we kind of never were successful with tracking those guys down. And then one of the [foreign media company] guys went past our booth, and then kind of had no idea who we were, but then he saw the partners. So we are partners with... and then [local media cluster] and all this. And then he stopped and said, "I'm working with all of these guys, but not you. So what do you do?" And that actually, we did get a deal with them. [...]. But that was it. So that was very direct.

But there's also a lot of indirect because we talk to each other a lot. And then we share experiences. And we do this. And we also piggyback sometimes on trade shows.

5.5.2 Innovation and Talent Pool

The actors within the media cluster benefit from the collaboration efforts they pursue within the cluster. Other benefits include access to the local talent pool and the interest of other

organizations in the cluster, that provide funding, for example, and thus foster the emergence of new start-ups within the cluster.

Cooperation among members of the media cluster

The degree of cooperation within the media cluster was not unanimously agreed on. Some informants reported that there is significant interaction within the media cluster, between spin-offs of Established Firm and other companies in the media cluster. One participant stated that they collaborated and co-created on products, but are less involved in conjoint sales activities.

So there is a group and there is kind of a family kind of a feel to it. And we do exchange a lot of experiences. Not a lot I think of direct kind of going towards customers together and all of that we haven't been too good at that. We've done that sometimes. But also probably because the product doesn't overlap. Now with [product], we do go together with [Software Inc] for instance, [...] and [Investment Group]. So that works well. The same also, we were down with [Investment Group] with the [other product]. So that's actually works really, really well. And it's the whole kind of story is good, because in the broadcast sector they know about the [name of the local cluster] and that media cluster.

Another participant voiced an opposing view, stating that most of the spin-offs collaborate in some ways, but mostly related to sales.

There is some cooperation, but it is silos.

Mostly with sales, I would say. Yeah, they talk together.

Talent pool

The creation of the local media cluster has also benefitted the attraction of talent. It is been an obstacle for growth of the companies in the past. The growth of the media cluster has enlarged the talent pool within the media cluster, but also made the companies more attractive to talent from outside the local cluster. The importance of Established Firm and its role as an incubator for the development of innovations and companies has been reduced as these roles are now adopted by the companies within the media cluster.

And then you have another one, which is the talent base. By having a larger and larger system, you are attracting more talent, and you get the larger talent pool, growing all the time, which has been one of the biggest obstacle for growth. I don't know how many times when I did the budget for R&D, we're just not able to get people. So I'm going to put this position elsewhere. Again, and again, not because I thought that was the best thing to do, because it was impossible to get enough. So the biggest limitation for growth of this office has been the availability of talents. So that also helps on that, although the effect of it so far can be a bit bitter, because I think in all the other startups here, you mainly find [Graphics Inc] guys, ex-[Graphics Inc] guys. So I didn't think so much about that, that that would be getting consequence. But at least it's a good feeling well, not when we lose some of the really good guys. Actually, I would say that the role that [Established Firm] had in helping new companies come about, that role has been ours the last 10 years, perhaps. And that is not desired, even I mean. But there are several of our employees that's gone out and start their own companies. I'm not happy when I lose them. But I'm happy when I see the the consequence of it.

In the environment of the spin-offs, different core-competencies are needed. The local media cluster is now a source of talents that are already familiar with the needs of the companies in this environment. They are familiar with the way they need to think about their work and the overall approach of commercializing their work.

So and this is one of the core competencies that the [Established Firm] political decision has given [city], is that you have a stack of, say, 200-300 developers, that's product oriented in [city], that knows how to productify things. And I have to say that it's not many developers throughout the world that knows how to do that. It's a lot of good developers out there, but most of them are consultants used to solving a given product in a given setting, fixing the SharePoint of the [local health organization] for example, that's kind of the core developer that you would find out in the market. But while [Graphics Inc] and [Control Room Inc] and these others, has done a big job in developing product developers that loves the product feedback cycle, and so on, which is a real asset for [city] as technology hub.

Formation of start-ups within the cluster

Other external actors such as investment firms have joined the media cluster in the past years. They are very consciously leveraging the benefits of the cluster, investing in emerging companies and strategically facilitating the process of growth within the cluster. As mentioned previously, some of these emerging companies are direct rivals to companies that Established Firm spun off.

It started as something called [company name], which is called [company name] and that they're selling boxes. Okay, yeah, cameras, whatever. Physical things. [...]. It started that way. And they Yeah, I think it's five, six years ago, maybe they started with this, but they bought some other companies which well, so they merged some other companies and then they started this up. And then for three years ago, they got some employees from [Graphics Inc] which would like to do this AI stuff. And then we came in on the side actually, because we were a little our own. And but then we came in and now we're merged into one. Well, as it is now it's [Investment Group] and under this are four small companies.

