Birger Rahal Lamnaouar Belboe
Geir-Åsmund Haugland
Yanislav Todorov Zagorov

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A multiple-case study of how sustainability-centered firms prepare for and execute an exit by acquisition

Master's thesis in NTNU School of Entrepreneurship
Supervisor: Lars Øystein Widding
June 2022

Master's thesis

NTNU
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NTNU SCHOOL of ENTREPRENEURSHIP

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Kunnskap for en bedre verden

Preface

This thesis was written in Trondheim in the spring of 2022, by B. Rahal L. Belboe, Geir-Åsmund Haugland, and Yanislav T. Zagorov. The researchers are master's students at the prestigious NTNU School of Entrepreneurship (NSE) - a study program located within the Department of Industrial Economics and Technology Management at the Norwegian University of Science and Technology (NTNU). The basis for this research stemmed from the researchers' joint passion for business development, renewable energy, and the entrepreneurial process. As the researchers are all co-founders and manage their own firms at the time of conducting this research, they also share a desire to understand the intricate dynamics of how firms exit by acquisition. Being part of an increasingly environmentally aware generation, the context of the thesis is sustainability-centered, aiming to make sustainable entrepreneurship a more viable, opportunistic option. The researchers have also prepared for this thesis through a term paper in "TIØ4535", NTNU School of Entrepreneurship, Specialization Course.

The researchers have had the privilege of receiving academic support and guidance from our supervisor Professor Øystein Widding, and would like to express gratitude towards the participating case firms, who were willing to share valuable data regarding their exits by acquisitions.

Trondheim, 2022

B. Rahal L. Belboe

Birger Rahal L. Belboe | Geir-Åsmund Haugland | Yanislav T. Zagorov

Abstract

Exit by acquisition is a viable and often sought-after method of harvesting entrepreneurial rent. Despite the importance of exits by acquisition as a technology and product commercialization and market expansion strategy, the phenomenon has been largely understudied. With the need for commercialization of sustainability-centered technologies and products to shift the economy towards sustainable products and services, we conduct a case study of the exits by acquisition of four sustainability-centered Norwegian firms operating in the energy sector. We examine the entire process of exit by acquisition from the initial intentions and imprints at the firm's founding, through the phases of resource building, signaling, and performing, as well as the search and courtship phases, until the sale happens and the acquisition is completed. We also examine the effect a firm’s activities, resources, and decisions have on the result of the exit by acquisition. In doing so, we further develop the ZHB model, a theoretical framework showcasing the entire process of exit by acquisition as seen from the seller’s side. The model is built upon theories from the research streams of search and courtship, founder intentions and imprints, resources’ effect on exit by acquisition, and exit by acquisition as an expansion strategy, and shows, in addition to the process itself, the effect the selling firm’s activities, resources and decisions have on the likelihood of, speed to, and economic return of the exit by acquisition. Our findings add a temporal sequence and interconnectivity of the different processes of the exit by acquisition, as well as show how the intention to build the firm for an exit from the founding results in a different process and result than selling a firm that had the initial intention of building to last. The main limitation of our study is its generalizability due to the qualitative nature of conducting four semi-structured interviews, although the quality and trustworthiness of it being high. We highlight the many gaps in the literature pertaining to the firms’ activities, resources, and decisions on the exit by acquisition result and provide indications that these resources should be viewed through the lens of resource configurations’ effect as opposed to the lens of single resources’ effect. This thesis contributes to the body of research by - to our understanding - providing the first framework with temporal placement of all the common processes of the exit by acquisition process as seen from the seller’s point of view.

Sammendrag

Exit gjennom oppkjøp er en mulig og ofte ettertraktet måte for gründere å innhøste urealisert gevinst på. Til tross for viktigheten av det å bli kjøpt opp som en strategi for teknologi- og produktkommersialisering, samt ekspansjon til nye markeder, har fenomenet i stor grad vært understudert. Med et økende behov for kommersialisering av bærekraftssentrerte teknologier og produkter, gjennomfører vi en casestudie av fire bærekraftssentrerte norske bedrifter innen energisektoren. Vi undersøker den fullstendige prosessen av exit gjennom oppkjøp, helt fra de første intensjonene og de påvirkende avtrykkene, gjennom fasene for ressursbygging, signalisering og bedriftsytelse, i tillegg til "søk og frieri"-prosessen, frem til salget finner sted og oppkjøpet blir gjennomført. Vi undersøker også hvilken effekt de forskjellige aktiviteter, ressurser og beslutninger har på resultatet av exit ved oppkjøp. Gjennom å forske på dette videreutvikler vi ZHB-modellen, et teoretisk rammeverk som fremstiller den fullverdige prosessen av exit gjennom oppkjøp sett fra selgersiden. Modellen er bygget på teorier fra litteraturstrømmer om "søk og frieri"-prosessen, gründerens intensjoner og påvirkende avtrykk, ressursers påvirkning på exit gjennom oppkjøp, og exit gjennom oppkjøp som en ekspansjonsstrategi, og viser, i tillegg til selve prosessen, hvordan bedriftsaktiviteter, ressurser og beslutninger påvirker sannsynlighet for, tid til, og økonomisk gevinst fra exit gjennom oppkjøp. Funnene våre legger til en dimensjon av temporalitet og sammenkobling av de forskjellige prosessene for exit gjennom oppkjøp, i tillegg til å vise hvordan intensjonen om å bevisst bygge et selskap for å bli kjøpt opp resulterer i et annerledes prosessforløp enn hvis selskapet bygges for å vare. Studiens hovedbegrensning er generaliserbarheten av våre funn samlet gjennom fire semistrukturerte forskningsintervjuer, til tross for at kvaliteten og troverdigheten er høy. Vi belyser også et stort antall hull i litteraturen vedrørende bedriftsaktiviteter, ressurser og beslutninger som omhandler exit gjennom oppkjøp, og tilføyer indikasjoner om at disse ressursene burde bli sett gjennom linsen av ressurskonfigurasjoners påvirkning, i motsetning til den enkelte ressurs sin effekt. Denne avhandlingen bidrar til forskningen ved å - etter vår oppfatning - tilføye det første rammeverket som modellerer den temporale plasseringen av alle oppkjøpsprosessene sett fra selgerens perspektiv.

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1 Introduction

To harvest value from entrepreneurial rent, being acquired is one of the most viable and sought after options (Clarysse et al., 2013; Westhead et al., 2003), having been shown to happen almost six times as often as IPOs in the US (Pisoni & Onetti, 2018). However, despite its popularity as an exit route, research on the resource structuring and the processes needed in order to reach an exit by acquisition for an entrepreneurial firm is lacking (Welch et al., 2020; Sirmon et al., 2021; Belboe et al., 2021; Wennberg & DeTienne, 2014). This thesis seeks to shed light on the resource and temporal dynamics of the critical processes in exits by acquisition. To do so, we conduct a case study of four Norwegian sustainability-centered firms that have achieved exit by acquisition. We do this in order to help sustainability-centered firms and technologies get acquired to expand their reach through resource-rich incumbents while simultaneously furthering the lacking research in the field of exit by acquisition.

Research on understanding the seller side process of exits by acquisition is important for several reasons. First, acquisitions are important for the commercialization of many technologies and products, as being acquired often serves as an expansion strategy for smaller firms to be able to compete with incumbents by attaining previously unheld resources and capabilities needed for expansion (Colombo & Piva, 2008; Gans & Stern, 2003; Pisano, 1991; Eisenhardt & Schoonhoven, 1996; Dashti & Schwartz, 2018, Graebner et al., 2010). Second, the research is essential to help guide entrepreneurs in harvesting entrepreneurial rent. Seeing as entrepreneurs with previous success often start new, more successful ventures (Westhead et al., 2003; Ucbasaran et al., 2003, p. 209), this contribution from the research is of importance for value creation in society, as well as for the attractiveness of being an entrepreneur. Lastly, understanding the seller's side of the process can help the buyer perform the acquisition by understanding the seller’s motives and concerns, thus easing the process for both parties. The seller can have several reasons to decline a bid from a buyer such as not trusting the seller’s intentions for the acquisition (Shankar et al., 2022), not believing in the combination potential or strategic fit of the acquisition (Graebner & Eisenhardt, 2004; Shankar et al., 2022; Zaks et al., 2018; Albert & DeTienne, 2016), building the firm to last (Wennberg & DeTienne, 2014; Albert & DeTienne, 2016; Keyhani et al., 2021), or not agreeing with the deal terms and economic return of the acquisition (Shakar et al., 2022).

Therefore, understanding the seller is crucial for both parties to succeed in the acquisition. Additionally, mistakes made in the acquisition process have been shown to be the reason for many of the challenges in the complex post-merger integration of the selling firm into the buying firm (Haspeslagh & Jemison, 1991). Therefore, knowing the process is of great importance for both sellers and buyers.

To our understanding, this thesis is the first study to present a temporal model for the entire process of exit by acquisition, from the founding of the firm with the initial intentions until an acquisition is completed. In addition, this thesis is a continuation of the work of Belboe et al. (2021), a literature review by the authors of this thesis that, to our understanding, was the first study to present an overview of all literature pertaining to firm held resources' effect on the result of an exit by acquisition. By investigating both the process of exit by acquisition as well as how firm held resources affect exit by acquisition result, this thesis attempts to address the following problem statement:

How do sustainability-centered firms prepare for and execute an exit by acquisition?

1.1 Literature gap

Even though acquisitions are a two-sided process involving both a seller and a buyer, most previous literature has focused solely on the buyer's perspective, while the seller's side has received little attention in research (Zaks et al., 2018; Graebner & Eisenhardt, 2004; Welch et al., 2020).

On the buyer's side, the literature has mostly examined how to use acquisitions as a strategic activity for the buying firm (e.g. Vermeulen & Barkema, 2001; Santos & Eisenhardt, 2004; Zollo & Singh, 2004; Ahuja & Katila, 2001; Graebner, 2004; Anand et al., 2005) or how to successfully integrate the newly acquired firm to generate a positive return on the investment (e.g. Angwin & Meadows, 2009; Angwin, 2004; Homburg & Bucerius, 2005, 2006; Weber et al., 2012; Weber, Tarba & Reichel, 2009) although many other literature streams also exist in the buyer side perspective (Gomes et al., 2013). Due to expansion via acquisition of other companies being a common strategy for mature firms, the buyer side of the process is well researched in the field of business (Graebner & Eisenhardt, 2004). Common for this type of research is that it sees the seller as a firm that gets taken over, without considering the seller's perspective, or simply treating the acquisition process as a prelude to the more complex post-merger integration process that has received a lot of attention in research (Welch et al., 2020).

On the seller's side, however, research on the process and events leading up to an exit by acquisition of an entrepreneurial firm is almost completely lacking (Welch et al., 2020). Although there has been some research, the field is still relatively young. Consequently, the lack of literature on the seller's side of the acquisition process leaves many holes to be examined (Belboe et al., 2021; Welch et al., 2020). Most notably, no unified model of the entire process of an acquisition from the seller's point of view that shows how the different processes actually affect the outcome of the exit by acquisition has been published (Belboe et al., 2021; Welch et al., 2020). In addition, research on the effect of many activities, actions, resources, and decisions on exit by acquisition performance is still lacking (Belboe et al., 2021; Bobelyn, 2012; Sirmon et al., 2021).

The limited literature pertaining to the seller's point of view can roughly be divided into four somewhat overlapping streams:

- The first stream examines the reasons behind acquisitions by presenting it as a commercialization strategy in the form of a more involved form of partnership or alliance (Anand et al., 2005; Dashti & Schwartz, 2018), where the acquisition is seen as a way to gain competitiveness with incumbents (Colombo & Piva, 2008) by attaining resources not previously held by the selling firm (Gans & Stern, 2003; Pisano, 1991; Eisenhardt & Schoonhoven, 1996), or attain the needed market and technological knowledge and capabilities (Colombo et al., 2009).

- A second stream examines how different resources and activities of a firm affect the outcome of an acquisition in terms of likelihood of being acquired, time from founding to acquisition, and economical return of the acquisition (e.g. DeTienne & Cardon, 2012; Ragozzino, 2016; Hoehn-Weiss & Karim, 2014; Dashti & Schwartz, 2018; Sirmon, 2021; Wang et al., 2021; Bobelyn, 2012).

- A third literature stream closely related to the previous stream more closely examines how the early intentions and early resources of a firm imprint the future of the firm and affect the result of an acquisition (Albert & DeTienne, 2016; Simsek et al., 2015; Colombo & Piva, 2012; Collins, 2000; 2005; 2009; Keyhani et al., 2021).

- Lastly, a fourth stream of literature examines the firm's courtship with- and search for potential buyers, especially focussing on whether or not the seller and the buyer wish to perform the transaction based on the circumstances (Graebner & Eisenhardt, 2004; Albert & DeTienne, 2016; Brueller & Capron, 2021; Keyhani et al., 2021; Shankar et al., 2022).

Common for most of the literature on the pre-acquisition process leading up to a deal is that it lacks theoretical conceptualization (Welch et al., 2020). Especially literature and conceptualization of the temporal dynamics of the acquisition process with the timing and interconnectivity of decisions, activities, and actions have been completely absent (Welch et al., 2020) except for a very recent paper by Shankar et al. (2022) researching search and courtship exclusively. Thus, following research recommendations by Welch et al. (2020), we build upon the existing literature on the acquisition process with empirical data to attempt to create a model of the temporal dynamics of exits by acquisition.

The literature pertaining to the effect of resources and activities on the process and results of exits by acquisitions has mostly focused on the effect of single resources (Sirmon et al., 2021). As exits by acquisition are complex processes, focusing on isolated resources to explain what resource should be built to achieve a desired exit scenario oversimplifies the phenomenon (Sirmon et al., 2021). Instead, by examining how resources complement each other and looking at the interdependency and interconnectivity of resources and activities through resource configurations, a clearer view of the causalities of the process could be made (Sirmon et al., 2021). Thus, as recommended by Sirmon et al., (2021), we test these two views - single resources and resource configurations - with empirical case data to see which view better explains the phenomenon of exit by acquisition within our scope and context.

1.2 Purpose

A non-published, not peer-reviewed article by the authors of this paper has, for the first time, tried to distill the four literature streams into a single preliminary unified model of exit by acquisition as seen from the seller's point of view (Belboe et al., 2021). This model, named the ZHB-model, is presented in chapter 2, *theoretical foundation*, and along with the extensive literature review conducted, it will serve as the basis of our study.

The ZHB model has two main theoretical implications. The first is a unification of what the literature says about the different processes of the sale. The second is an overview of what resources, activities, actions, and decisions affect the likelihood, economic return, and speed of an exit by acquisition. The second implication also shows the many gaps in existing literature pertaining to the effect that these firm metrics have on the different performance parameters. These holes are presented in sections 2.1.3 and 2.1.4.

The ZHB-model is so far only based on an extensive literature review, and no empirical evidence has been gathered to verify the model before this study. Consequently, as literature on the temporal interconnectivity of these processes is lacking, the ZHB-model poorly accounts for the timing of the different processes. The purpose of this paper is to explore and develop the ZHB-model and the theories behind with empirical data, to further the search for a unified temporally accurate model of exit by acquisitions from the seller's point of view, either by corroborating the ZHB model presented in Belboe et al. (2021), or falsifying some of its claims and revising any discrepancies we find.

To corroborate or falsify the claims of the literature-based ZHB-model with empirical evidence, we formulate two research questions based on the two main findings of Belboe et al. (2021) in Table 1.1.

Table 1.1: *Research questions*

RQ1	**How does the temporal process of exit by acquisition as described by the ZHB-model compare to empirical evidence from actual firms' path to exit?**
RQ2	**How does the theoretical firm metrics' importance towards exit by acquisition performance as described by the ZHB-model compare to empirical findings from exited firms?**

To attempt to answer these questions, we will conduct a multiple-case study of four sustainability-centered Norwegian firms which have exited through acquisition. Given the scarcity of such firms, we select a population of cases through purposeful sampling (Schatzman & Strauss, 1973) in order to get information-rich cases that will illuminate the questions under study (Patton, 1990). The data is acquired through a combination of both qualitative and quantitative approaches, mainly emphasizing qualitative in-depth semi-structured interviews, as described in section 3.4 *Data collection.* The acquired data is then to be analyzed within-case and cross-case, looking for patterns and similarities in the attempt to rebuild the ZHB-model with the corroboration of literature.

1.3 Scope and context

1.3.1 Scope

Firms can exit in a variety of ways, including liquidation, sale to a third party, sale to another business, merger and acquisition, IPO, management buy-out, employee buy-out, and shutdown (Wennberg & DeTienne, 2014). This thesis focuses solely on exit by acquisition.

Acquisitions are exit events where a firm is sold as a whole, or its core assets and resources are sold to another firm (Puranam, 2001; Rossi et al., 2013). As an exit event, acquisitions are quite common, happening almost six times as often as IPOs in the US (Pisoni & Onetti, 2018). Acquisitions are sometimes known as trade sales, especially when referring to a VC firm's economic harvest of a previous investment (Mathisen, 2017; Bobelyn, 2012). The trade sale definition entails that the buyer assumes more than 51% of the bought firm and is a more established incumbent (Mathisen, 2017). We use the trade sale definition of acquisitions throughout this paper.

Literature and practice often use the term merger and acquisitions (M&A), effectively bundling acquisitions together with mergers. Mergers, however, emphasize that the two firms are both dissolved and fused into a common larger entity (Hagedoorn & Sadowski, 1999), while an acquisition sees the larger firm remaining intact and incorporating the new firm into it (Puranam, 2001; Rossi et al., 2013). Acquisitions can therefore be seen as an exit event distinct from mergers.

The definition of acquisition also effectively separates it from other forms of firm takeover such as independent sales, management buy-out, and employee buy-out (DeTienne & Cardon, 2012; Periu, 2013). These are exit events where the firm is not taken by another firm, but where either, respectively, the founder sells shares to other individuals through a broker or to individuals in the founder's network, the senior management acquires significant ownership of the equity of the firm, or the employees acquire significant ownership of the firm.

Lastly, as a comment about our terminology, in RQ2, we define firm metrics as resources, activities, intentions, decisions, and actions by the firm, although often limiting this to simply referring to them as resources as a reference to resource-based theory of which this study draws inspiration.

1.3.2 Context

The last decade has seen a societal and individual shift of attitudes and actions toward humanity's impact on the Earth's ecosystem (Crutzen, 2006). Thus, new initiatives and technology are needed to shift the economy towards sustainable products and services (Bocken, 2015). The incentives of being sustainable are clear, and sustainability increasingly acts as a criterion for new ventures looking for financing. This can be seen in government-led financial instruments and how venture capitalists are more aware of the responsibility of their resources, expressing a clear willingness to invest in sustainable ventures (Chalmers et al., 2021). As such, we incorporate the six environmental objectives presented by the EU as a selection criterion, where the firms have to contribute significantly to at least one of them in order to be defined as sustainable (European Commission, 2021). This is important as new ventures play a crucial role in securing a sustainable future, and the contribution objectives will be presented in section 3.3, *Selecting Cases*.

Given the significant literature gaps which are yet to be explored by any other science, setting a context of sustainability allows us to collect a more uniform base of empirical data, limiting external variables which are not subject to the scope of this study. To further strengthen this, we also restrict the population to Norwegian firms operating within the energy sector due to significant variation in business cultures across geographical locations and across sectors. Below we have listed the main characteristics of this sector:

- Large industrial incumbents
- Strict climate commitments and political regulations
- World-leading in renewable R&D
- Major supplier of energy to Europe as a whole
- High degree of governmental support and incentives
- High sustainable adaptation, as 70% of Norway's energy consumption is renewable
- High degree of cooperation between small innovative technology firms and large industrial incumbents.

Setting this context also applies a certain level of uniqueness to the study. With the introduction of the EU taxonomy currently being implemented, the question of sustainability-exploration vs exploitation (Maletič et al., 2014) has never been more relevant. In order to achieve the ambitious environmental goals of the taxonomy, we argue a need for establishing new ventures to challenge existing sustainability solutions (exploration), consequently allowing for large, established firms to adopt new sustainable practices improving sustainable output (exploitation) through the acquisition of those firms. Thus, making the timing of this study highly relevant.

As such, we, the researchers, want to contribute towards making sustainable entrepreneurship more attractive as an opportunistic option through exploration, as opposed to solely being an idealistic one. By exclusively sampling firms that are deemed sustainable in line with the EU taxonomy, we aim to increase the relevance and contributing factor of our findings, in order to implicate how one can successfully build sustainable ventures towards exit - without necessarily being an idealist.

1.4 Structure

In the next chapter, we present the theoretical framework and its underlying foundation, highlighting gaps in the literature and laying the foundation of which the later analysis and discussion will be anchored. Thereafter, we give a thorough description of the methodology used to acquire and analyze the empirical data, both within-case, and cross-case, aiming to increase the study's replicability. Accordingly, this is followed by the data analysis, utilizing the theoretical framework before discussing our findings in relation to the theoretical foundation. Finally, we conclude the study and reflect upon the theoretical- and practical implications of the findings, as well as discuss the limitations of our findings - and areas for future research.

2 Theoretical foundation

In this chapter, we will outline the theoretical foundation for the thesis. First, we present the theoretical framework that will constitute the foundation for the analysis, the ZHB model. This is followed by an elaborative explanation of the framework's underlying theory, highlighting the several gaps in the literature, which will be the basis for our discussion.

2.1 The ZHB model

The limited literature on acquisitions seen from the seller's side has been distilled in an extensive literature review by Belboe et al. (2021) into a model of the process of being acquired as seen from the seller's side. The literature review was written as a project thesis and is therefore not published and not peer-reviewed, so the relevant parts are repeated throughout this chapter. The original model includes some factors from the buyer side and post-acquisition, which will not be presented here as they are outside the scope of our study. The literature was gathered in a literature search in the autumn of 2021, so updated literature has also been added during our study. The model from Belboe et al. (2021) is solely based on literature and is therefore not to be considered robust. The purpose of this thesis is to update and explore this model so that it accommodates our empirical evidence.

The model presents the activities, actions, and decisions that lead up an exit by acquisition and how these affect the three parameters for exit by acquisition performance: the economical return on investment of the acquisition (economic return), the time it takes from the startup is founded until acquisition (speed), and the likelihood of the startup being acquired (likelihood). We will refer to this model as the ZHB-model (Zagorov-Haugland-Belboe model). An adaptation of the ZHB model is presented in figure 2.3.

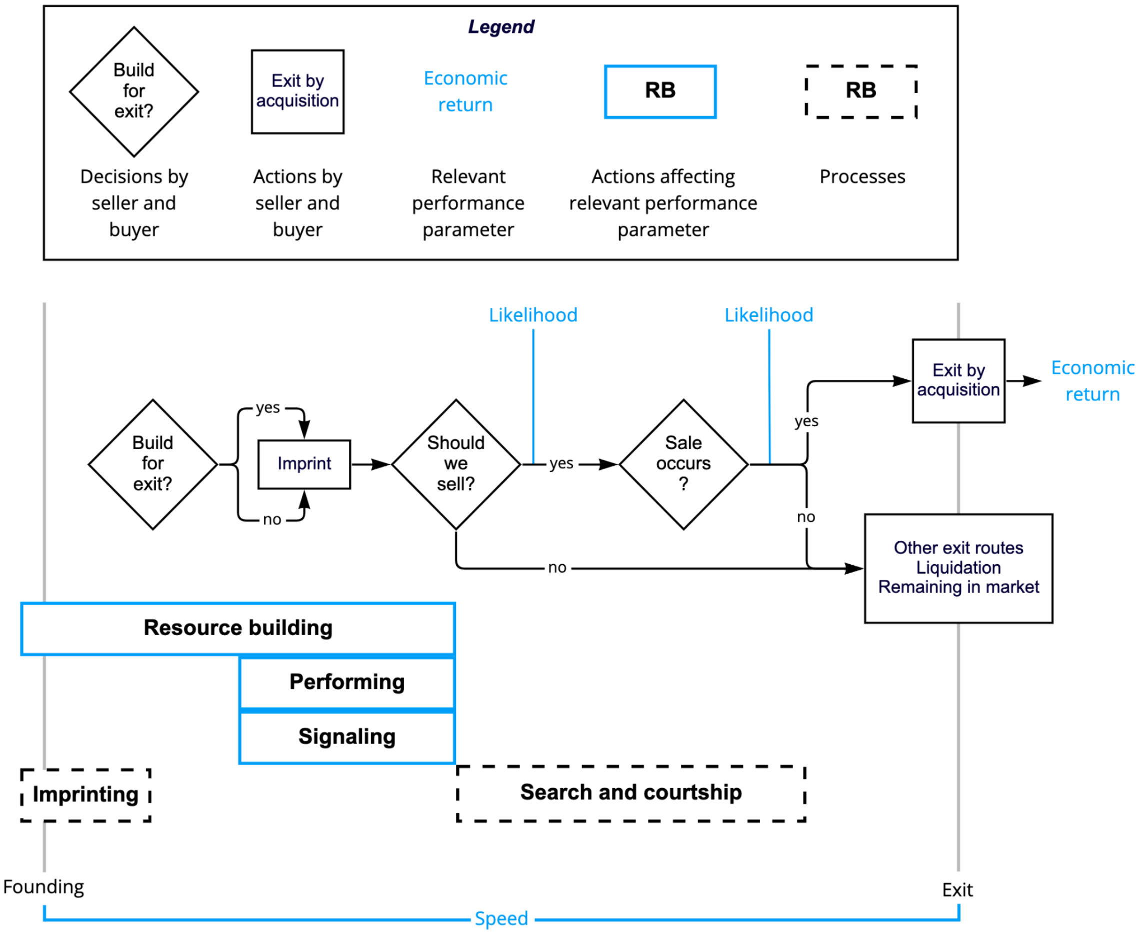

Figure 2.1: *The ZHB model, showing the process of exit by acquisition as seen from the seller's point of view (Belboe et al., 2021).*

The following is a short summary of the model where each point will be further elaborated further out in this chapter:

Summary of the model

The model presents sequential, causal actions and activities, with a nonlinear time frame represented from left to right, from founding until exit. Notably, the time is not to scale for the different activities as no conclusive literature was found on the time duration of the different activities.

The upper part of the model explains the decision process of the firms pertaining to exit according to literature (Albert & DeTienne, 2016; Simsek et al., 2015; Colombo & Piva, 2012; Collins, 2000; 2005; 2009; Keyhani et al., 2021; DeTienne and Cardon, 2012; Wennberg & DeTienne 2014; Bongard et al., 2019; Wasserman, 2003; Vermeulen &

Barkema, 2001; Santos & Eisenhardt, 2004; Zollo & Singh, 2004; Graebner & Eisenhardt, 2004; Belboe et al. 2021). The first decision is whether or not to build the firm with the purpose of attaining an exit by acquisition or to build the firm for other purposes. The second decision comes later in the firm's life in regards to whether the firm should enter the search for a buyer or start courting/accepting the courtship of a potential buyer. The third decision is whether or not both the buying and selling firm agrees to the final conditions of the sale and decides to exit. As shown by the model, these decisions are affected by the intentions, actions, and resources of the firm which influence the likelihood of deciding for or against the sale. Notably, the likelihood parameter was found by Belboe et al. (2021) to be split into the likelihood that the firm wants to sell and the likelihood that the sale happens, both being affected by the firm's intentions, actions, and resources. Lastly, the decision to sell leads to the economic return of the exit by acquisition. If a firm chooses not to sell, or fails to sell to a buyer, the firm either remains in the market, liquidates, or tries another exit route.

The lower part of the model shows the actions and activities of the firm that affect a potential exit by acquisition in the period leading up to the decisions according to literature (Bobelyn, 2012; Roche et al., 2020; DeTienne & Cardon, 2012; Ragozzino, 2016; Dashti & Schwartz, 2018; Sirmon, 2021; Hoehn-Weiss & Karim, 2014; Wang et al., 2021; Lee & Lee, 2015; Brav & Gompers, 1997; Ponikvar, 2018; Hellman & Puri, 2000; Belboe et al., 2021). The activities start with the intentions during the founding of the firm, which together with the initial resources (e.g. that of the founders) imprint the following activities. The resource building, signaling, and performing of the firm continues until the firm decides to sell, in which case it enters the search and courtship phase as mentioned above. The intentions, resource building, signaling, and performing activities were directly found to influence the parameters for exit by acquisition performance by Belboe et al. (2021).

Lastly, the speed to the exit is denoted as the time from founding until exit. The speed in itself has also been shown to correlate with the likelihood of exit as Pisoni & Onetti (2018) has found that a firm has the highest chance to reach an exit by acquisition within 5 years from the founding of the firm. The speed is otherwise affected by the actions and activities denoted in the model.

This model will serve as our theoretical framework for assessing impact on exit by acquisition performance. Therefore, an explanation of the literature behind each step in the model will be presented more thoroughly in this chapter.

2.1.1 Founding resources and intentions

At the founding of the firm, the performance for a future exit by acquisition has shown to be particularly affected by the human resources of the founders (Bobelyn, 2012; Roche et al., 2020; DeTienne & Cardon, 2012; Robinson & Sexton, 1994). When the founders start the firm, they naturally bring many human and social resources into their new venture, such as their previous experience, education, and network. Human and social resources are complex, unique, and hard to imitate, and as such, the founder’s resources imprint will therefore determine much of the firm's entrepreneurial competitive advantage (Haynes et al., 2015: 481) and firm performance (Crook et al., 2011). Qualified founders and experienced managers thus play a crucial role in the firm's success (Colombo & Grilli, 2005; Cooper et al., 1994).

The previous startup or managerial experience of the founder has been found to correlate positively with both exit by acquisition likelihood (Bobelyn, 2012), and founder’s intention to build for the purpose of exiting (DeTienne & Cardon, 2012). Several studies suggest that previous entrepreneurial experience increases the firm’s ability to acquire skills, knowledge, abilities, and other critical resources for success (Ucbasaran et al., 2003, p. 209). Many founders with previous experience have also had previous success, thus bringing with them financing and investor network into the new startup, increasing its growth potential (Westhead et al., 2003; Colombo & Grilli, 2005; Stam et al., 2008). Founders with large formal industry networks have also been shown to more easily find buyers, thus greatly increasing speed to exit by acquisition (DeTienne & Cardon, 2012). The degree of the founder’s education has also been shown to positively affect the founders' intention to build for exit (DeTienne & Cardon, 2012). The notion that high education level positively affects firm performance is also highly accepted in literature (Gimeno et al., 1997; Fairlie & Robb, 2007; Robinson & Sexton, 1994; Sapienza & Grimm, 1997; Bates, 1990; Cooper et al., 1994), however no studies have tied this to exit by acquisition performance. Lee and Lee (2015) show that the founder’s grit acts as an important resource towards a successful exit by acquisition, with founders who successfully exited their firm working on average 36 to 55 hours per week and founders who ended up liquidating their firms working 20 to 45 hours per week.

Whether or not the founder has an academic background has also been shown to affect exit by acquisition performance parameters, with academic founders having lower speed and likelihood of achieving exit by acquisition (Roche et al., 2020) as they often lack resources typical for high firm performance such as commercial knowledge (Colombo & Piva, 2012), network, social resources and culture-building knowledge (Roche et al., 2020), management experience (Brüderl et al., 1992, Rothaermel & Thursby, 2005), commercialization knowledge (Colombo and Piva, 2012), knowledge of regulatory functions (Roberts, 1991), and knowledge of how to acquire complimentary resources needed for innovation (Rothaermel, 2001; Teece, 1986). Academic founders are also more likely to start ventures with early-stage technologies due to their exposure to new technologies, consequently prolonging time to maturity for the firm and slowing time to acquisition (Aghion et al., 2008).

2.1.2 Intention for exit and imprints

When looking at acquisitions from the sellers' point of view, it is not just something that "happens to" the firm (Graebner & Eisenhardt, 2004), but it is often the result of deliberate business development all starting at the birth of a venture. In this chapter, we will lay the theoretical foundation of how founder intentions imprint the ventures resource building, performance, and signaling in accordance with the ZHB-model.

Intention & imprint

The founder's intentions for whether the company should be built for the purpose of an exit, or if it should be built to last has great impact on exit by acquisition performance (Wennberg & DeTienne, 2014; Collins, 2000; 2005; 2009; Keyhani et al., 2021). This is because the founder's intention at the founding will imprint what resources the venture builds, how it performs, and which of its attributes it signals (Albert & DeTienne, 2016; Simsek et al., 2015; Colombo & Piva, 2012). To support this, Wasserman (2003) has shown that founders control substantially more of the exit strategy than non-founders and managers. Further, resources are pointed out as most important in the start phase of a venture, and the imprint of these resources are seen to have a definite effect on the venture's direction (Colombo & Piva, 2012; Albert & DeTienne, 2016; Simsek et al., 2015). Different resources (human, financial and technological) impact different exit routes (Albert & DeTienne, 2016), and the initial presence of a strong resource base indicates greater ambitions of the founders as well as an intention of strategically building the venture for exit (Brush et al., 2008; Albert & DeTienne, 2016).

It's evident that when using the imprinting viewpoint, which is defined as a "perspective that suggests that the decisions made early in the life of a firm may have lasting impact on its ability to move in a strategic direction" (Albert & DeTienne, 2016), early actions imprint a venture's ability to strategically building for exit. As for how this strategy affects exit performance, DeTienne & Cardon (2012) shows from their post hoc analysis that entrepreneurs very often exit through their intended strategy for exit, showing that the strategy chosen and imprinted indeed has an impact.

It is also important to note that initial intentions are not exclusively accountable in the event of an acquisition. Founders may reconsider the initial exit strategy of ventures who are facing multiple strategic- challenges or hurdles, leading to increased interest in being acquired (Albert & DeTienne, 2016). This is further affected by the founders' personal motivation and risk aversion (Albert & DeTienne, 2016). However, when it comes to accepting attractive buyers, research has found strategic and organizational compatibility with the acquiring firm to trump founders' personal gain (Zaks et al., 2018; Albert & DeTienne, 2016), substantiating the fact that being acquired indeed is a deliberate intention of the founders. In addition, VC backing also affects the intentions for exit (Sirmon, 2021; Hoehn-Weiss & Karim, 2014; Wang et al., 2021), as they receive their economical harvest from the exit of the company they have invested in (Gompers & Lerner, 2004; Lerner & Nanda, 2020) and thus influences their investment object's intention of exit. Even so, the exit strategy is often decided before the VCs are approached, ultimately making the choice of exit strategy that of the investment object firm (DeTienne & Cardon, 2012).

2.1.3 Resource building, signaling and performing activities' effect on exit

In addition to the human and social capital of the founders mentioned earlier, several other resources and activities of a firm affect exit by acquisition performance.

Technological resources

Technological resources are resources that pertain to the technology, degree of innovation, patents, and R&D capabilities of the firm (Bobelyn, 2012).

Science-based startups have been shown to be highly attractive acquisition targets, especially by industry incumbents (Bonardo et al., 2010). Bobelyn (2012) shows that there is a strong correlation between the number of patents a startup owns and the likelihood of that firm being acquired. The presence of patents in a company's resource pool was shown to be the strongest predictor of exit by acquisition, to such an extent that other seemingly positive resources' effects were negated in relation (Bobelyn, 2012). The correlation is especially high in innovative environments where patents are a strong indicator of future firm success (Teece, 1986).

The degree of innovation has been found to positively correlate with higher financial return in exit by acquisition (Bobelyn, 2012; Keyhani et al., 2021), higher likelihood of exit by acquisition (Cefis & Marsili, 2011), as well as speed to exit by acquisition (Keyhani et al., 2021). The reason for this is proposed by Keyhani et al. (2021) to be related to the exploration-exploitation dilemma, which refers to whether a firm should focus on exploring new innovation and creation of new resources, or if the firm should exploit existing resources for firm growth (March, 1991). Generally, young firms are more explorative in nature as they have a higher risk tolerance, while large established firms are more exploitative in nature. However, small firms need stability in the long term, while large firms need innovation in order to stay competitive (Benner & Tushman, 2003). This leads to a dynamic where many large firms are actively trying to acquire smaller, more innovative firms in order to stay competitive and acquire inventions (Keyhani et al., 2021; Arora et al., 2001; Gans & Stern, 2010, Graebner et al., 2010). As such, most technology startups are primed for exit by acquisition by larger corporations (Arora et al., 2021).

Financial resources and firm performance

Financial resources such as funding, revenues, and profits also affect parameters for exit performance. Financial resources are also often synonymous with firm performance, as the profits, liquidity, and revenues of the company is what is usually measured to see how a firm performs (Delen et al., 2013).

Bobelyn (2012) found that funding and revenues exclusively correlated positively with the economic return of the exit by acquisition, while likelihood was completely unaffected. They found that acquirers do value financial resources in the valuation of the firm, they do not in themselves act as a catalyst for the exit by acquisition. The study suggests that the reason is that larger firms with more financial resources and more employees are less dependent on other firms' assets or market channels to access the market and are thus less keen to attain these resources through being acquired. In addition, Ponikvar (2018) finds that firms with inferior profitability that also do not have resulting problems with liquidity or efficiency were the most frequent acquisition targets. Keyhani et al. (2021) notes that due to this, there seems to be a trade-off between profitability and likelihood of exit by acquisition in high-technology firms. They hypothesize that this occurs as the acquirer sees that they can increase the profit margins by integrating the selling firm into their more efficient firm.

Social capital

Social capital can be defined as the relationships between individuals or organizations and can enable value creation in the firm (Adler & Kwon, 2002), thus, affecting the parameters for exit performance.

Bobelyn (2012) shows that strong social capital increases economic return when the startup is acquired due to a higher level of maturity, making them more attractive as a target for acquisition. The resources and capabilities gained from its social capital (e.g. partnerships and alliances) signals high performance as it allows the startup to compete with incumbents and helps it overcome limitations in resources and knowledge (Bobelyn, 2012; Colombo, Grilli & Piva, 2006). However, Bobelyn (2012) also shows that social capital has no significant correlation with likelihood of exit by acquisition.

Further, Dashti and Swartz (2018) showed increased likelihood of being acquired through cross-border M&A if the startup's social capital included foreign stakeholder from an early stage when compared to mainly focusing on domestic stakeholders. Especially foreign stakeholders in the form of VCs and board members increased both the economic return and the likelihood of the exit by acquisition due to them often being tied to potential buyers in similar markets abroad. This is in line with Vermeulen and Barkema (2001) who presents acquisitions as a means of entering international markets reliably, where foreign stakeholders ultimately play the role of being an executive champion (Brueller & Capron, 2021).

VC backing

Bridging the gap between financial and social resources, funding by VCs has received some attention in literature. Due to the high selectivity in VC's choice of which firms to back, in addition to VCs contributing with intangible assets such as network expansion, assistance in formulating key strategies, serving as advisors on the board of directors, contributing to sales and hiring, VC backed firms both appear more mature in the eyes of acquirers (Megginson & Weiss, 1991; Timmons & Bygrave, 1986; Gorman & Sahlman, 1989). As VCs goal is to harvest an economic return on their investments (Gompers & Lerner, 2004; Lerner & Nanda, 2020), VCs wish to increase the return, likelihood and speed of exit by IPO or acquisition for the investment object company (Sirmon, 2021; Hoehn-Weiss & Karim, 2014; Wang et al., 2021). Consequently, VC backing is shown to increase the speed of exit by acquisition (Brav & Gompers, 1997; Hellman & Puri, 2000). Bobelyn (2012) has also shown that the firm's backing VC's previous experience with acquisition exits of their investment objects greatly correlates with likelihood of exit by acquisition of the firm (also, Clarysse et al., 2013). In addition, in the case of post-IPO firms, VC-backed post-IPO firms are 1.5 times more likely to be acquired than post-IPO without VC backing (Ragozzino & Reuer, 2007).

Signaling

Startups can signal increased worth or potential through their technological, financial, and social resources (Ragozzino & Reuer, 2007; Megginson & Weiss, 1991; Bonardo et al., 2010; Connelly et al., 2011). The most common and researched type of signaling is through VC-backing. As mentioned before, VC-backing often acts as a sign of approval due to their low granting rate in terms of number of proposals they actually receive (Megginson & Weiss, 1991; Ragozzino & Reuer, 2007). Additionally, Pollock et al. (2010) show in their study of

257 software IPOs that generally being associated with prestigious actors (e.g. prestigious-executives, investors, and VC firms) increased both IPO worth and likelihood. This is in line with Pahnke et al. (2015a; b) findings within the biotech industry and Sørensen's (2007) findings of increased likelihood of exit by IPO. A point to be made in terms of "VC signaling", is the emergence of smart capital, meaning how startups are being more selective towards which VCs they choose to approach. The choice of such capital is more so based on intangible resources rather than financial (Timmons & Bygrave, 1986; Gorman & Sahlman, 1989), thus substantiating the startups' ability to affect its signaling (Belboe et al., 2021). Although research on the subject of signaling is mostly in the context of exit by IPO, the similarities in resource configurations of acquisitions (Sirmon et al., 2021) leads one to possibly expect similar results. Even so, signaling the achievement of a previous IPO has been shown by Bonardo et al. (2010) to increase likelihood of a subsequent exit by acquisition.

Summary of the effect of single resources

Table 2.1 summarizes the findings of how single resources affect the exit by acquisition performance parameters according to Belboe et al. (2021). Interestingly, this table shows that there are many holes in literature pertaining to how resources affect exit by acquisition performance parameters. All the blank fields in the table represent holes in the literature, supporting the claim of Welch et al. (2020) that the field of pre-acquisition literature pertaining to the seller side is lacking.

Table 2.1: *Single resources' effect on the exit by acquisition performance parameters. (Belboe et al., 2021)*

	Likelihood	Speed	Return
Alliance Capital			
Social resources (Bobelyn, 2012)	O		I
Foreign stakeholders (Dashti & Schwartz, 2018)	I		
VC backing (Brav & Gompers, 1997; Hellman & Puri, 2000)		I	
VCs previous experience with exit by acquisition (Clarysse et al., 2013)	I		

Human Capital			
Hiring/having experienced managers (Bobelyn, 2012)	I		O
Founder's previous managerial or startup experience (Bobelyn, 2012)	I		O
Large networks of formal industry relationships (DeTienne & Cardon, 2012)		I	
Education of founders			
Academic founders (Roche et al., 2020)	N	N	
Hard work and grit from the founders (Lee and Lee, 2015)	I		I
Business Resources			
Firm size (Pisoni & Onetti, 2018)	N		
Firm age (Pisoni & Onetti, 2018)	N		
Proprietary technology (especially patents) (Bobelyn, 2012)	I		I
Innovation (Cefis and Marsili, 2011; Bobelyn, 2012; Keyhani et al. 2021)	I	I	I
Revenues (Bobelyn, 2012)	O		I
Inferior profitability without liquidity issues (Ponikvar; 2018; Keyhani et al., 2021)	I		
Product in market	N/A	N/A	N/A
Explicit Signaling			
Signaling of prestigious affiliates (Sørensen, 2007; Pahnke et al. 2015a; b; Pollock et al., 2010)	I*		I*
Signaling of previous IPO (Bonardo et al., 2010)	I		

Legend: I = positively affects, O = no correlation, N = negatively affects, * = affects IPO

2.1.4 Resource configurations

As this chapter shows, most to all research focuses on how single resources, actions, decisions or resource types affect exit by acquisition performance. Bobelyn (2012) is the exception and tries to go broader and examine the effect of multiple resources, yet still examining a cause-effect relationship between each single resource and the exit by acquisition performance. However, neither they nor the rest of the research examines how the interdependent combination and complementarity of these resources and actions affect the exit by acquisition performance. After all, how an organization is organized to exploit its resources are of equal importance to the value of those resources (Barney, 1991) when affecting firm performance, so to expect that an isolated resource in and of itself plays a significant role in the exit by acquisition parameters goes against long withstanding entrepreneurial theory when seen through the resource based theory lens (Penrose, 1959).

Sirmon et al. (2021) attempts to address this and begin a new stream of literature by looking at how interdependent configurations/combinations of resources affect the exit by acquisition and IPO performance. Although their study is limited to the US medical device startups, their research shows that no single resource was required or repeated in all cases of exit by acquisition. They instead found six different configurations of resources that each led to increased likelihood of exit by acquisition, and four supersets of these six resource configurations that also led to higher speed to exit by acquisition. Both of these are presented in table 2.2 - adapted from Sirmon et al. (2021) in Belboe et al. (2021). They conclude that the complementing effect of certain resources, or the lack thereof, better explain the realities of exit by acquisition performance.