These companies have no relationship to Established Firm through ownership, they also have not acquired Established Firm as a customer yet. They however, do have knowledge about Established Firm, through their own personal biography, from either direct employment at Established Firm or through interactions with Established Firm as an employee of the spin-offs of Established Firm.

Not really, but we know about [Established Firm] to put it that way. And there's a lot of people [who've] been in [Established Firm]. The CEO has been in [Established Firm]. And also in [Graphics Inc]. There is some relationship in it.

6. Discussion

In this section the empirical findings are discussed in relation to the existing literature. The empirical analysis of how an established firm can benefit from spinning of and innovate via proxy is synthesized with the literature review. It is outlined how the study supports, extends, contributes and contradicts the existing research in the field by introducing a theoretical model.

This thesis explores the relationships of an established firm that generated several technology spin-offs with its spin-offs, between the spin-offs, between the spin-offs and its customers, and in the emerging local cluster. Many of the findings are regarding the research question of how an established firm can benefit from spinning of and innovate via proxy are worth highlighting.

The figure below is a representation of the aggregated findings. Firstly, I have outlined some conditions that appear beneficial for spinning off in this given setting. In line with O'Reilly & Tushman (2016), spin-offs are found to be an appropriate form of value creation when their activities, products or services are non-core. The industry setting is suitable for spinning off when the level of competition is low and the companies engage in cooperative activities frequently. In the same sense, it is beneficial for spin-offs when the relationships in the setting are well established. Established Firm has strong ties to its former spin-offs, the spin-offs are closely engaged in relationships between themselves. In the same way, they are engaging in activities within the media cluster.

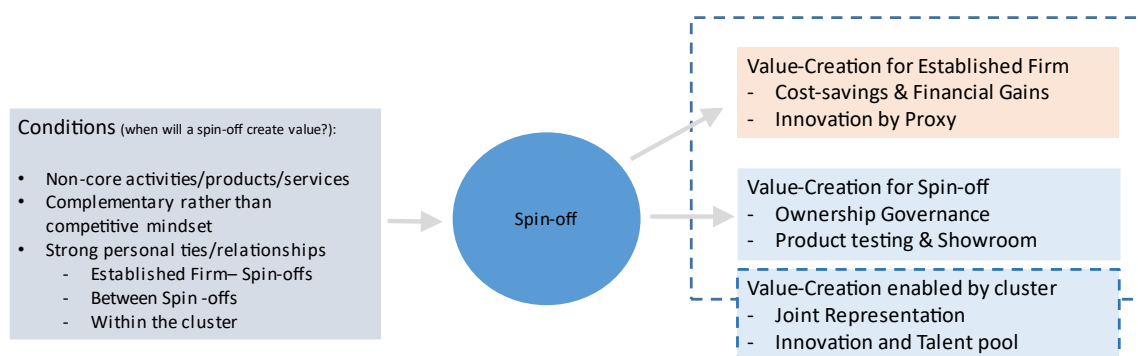


Figure 7: Inductive model presenting conditions that are suitable for spin-offs in the context of innovation by proxy

Once spun-off, the Established Firm can then benefit from the relationship with its spin-offs in the form of cost savings and financial gains and innovation by proxy. The spin-offs benefit from the interaction with the Established Firm by their ownership governance and by using their operations for product testing and showrooming. The value creation of the spin-off is facilitated by its interaction with the local cluster, which benefits them with joint representation, innovation activities within the cluster and provides a talent pool.

The established firm experienced two forms of cost savings. The first form of cost saving was generated by the implementation of the spin-off's products. The products are all related to efficiency gains and direct cost savings through the reduced number of employees to perform tasks. The second form of cost savings was savings on the acquisition costs of products. Both based on their relationship as a parent and through the motivation of being able to test and showroom products at Established Firm, the spin-offs were making an effort to reduce the cost billed to Established Firm.

Established Firm could also benefit indirectly by innovation by proxy. In this process, the spin-offs innovate together with their customers, but both spin-offs and customers are allowing the innovation to flow back to Established Firm. An additional finding was that Established Firm gained status and a reputation for being innovative within the industry during this process.

The spin-offs perform inbound open innovation activities mainly by engaging in customer involvement. This contradicts the findings of Lichtenthaler (2008), who found that predominantly large firms engage in open innovation activities due to their opportunity to support such activities from their large resource base. In turn it partly supports the findings of van de Vrande et al. (2009), who found that small and medium-sized enterprises are increasingly often engaging in open innovation. In the context of spin-offs, one possible explanation for this finding might be that the spin-offs inherit their parent firms social network, thus providing opportunity for open innovation (Higgins & Gulati, 2003; Yli-Renko et al., 2001). In the same way they could also be enabled to outside-in open innovation by the relationship to the established firm as an owner and their ability to draw on their financial and human resources (Ferriani et al., 2012). Another contributing factor might be the type of products the spin-offs develop. Software products are commonly researched upon in the context of open innovation. (Bogers et al., 2017).