Table 2.2: *Resource configurations' effect on the exit by acquisition performance parameters (Sirmon et al., 2021; Belboe et al., 2021)*

	Likelihood	Speed	Return
**Has patents, not received funding, no product in market	I		
**Member of cluster, ties to VC, has patents	I		
**No patents, heavy early funding, ties to VC	I		
**No VC ties, no startup experience, member of cluster	I		
**Has products in market, VC ties, strong financial capital, prior startup experience	I		
**Has products in market, member of cluster, ties to VC	I		

**Has products in market, member of cluster, ties to VC, prior startup experience, strong financial capital	I	I	
**Prior startup experience, has patents, member of cluster, ties to VC, low funding	I	I	
**Strong financial capital, some prior startup experience, no patents	I	I	
**Has patents, has product in market, backed by VC, not member of cluster	I	I	

Legend: I = positively affects, O = no correlation, N = negatively affects, * = affects IPO, ** = startup is in the US medical device industry.

Notably, not all resources were of equal importance in the findings of Sirmon et al. (2021). Especially VC ties were not considered core resources necessary for the exit, but still had some effect. In addition, cluster membership was not a core resource in any of the speedy exits. Cluster membership can be seen as social resources, while VC backing can be seen as funding according to Sirmon et al. (2021). Lastly, no research was done on how the resource configurations affected economic return of the exit by acquisition.

2.1.5 Search and courtship

Search and courtship (Graebner & Eisenhardt, 2004) is a mutual process of an acquisition involving both the seller and buyer side - in the search for a good match. According to Shankar et al. (2022), the search and courtship phase can be separated into three sequential phases: 1) identifying strategic fit, 2) gaining synergy confidence, and 3) structuring the deal. The following is a closer examination of the theoretical foundations of these three phases:

1. **Strategic fit.** While identifying the strategic fit, the seller usually searches for capabilities and resources that are complementary to help scale the firm while the buyer searches for resources and competencies that will help them overcome competition. According to Shankar et al. (2022), this is also the phase where the search happens, with the selling firm assessing multiple potential buyers through their networks and thus also initiating the process of exit by acquisition. Typically, this process is initiated by the founder of the firm (Wasserman, 2003). Complementarity with the acquiring firm is a crucial part of the search process and deciding whom to

sell to (Collins, 2000; 2005; 2009). Surprisingly, this is seen in both built-to-flip firms (building for exit) and young firms looking to expand their reach through exit by acquisition (Collins, 2000; 2005; 2009). In fact, research has shown that leaders of the firm looking to be acquired often refuse offers due to low degree of synergies, even though a high motivation to sell is present (Graebner & Eisenhardt, 2004; Albert & DeTienne, 2016; Zaks et al., 2018), and thus it may in some cases be at the expense of economic return (Graebner & Eisenhardt, 2004). On the buyer's side, complementarity is of equal, if not greater, importance (Ranft & Lord, 2002; Graebner & Eisenhardt, 2004; Ahuja & Katila, 2001) - making the buying firm often overpay due to the combined potential (Graebner & Eisenhardt, 2004) and the resulting potential competitive edge after the acquisition (Shankar, 2022).

2. **Synergy confidence**. In the phase of gaining synergy confidence, the seller and buyer attempts to gain confidence and trust in each other's capabilities and intentions (Graebner, 2009; Shankar, 2022). According to Shankar et al. (2022), the selling firm assesses the buyer's intentions for the post-acquisition treatment of the bought firm through opinions from their network and their own previous experience with the buyer. The buying firm assesses the quality of the human knowledge assets of the selling firm, as well as assessing whether key human knowledge assets intended to continue in the firm after the acquisition. For the seller's side, Brueller and Capron (2021) suggest the "3Cs" as a strategy for technology startups to gain the buyer's confidence and exit through the acquisition: *Complementarity*, *Customer endorsement*, and *executive Champions.* First, given the defensive nature of technology incumbents, fulfilling the factor of complementarity makes the startup present itself as an opportunity, rather than a threat (Adegbesan, 2009). Then, by achieving endorsement from an incumbent's key customers, it signals a sign of approval to the potential buyer. Lastly, convincing "executive champions" (Barrow, 1990), or sponsors (Watson et al., 1996) that pose as executive roles within the incumbent firm who can vouch for the quality of the selling firm helps in creating synergy confidence within the buyer.

3. **Deal structuring**. To finalize the acquisition process, the seller and buyer need to find mutual agreement to the price and terms of the acquisition in the deal structuring phase. In this phase, negotiations, valuation and payment planning occurs (Welch et

al., 2020). According to Shankar et al. (2022), the buyer wants to seek a low price, while the seller wants to seek a high price. Furthermore, the buyer wants terms that secure the knowledge assets of the acquired firm, while the seller wants the terms to secure the interests of future operations and stakeholders. In addition, both side's sense of urgency affects the structuring of the deal. The selling firm decides on deal terms based on their sense of urgency in acquiring the financial assets from the sale, as well as whether or not they would be able to access these funds from other sources. The buyer, however, structures the deal based on the perceived urgency in acquiring the knowledge assets before competitors and to save development or search time. These hurdles are often formally overcome in contractual arrangements for the acquisition to happen (Shankar et al., 2022; Cain et al., 2011).

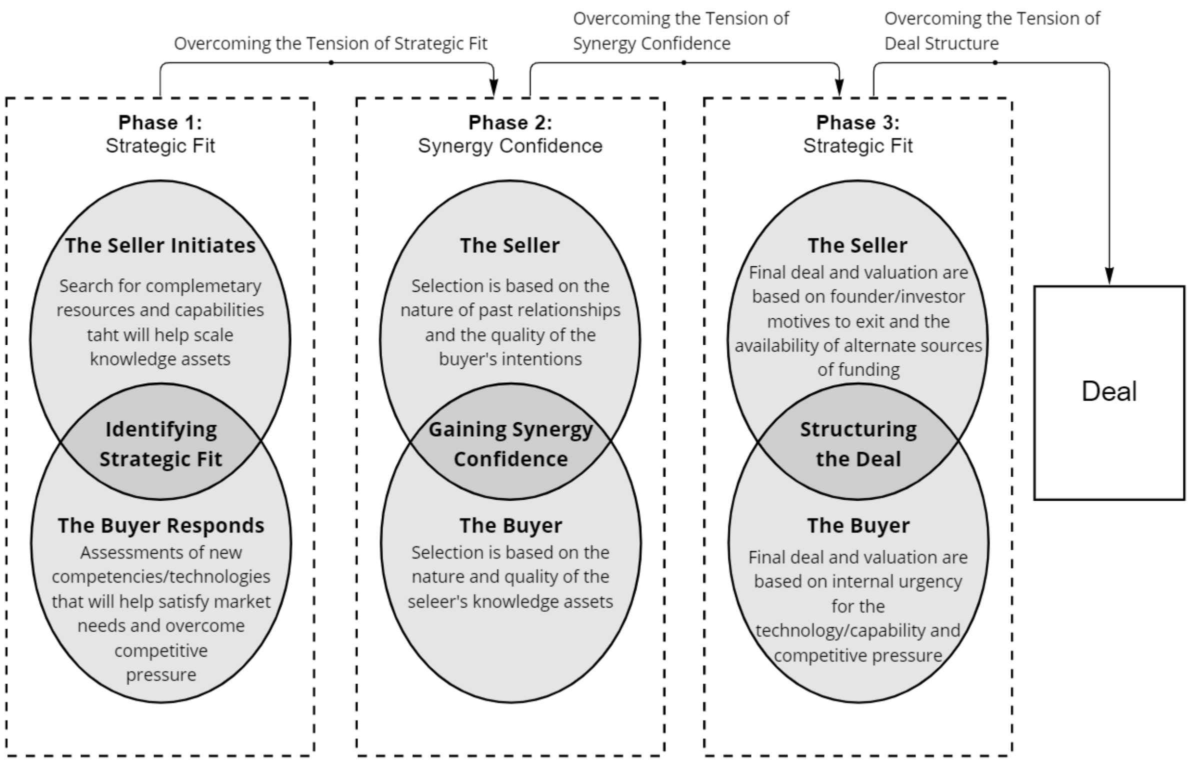

Figure 2.2: *Three-phase model of the pre-acquisition process outlined in Shankar et al. (2022)*

When looking at acquisitions as a result of the process of search and courtship, it clearly becomes more of an exchange between buyers and sellers, rather than a takeover or purely an economic transaction (Graebner & Eisenhardt, 2004). The process is strongly shaped by long-term complementarity, as well as price, and shows that sellers are influential and active participants when deciding to initiate said courtship - having the final decision of whom to sell to (Graebner & Eisenhardt, 2004). As seen, the results of this process and the courtship activity itself are greatly affected by factors based on signaling, performing, resource building, and intention setting activities (e.g., DeTienne & Cardon, 2012; Ragozzino, 2016; Dashti & Schwartz, 2018; Sirmon, 2021; Hoehn-Weiss & Karim, 2014; Wang et al., 2021) addressed earlier in chapter 2.

2.2 Summary

This chapter has outlined the ZHB model as the theoretical foundation for our thesis. The chapter also provided an overview of the literature review that has been used to build the ZHB model as well as highlighting the gaps in the literature.

Three main areas are described in the literature of the ZHB model:

1. The decision process leading from the initial intentions of the founders and how this imprint the firm and affects the exit by acquisition.
2. The effect of different processes, activities, and resources on the exit by acquisition performance parameters seen both through the view of single resources correlation and effect on the parameters, as well as the view of examining the effect of interdependent resource configurations on the parameters.
3. An elaboration of the search and courtship process leading up to the exit by acquisition.

The ZHB model will be used as a template to structure our findings in chapter 4, and we discuss the literature against the findings in our discussion in chapter 5. In addition, several gaps were found in the literature, which will be addressed in our call for further research in chapter 6.

3 Method

In this upcoming chapter, we will describe to the reader the precise steps conducted to address the research questions of this thesis. Firstly, we start off by taking the reader through our research approach and research design. This is then followed by a section that explains how and why the cases in question were selected. In section 3.4, *data collection*, we describe how we collected the qualitative data through individual semi-structured interviews with the firm representatives, as well as quantitative data through our theoretical construct. We then describe the actual analysis of the data collected through within-case analysis and cross-case analysis in section 3.5. Finally, we elaborate on the method's shortcomings as well as a summary of the chapter.

3.1 Research approach

This thesis presents four qualitative case studies where data have been gathered from semi-structured interviews of representatives from four different case firms. According to Zainal (2007), a case study allows you to "explore and investigate contemporary real-life phenomenon through contextual analysis of a limited number of events or conditions and their relationships" (p. 2), and using multiple cases typically yields more robust, generalizable and testable theory than single-case studies (Eisenhardt & Graebner, 2007). Furthermore, case studies are deemed suitable as it helps answer the "how" and "why" types of questions (Yin, 2013). Thus, we deemed the choice of conducting a multiple-case study appropriate, considering our desire to understand *how* sustainability-centered firms prepare for and execute an exit by acquisition. The selection of the four case firms is according to the aims of the research, which is also known as purposeful sampling (Schatzman & Strauss, 1973). In the following sections, we will go further into the method and process of selecting cases.

3.2 Research design

Establishing a research focus is a crucial part of the research process, as lack of such focus will hinder the researcher from extracting meaning from the data they collect (Brinkman & Kvale, 2015). This focus is defined through our research questions (hereby referred to as

RQ); which have been adjusted along the way, similar to how Eisenhardt and Graebner (2007) points out that initial RQs often are tentative and that the researcher(s) should be prepared to make adjustments. Initially, when making the RQs and laying the theoretical foundation, we discussed how broad the scope of our focus should be. Given the number of research gaps uncovered in our literature review (Belboe et al., 2021), we concluded that taking on all of them would blur our focus. Accordingly, a "trade-off" was seen necessary to keep focus which is supported by Mintzberg (1979) who said that "no matter how small our sample or what our interest, we have always tried to go into organizations with a well-defined focus - to collect specific kinds of data systematically" (p. 4). Having this in mind, the development of our RQs was an iterative process where we have altered one of the two.

By conducting our literature review, we synthesized a model picturing the process of firm acquisition seen from the seller's side - taking on everything from the founding of a firm, through the courtship process, towards the sale itself. Having made a theoretically "correct" picture of the process, it was evident to us that we needed to compare it to how the case firms actually experienced the process. Thus, leading us to our first RQ: (1) **How does the temporal process of exit by acquisition as described by the ZHB-model compare to empirical evidence from actual firms' path to exit?** For our second RQ, we wanted to understand how founder intentions in terms of exit imprinted the resource configuration and actions in the firm through the question: (2) *How do founder intentions affect the theoretical firm metrics?* Firstly, RQ (1) was deemed satisfactory and gave great context when conducting the interviews. Secondly, in terms of RQ (2), our first interview object pointed out a flaw in the question, namely that all firms are started with some sort of intention to exit (except in the case of family businesses). So rather than putting our focus heavily on the intention of the founder, we modified the RQ to focus on the theoretical firm metrics in itself and to then cross-check our findings with both the theoretical foundation and cross-case analysis in order to identify any differences due to clear founder intentions. Thus, our second RQ was formed: (2) **How does the theoretical firm metrics' importance towards exit by acquisition performance as described by the ZHB-model compare to empirical findings from exited firms?**

Having defined the RQs, we also made the decision to identify a theoretical construct that would help us structure the information gathering and were especially relevant in terms of

RQ 2. This construct was based on resource-based theory, acquisitions, and signaling and can be seen in Appendix C.

3.3 Selecting cases

As mentioned before, we applied purposeful sampling as part of our method (Schatzman & Strauss, 1973). As Patton (1990) said, "The purpose of purposeful sampling is to select information-rich cases whose study will illuminate the questions under study" (p. 169). Having our purpose and context set on exploring the process of sustainable firms being acquired from the sellers' point of view, a set of criteria for the selection of case firms were constructed; in order to choose cases that could contribute purposeful information (Malterud, 2003). By doing so, it controls extraneous variation and makes it easier to identify the limits for generalizing the findings (Eisenhardt & Graebner, 2007). The criteria are presented below:

- The firm representative must be the founder or equally involved person.
- The firm is based in Norway.
- The firm must be able to be defined as sustainable in line with the new EU taxonomy, by contributing significantly towards at least one of the following:

    (Obj.1) Restriction of climate change
    (Obj.2) Adaptation to climate change
    (Obj.3) Sustainable use and protection of water and marine resources
    (Obj.4) Conversion towards circular economy
    (Obj.5) Prevention and limitation of pollution
    (Obj.6) Protection and recovery of biological diversity and ecosystems

- The firms should be diversified in terms of clear initial intentions of building for exit, and in terms of founding resources.

Firstly, one requirement was for the acquisition to already have taken place as this would allow us to capture the holistic essence of the process. There is also an assumption that viewing the process in retrospect would enable our subjects to take a more objective standpoint, increasing the quality of the data accordingly. Yet, when viewing the process in retrospect, there is also the chance of this leading to a more glorified picture of the reality (Jacobsen, 2016). Secondly, we required that the firm representative had to be a founder or equally involved person. This was an important criterion, allowing us to answer RQ1 and identify potential diversions on how the case firm's resources were imprinted by e.g. initial founder intentions. Further, we also limited the population to Norwegian firms due to great variation in business cultures across geographical locations, in line with the context of the study. The last two criteria were set to keep true to the context of the study as well as purposely diversifying the selection of cases.

Based on our selection criteria, we set out to choose case firm's through our professional network and by screening the company-insight web page, Crunchbase, for acquisitions of Norwegian sustainable firms in the last five years. For one of the cases, we had sufficient information regarding their intentions, resources, and development before selecting the firm. However, we lacked sufficient information in the other cases and therefore had to both call and read up on them before making our decision. Presented in Table 3.1 below are the four chosen cases, along with a short description and rationale for choosing them.

Table 3.1: *Cases and rationale*

Firm A ***Description:*** Firm A was a Norwegian startup company within the electric grid industry ***Rationale:*** Firm A was chosen based on the combination of: (1) relatively inexperienced founders, (2) time to acquisition was low and (3) the firm did not have a clear intention of building for exit. ***Contributing to objective(s):*** (Obj.2), (Obj.5)
Firm B ***Description*:** Firm B was a Norwegian international power investment company. ***Rationale*:** Firm B was chosen based on the combination of: (1) the size of the firm and acquisition, (2) their initial access to resources and (3) the firm did have a clear intention of building for exit. ***Contributing to objective(s):*** (Obj.1), (Obj.3)
Firm C ***Description*:** Firm C was a research-intensive hardware company. ***Rationale*:** Firm C was chosen based on the combination of: (1) emphasizing R&D heavily as a core activity, (2) seemingly frequent and clear signaling and (3) the firm did have a clear intention of building for exit. ***Contributing to objective(s):*** (Obj. 1), (Obj.5)

Firm D
Description: Firm D is a hardware company within the hydrogen industry. ***Rationale***: Firm D was chosen based on the combination of: (1) seemingly unorthodox path to exit by acquisition, (2) interesting IP structure and (3) the firm did not have a clear intention of building for exit. ***Contributing to objective(s):*** (Obj.1), (Obj.5)

3.4 Data collection

In social sciences methodologies, the two approaches used when collecting data are quantitative and qualitative (Johannessen et al., 2008). When conducting a qualitative approach, data is collected by participant observation and interviews, i.e., information that is not numerical. By contrast, a quantitative approach gathers data in numerical form where the raw data often is utilized to create graphs and tables. Due to the descriptive nature of qualitative data, it is considered more difficult to analyze (McLeod, 2017), and a combination of the two approaches could serve the method beneficially due to shortcomings of limiting the method to a single approach (Jick, 1979). Therefore, for the purposes of this case-study, we chose a mix of qualitative and quantitative approaches.

Our main focus during the research was to gather qualitative data through individual in-depth interviews, as this allowed us "to more closely capture individuals' own subjective experiences and interpretations" (Graebner et al., 2012, p. 278). Additionally, a qualitative approach can be used when trying to bring an abstract idea or a model to life, which in our case was directly linked to RQ1 and the ZHB-model (Graebner et al., 2012). Furthermore, we sent out our theoretical construct to the case representatives after the interviews were conducted with the instruction to score 0 - 10 points on the different types of firm metrics. By doing so we were able to collect quantitative data without influencing the in-depth interviews, which increased the quality of the interviews in terms of personal reflection and spontaneous answers (Brinkman & Kvale, 2015). These steps let us capture both the initial response as well as a more thoughtful response where clearer options were available.

3.4.1 Interviews and documentation

Our main source of data came from semi-structured interviews conducted individually with the case representatives. We chose this for a number of reasons: (1) we were several interviewers, (2) the case representatives were only going to be interviewed once, and (3) it opened up for follow-up questions (Cohen & Crabtree, 2006). By choosing semi-structured interviews, we created an interview guide that could facilitate a broader understanding of the RQs and also make it easier to capture the individuals' unique experiences and interpretations (Graebner et al., 2012). This being our main source of information, it was important that the process was well planned before the interviews took place (Yin, 2013). This planning consisted of making an interview guide and delegating different roles between the researchers.

First off, we made the interview guide based on what we wanted to explore through our two RQs. As mentioned in section 1.2, *Purpose,* we have prior to this thesis, conducted an extensive literature review which resulted in the ZHB-model (Belboe et al., 2021). As this was the basis of our study, the process of developing the interview guide naturally started by looking into the ZHB-model and its underlying theory - similar to the development of our RQs. By doing so, we defined our initial interview construct, then to be tested on a firm within the researchers' own professional network. This led to slight iterations in terms of adjusting the openness of some of the questions, which increased the interviewer's ability to glide between the two main sections of the guide, ensuring natural flow of the conversation by having greater freedom to chase certain threads of thought.

Accordingly, the guide was roughly split into three sections. For the first section, the firm representative was asked to address basic questions such as their background and their role in the company, along with a brief explanation of the firm and in what way they are defined as sustainable. The two following sections went in-depth in the actual path of the firm where the representative was asked about initial intentions, search and courtship, and different reasons and considerations made over time in connection to the acquisition process, before going in-depth on the firm's resources and actions and their importance. Having the interview guide consist of both open and closed questions, it facilitated for personal reflections (Flick, 2015) as well as keeping in line with the theoretical construct.

The researchers had definite roles when conducting the interviews. One of the researchers took the lead role and facilitated the interviews and directed the conversation through our interview guide, while the second role had the responsibility of noting things that seemed to be of significance for the thesis, e.g., specific incidents and statements (Jacobsen, 2016). The third role we delegated was the role of asking follow-up questions across the entirety of the interview guide. By having different roles, we enabled the lead interviewer to get a perspective of personal interaction with the firm representative, whereas the role of noting specifics and asking follow-up questions retained a more distant view (Eisenhardt, 1989).

The structure itself was based on Tjora's (2017) three phases; warm-up, reflection, and wrap-up. The warm-up phase consisted of introducing the firm representatives to the thesis and thematics of the interview, as well as going into the first section of the interview guide - making the firm representative comfortable and reflective on past events (Tjora, 2017). Leading into the reflection phase, we went through the two remaining sections of the interview guide, exploring our RQs. Lastly, the wrap-up phase consisted of summary questions allowing the firm representative to add additional views, followed by a request to fill out our theoretical constructs.

Due to geographical distance and varying national recommendations and restrictions (due to COVID-19) during the time of writing this thesis, all interviews were conducted digitally. We acknowledge that this may have led to a lesser degree of personal contact, similar to how Saunders and Lewis (2012) state that qualitative data acquisition should be conducted in person as it is important to establish personal contact. However, after two years of digital communication being the norm, the negative consequences of this are seen less significant than it would have usually been (pre-COVID-19).

Although we dedicated a role taking notes throughout the interviews, we also recorded each one through the built-in recorder in Microsoft Teams, as encouraged by Widding (2006). By doing so, the note-taker was able to capture moments of significance while also following the conversation. The recorded data was then transcribed and organized in case-specific folders.

3.5 Analysis of data

Analyzing the data is the most difficult part of the research process (Eisenhardt & Graebner, 2007). Having collected the raw data, we wanted to retrieve the data which would be of value to us. The aim of our thesis was to observe a number of instances in order to indicate the legitimacy of the ZHB-model at a general level. We chose an inductive analysis approach (Brinkman & Kvale, 2015), in order to analyze similarities within and between cases to build concepts or ideas. Accordingly, both our within-case analysis and cross-case analysis will be described in the following sections.

Additionally, we take extensive steps to anonymize the data below due to the sensitive nature of the details discussed in each interview. Specifically, we anonymize names, dates, specific places, and acquisition sums. For names, we made the decision to avoid naming all involved parties, regardless of our interviewee's request as naming some participants might reveal the identities of the people they talked about (Clark, 2006). In order to avoid cultural associations (and thus risking privacy), we also took the choice to avoid pseudonyms and instead use labels such as Firm A, Interviewee A, and Acquirer A (Moore, 2012: 332). In regard to acquisition sums, we purposefully categorized our data in three logarithmic increments; EUR 1-5 million, EUR 20-50 million, and over EUR 1 billion. Acquisition dates are also removed.

3.5.1 Within-case analysis

The goal of a within-case analysis is to derive meaning from the collected data and provide the researchers with new insights and perspectives (Brinkman & Kvale, 2015). Further, Brinkman and Kvale (2015) state that categorization and coding are frequently used to describe the same actions, but we will separate them.

At the start of our analysis, we read the transcripts and approximately categorized relevant parts according to their relevant RQ. While it may not have been critical, having this rough categorization allowed us to delegate the material easily and associated tasks between us - which improved the research structure by allowing three researchers to not always work on the same schedule to ensure progress. Having categorized the transcripts, we started the process of coding. Based on the ZHB-model and its underlying theory described in chapter 2, *Theoretical foundation,* we developed the codes beforehand - also known as concept-driven coding (Brinkman & Kvale, 2015). To exemplify, we made three different codes for the different "actions affecting parameters for exit performance" (Belboe et al., 2021): *signaling, performing, and resource building* (as seen in Figure 2.1). Although the majority of data fell under our already predefined codes, the nature of semi-structured interviews makes some of the data unable to be put within said codes. We applied data-driven coding in such cases (Brinkman & Kvale, 2015), meaning we developed additional codes by reading the transcripts. Having coded all of the four interviews, we reviewed the material to see if we were able to combine the codes that seemed too narrow or break up the codes that seemed too large. As a result of this, some of the codes were combined, and some were broken up into smaller codes.

Using the coded transcripts, we then generated insight through write-ups (Eisenhardt, 1989), structuring the within-case analysis of each case into four parts: (1) general description, (2) acquisition process, (3) firm X's ZHB process, and (4) resource overview. Part (1) and (2) were straightforward write-ups, while part (3) consisted of putting this information into the framework of the ZHB-model. In part (4), we present the results from the research participants' answers to the theoretical construct as part of the analysis.

3.5.2 Cross-case analysis

In order to say something general, an important step in the research process is to conduct a cross-case analysis (Widding, 2006) to, e.g., find patterns and/or similarities by examining across cases. Having completed our within-case analysis, we moved on to compare the data from the four case firms. By looking at differences, similarities, and patterns across the cases, we took the data to a higher level of abstraction (Widding, 2006), and the structure of the analysis was according to our RQs.

We started out by looking at how the actual process of exit by acquisition of the case firm compared to the ZHB-model. Comparing the firms' ZHB process from part (3) of the within-case analysis, we were able to identify three recurring stages of their respective acquisition processes: (1) initial resource acquisition, (2) search and courtship, and (3) deal brokering. This neither confirmed nor contradicted our preunderstanding of the process and allowed us to create a common event model emphasizing all four of the case firms. Having created this common event model, we were able to further compare the case firms based on initial founder intentions - in line with the intention of our selection criteria and purposeful sampling. Thus, resulting in two new iterations of the ZHB-model.

Following this, we went in-depth on the firm metrics' of the case firms in order to indicate their significance towards acquisition performance (likelihood, economic return, and speed). We compared the results of the theoretical constructs, calculating the variance between the resources held by the firms using Microsoft Excel and the "VAR.S" formula. We set the threshold for stating that all firms have a similar amount of the resource to a variance of 3 and below. Reviewing this, we found 11 different firm metrics affecting different performance parameters.

3.6 Limitations and trustworthiness of the study

In this section, we seek to evaluate the quality of the thesis. We do this by reflecting on internal and external limitations, the quality of the study, and the research process - in order to consider the trustworthiness, reliability, and construct validity of the research (Lincoln & Guba, 1985; Yin, 2013).

3.6.1 Limitations of the information collection

"Interview bias is likely to occur as a result of some motivation on the part of the respondent or interviewer (or both) to falsify a response" (Williams Jr, 1964, p. 339). The researchers during the time of this thesis are all building- and running their own firms. Whether intentional or unintentional, we acknowledge a presence of personal motivation for finding a "recipe" on how to build firms towards a successful acquisition, which may have led to an instance of interview bias. As such, there is a need for us to separate our preunderstanding on acquisitions as a seller side process and the actual facts emerging from the collected data - in order to avoid negative impact on the research validity- and reliability. However, the use of semi-structured interviews consisting partly of open-ended questions leads to the results being less prone to biased information due to personal reflection from the firm representative (Larsen, 2017).

As mentioned above, the respondents might also have a motivation to alter their responses throughout an interview (Williams Jr, 1964). To avoid this, we clearly stated in the warmup phase of each interview that we wanted an open and honest conversation. Additional measures were taken according to Qu and Dumay (2011) and Schensul et al (1999), by avoiding: (1) interruption, (2) rushing through the respondents' sentences, and (3) prematurely terminating a narrative; while simultaneously (1) maintaining a positive relationship with the respondent and (2) clarifying terms and questions that the respondent does not understand. By doing so, we built a sense of trust with the respondents leading them to be more open to sharing sensitive information (Hæreid & Indregård, 2015).

Given the challenging nature of generalizing case studies (Yin, 2013), we have created an interview guide, a theoretical construct, and described the structure of data acquisition, which guided the interviews and gave a replicable foundation for others to follow. Having all three of the researchers present at all of the interviews, we made sure the routine was replicated each time. The interview guide, a modeling of the research process, and the theoretical construct is to be found in Appendix A, B, and C.

3.6.2 Quality of the study

The grand goal of every author is to write a paper that readers (and reviewers) find convincing (Siggelkow, 2007). When using the approach of case studies, such as this thesis, the process of achieving this goal often feels like an uphill battle due to e.g. accusations of the case sampling being too small (Siggelkow, 2007; Eisenhardt & Graebner, 2007). By using purposeful sampling we chose four sustainable Norwegian case firms we deemed information rich in terms of the aims for this thesis. Although our sample may not be the biggest, these four cases are pioneers in terms of being some of the few sustainability-centered Norwegian firms that have actually gone through an acquisition. Therefore, due to the scarcity of such firms, we argue that the sample is representative. Also, by using a multiple-case design we enabled triangulation of the acquired data - thus increasing the credibility (Bryman, 2016)

Since we had a preunderstanding of the phenomena studied, we used an inductive analysis approach in search of generalizing the findings (Brinkman & Kvale, 2015). A limitation of having as few cases as in this thesis is the possibility of the findings being unique to that case (Widding, 2006), ergo limits the possibility of generalization. Although we personally have not experienced the process of being acquired, we have all been building our own firms with the possibility of a potential future exit in the back of our heads for the last 1,5 years and are familiar with several steps of the ZHB-model through building firms that are primed to perform. In combination with being part of an extensive entrepreneurial ecosystem where alumni both teach and speak of the exit process (through the venture-creation-programme currently attending), we believe that our knowledge of the topic makes us able to understand what parts of the findings can be generalized - and what parts that should not be. Furthermore, we limit our findings to apply only to sustainable Norwegian firms.

As stated in section 1.2, *Purpose,* the theoretical foundation on which the study is based, almost exclusively came from a previously conducted literature review by the researchers. To make sure we positioned this thesis at the far end of the research front, we did an additional literature search within the same scope of the literature review. By doing so, we found two additional articles which would come to be central points of the later discussion. These were:

- Shankar et al (2022). *Overcoming Buyer-Seller Tensions in the Pre-Acquisition Process*;
- and Welch et al (2020). *The pre-deal phase of mergers and acquisitions*: *A review and research agenda*

Shankar et al (2022) was published in the end of May of 2022, making it unavailable at the time of conducting the literature review. From this article we snowball sampled Welch et al (2020), which most likely was overseen due to certain limitations in the follow-up database search of the literature review. Furthermore, from these two articles, we snowballed an additional four articles strengthening our theoretical foundation:

- Clarysse et al (2013). *Learning from own and others' previous experience: the contribution of the venture capital firm to the likelihood of a portfolio company's trade sale,*
- Delen et al (2013). *Measuring firm performance using financial ratios: A decision tree approach,*
- Mathisen and Rasmussen (2019). *The development, growth, and performance of university spin-offs: A critical review,*
- and Haspeslagh and Jemison (1991). *Making acquisitions work.*

By doing the additional literature search, we further increased the quality of the study by making sure all relevant literature was covered in the theoretical foundation of this thesis.

3.6.3 Reflections on the research process

Although we followed Tjora's (2017) structure and went through a warm-up phase in each of the interviews introducing the firm representatives to the thesis and thematics, we experienced that some of the data acquired is outside the scope of the study. As exit as a whole is a relatively loose term, in contrast to the ZHB-model which has very defined steps, we acknowledge that the research could have benefited from giving the respondents access to the ZHB-model in advance of the interviews, yielding more information-rich interviews and reflections regarding the model itself.

Being founders of our own firms and students enrolled at NTNU School of Entrepreneurship, we are well involved and experienced within the sphere of entrepreneurship. It's evident that this being the background of the researchers, our opinion around the problem statement has been influenced by previous experience and knowledge. Thus, it was even more so important to avoid creating a "biased viewpoint effect" - negatively influencing the quality of the study (Ringdal, 2013). As mentioned before, we clearly instructed the firm representatives to give open and honest answers. Additionally, in order to avoid this "biased viewpoint effect", we had to be especially careful not to neglect but rather be mindfully open to findings that would contradict our preunderstanding of the phenomenon. We deem this measure to be successful as several of the findings contradicted our initial thoughts on expected results, and we would also argue that the underlying motivation of finding a "recipe" on how firms get successfully acquired allowed us to be even more open - arguably increasing the quality of the study.

3.7 Summary of the method and work process

To summarize, this thesis is a multiple-case study of four sustainable Norwegian firms - exited through acquisition. The cases were chosen using purposeful sampling according to the aims of the thesis, and the data is acquired mainly through qualitative in-depth interviews, along with quantitative data from a theoretical construct. The data was analyzed inductively, using within-case analysis and cross-case analysis. Prior to writing this thesis, the researchers conducted a literature review during the autumn of 2021 with the aim of creating a theoretical framework for acquisitions seen from the sellers' perspective - namely the ZHB-model. This literature review laid the theoretical foundation for this master thesis through chapter 2, and an overview of the research process is to be found in appendix B.

4 Findings and analysis

In this chapter, we will present the key findings from the information gathered in our semi-structured case interviews. We will first conduct a within-case analysis, where we present relevant events, decisions, and historical data, as well as an overview of all theoretically important resources found in the literature review by Belboe et al. (2021) for each of the four cases. Following this, we perform a cross-case analysis where findings we deem relevant to our RQs are presented, and similarities between them are drawn in preparation for chapter 5, *Discussion*.

4.1 Findings and within-case analysis

4.1.1 Case A - Acquisition of Firm A by Acquirer A

Firm A was a startup company within the electric grid industry. Their primary product was going to be a piece of optimization software for grid companies. Three years after founding, 100% of the stock was bought by Acquirer A, a hardware company within the same industry. Firm A was started as a spinout company from a university venture creation program, where all three founders initially met and started work on the company.

We interviewed Founder A, co-founder, and ex-CEO at Firm A on April 6th, 2022. A short description of relevant information on the acquisition is given in Table 4.1.

Table 4.1: *Firm A case information*

Acquisition sum	EUR 1-5 million
Acquisition speed	3 years
Interviewee	Co-founder and CEO of Firm A (Founder A)
Interview date	06.04.2022
Other involved parties:	Acquirer A, Investor A1, Party A1.

Acquisition process

One year after founding, Firm A was looking for private equity to finance their development strategy and speed up development. One pre-seed investor the team had contacted was Investor A1, a technology-based accelerator based in Norway. Through this, Founder A was introduced to Party A1 of Acquirer A through Investor A1 due to their business case proximity.

Acquirer A initiated the acquisition discussions, to the surprise of the Firm A team. Founder A was the primary contact with Acquirer A for most of this discussion process, eventually traveling to continue talks in person. The rest of the founding team kept working on the product and market during this time, not wanting to risk diverting focus from their resource building prematurely.

> "*We had the next few years planned. We planned on getting VC, planned on getting soft funding, and planned out our development strategy. But when [the acquisition] opportunity came, we just had to jump on.*"
>
> - Founder A, Co-founder and CEO of Firm A

The decision for Acquirer A to acquire Firm A was made shortly after initial contact between the companies and is described by Founder A as a mostly straightforward and "nondramatic" process. However, the initial reaction of the rest of the Firm A team was partly skeptical to this sudden discussion of being acquired, going against the imprinting the team had done during founding. This was mediated by having Acquirer A's executives travel to meet the rest of the team and present their business case.

Firm A's ZHB process

Firm A had three distinct phases in their acquisition process. During its initial resource acquisition phase, the team built up their resources, team, and social capital without the explicit intent to sell. The team heavily signaled, however, and promoted both prestigious affiliates and the progress of the team outward.

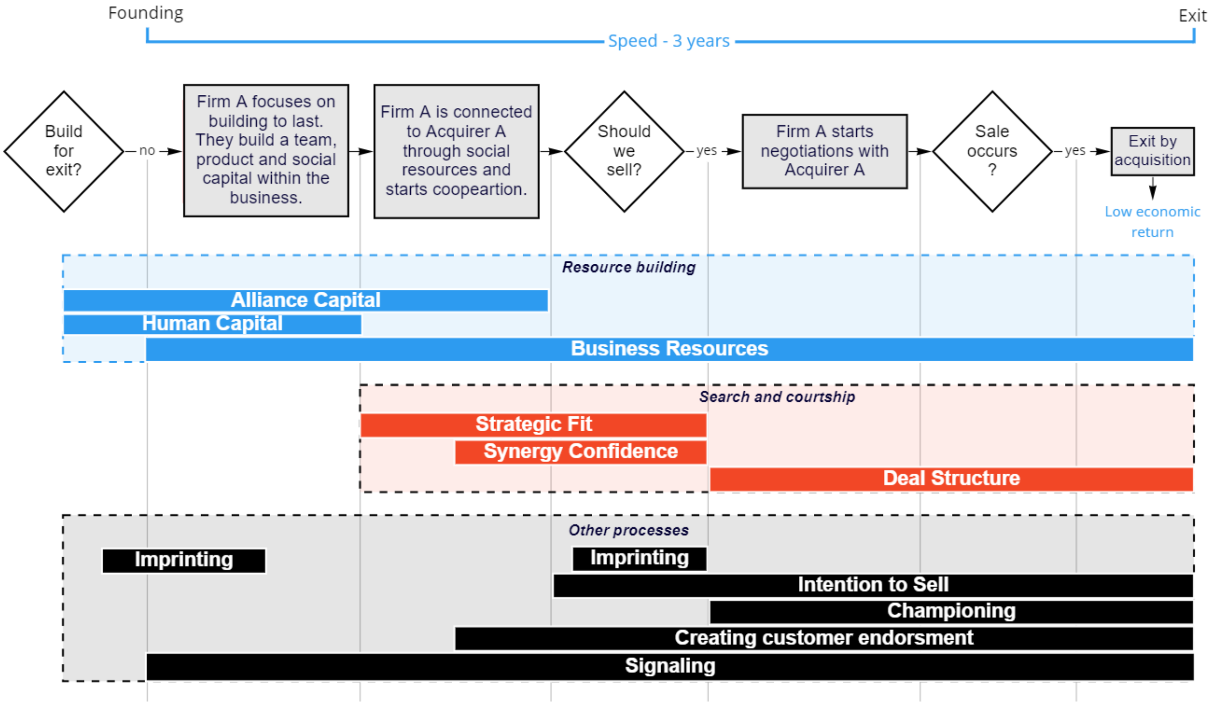

Figure 4.1: *Firm A ZHB process*

The team's introduction to Acquirer A happened through a social resource they acquired under their initial alliance capital acquisition phase. The two companies started analyzing each other's strategic fit due to the proximity of their business cases, Acquirer A presented Firm A with the thought of a possible acquisition. The firm eventually took a consultancy project on behalf of Acquirer A - something which ended up being the catalysator for a new imprinting phase for the founders, and a synergy confidence phase. Here, Firm A started performing through a short-term contract with Acquirer A while simultaneously developing their unique product. The team started a new imprinting process at this point, reconsidering their long-term strategy. The founding team was interested in learning more about the possible strategic fit between the two firms, and built up rapport with them during this process.

The positive effects of joining a larger team, getting access to more resources, and focusing on product development was appealing for the founders of Firm A, and they decided to proceed with the acquisition talks, eventually starting a period of negotiations with Acquirer A in which both sides worked with gaining each others' confidence and finding a possible structure for an acquisition event. At this point, Firm A had acquired corporate champions within Acquirer A, which fronted the team's technical prowess and helped the deal talks. All of these factors lead to a very straightforward and relatively quick acquisition process for both parties, in which Firm A was acquired in under half a year of discussions.

Resource overview

Firm A's resource acquisition strategy was primarily based on acquiring human capital, developing their business strategy, and getting a product to market. Firm A also both explicitly signaled their prestigious affiliates, and implicitly signaled to their eventual acquirer through externally visible hard work and resulting product and customer interest.

"*Our biggest achievement was managing to build a good team, which in a way was the most important part of the acquisition on Acquirer A's part*."

- Founder A, co-founder and ex-CEO of Firm A

The team composition seemed to play a large part in the acquisition discussions with Acquirer A, with all of the acquired team continuing onto positions at Acquirer A, post-acquisition. This is possibly in part due to the high level of knowledge resources the team had access to. The acquisition also gave Acquirer A control over Firm A's MVP algorithms and initial prototypes.

Table 4.2: *Firm A results*

Type	**Description**	**Points (0-10)**	**Rationale / Comments**
Alliance Capital			
AC	Social resources	7	The firm had access to an extensive network of experienced founders, mentors, and industry researchers through their affiliation to a Venture Creation Programme.
AC	Foreign stakeholders	0	The firm had no foreign stakeholders
AC	VC backing	0	The firm had no VC backing
AC	VCs previous experience with exit by acquisition	N/A	The firm had no VC backing

Human Capital			
HC	Hiring/having experienced managers	2	Some of the founders had some limited managerial experience. No external managers.
HC	Founder's previous managerial or startup experience	3	Some of the founders had some limited managerial experience
HC	Large networks of formal industry relationships	4	The team had industry knowledge, and 5-9 formal industry relationships
HC	Education of founders	6	Founders all had a background from a well-known university, and all had a relevant background for the Acquirer A at the time of the acquisition
HC	Academic founders	3	Only one of the three founders had completed a full degree when founding the company. All three founders had written a dissertation, and acquired M.Sc. degrees by the time of the acquisition.
HC	Hard work and grit from the founders	7	The founders worked an estimated 50 hours a week each on the firm leading up to the acquisition, as well as working for the acquiring company the summer prior to the acquisition. The rest of the team were working on a 40% basis from the founding of the firm.
Business Resources			
BR	Firm size	2	The firm had 6 employees at the time of the acquisition
BR	Firm age	2	The firm was acquired shortly after founding
BR	Proprietary technology (especially patents)	3	The firm had an intentional IP strategy by way of trade secrets, but no explicit patents on their work. Some proprietary algorithms.
BR	Innovation	6	The firm's product was not available in the market, but not revolutionarily innovative.
BR	Revenues	1	The firm had almost no revenues apart

			from a project with their future acquirer.
BR	Inferior profitability without liquidity issues	3	The firm had some liquidity issues as they depended on soft funding.
BR	Product in market	0	The firm had no product in the market.
Explicit Signaling			
ES	Signaling of prestigious affiliates	8	The firm was active on social media, sharing prestigious prizes, affiliates and soft funding opportunities.
ES	Signaling of previous IPO	N/A	The firm had not performed an IPO.

4.1.2 Case B - Acquisition of Firm B by Acquirer B

Firm B was an international power investment company. The company was founded as a joint venture between two large founding firms, PE Fund B and Founding Firm B2 . At the time of acquisition, only PE Fund B remained the owner of Firm B1. Firm B invested heavily abroad as a core activity of its business model. Nineteen years after founding the firm, 100% of Firm B's stock was bought by an actor looking to expand its market, Acquirer B.

We interviewed Founder B on the 6th of April, 2022, and later board leader and five-year head of acquisition negotiations, Boardmember B, on the 26th of April, 2022. A short description of relevant information on the acquisition is given in Table 4.3.

Table 4.3: *Firm B case information*

Acquisition sum	Over EUR 1 billion
Acquisition speed	19 years
Interviewees	Founder B and Boardmember B
Interview date	06.04.2022 and 26.04.2022
Other involved parties	Acquirer B, PE Fund B, Founding Firm B2

Acquisition process

The initiation of the acquisition process was started by Firm B. As the firm grew and matured to the point where it represented over 50% the total assets of PE Fund B, it grew out of their mandate, making Firm B move into the phase of *search and courtship.* Approximately one year before the acquisition took place, Firm B started "dressing up the bride" - meaning the implementation of concrete measures showing unrealized potential, increasing the firm's attractiveness as a target of acquisition and the potential economic return. Among several, some of these most prominent measures were (1) hiring an asian consulting firm to calculate new market-growth models as they believed the firm would be highly attractive for asian acquirers, (2) hiring a new CEO which shifted the management in the direction of selling the firm, and (3) achieving multiple letter-of-intents (LOI) not only within the market currently operating in, but expanding towards other power sources as well.

After some time in the *search* process, Firm B was approached by a Norwegian broker firm wanting to take part in the transaction. Somewhat surprisingly, they suggested a Scandinavian firm as a potential acquirer, which was quite the opposite of Firm B's initial thought of whom to sell to. As time would show, this Scandinavian firm made the highest non-binding offer, thus starting the phase of *deal brokering*. A challenge during this phase was getting the management of Firm B onboard with the acquisition knowing they would lose their job. This is partly why PE Fund B reinstated a new CEO and a full-time consultant, acting as the owners' "spy" into management, making sure that Firm B was able to highlight all of the unrealised potential in the due diligence process.