The forms of customer involvement found in were co-creation, lead users and user innovation. Co-creation was the most common form the spin-offs engage in. The spin-offs are allowing the customers to configure and co-construct the products according to their individual context, which is in line with the definitions of Prahalad & Ramaswamy (2004), Chesbrough & Schwartz (2007) and the second mode of co-creation described by Piller & Ihl (2010). The first mode of co-creation, which is observing a customer's needs and then suggesting fitting solutions, was also illustrated by a quote in the findings section. Some of the spin-offs implemented lead users (Hippel, 2007). In addition, user innovation was reported from the spin-offs.

Contradicting the findings of Harlan (2018), it was found that spin-offs can experience difficulties when reintegrating their improved products and new product developments in the established firm. The separation of the ownership relationship from the customer relationship between the Established Firm and its spin-offs impeded the collaborative relationship between the two organizations.

The spin-offs benefited from the relationship with Established Firm by receiving ownership governance and by being able to test and showroom their products within Established Firm's organization. The low level of involvement and supervision of the Established Firm in the operations of the spin-offs affected the development of the spin-offs diversely. Some of the spin-offs were thriving in their innovation processes, other firms became very ineffective due to continuous availability of financial resources. Tied to this is also the distribution of shares to key employees, which seems to have fostered a more entrepreneurial culture within the spin-offs. The access of the spin-offs to Established Firm as a customer has deteriorated. The informants reported that Established Firm is only willing to adopt their product if they outperform the products in the open market. This has impeded the spin-offs in their ability to test their products and showroom them.

The formation of a cluster driven by the spin-offs is in line with the literature that suggest spin-offs can be drivers of cluster formation (Garnsey & Heffernan, 2005; Keeble & Wilkinson, 2017). The benefits the cluster provides to organizations involved were joint representation, facilitating innovation and providing a talent pool. The cluster that emerged from the spin-offs and their collaboration became a brand itself, actively aiding companies in the acquisition of customers. The spin-offs would use their inheritance to perform sales activities and relationship building for example at trade shows together. The spin-offs used joint

representation already before the cluster was formed. The cluster now facilitates joint representation and allows external actors from different corporate inheritance to benefit. Within the cluster, there is collaboration and frequent exchange of knowledge and human capital. This provides opportunities for the emergence of new companies and external actors to join. Established Firm's spin-offs were found to collaborate with such start-ups in the cluster.

7. Conclusion

The last section summarizes the findings of this thesis in relation to the current and relevant literature. Recommendations for potential future areas of research are provided before suggesting practical implications for managers and finally discussing the limitations of this thesis.

This thesis was set to explore the research question of how an established firm can benefit from spinning off and innovation via proxy. To answer this question, a case study was conducted with an Established Firm and its spin-offs. Eight interviews were conducted with executives and employees from the Established Firm and its spin-offs, allowing for an in-depth understanding of the spin-off process and the inter-company relationships that emerged between the spin-offs over time. Drawing on the literature on corporate spin-offs, open innovation and cooptation, a theoretical framework was provided to facilitate the analysis.

The findings of this thesis show that an established firm can benefit from spinning-off and innovation via proxy directly through cost savings and financial gains and indirectly through integration of the innovations that were developed in the spin-offs. However, there was found to be a barrier for reintegration of the indirect benefits into the established firm from making the spin-off compete with the open market. The spin-offs in turn benefit from the ownership governance of the established firm, and the relationship to established firm as a customer in the form of product testing and showrooming. Additionally, a cluster was formed around the spin-offs, which provided them and other actors with benefits through joint representation, the facilitation of innovations and talent pooling.

An inductive model was developed to facilitate the understanding of the relationships between the established firm, its spin-offs, the customers of the spin-offs and the local media cluster and identify conditions that are appropriate to facilitate spin-offs and innovation by proxy. The first condition is that the spin-offs should represent non-core activities, products or services with regard to the established firm. Secondly, the industry should be characterized by a rather non-competitive mindset and lastly strong relationships between the actors are found to have been beneficial in this case.

Practical implications from this thesis are for managers of an established firm that are either considering to spin-off an innovation company or are managing the relationships with their spun-off companies.

The conditions for spinning off detailed above provide guidance for managers in the process of deciding whether spinning-off is suitable with regards to innovation by proxy. Furthermore, this study suggests that the relationship of the established firm as an owner and the relationship of the established firm as a customer should be reflected in their interactions. This means that the spin-off should be considered differently from other companies in the open market. Both sides benefit from interacting. The established firm should remove the barrier for reintegration of the spin-off's product improvements and innovations to fully benefit from innovation via proxy. This aids the spin-off in their development, because it provides further opportunities for product testing and showrooming. Additionally, it was established that although the spin-offs are of similar type and share inheritance, the low supervision in ownership governance can affect the company's performance positively and negatively.