Firm B's ZHB process

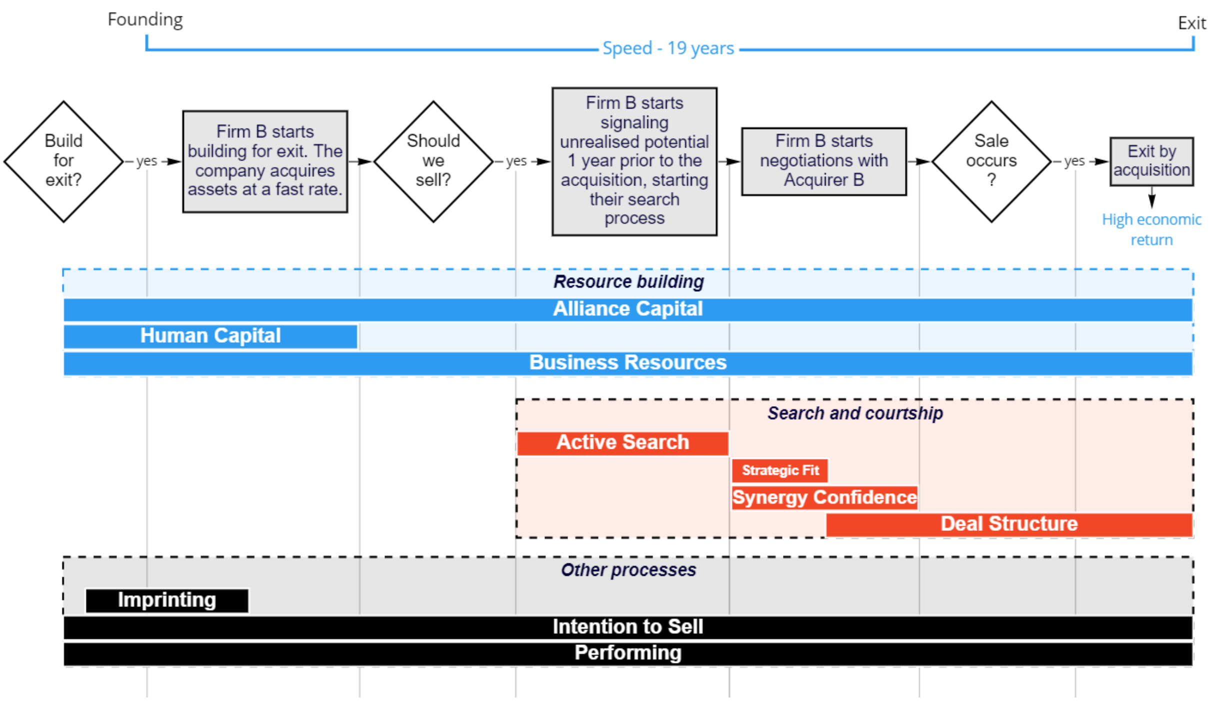

Figure 4.2: *Firm B ZHB process*

Firm B's initial resource acquisition phase took the longest amount of time out of our four cases (+5 years). During this period, Firm B built up its business resources, managerial and operational teams, and acquired alliance capital both in regards to geographic proximity and industrial affiliation. Experienced managers were brought into the firm, a large industrial network was built by the founding firms, and critical foreign stakeholders regarding operations were involved. PE Fund B, Firm B's owner, was not typically used to being involved in its investments for such long periods but was content with the recurring revenue from Firm B's operations for a +15 year period.

Approximately one year prior to the acquisition, Firm B initiated their focused search period, attempting to find potential suitors for the company. This active search process led to their introduction to Acquirer B, and subsequent acquisition.

Starting talks with Acquirer B, Firm B did not stop expanding its alliance and business capital in case the deal did not go through. However, the companies underwent and overcame the buyer-seller tension process without much issue, and a deal was made. According to Founder B, Firm B managed to quickly gain Acquirer B's confidence through their superior performance throughout the company lifecycle, and despite not actively working on signaling this performance outwards.

Resource overview

Being founded as a joint venture between two large firms, Firm B had good access to financial capital. The founding firms injected a total of EUR +40 million, which allowed Firm B to quickly acquire the physical assets needed to grow, and expand their managerial, development and operative teams without spending time on fundraising. Although the human and managerial resources played a crucial role in acquiring the physical asset in this case, they are not highly valued in an acquisition in the energy industry, making Firm B's physical assets their single most valuable resource for the acquisition. This is due to the liquidatable value they represent, as well as representing long-term contracts and reliable cash flow.

"Founding Firm B2 had virtually infinitely long experience with starting and managing this type of business. So from the start, we had a fantastic mix of competence, capital and market-fit which was both unique. Without this mix, we would have never succeeded."

- Founder B, Firm B

According to Boardmember B, Firm B was acquired due to Acquirer B wanting to expand their market, as well as having the need for a positive revenue stream. This is in line with our own perception, as it gave access to an internationally established recurring revenue source, allowing Acquirer B to finance and expand on their future plans.

Table 4.4: *Firm B results*

Type	Description	Points (0-10)	Rationale / Comments
Alliance Capital			
AC	Social resources	9	The firm had access to a broad network of industry leaders through their stakeholders and managerial team
AC	Foreign stakeholders	8	The firm had most of its operations and management team outside of the company's origin country.
AC	VC backing	0	The firm had no VC backing
AC	VCs previous experience with exit by acquisition	N/A	The firm had no VC backing
Human Capital			
HC	Hiring/having experienced managers	9	The firm had access to managers experienced in both Firm B's industry of operation, and general managerial activities.
HC	Founder's previous managerial or startup experience	8	Founding Firm B2 and PE Fund B had both access to managers highly experienced in relevant industry.
HC	Large networks of formal industry relationships	10	Firm B had access to, and focused heavily on building functional industry relationships. Firm B's founding firms were heavily involved in both investing, and business development abroad, and as such could easily find formal industry relationships when needed.
HC	Education of founders	N/A	
HC	Academic founders	N/A	
HC	Hard work and grit from the founders	3	The founding firms were dedicated to their work, but no exceptional time investment was made. The founding managers worked an average of 40 hours per week.

Business Resources			
BR	Firm size	4	The firm had 20 employees at the time of acquisition.
BR	Firm age	8	The firm was acquired 10-20 years after founding, having established itself as an industry leader.
BR	Proprietary technology (especially patents)	2	The firm had no patents, only securing their operation models and proprietary technology through trade secrets.
BR	Innovation	3	The firm had developed innovative proprietary technology. The company also slightly innovated in regards to business models.
BR	Revenues	10	The firm had good revenues and no liquidity issues throughout most of its lifecycle.
BR	Inferior profitability without liquidity issues	2	The firm had very high profit margins throughout most of its lifecycle
BR	Product in market	9	The firm invested heavily in expansion and starting their production pipeline, quickly becoming a significant actor in its respective market.
Explicit Signaling			
ES	Signaling of prestigious affiliates	2	The firm generally did not partake in signaling activities, only occasionally partaking in news stories.
ES	Signaling of previous IPO	N/A	The firm had not performed an IPO.

4.1.3 Case C - Acquisition of Firm C by Acquirer C

Firm C was a research-intensive hardware company. Their main product began as a research project by Industrial Partner C, and was made into its own spin-off company through Firm C. Two years after founding, Firm C in its entirety was acquired by Acquirer C, for EUR 20-50 million.

We interviewed Founder C, founder and ex-CEO at Firm C on May 19th, 2022. Founder C owned a majority of the stock at Firm C, and was a board member and general manager from founding to acquisition. A short description of relevant information on the acquisition is given in Table 4.5.

Table 4.5: *Firm C case information*

Acquisition sum	EUR 20-50 million
Acquisition speed	2 years
Interviewee	Founder C
Interview date	19.05.2022
Other involved parties	Acquirer C, Industrial Partner C

Acquisition process

Firm C was founded with clear intention to sell, something executives and the board of directors at the company accounted for when building up the firm. Some of the steps taken were that all official documentation in the firm was conducted in English, the company history was kept short and concise, and the firm went into as few binding agreements with third parties as possible.

"*We worked extensively on removing as many red flags as possible in a due diligence process*."

- Founder C, founder and ex-CEO of Firm C

After branching out from Industrial Partner C, Firm C started development with a small team of highly motivated technologists with industry knowledge, led by Founder C who had little industry knowledge, but a good amount of managerial experience from previous ventures. The team focused heavily on developing their product, applying for research grants and financing, starting research partnerships with prestigious actors, and participating and signaling prestigious awards.

Firm C had originally planned to bring on investors in order to finance parts of their growth and product development. However, one year after founding, Firm C met with Acquirer C to discuss a potential industry relationship where Acquirer C would have been a research partner and client of Firm C, and purchase the company's initial product. The talks did not result in a collaboration, as Acquirer C initially demanded what Founder C described as a de-facto exclusivity agreement over the product IP, which would make a potential exit by acquisition at a later stage impossible. Firm C ended up walking away from the discussions but was contacted by Acquirer C again at a later occasion. This is when serious discussions of acquisition started and led to Firm C bringing in external acquisition guidance and started reconsidering their financing strategy.

Before starting acquisition talks with Acquirer C, Firm C had originally planned to bring on investors to finance their product development. They used this alternative strategy as a bargaining chip multiple times in their negotiations. Founder C emphasized the importance Firm C put on having multiple alternative routes in negotiation and making these known to their suitor.

Firm C's ZHB process

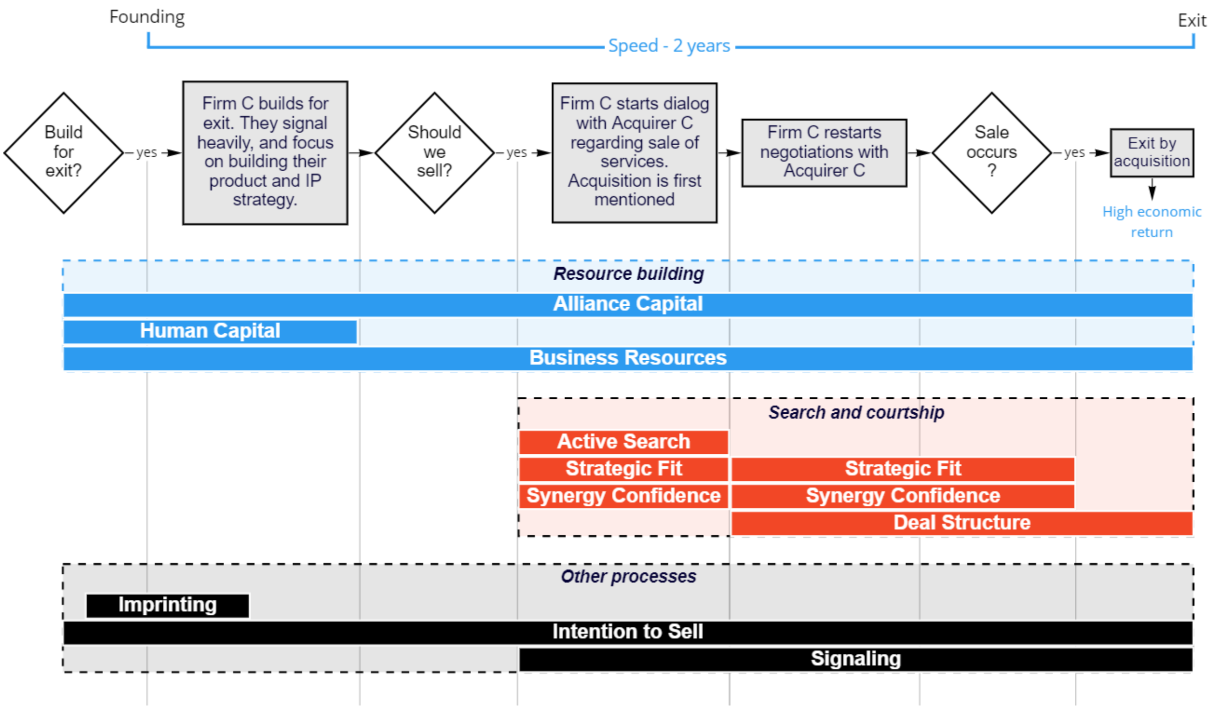

Figure 4.3: *Firm C ZHB process*

Firm C's acquisition process starts at the company's founding. The firm had decided early on that they were going to attempt to be acquired and built their resources accordingly. The firm spent the first year after founding on gathering human capital, starting to build their product and integrating themselves in the industry they were going to operate (and be sold) in.

Firm C started actively searching for possible suitors when the team had developed its research and IP enough to sign formal industry partnerships with prominent actors, supplying their search through extensive outward signaling towards industry and research institutions. At this point, Firm C was in frequent contact with Acquirer C regarding a future cooperation. Firm C quickly realized that traditional cooperation between the two businesses would not be the correct approach and started strategic fit discussions with Acquirer C in order to see if they could be aligned for an acquisition. Simultaneously, both parties started building up rapport with each other, strengthening their synergy confidence. The companies froze discussions for a period after this initial courtship period, and Firm C continued looking for suitors.

Some months prior to the acquisition, Acquirer C reinitiated contact with Firm C, only now with a stronger intent of acquiring the company. Both parties restarted their alignment process, quickly going into a deal structuring phase. According to Founder C, the speed and outcome of this process were heavily influenced by Firm C's signaling, and openness around other potential suitors and cooperation partners Firm C had acquired in the previous period, giving them leverage to incentivize Acquirer C into the acquisition.

The strategic fit and synergy confidence buildup phases lasted well into the deal discussions between the parties, only stopping once Firm C was certain that Acquirer C was the correct suitor and dedicated themselves to the acquisition.

Resource overview

Firm C's focus was on developing their proprietary technology, and securing it with proper patents and trade secret procedures. Founder C describes the process of securing Firm C's freedom to operate as three-fold; 1) publishing articles to secure "prior up" rights in the event legal issues arise, 2) patenting all easily reproducible proprietary technology management thought could be of interest at a future, and 3) keeping tightly held trade secrets and only publicly sharing information which would not be reproducible by a third party. Founder C estimates that Firm C owns in excess of 20 patents either directly or indirectly registered to the company, indicating a strong presence of technological resources. Despite having these strict IP guidelines, Founder C emphasized how important a part tactical signaling played for the firm's successful acquisition.

> "*We actively sought out media attention and consciously cultivated our relationship with [prestigious research partner] extensively in order to use their name as a stamp of approval publicly.*"
>
> - Founder C, founder, and ex-CEO of Firm C

Apart from patents, the firm kept operations limited, only having a single manager and a small technical team for most of the firm's life cycle.

Table 4.6: *Firm C results*

Type	Description	Points (0-10)	Rationale / Comments
Alliance Capital			
AC	Social resources	5	Founder had a strong network, but little social resources in the firm's exact field of operation.
AC	Foreign stakeholders	0	The firm had no foreign stakeholders
AC	VC backing	0	The firm had no VC backing
AC	VCs previous experience with exit by acquisition	N/A	The firm had no VC backing
Human Capital			
HC	Hiring/having experienced managers	5	Founder had a strong managerial education background, as well as previous managerial experience. No extra managers were needed.
HC	Founder's previous managerial or startup experience	6	Founder had a strong managerial education background, as well as previous managerial and startup experience.
HC	Large networks of formal industry relationships	6	The founder had little industry knowledge when starting the firm, but still gained access to a fair amount of formal industry relationships.
HC	Education of founders	4	The firm founder has a Master of Science degree.
HC	Academic founders	3	The firm's founders have written academic papers on the field Firm C operates in, as well as been involved as advisors on research projects in the past to a small extent
HC	Hard work and grit from the founders	8	The firm founders describe themselves as very hardworking, with an estimated average of 70 hours per week according to Founder C

Business Resources			
BR	Firm size	2	A total of 3 employees at the time of acquisition.
BR	Firm age	2	The firm was acquired two years after founding
BR	Proprietary technology (especially patents)	10	The firm was very protective of its IP and research, signing non-disclosure agreements and keeping trade secrets highly confidential with third parties.
BR	Innovation	10	The firm had a strong emphasis on innovation and research during their development phase
BR	Revenues	0	The firm had no revenues at the time of acquisition
BR	Inferior profitability without liquidity issues	0	The firm could not have had a higher profit margin at the time of acquisition, according to the founding team.
BR	Product in market	0	The firm had no product in market
Explicit Signaling			
ES	Signaling of prestigious affiliates	10	The firm extensively signaled their prestigious affiliates, primarily their cooperation with a large industry partner.
ES	Signaling of previous IPO	N/A	The firm had not performed an IPO.

4.1.4 Case D - Acquisition of Firm D by Acquirer D

Firm D is a hardware company within the hydrogen industry. The company was started as an equal joint venture by three medium-sized firms working on various products in the hydrogen industry; Founding Firm D1/D2/D3. Four years after founding, 100% of the shares in the company were purchased by Acquirer D.

We interviewed CEO D, CEO at Firm D on May 5th, 2022. CEO D was not a founder, but was appointed CEO of the company after a restructuring following the acquisition process. This would have made this interview an outlier in our data, as the interview would have been from a post-acquisition perspective. To counteract this, we made sure CEO D was well prepared for the interview and asked a modified question set that still answered our questions from the perspective of Firm D, pre-acquisition. Additionally, CEO D is arguably one of the few people with a sufficient understanding of the entire process as he was debriefed by the acquiring and acquired parties post-acquisition. Both CEO D and his business partner, Business Partner D, which took over leadership of the newly acquired Firm D, were heavily involved in the entire acquisition process from both sides of the table. A short description of relevant information on the acquisition is given in Table 4.7.

Table 4.7: *Firm D case information*

Acquisition sum	EUR 1-5 million
Acquisition speed	4 years
Interviewee	CEO D
Interview date	13.05.2022
Other involved parties	Acquirer D, Founding Firm D1/D2/D3, Business Partner D, Champion D, Acquirer D2

Acquisition process

The venture was initially started as a way for Founding Firm D1, D2 and D3 to integrate their complementary businesses together, with the intent of leading to increased cross-business sales for each of the companies. However, this goal was never realized, in large part due to mismanagement and lack of a common strategy for Firm D by the three founding firms.

One year prior to the acquisition, founding chairman at Firm D and VP of investor relations at Founding Firm D1, Champion D, left Firm D to assume the role as CEO at Acquirer D. Champion D kept a close dialog with the management team at Firm D, and later reached out with a proposal to restructure the ownership structure and put in place a new management team. At this point, Firm D had just lost its management team due to a lack of clear strategy, and the founding firms agreed to the deal.

> *"Firm D was in trouble, they could either shut down the business, attempt a risky scale-up process, or they could sell to Acquirer D."*
>
> \- CEO D, CEO at Firm D

Firm D's was acquired by Acquirer D for a sum between EUR 1-5 million. At that time, Firm D had a single employee in a management position. Some months later, a secondary agreement was finalized, granting Acquirer D, Founding Firm D1 and Acquirer D2 29% each of the company, with the remaining shares being delegated between the newly appointed CEO, our interviewee, and commercial and project development director Business Partner D.

Firm D's ZHB process

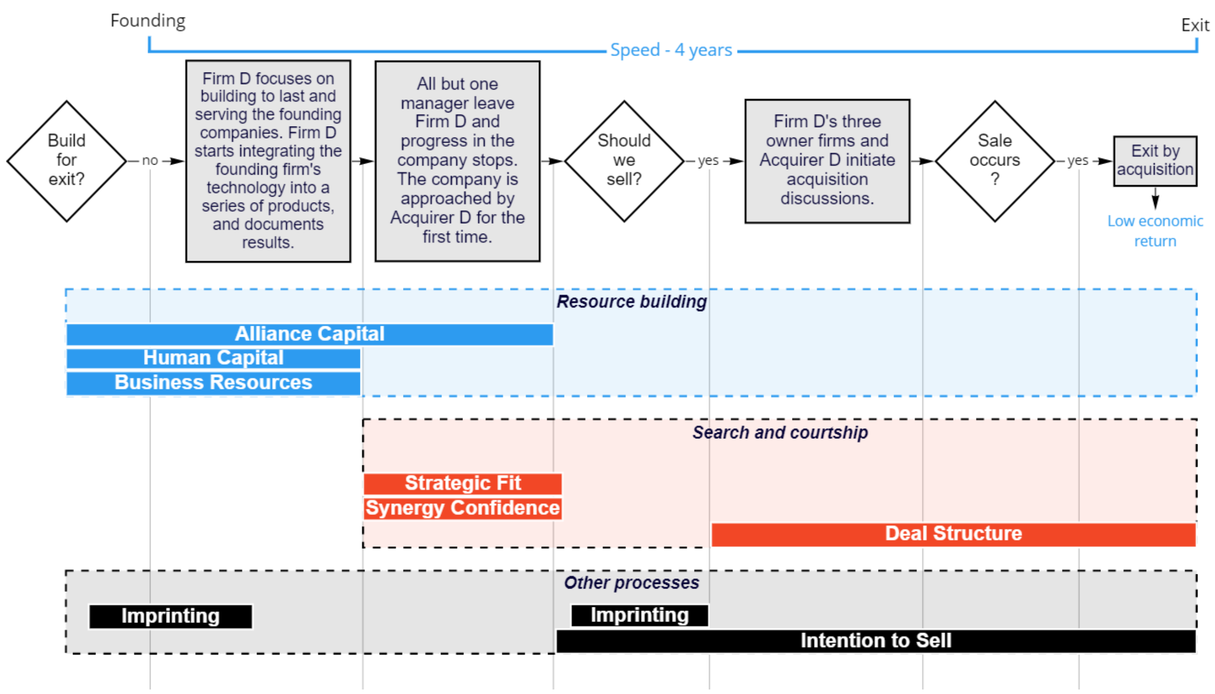

Figure 4.4: *Firm D ZHB process*

Firm D's initial resource building process was primarily focused on research, and finding a potential strategic collaboration for the founding firm's products and services. This built up business resources which CEO D claims were of importance for their future buyer, Acquirer D.

As funds ran out and Firm D entered a phase where they were losing managerial staff due to a lack of strategy and other critical employees due to a drying up of funds, the firm's future outcome was becoming uncertain. The company kept acquiring alliance capital through the strong industry relationships of its founding firms, but most other development had stopped. The founding firms' disagreement on a common strategy made Acquirer D's acquisition proposition worthwhile, and both seller and buyer spent this period analyzing each others' strategic fit and building synergy confidence.

After an imprinting period where the founding firms re-evaluated their long-term strategy, Firm D went into acquisition discussions together with Acquirer D, being eventually fully acquired and restructured.

Resource overview

Firm D received a cash infusion early on from its established founder companies and as such did not need any VC backing for development. The company performed multiple test projects to determine where a possible collaboration between all three firms could lie, but these ultimately failed to produce any valuable result for the original owners, and as such, no further funding was added to the project after the initial funds were depleted.

Human capital also played no role in the acquisition, as the purpose of the acquisition was a complete corporate restructure. CEO D told us that the firm had no human or financial resources left at the end. The brand and test project results were the only things of value left, and this is what Acquirer D ultimately purchased.

"*The firm had no [human or financial] resources left. The brand and project results were the only things of value left.*"

- CEO D, CEO at Firm D

Table 4.8: *Firm D results*

Type	Description	Points (0-10)	Rationale / Comments
Alliance Capital			
AC	Social resources	2	The firm had strong ties to its founding firm, but management was not present to take advantage of these.
AC	Foreign stakeholders	3	The firm was ⅓ owned by the foreign stakeholder, Founding Firm D1.
AC	VC backing	0	The firm had no VC backing
AC	VCs previous experience with exit by acquisition	N/A	The firm had no VC backing
Human Capital			
HC	Hiring/having experienced managers	3	The firm initially had experienced managers, but was not able to retain these.
HC	Founder's previous managerial or startup experience	7	The firm's founding firms were all heavily experienced managerially, but did not delegate these assets to Firm D.
HC	Large networks of formal industry relationships	7	The firm had a large amount of formal industry relationships and contracts interested in their proprietary technology.
HC	Education of founders	N/A	
HC	Academic founders	N/A	
HC	Hard work and grit from the founders	N/A	
Business Resources			
BR	Firm size	1	Only one manager was left in the firm at the time of the acquisition, all other employees had left due to a lack of long-term strategy in the firm.
BR	Firm age	2	The firm was acquired shortly after founding
BR	Proprietary technology (especially patents)	6	The firm had a strong emphasis on proprietary technology development,

			but no IP protection or focus on trade secrets.
BR	Innovation	4	The firm aimed to combine its founding firm's existing products and services, and as such was only slightly innovative.
BR	Revenues	3	The firm had some revenue streams of their founding firm's products, but these were relatively low compared to Firm D's total expenses.
BR	Inferior profitability without liquidity issues	0	The firm claims it could not have had a higher profitability at the time of the acquisition.
BR	Product in market	2	The firm tested a combination of its founding firms' products, but had no direct product in the market itself.
Explicit Signaling			
ES	Signaling of prestigious affiliates	3	The firm signaled their prestigious affiliates on investor channels prior to the acquisition, but did not have a focus on this otherwise.
ES	Signaling of previous IPO	N/A	The firm had not performed an IPO.

4.2 Cross-case analysis

In the following cross-case analysis we will look for patterns and similarities within the two categories: *The ZHB process* and *Resources held by the firm* - in line with our research questions and the literature presented in chapter 2, *theoretical foundation.*

4.2.1 The ZHB process

The three phases of acquisition

All case firms shared three main stages in their respective acquisition processes. First, an initial resource acquisition phase of varying length was needed where the firm acquired its founding resources and established itself as an actor in its respective industry. All interviewed firms shared a focus on building a) alliance capital, b) human capital, and c) business capital, and all firms benefited from these resources during the next stages of their respective acquisition.

Then, a catalyst for the search and courtship process was needed, by which firms either were approached by a potential buyer or initiated their active search process, depending on their previous imprinting. This phase was either preceded or followed by a decision to sell by the case firm. For firms that had no imprinted intent to sell, a new imprinting phase was held before phase 2, where this explicit intent had to be set. For firms that had imprinted building for exit early on, the decision to sell came after search and courtship was initiated, as the firm had to evaluate if the current time was right for being acquired.

Finally, a deal brokering phase with a potential buyer was found to occur after each firm decided to sell, wherein the deal structure phase of Shankar et al. (2022) was initiated.

These findings allow us to create the common event model for all four cases shown in Figure 4.5, making our model more easily reproducible by adding specific stages which can be mapped to any given firm either post-hoc or during an attempt at an exit by acquisition.

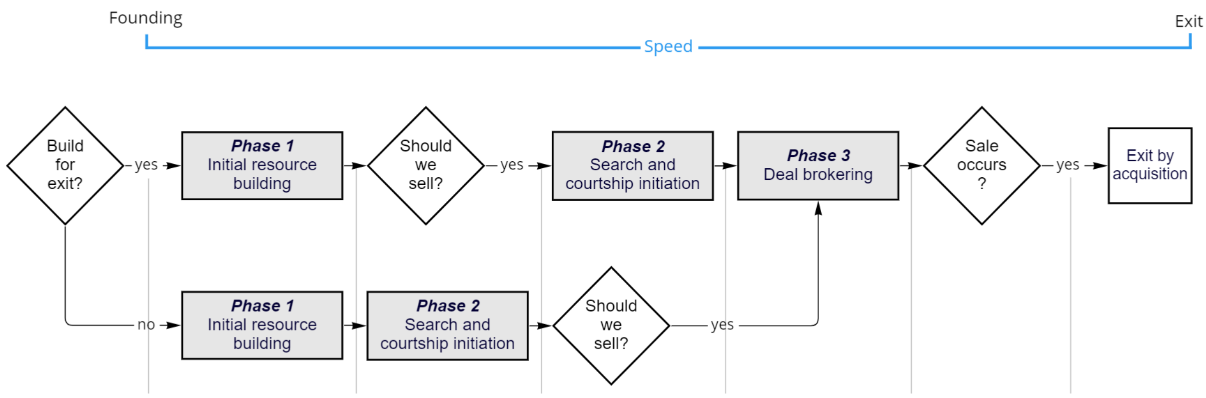

Figure 4.5: *Common event and decision timeline for all cases*

Common traits for firms building for exit

The firms building for exit continued building alliance capital throughout the entirety of their acquisition process, as this was part of their respective acquisition strategies. For Firm C, this led to a greater pool of potential suitors and thus more bargaining power for them to bring to the table under the deal structuring with Acquirer C, and for Firm B it led to more industry connections which Acquirer B ended up valuing under their acquisition. As Founder C notes, "*we were ready to walk away from discussions knowing we had multiple choices. [This] definitely pushed up the price we got in the end.*" Additionally, focusing on business resources was also shared by both Firm B and Firm C, and led to both teams feeling more autonomous under negotiations, as they knew their progress was not dependent on the acquisition.

Both cases also experienced an active search phase when deciding if now was the right time to start the deal brokering phase with a potential acquirer. The strategic fit and synergy confidence phases varied for each case, but deal structuring happened during phase 3 in both cases.

These findings are summarized in the model shown in Figure 4.6, which shows all commonalities between the two built-to-flip cases.

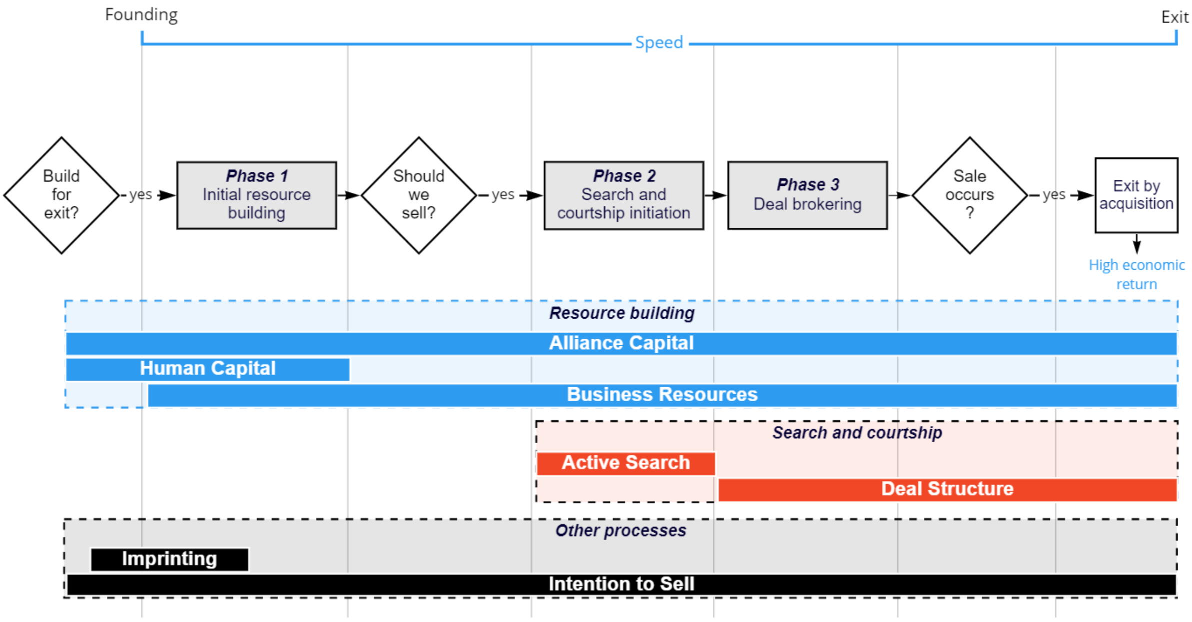

Figure 4.6: *Common process, event and decision timeline for built-to-flip cases*

Common traits for firms building to last

The firms building to last were both approached and acquired by their first serious suitor, and as such did not see the need to continue building alliance capital to the same extent throughout the acquisition process.

Both built-to-last firms needed to undergo a new imprinting phase when evaluating their respective acquisition requests, where shareholders and stakeholders were consulted before deciding to proceed to the search and courtship phase. Deal structure was also started during the deal brokering phase for both cases, but the rest of the buyer-seller tensions varied from each case.

These findings are summarized in the model shown in Figure 4.7, which shows all commonalities between the two built-to-last cases.

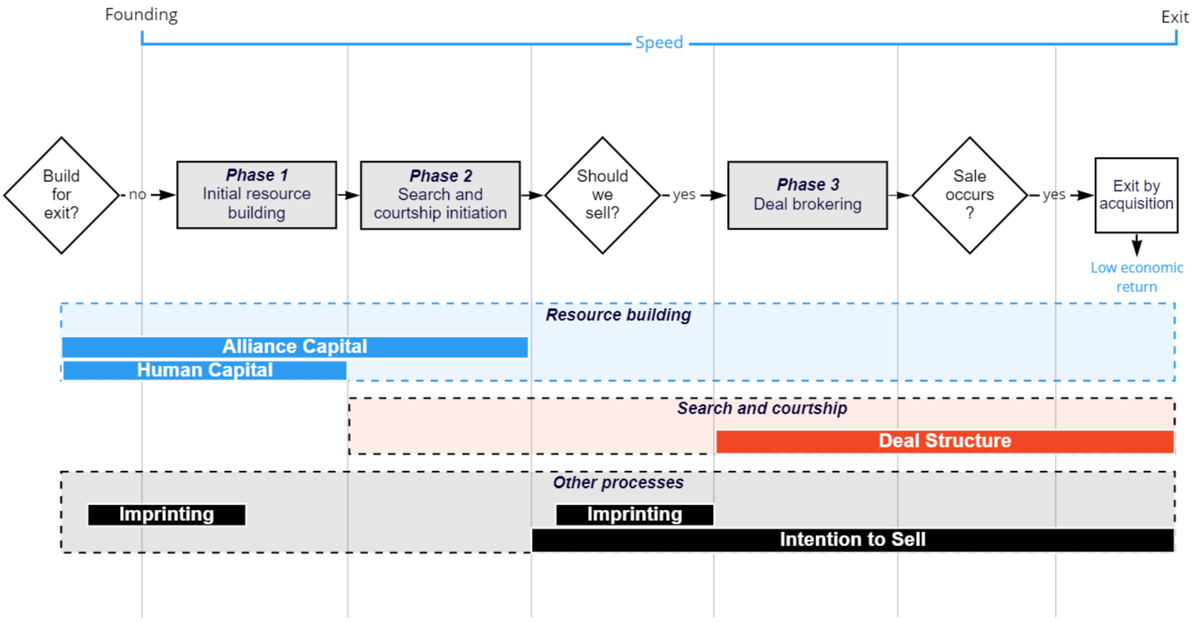

Figure 4.7: *Common process, event and decision timeline for built-to-last cases*

Discrepancies between all case interviews

Apart from the change in timing for the search and courtship phase between the built-to-flip and built-to-last cases, we note a significant difference in economic return from each case. Specifically, the built-to-flip cases experienced a high economic return, as opposed to the low economic return from the cases which did not imprint acquisition ambitions from the start.

Finally, the use of performing, signaling, strategic fit, synergy confidence, championing, and creating customer endorsement undertaken in the theoretical foundation, varied heavily between the cases, and as such, no correlating conclusions can be drawn for the concise temporal placement of these processes based on our study. However, strategic fit and synergy confidence appeared in all cases in different timings.

4.2.2 Resources held by the firm

To examine if any of the resources were similar between the acquisitions, we examine the variance between the scores given to each company's single resources in the within-case analysis. This allows us to examine where the similarities between the firms lie, and where they differ, in regards to that specific resource.

Table 4.9 shows the variance between the held resources of the four case firms. We set the threshold for stating that all firms have a similar amount of the resource to a variance of 3 and below. The likelihood column shows the variance between all four cases, the high economic return and low economic return columns, respectively, show the variance between the two cases with high economic return (B and C) and the variance between the two with low economic return (A and D). Lastly, the speed column shows the variance between the three firms that had their exits within five years of the founding of the firm (A, C, and D).

Table 4.9: *Variance analysis of firm resources*

	Resource	A	B	C	D	Likelihood	High ER	Low ER	Speed
Alliance Capital									
	Social resources	7	9	5	2	**8,92**	**8**	**12,5**	**6,33**
	Foreign stakeholders	0	8	0	3	**14,25**	**32,00**	**4,50**	**3,00**
	VC backing	0	0	0	0	**0,00**	**0**	**0**	**0**
	VCs previous experience with exit by acquisition	N/A	N/A	N/A	N/A	**N/A**	**N/A**	**N/A**	**N/A**
Human Capital									
	Hiring/having experienced managers	2	9	5	3	**9,58**	**8,00**	**0,50**	**2,33**
	Founder's previous managerial or startup experience	3	8	6	7	**4,67**	**2,00**	**8,00**	**4,33**
	Large networks of formal industry relationships	4	10	6	7	**6,25**	**8,00**	**4,50**	**2,33**
	Education of founders	6	N/A	4	N/A	**N/A**	**N/A**	**N/A**	**N/A**
	Academic founders	3	N/A	3	N/A	**N/A**	**N/A**	**N/A**	**N/A**
	Hard work and grit from the founders	7	3	8	N/A	**7,00**	**12,50**	**N/A**	**N/A**
Business Resources									
	Firm size	2	4	2	1	**1,58**	**2,00**	**0,50**	**0,33**
	Firm age	2	8	2	2	**9,00**	**18,00**	**0**	**0**
	Proprietary technology (especially patents)	3	2	10	6	**12,92**	**32,00**	**4,50**	**12,33**

	Innovation	6	3	10	4	**9,58**	**24,50**	**2,00**	**9,33**
	Revenues	1	10	0	3	**20,33**	**50,00**	**2,00**	**2,33**
	Inferior profitability without liquidity issues	3	2	0	0	**2,25**	**2,00**	**4,50**	**3,00**
	Product in market	0	9	0	2	**18,25**	**40,50**	**2,00**	**1,33**
Explicit Signaling									
	Signaling of prestigious affiliates	8	2	10	3	**14,92**	**32,00**	**12,50**	**13,00**
	Signaling of previous IPO	N/A	N/A	N/A	N/A	**N/A**	**N/A**	**N/A**	**N/A**

Likelihood of exit by acquisition

As all the firms have achieved exit by acquisition, a resource must be similar in all four cases to count towards being relevant for likelihood for exit by acquisition. As table 4.9 shows, the four case firms show only three similarities:

1. None of the firms have received VC backing.
2. All firms are relatively small with less than 25 employees.
3. No firm experiences inferior profitability while still having no liquidity issues.

Apart from these three similarities, no single resource is held in the same amount by all firms.

Economic return

Comparing the two firms with a high economic return also show one further similarity other than that of the likelihood column, in that both firms had somewhat experienced managers. Comparing the two firms that received a low economic return show more similarities. Specifically, both firms had the same age, did not have a resource in experienced managers, a medium focus on innovation, low revenues, and no considerable product in market. Most notably, both of the two firms with low economic return were intended to be built-to-last, while both firms with high economic return were built for exit.

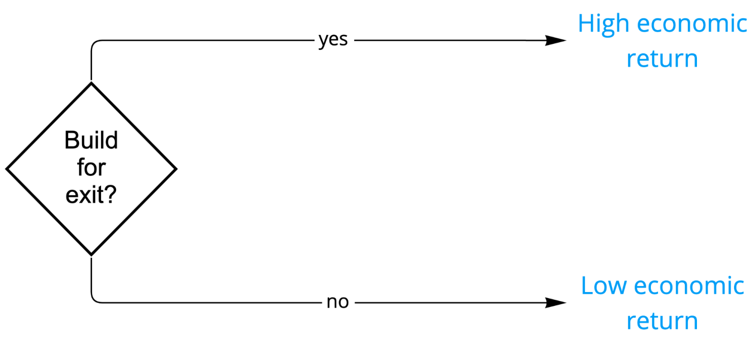

Figure 4.8: *Findings of founder intention effect on economic return*

Speed to exit by acquisition

When comparing the three firms that had fast exits (exit within five years of founding), more similarities appear. In addition to the similarities from the likelihood column, none of the firms had any particular foreign stakeholders, none had experienced managers as a resource during the acquisition, all had medium industry networks, very low revenues, and no finished product in the market.

4.3 Summary

In this fourth chapter, *Findings and analysis,* we have generated insight to each of the case firms through a within-case analysis presenting their respective acquisition processes using the ZHB-model as a template of structuring the process, as well as their resources acquired - presented in the form of our theoretical construct. This information allowed us to derive meaning through creating a common event model for further analyzing cross-case, enabling us to answer our RQs through the discussion in Chapter 5.

Additionally, we compared each firm's theoretical construct results (firm metrics') and calculated the variance between the firms indicating the metrics relevance towards the theoretical framework, laying the foundation of answering RQ2. Our findings show 11 different firm metrics with a variance of 3 and below, affecting the different parameters of acquisition performance, as seen in Table 4.9. The meaning of these findings was then outlined in accordance with the affected parameter, which will be further discussed in the upcoming chapter 5, *Discussion.*

5 Discussion

Having presented our findings, we will now discuss these in accordance with the *theoretical foundation* laid in chapter 2. First, we will briefly summarize our main findings, giving the reader a sufficient overview of what is to be discussed. Afterwards, in sections 5.2 and 5.3 we thoroughly discuss *the process of exit by acquisition* and *resources effect on exit by performance parameters* - ultimately allowing us to revise the initial ZHB-model; proposing to our understanding, the first-ever model depicting the entire process of exit by acquisition, accounting for temporal and resource interconnectivity, answering to some extent the rRQs presented in chapter 1.

5.1 Summary of main findings from the analysis

To begin the discussion of the analysis, we summarize the main findings in this section for clarity and simplicity for the reader.

In the process part of the analysis, we were able to model the process of exit by acquisition of each firm through using the ZHB model as a process template and naming each step of the process according to the theories presented within. By doing so, we showed that the process had three separate activity phases, was distinctly different between firms building to last and firms building to exit, as well as showing which processes were common for all the firms. The analysis showed that the original ZHB model did not show the correct sequence or timing of any of these factors. Instead, we found that Belboe et al. (2021) had wrongly estimated the speed and duration of the search and courtship, resource building, and imprinting stages. However, we corroborate the strong correlation the original ZHB model makes between the initial intentions and imprinting made by the firm and the effect this decision has on exit speed and economic return.

When analyzing the firms' resources, we were able to map out each of the firm's resource bases. By comparing the similarities between them, we were able to show which of the common resources of the firms could have a potential effect on the exit by acquisition performance parameters. Additionally, we found that the ZHB model a) emphasizes resources that were not common for all of the firms and b) emphasizes resources that were irrelevant for some of the firms.

Consequently, we have found that the process of exit by acquisition described by the original ZHB model is partially correct and, with slight adjustments, entirely fits the specific exit path of each of our case studies very well. However, we also found that few resources were relevant for the exit performance across all cases. In this chapter, these findings will be discussed in further detail and compared to the leading theories presented in the ZHB model.

5.2 The process of exit by acquisition

In this section, we present the theoretical and case-based findings we have made in regards to RQ1 presented in chapter 1:

RQ1: **How does the temporal process of exit by acquisition as described by the ZHB-model compare to empirical evidence from actual firms' path to exit?**

We, therefore, discuss the decision-making event sequence, resource building process, search and courtship process, and all other theoretical processes present in the ZHB model. We then use these findings to present an updated, shared understanding of how each of these should be updated in the new, empirically explored model with temporal dynamics added to the model.

Decision-making event sequence and distinction between built-to-last and built-to-flip cases

Generally, we have found that the decision process for each of the case firms, starting with deciding the intention to exit, the decision to attempt a sale, and finally, the decision to complete a sale with a specific buyer, was completed in the order shown in the original ZHB model.

However, one significant hindrance was made evident in that the ZHB model made no distinction between built-to-flip and built-to-last firms, primarily in regard to the decision-making process, but also when considering how and when firms imprint their intentions. Specifically, we found that both built-to-flip firms in our case study experienced a notably slower search and courtship process compared to their built-to-last counterparts, involved multiple parties, performed an active search for suitors, and achieved a significantly higher economic return compared to their built-to-last counterparts. We go more in-depth on these findings in section 5.2.3, search and courtship process, but the distinction is important. We found it necessary to add a "no" decision to the first decision of the ZHB model and split the model into two parts to incorporate this finding.

Additionally, adding the three phases of acquisition presented in section 4.2.1 was necessary for marking the distinction we found between built-to-flip and built-to-last firms' event and decision sequences (not to be confused with the three phases of Shankar et al. 2022). Belboe et al. (2021, p. 46) explicitly chose to not include the fact that founder intention of exit might change during the lifecycle of a company for the sake of simplicity, despite the existence of research on the matter (Albert & DeTienne, 2016). However, we see that this distinction is needed and have added it to the revised model, since it leads to the question of if a firm should sell or not coming either before or after phase 2, search and courtship, based on this imprinting decision. The path up to phase 3 therefore differs for built-to-flip and built-to-last cases. Both cases we interviewed that had also reconsidered their exit strategies did so due to strategic challenges, adding weight to the findings in Albert & DeTienne (2016).

The updated decision and phase timeline for our model is shown in Figure 5.1.