The findings of the study must be considered in their context, a generalization is not intended and potentially inappropriate. As mentioned in the findings and the discussion section, the context of the media industry and the specific section of it might influence the studied benefits. Exploring the phenomenon in a different industry setting or a different region thus might benefit the body of research on spin-offs in the context of open innovation.

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9. Appendix

9.1 Appendix A – Consent Form

Informed consent form –Participation in RaCE research program NHH Norwegian School of Economics

Background and aim

This research is a part of the RaCE project at SNF and NHH Norwegian School of Economics. The goal is to examine how established firms respond to and manage radical technology-driven change. We are targeting individuals within established firms that have information on and experience with organizational changes.

What participation in the study entails

We invite you to participate in an interview lasting hour(s). If you permit, the interview will be recorded and later transcribed. The audio file will be deleted after transcription and the transcribed version will be anonymized.

How is information about you handled?

Personal information will be treated confidentially. Any information that could identify individuals will be removed (eg your name). Transcriptions will be allocated a code instead. Name and contact information, including this form, will be kept separate from any interview data. Only persons participating in the RaCE project at NHH/SNF will have access to the anonymized interviews.

Your firm/organization will be anonymized.

The project will be completed in June 2023.

Voluntary participation

Participating in the project is voluntary. You can withdraw at any time without any further explanation. If you chose to withdraw, all information about you and your interview will be deleted.

Should you have questions regarding the research project, please contactor Inger Stensaker 9979 2127 email: inger.stensaker@nhh.no. Should you have other questions please contact: personvernombud@nhh.no

On behalf of SNF/NHH, the Norwegian NSD has approved the procedures followed by the RaCE research project are in accordance with current rules and regulations for handling data.

Your rights

As long as you can be identified in the data material, you have the right to:

- Access in which personal information is registered in your name
- To correct personal information about you
- To have personal information about you deleted
- To receive a copy of your personal information (data portability)

-
- To file a complaint to personvernombudet or Datatilsynet regarding use of personal information on you

What gives us the right to use personal information about you?

By signing this form you consent to participate in the study.

Informed consent form:

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

Signature Date.....

Printed name.....

9.2 Appendix B- Interview Guide

This is the interview guide used in the interview process. During the process of the interviews and becoming more knowledgeable about the research setting, some additions were made to the interview guide. The semi-structured nature of the interview meant that the participants were encouraged to speak freely. Depending on the direction of the dialogue, the number of questions and the order of questions asked varied between the interviews.

1. What was your role at [Established Firm]?
2. What is your current role?

What is the story of your firm? It started in [Established Firm] and was then spun out, correct?

3. What were the reasons for spinning off your work from [Established Firm]?
 - a. What were the intended benefits for your firm?
 - b. How did spinning off provide value to [Established Firm]?
4. What advantages resulted from spinning off?
 - a. Did spinning off result in a market advantage?

- b. Did spinning off improve innovativeness?
5. What challenges resulted from spinning off?
- a. How did these challenges affect the performance of your firm?
 - b. Are they resolved? If not, how do you deal with them?

How would you describe the strategy of your firm?

6. How would you describe your business strategy?
7. Has the strategy of your (spin-off) firm changed over the years?
- a. How?
 - b. Why?
8. How would you characterize the industry your firm is in?
9. How would you describe your product/service?
- a. Is it rather standardized or highly customized?

How would you describe the relationship between your firm and [Established Firm]?

10. How are you still connected with [Established Firm]?
- a. Does [Established Firm] possess ownership of your firm?
 - b. Is [Established Firm] a customer of your firm?
 - i. Is [Established Firm] the main customer?
 - ii. (percentage of revenue from [Established Firm])?
11. How did the connection with [Established Firm] change over time?

-
12. How would you characterize the relationship with [Established Firm]?
 13. What influence does [Established Firm] have over your firm?
 - a. How?
 - b. Is this beneficial or challenging?
 14. Does your relationship with [Established Firm] affect the relationship with other customers?
 - a. How?
 - b. Is this beneficial or challenging?
 15. Does working with [Established Firm] influence your costs?
 16. Does working with [Established Firm] influence your profits?
 17. How does [Established Firm] benefit from working with you?

How would you describe your firm's innovation strategy?

18. How does your company innovate?
19. Did the innovation process change over time?
 - a. How?
 - b. Why did it change?
20. In what ways do customers influence the innovation process?
 - a. Is [Established Firm] different as a customer? In what ways?
 - b. Are your customers competing?
21. Is there anything else you would like to add?