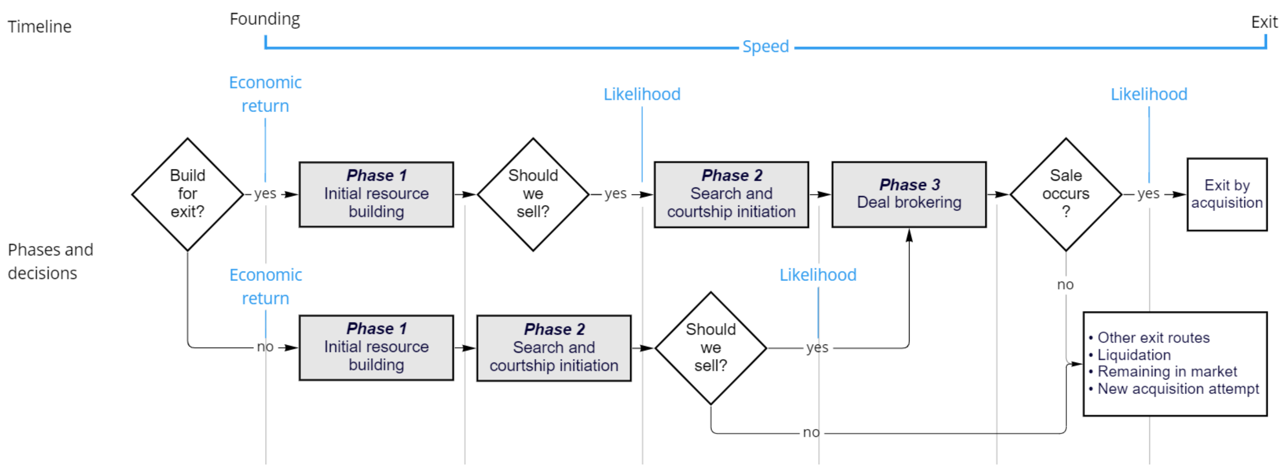

Figure 5.1: *Updated ZHB event and decision model*

Additionally, we needed to update the process view in order to distinguish between the two process sequences. To achieve this, we created two separate process charts; one for built-to-flip firms which imprint an intention to sell during founding, and one for those that do not (built-to-last). A simplified version of these two charts is visible in Figure 5.2.

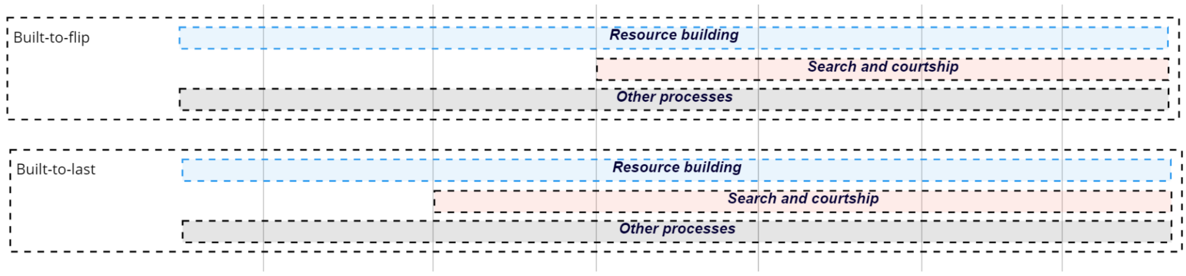

Figure 5.2: *Overview of updated split ZHB process model for both built-to-flip and built-to-last cases*

Resource building process

Most of our case findings corroborated the resource building phase described by Belboe et al. (2021). The leading theory used when building the ZHB model found that founders bring a lot of valuable alliance capital early on into a new venture, which increases entrepreneurial competitive advantage (Haynes et al., 2015: 481) and firm performance. Our study corroborates this by observing an accumulation of social resources early on in each of our four cases, as well as an increase in firm performance in firms that ranked high on social capital. A noteworthy observation is that in all observed cases, Alliance Capital helped connect buyer and seller. Belboe et al. (2021) also implied that the resource building phase begins at the same time as the imprinting of the founders' intentions. After founding, the activity of building resources is further imprinted by the direction the founders have intended for the firms' acquisition.

However, some adjustments had to be made, as the original ZHB model (Belboe et al., 2021) shows resource building as a short-term process that stops at the decision to attempt a trade sale. Our findings showed that to be true for only one of the built-to-last cases we interviewed, while all other cases continued building either alliance capital or business resources until the acquisition was finalized.

Taking these findings into consideration, we suggest the following resource-building process, shown in Figure 5.3.

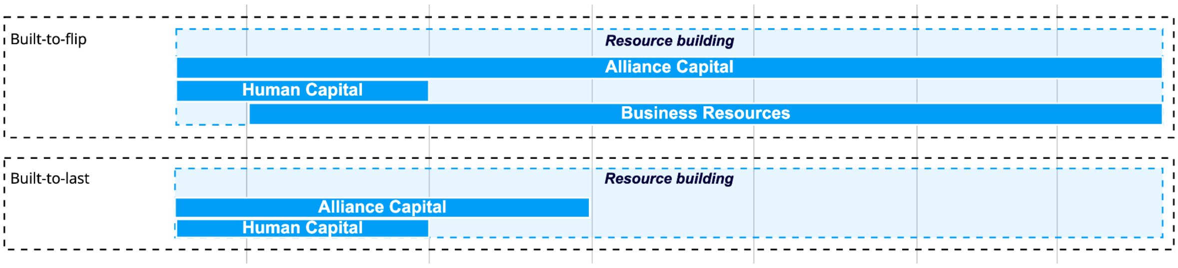

Figure 5.3: *Updated ZHB resource building process model*

Search and courtship process

In section 5.2.1, we noted that firms building to sell experienced a slower search and courtship process compared to their built-to-last counterparts. This makes sense in the context of another important finding - namely the fact that built-to-flip cases involved multiple parties in their search and courtship, compared to built-to-last firms, which only focused on a single seller in their search and courtship stage. This strongly corroborates findings by Mathisen & Rasmussen (2019), which claim that attracting multiple buyers and keeping alternate financing options at hand increase the potential of an acquisition, and was implemented in our new model by adding an active search process to the search and courtship phase, in order to show this active acquisition of alliance capital on the side of the firm, effectively splitting the strategic fit phase of Shankar et al. (2022) into two distinct phases.

While analyzing our findings, we found that all companies also described having undergone the same search and courtship process with their future acquirers as the one outlined by Shankar et al. (2022). We, therefore, incorporated this process in the process analysis for each of the four cases, ultimately finding that the deal structure process had occurred at the same time for all four cases.

In the ZHB model, search and courtship is shown to come sequentially after the resource building process is concluded and under the “should we sell?” decision. We have found that not to be the case, as resource building, performing, and to an extent, signaling was shown to last throughout the entire lifecycle when first present in all of the firms we interviewed, and one or more of these activities were active simultaneously as the search and courtship process in the acquired firms.

Bearing these discrepancies compared to the original ZHB model (Belboe et al., 2021) in mind, we present the search and courtship process diagram in Figure 5.4.

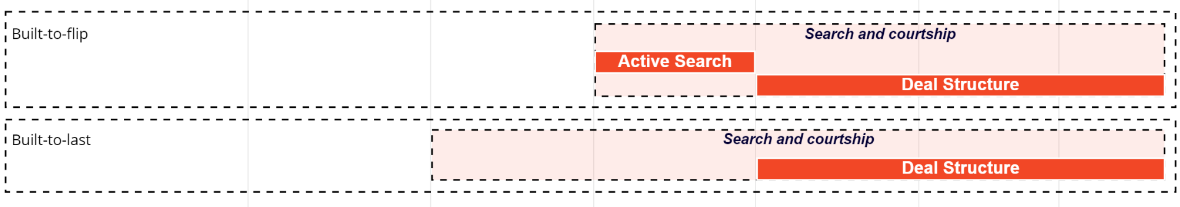

Figure 5.4: *Updated ZHB search and courtship process model*

In our cases we also found that the strategic fit, synergy confidence, and deal structuring phases of Shankar et al. (2022) were not sequential and temporally separated and dependent on the completion of subsequent phases as stated by them, but rather often happened simultaneously to some extent as shown in figure 4.1, 4.2, 4.3 and 4.4, although the strategic fit and synergy confidence phases always ended before the end of the deal structuring phase. We found a tendency for the first two phases, strategic fit and synergy confidence, to completely overlap at the beginning of the search and courtship process. An observed reason for this with case D was that the buyer and seller firm CEOs had previously worked together on Firm D, and as such had built rapport with each other before the buyer firm CEO, Champion D, assumed his position at Acquirer D. We also found a partial overlap of phase 3, deal structure, in built-to-flip cases B and C, where the firms started working on a deal structure while still under some uncertainty regarding buyer intentions, as an attempt to get more insight into these through the process of the deal-making. Finally, we observed that in both built-to-last cases we had interviewed, the buyer had approached the seller first, while the Shankar et al. (2022) model only shows the process where sellers are the initiators for this phase. This is something the paper acknowledges is due to the context of the data collected. However, we still find all phases presented by Shankar et al. (2022) to be fully relevant for our use and cases, and have as such chosen to implement them in our revised ZHB model below.

Other processes

Relevant theory suggests that the founder's initial imprinting of whether a firm will build to flip or last have a great impact on acquisition performance (Wennberg & DeTienne, 2014; Collins, 2000; 2005; 2009; Keyhani et al., 2021). Our research strongly corroborates this, as both Firm B and Firm D, which are built-to-flip, achieved a much higher economic return compared to their built-to-last counterparts.

The initial imprinting phase was correctly modeled in the ZHB model, however, said model failed to take into account the initiation of a secondary imprinting phase in built-to-last cases, which shifted strategic focus toward acquisition after being approached by a suitor starting a not planned strategic fit and synergy confidence phase, thus affecting the future exit by acquisition with the resources held at that time in a similar fashion as described by Albert & DeTienne (2016). Our case analysis also presents two cases that are not in line with the quantitative research by DeTienne & Cardon (2012) that found founders exited through their initially imprinted exit strategy. We again lack the empirical evidence to make any robust claim towards their research but still consider this observation noteworthy for remaking our model.

Lastly, Belboe et al. (2021) also claim that a performing and signaling phase comes directly and naturally after founding for cases that want to be acquired, something we found not to be the case for three of the four case firms we interviewed, as only Firms A and C explicitly signaled (Connelly et al., 2011), and only Firm B had matured enough to perform (Bobelyn, 2012). As such, these actions were removed from the revised model. It is worth noting that Firm B's maturity was also a useful replacement for outward signaling, as we observed that their size and industry relationship let them connect with potential acquirers through the firm's network, in which they were known as good performers.

The revised processes overview diagram is shown in Figure 5.5.

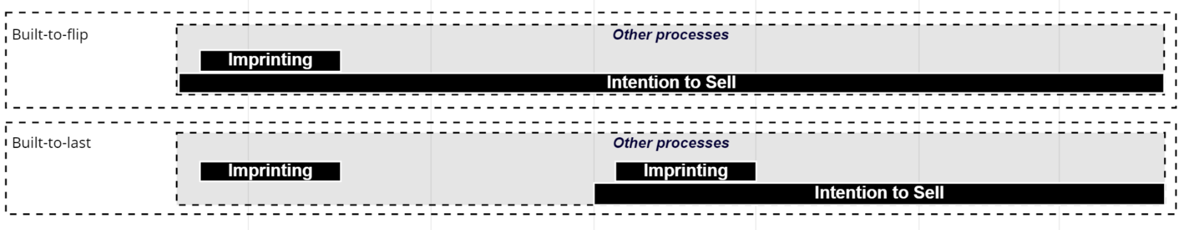

***Figure 5.5:** Updated ZHB process model for other processes*

5.3 Resources effect on exit by performance parameters

By examining the held resources of the firms, we set out to answer the second of our research questions:

RQ2: **How does the theoretical firm metrics' importance towards exit by acquisition performance as described by the ZHB-model compare to empirical findings from exited firms?**

We, therefore, compare all findings on the effect of firm resources on exit by acquisition performance parameters from the analysis in chapter 4 with the literature presented in chapter 2, *Theoretical foundation*. As such, all similarities between the firms found in the cross-case analysis are gathered and compared with literature pertaining to the effect of single resources, as presented in Table 2.1. In addition, we compare the within-case analysis of the resources of the firms with the resource configurations of Sirmon et al. (2021) from Table 2.2 to see if their resource configuration view gives a clearer picture of the realities of the cases.

Resources where no similarity was found

As shown in 4.2.2, the four exited firms did not show similarities in many of the single resource categories. This effectively proves by falsification that none of these resources are in themselves required for affecting any of the exit by acquisition performance parameters. The single resources that are thus not required for any of the performance parameters are listed in figure 5.6.

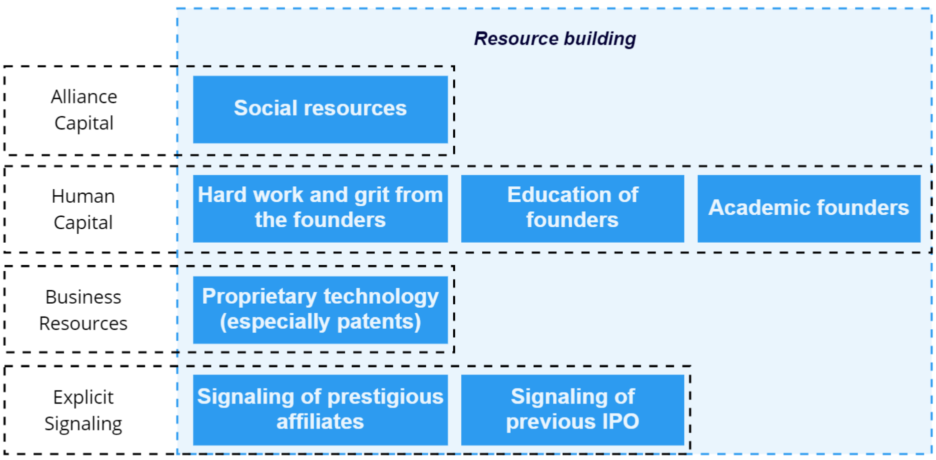

Figure 5.6: *Single resources not required for performance parameters*

However, we do not falsify any of the claims of the literature behind these resources' effect on the performance parameters, as none of them claim that the resources are a definite requisite either (Bobelyn, 2012; Roche et al., 2020; Lee and Lee; 2015; Clarysse et al., 2013; Sørensen, 2007; Pahnke et al., 2015a; b; Pollock et al., 2010; Bonardo et al., 2010).

Resources where similarities were found

As for the resources in which the firms did show similarities that thus are relevant for the performance parameters, most of the firm-held resources are not in accordance with the literature or are not mentioned in the literature at all. Consequently, we call for further research in this area, preferably using the resource configurations view of Sirmon et al. (2021). We here present all literature pertaining to our findings.

Only three of the similarities between the firms are in accordance with the theory presented:

1. All four firms have relatively few employees in accordance with the theory that bigger firm size lessens the likelihood of exit by acquisition (Bobelyn, 2012; Pisoni & Onetti, 2018). We therefore corroborate this theory to some extent.
2. Formal industry networks have been shown to increase speed to exit by acquisition (DeTienne & Cardon, 2012), so a medium score in this category on all fast exit firms does corroborate this to some extent. However, the firm with slow exit had the largest industry network, making the corroboration of the theory less strong.
3. Only one of the four cases we interviewed were older than 4 years at the time of acquisition, somewhat corroborating the findings by Pisoni & Onetti (2018) that mature firms are more rigid, leading to exits by acquisitions being less likely.

Five resource similarities had discrepancies from the literature to some extent:

1. All firms either had liquidity issues or had very high profitability, in contrast to the findings of Ponikvar (2018) and Keyhani et al. (2021) that low profits with no liquidity issues led to higher likelihood for exit by acquisition. However, as Ponikvar only states that firms with this characteristic are the most frequent targets for acquisition, and not that they are a requirement, our findings do not falsify any of their claims.
2. Both firms with low economic return had low revenues, however not both of the firms with high economic return had high revenues. This therefore stands somewhat in contrast with Bobelyn (2012) that claims that high revenues correlates to high

economic return from the acquisition. Although not statistically significant in any way, our results show that this is not a one-to-one relationship.

3. Both firms with low economic return had a medium focus on innovation, but not both of the firms with high economic return had a high focus on innovation. This is in some degree contrasting to Keyhani et al. (2021) and Bobelyn (2012) that both claim that degree of innovation correlates positively with economic return.
4. As no firm had received VC backing, no conclusion can be made towards whether or not it affects speed as theory suggests (Brav & Gompers, 1997; Hellman & Puri, 2000), except that it is at least not a prerequisite for fast exits.
5. Having experienced managers was also found to be correlated with increased acquisition return in the built-to-flip cases, challenging the findings by Bobelyn (2012), claiming no general correlation could be made between these.

The literature does not mention anything about six of the resource similarity findings:

1. None of the firms with speedy exit had any particular foreign stakeholders.
2. None of the firms with speedy exits had particularly experienced managers as a resource during the acquisition.
3. All firms with speedy exits had low revenues.
4. None of the firms with speedy exits or low economic return had any finished product in the market.
5. Both firms with low economic return had a low age.

None of these five findings were mentioned in previous literature as these coincide with the holes in previous research shown in Table 2.1. This study thus gives an indication that further research should be made in these areas. In addition, when the findings are compared to Table 2.1, many of the similarities affected different performance parameters than theorized. This can be explained with the claim of Sirmon et al. (2021) that the interdependencies of different resources are more important than the resources in themselves. As such, the combination with the other resources of the firm could have made the resource affect the parameters differently.

Of course, our study is qualitative and low in number of cases as mentioned in our limitations. This makes our claims less able to corroborate the literature, and as the literature makes no absolute one-to-one relationship claims between a resource and a parameter, we are also not able to completely falsify any claims. Thus, we can only use our findings to corroborate that to accommodate for all paths that firms may have to exit, a more nuanced model will be required. We suggest the use of the resource configurations view of Sirmon et al. (2021), as this view treats firm exits as a more heterogeneous process, in accordance with our findings.

Resource configurations

The within-case analysis better explains the effect on exit by acquisition performance parameters than the cross-case analysis when seen through the lens of Sirmon et al. (2021) and their resource configurations. All four firms match up with at least one of the described resource configurations.

Firm A has strong social capital, no VC ties, and no previous experience, thus matching one of the resource configurations of Sirmon et al. (2021) that correlates with an increased likelihood of exit by acquisition. As Firm A had no previous experience they relied on social capital heavily, and it was through an accelerator that they found their buyer.

Firm B scores high in three of the resource configurations correlating to high likelihood of exit by acquisition, as well as high in one configuration that leads to both a high speed and likelihood. It scores high in respectively, having 1) no patents but heavy early funding and ties to investment companies, 2) products in market, investment company ties, strong financial capital and prior experience, 3) products in market, strong social resources and investment company ties, and 4) products in market, strong social capital, investment company ties, prior experience, and strong financial capital. However, all these traits can be attributed to simply being a mature firm, and as such, it is less clear to see which of these configurations was the most important one in this case. It is also worth noting that although having the resource configuration for a speedy exit, Firm B was by far the slowest of the firms.

Firm C can be placed in one configuration that correlates to higher likelihood as it has patents, low investor funding and no product in market. Firm C relied heavily on patents to be a strategic fit for its buyer. In addition, their product was dependent on incumbent activities, strengthening the strategic fit.

Firm D is placed in two configurations, one with correlation to likelihood and one with correlation to speed and likelihood. With no patents but heavy early funding, it matches the first, and with strong financial capital, prior experience, and no patents, it matches the second. Interestingly, the firm was sold as the founder utilized their social capital to find the buyer, even though social capital is not mentioned in any of the resource configurations.

Even though the study of Sirmon et al. (2021) was done in the field of high tech medical companies and thus not being completely applicable to our Norwegian power and utilities firms, it is evident that its approach gives a more accurate view of the dynamics behind the resources' effect on the performance parameters compared to simply contrasting the four cases to each other and looking for similarities. It is therefore evident that this approach should be used in further research of other markets and fields as well to be more accurate in what resource configurations are relevant for each field. In addition, as Sirmon et al. (2021) did no research on the resource configuration's effect on economic return, we also call for further research in this area.

5.4 Revised ZHB model

Figure 5.7 presents the final, revised ZHB model. The new model has temporal separation with gray vertical lines showing activities that occur at the same time. This model is to our understanding the first to show this temporal placement of all the common processes of the exit by acquisition process as seen from the seller's side (Belboe et al., 2021; Welch et al., 2020), while accounting for temporal and resource interconnectivity. We believe this revised model can be used as a framework for further studies of the exit by acquisition process.

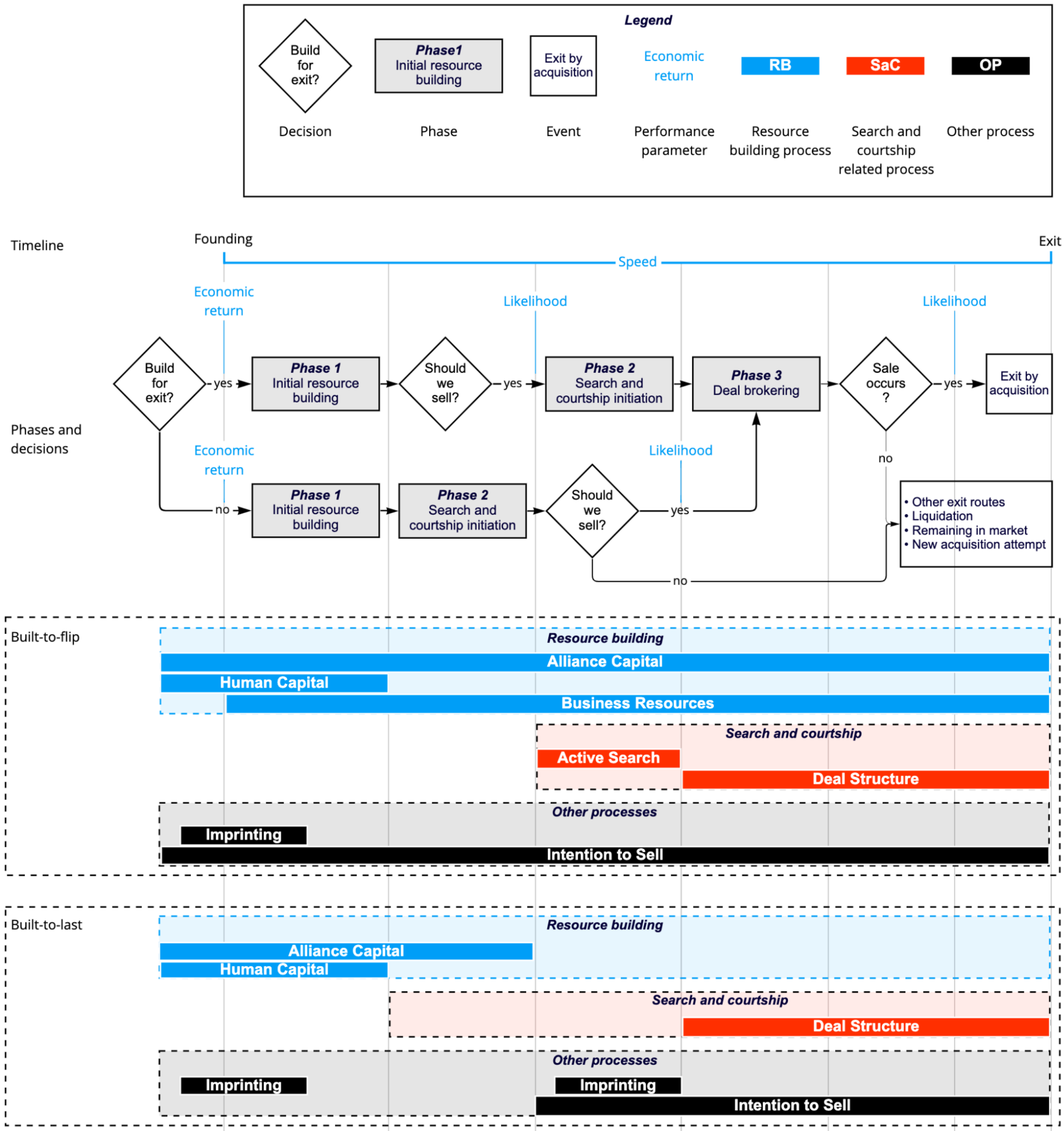

Figure 5.7: *The revised temporal ZHB model, including all process, event and decision timelines.*

Compared to the original ZHB model presented in figure 2.1, there are many differences. First and foremost, exit intention played a more important part than previously theorized by Belboe et al. (2021), as we have shown that the process is distinctly different between firms that have built the firm with the intention of exit from the start (built-to-flip), and firms that have built with the intention of lasting from the start (built-to-last). This splits the decision tree into two different paths, as well as influences the timing and occurrence of all but two processes.

The revised model removes signaling and performing as common actions affecting parameters for exit performance, as these were shown to not be present in all of the successfully acquired firms in our case study. Conversely, resource building, sale intentions, and the search and courtship process were deemed of such high theoretical value that we decided to expand upon all three in the revised model.

Resource building was split into three distinct processes; alliance capital, human capital and business resources. Alliance capital includes social resources (Bobelyn, 2012), and stakeholder involvement and experience (Brav & Gompers, 1997; Hellman & Puri, 2000; Dashti & Schwartz, 2018). Human capital focuses on the industry relationships, managerial experience (Bobelyn, 2012), education and hard work brought by the founders and managerial team (Roche et al., 2020; Lee & Lee, 2015). Business resources indicate the value of intellectual property (Bobelyn, 2012), proprietary technology (Cefis and Marsili, 2011; Bobelyn, 2012; Keyhani et al., 2021), firm age and size (Pisoni & Onetti, 2018) and revenue, profit, and liquidity within the firm (Bobelyn, 2012).

Search and courtship process was added theoretical depth by including new theory on buyer-seller tensions in the pre-acquisition process by Shankar et al. (2022), as well as a new active search phase to indicate the search process built-to-flip firms were shown to enter following a decision to actively start the acquisition process..

Imprinting and sale intentions were also shown to be commonly present at the same stages for build-to-flip and build-to-last firms, and were added to our new model accordingly. Specifically, we find that build-to-last firms looking to be acquired tend to undergo a new imprinting phase when deciding to shift their strategy toward an exit-oriented one, while the built-to-flip firms in our study held their initially imprinted values throughout their entire lifecycle.

Finally, we found that the literature behind the single resources' effect on exit by acquisition performance was not satisfactory in describing the four cases. However, by instead using the view of resource configurations as suggested by Sirmon et al. (2021), the four cases were better represented, although the view did not accommodate for all factors to be precisely represented. Conclusively, we call for research to be done on the interdependence and connectivity of resources to further a precise understanding of their effect on exit by acquisition.

6 Concluding remarks

Through conducting this thesis, we have made the effort of answering how firms prepare for and execute an exit by acquisition. Prior to the master thesis, we unified four main streams of literature, resulting in a synthesized preliminary model of acquisition as a seller-side process, serving as the theoretical framework in order to explore our two RQs. Based on this, we created our theoretical construct and interview guide for gathering- and structuring data before conducting four qualitative in-depth interviews with four stainable case firms - chosen purposely in line with the aims of the study.

In this final and concluding chapter, we will provide the theoretical and practical implications of the thesis towards the field of entrepreneurial research and future sustainability-centered entrepreneurs. We argue that we are able to achieve strong analytical indications for certain parts of the ZHB framework, corroborating empirical evidence with existing literature on how firms prepare for and execute an exit by acquisition - in one unified model. Furthermore, we indicate its practical importance by highlighting how the knowledge of the process can help guide entrepreneurs and other parties. Finally, we present our proposals for further research.

6.1 Theoretical implications

Introducing this thesis, we presented several gaps in the literature. Through an earlier extensive literature review (Belboe et al., 2021), we examined the research concerning exit by acquisitions from the seller's point of view, finding that the body of research that does exist primarily focuses on specific phases or phenomena, with little existing theory looking at the process as a cohesive multi dependent network of resources, parameters, decisions and outcomes (Shankar et al., 2022; Welch et al., 2020). Our findings resulted in four, roughly divided streams of literature; (I) acquisitions as a commercialization strategy, (II) resources' and activities' effect on acquisition outcome, (III) early intentions and resources' imprint effect on acquisition outcome, and (IV) search and courtship. We believe that by combining these singular elements and theories into a composite process, our research achieves this top-down perspective on seller-side acquisitions, and as such acts as a theoretical contribution to the broader, macro-level acquisition literature.

In terms of our two RQs, we believe to have theoretically contributed to both questions through our findings and discussion. In regards to RQ1, our findings are that much of the decision-making process in the original ZHB model was correct, but the presented processes and their time-wise placement were incorrect for some processes. Using this information, we have revised and presented an updated ZHB framework, making it reproducible by others by adding the three phases of acquisition presented in section 4.2.1, implementing new research by Shankar et al. (2022) to the search and courtship process, and made adjustments to the length and timing of each process, thus making the model a better temporal representation of the acquisition process that can be used in further research on exits by acquisition.

Our findings support the existence and order of the pre-acquisition process model for search and courtship presented in Shankar et al. (2022), and our suggested model benefits from the addition of these pre-acquisition processes. However, we would like to suggest that the idea that pre-acquisition processes are sequentially separated is flawed, as all of the cases we interviewed had some overlap. Specifically, we found a tendency for the first two phases, strategic fit and synergy confidence, to often completely overlap at the beginning of the search and courtship process, and later somewhat overlap with the deal structuring phase in many cases. In addition, we have also emphasized an area for further research regarding buyer initiations of the strategic fit phase in the model outlined in Shankar et al. (2022), as discussed in chapter 5, *Discussion.*

We answer RQ2 by providing a thorough analysis of each of the four cases' metrics' importance for exit by acquisition. Here, our findings suggested that economic return was influenced by initial firm imprinting of exit strategy, where building for exit resulted in a significantly higher acquisition result. While there is no single resource that can act as a predictor or effector for exit by acquisition, some parameters were influenced by resources. However, we found more discrepancies than corroborative relationships between our findings and the theory presented in chapter 2 when examining the effect of single resources on exit by acquisition performance. As such, we strengthen the view that examining single resources' effect on exit by acquisition performance fails to clearly accommodate for the realities of many firms. However, examining the within-case findings with the view of resource configurations better accommodated the results, although discrepancies were still found. Nonetheless, we strengthen the view that resource configurations have an effect on exit by acquisition performance, corroborating the claim of Sirmon et al. (2021).

By constructing the ZHB framework, we have to our understanding modeled the first unified model of exit by acquisitions accounting for the temporal dynamics from the seller's point of view, as recommended by Welch et al. (2020).

6.2 Practical implications

The practical implications of this thesis will be separated into two parts: the seller side and the buyer side. We believe that although the ZHB-model is exclusively picturing the seller's point of view, the practicalities of understanding the process a firm goes through before getting acquired can also serve useful for the buyer side.

Seller side

First, knowledge on how to build a sustainability-centered firm for exit by acquisition, or knowledge of how to exit a sustainability-centered firm without the initial intention to build for exit can lead to greater economic return. Specifically, we found that firms that did not build for exit received distinctly lower economic return in their acquisition. We believe the main reason for this is that the built-to-last firms did not perform an active search for more potential buyers when approached, effectively reducing their leverage in the following negotiations. We, therefore, recommend built-to-last firms to actively search and build alliance capital with other potential buyers, involving multiple parties early on to potentially increase their economic return when approached by a buyer. This greatly affected the firm's leverage in the phase of deal brokering, thus increasing the economic return. We also recommend firms, in general, to be built as if they were built to sell, even if the intention is to build a firm for lasting, as the strategy may change to attempting to exit by acquisition later in the life of the firm. We also recommend all companies attempting to exit by acquisition to consider other sources of financing to use as leverage in the negotiations, as described by Shankar et al. (2022) and done by Firm C in their acquisition process.

We believe that our study can have implications for firms looking for VC backing. VCs' goals are to invest in firms that can later achieve an exit, thus providing economic return for the VC (Gompers & Lerner, 2004; Lerner & Nanda, 2020). Therefore, having a clear understanding of what resources and processes are needed for a firm's exit can aid an entrepreneur in building the firm to be viable for VC backing and later exit by acquisition.

By shedding light upon the process for exit by acquisition, entrepreneurs can more easily harvest entrepreneurial rent through founding sustainability-centered firms. As entrepreneurs having achieved previous success tend to replicate this process, we have now given them a baseline framework which they can modify through their own experiences. Furthermore, we believe in this framework to reduce the perceived risk for future entrepreneurs to found new sustainability-centered firms, yielding societal gains through more innovative firms, sustainable exploration, and increased attractiveness of being an entrepreneur. This, in turn, may have a positive effect on the implementation of the newly presented EU taxonomy. Therefore, we recommend the revised ZHB-model to be used in either post-hoc rationalizations of acquisition events for experienced (serial) entrepreneurs, or for modeling a firm’s progress through the various acquisition stages along the way, for inexperienced entrepreneurs.

Buyer side

From the buyer's side, acquiring firms is often seen as a strategic activity of getting access to new technology, expanding into new markets, or liquidating competition. However, a selling firm can have multiple reasons for declining potential buyers, e.g. lack of trust and strategic fit between the two. As such, it is important for incumbents to acquire an understanding of the process seen from the sellers' point of view. Therefore, we argue that the insights provided by this thesis on how firms prepare for and execute acquisitions can give the buyer a greater understanding of the seller’s point of view. As a result of this, we believe post-merger integration can become less prominent for failure, and more acquisitions can succeed for both parties. We, therefore, recommend potential buyers make use of the revised ZHB-model as a framework for mapping the routes, activities, and stages that potential sellers have been, or are to be, subject of, in order to better adapt their own strategies accordingly. Specifically, we can recommend buyers wanting to cheaply acquire another firm to actively search for firms to buy, instead of waiting to be approached by potential sellers, as this can lower the economic cost of the transaction.

6.3 Further research

In this section, we propose further research towards our research questions based on our findings as well as the discovered lack of literature and research.

We researched four cases in Norway in the power and utilities industry that were sustainability-centered to begin exploring the ZHB model. As this was all the data used to restructure the ZHB model, we call for further research to gather more data from different contexts to improve the ZHB model to a robust unified temporal model of the process of exit by acquisition. With our thesis, we have prepared the ZHB model for testing by quantitative analysis with bigger data sets and believe that a QCA or fuzzy-set QCA (fsQCA) examining the sequentiality of the different phases of the ZHB model given different intentions and firm parameters should be done to find more robust relationships within the model. We encourage future research to change the model to better explain cases within different industries, geographies, and markets and to corroborate the model within the context we have examined. There are also undoubtedly other processes important for exits by acquisitions that our cases did not reveal, such as third party brokering of the deals or employee or management restructuring leading up to the deal, so more qualitative case studies should also be done. With the gathering of more data, the model should be updated such that any possible scenario could be accomodated.

We also call for researchers on exit by acquisition to use the ZHB framework as an anchoring in the scopes of their research to clearly state which parts of the exit by acquisition process they are examining.

In the view that single resources affect exit by acquisition performance, a lot of research is lacking. Six of our similarity findings of firm held resources' effect on the exit by acquisition performance parameters were not connected to any literature, as there had been no research on the effect. The six findings were:

- None of the firms with speedy exit had any particular foreign stakeholders.
- None of the firms with speedy exits had particularly experienced managers as a resource during the acquisition.
- All firms with speedy exits had low revenues.

- None of the firms with speedy exits or low economic return had any finished product in the market.
- Both firms with low economic return had a low age

In addition, Table 2.1 in section 2.1.3, *theoretical foundation,* shows many gaps in the literature pertaining to the resources effect on exit by acquisition performance. We therefore call for further research on these gaps, and we especially call for further research on the six effects mentioned above as our findings hint that there exists an effect in those areas that is yet to be researched. With further research on these, our main conclusion on RQ2 that the resource configuration effect better accommodates the result of our firms may be overturned if most or all of these six findings end up being in accordance with the view of single resources' effect on exit by acquisition performance.

Only one previous study has been done in the view that resource configurations give a clearer picture of the effect of resources on exit by acquisition performance (Sirmon et al. 2021). As our results were better accommodated by this view, we call for this view to be used in further research in different contexts such as different industries, geographies, firm sizes, etc. We also call for research to be done on resource configurations' effect on economic return from the acquisition, as this has never been done before. This should arguably be done with fsQCA as described by Sirmon et al. (2021) for accurate results.

Lastly, our study only examines the process of firms that achieved exits by acquisition. Thus our research does not accommodate firms that have unsuccessfully attempted exit by acquisition. Researching what parameters and processes could lead the acquisition to fail would be of equal importance as seeing what made the acquisition happen. We, therefore, call for further research on firms that have failed the process by examining the firm-held resource configurations and what processes the firms went through at what time.

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Appendix A - Interview guide

Go through the warm-up phase. Go "around" the table introducing the researchers as well as the thesis and what we are trying to analyze. Get the firm representative comfortable and trusting in us.

Background and sustainability:

I. What was your role in the company

II. Could you tell us what the company did in detail. How was the business model? How many employees, how many developers/researchers/sales/management?

III. How would you rate yourself on the EU tax sustainability metrics?

   A. Climate change mitigation
   B. Climate change adaptation
   C. The sustainable use and protection of water and marine resources
   D. The transition to a circular economy
   E. Pollution prevention and control
   F. The protection and restoration of biodiversity and ecosystems

IV. How would you describe the startup's prioritization of profits vs sustainability (in percentages)?

In this introductory section of the interview we want to find out more about the firm in general and what role the firm representative played in the firm. Additionally, we want to find out how they define themselves sustainable according to the EU taxonomy and the context of our study.

RQ1: Your path to acquisition

I. Did you have the intention of selling when the company was founded?

   A. If so, how did you work towards that goal?

II. Who initiated the acquisition?

   A. How did you approach the buyers?
   OR
   B. How did they approach you?

III. How did the acquisition happen?
IV. How much was the company bought for?
V. Did you target any specific individuals?
    A. Did you have a “champion” at the acquiring company?
VI. Did you have any considerations as to who you wanted to sell to before starting the official process?
VII. Did you consider not selling after having received interest from the buying company?
    A. After seeing the proposed sum?
VIII. What was your reason for selling?
IX. Did you consider an IPO or acquisition as your goal?
    A. Were you sufficiently informed about these options before starting the M&A process?

In this question we want to understand the single firms' path to being acquired. Was it intentional or not? Who initiated the process? Why did they sell? What triggered the event? We want to know how and when the important decisions and actions occurred. Depending on the answers during this section, feel free to go back and forth between RQ1 and RQ2 connecting the dots between the path, resource acquisition, and actions affecting parameters for exit performance.

RQ2: Resources present in your firm and :

I. Who were the main stakeholders/decision makers in the acquisition process?
II. Did any of the founders have any previous experience in startups or management?
III. What was the education of the founders?
IV. Did any of the founders have any network in the industry of the company you sold to beforehand?
V. How many working hours did you usually have per week prior to the acquisition?
VI. Did you have any partnerships or alliances prior to the acquisition?
VII. Was the acquisition cross-border?
VIII. Did you have any foreign stakeholder?
IX. Did any of the founders bring capital into the firm?
X. How much funding did you receive prior to the acquisition?
XI. How much revenue and profits? Profit margins?
XII. Could you describe your investors' role in the acquisition?

XIII. Did you have any VC backing?

XIV. Did any of the founders come from academia (professors, researchers etc.)?

   A. What about other key stakeholders?

XV. How was your IP strategy?

   A. Patents? Corporate secrets?

   B. Did this strategy change prior to the acquisition?

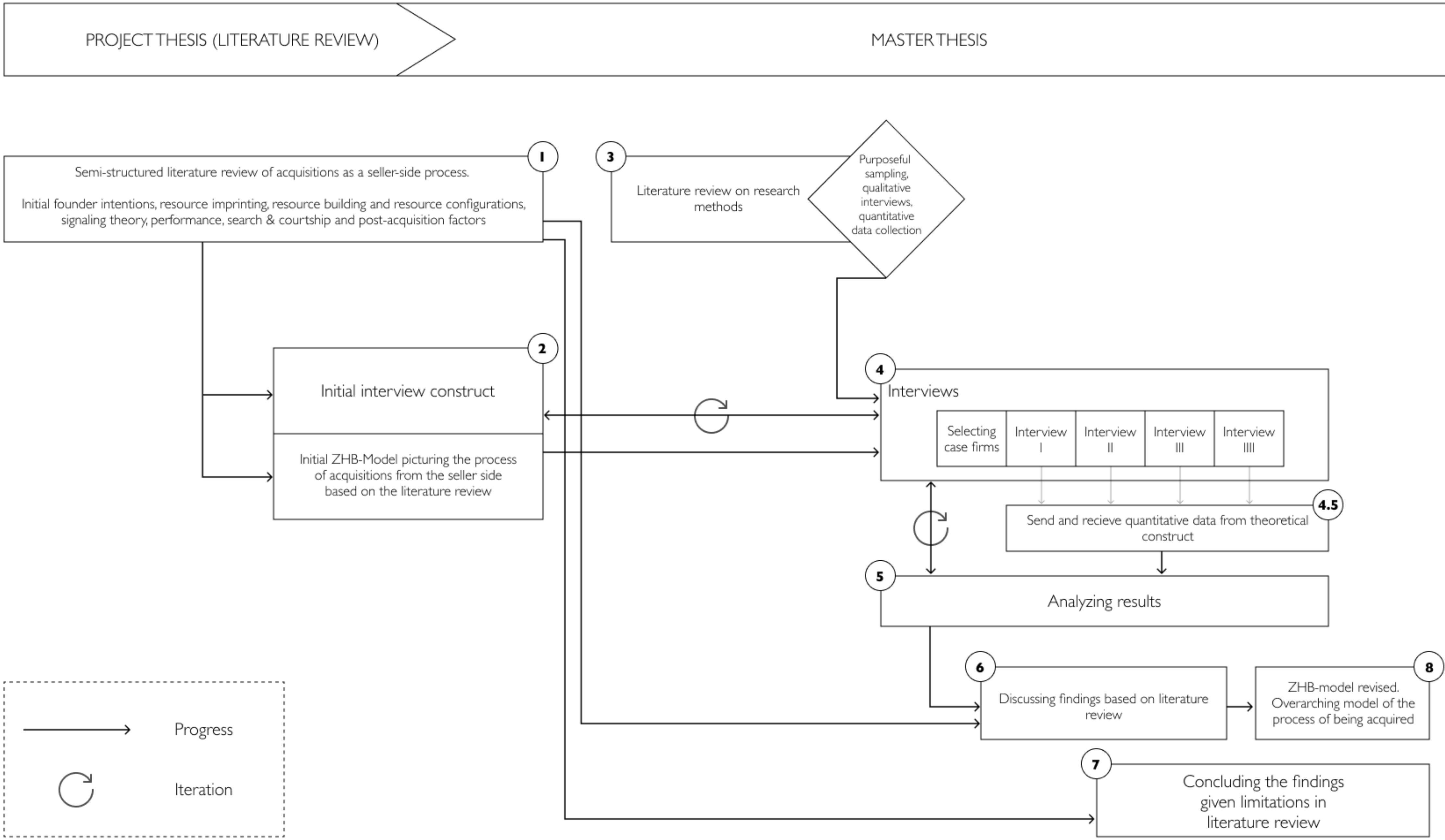
   C. Did you have to make any changes to this strategy post-aquisition?

XVI. Did you have any products in the market at the time of the acquisition?

XVII. How much effort was put into innovation?

XVIII. Did you by purpose signal out any prestigious affiliates or awards?

In this question, we seek to outline the firms' resources and how these were acquired. Try to get the element of time into the equation. We want to find out the importance of the different human, technological and social resources mainly seen from the seller-side, but if appropriate, feel free to get the firm representatives' thoughts on how the buyer valued the resource in question. Move further into strategic actions affecting the resources in order to say something about the firm performance.



Appendix B: *Model picturing the research process from project thesis to master thesis*

Table B: Explanation of Appendix B

1	Literature review	Being founders of our own companies building for exit, the area of acquisitions as a seller side process was a interesting topic. Initial reviews of the literature showed a majorly understudied area - the sellers point of view. Thus, we conducted a extensive literature review on pre/post-merger success, resourced based theory, exit-strategies, resource imprinting, search and courtship and signaling.
2	Theoretical constructs and models	The literature review conducted in the project thesis served as the foundation in making initial interview contructs for understanding acquisitions from the sellers point of view. The review also resultet in a theoretically "correct" model pitcuring the process of acquisitions from the seller-side, serving as a framework.
3	Methodolog-ical literature review	Having finished the project thesis, the researchers reviewed different methods appropriate for conducting the data acquisition of the master thesis. The method deemed appropriate was then applied to the initial interview construct.
4	Interviews	The interviews was based on the ZHB-model and its underlying theory, emphasizing resource based theory. Using the method described in (3) the researchers conducted four semi-structured case firm interviews. Exploiting the experiences gathered by conducting the interviews, we accordingly reiterated our constructs improving our exploitation of the results in our analysis.
4,5	Quantitative data	Subsequent of the interviews, we sent out our theoretical construct (seen in Appendix C), collecting quantitative data - enabling the researchers to capture both the initial response, and a more thoughtful response where clearer options were available.
5	Analysis	Having collected the data, the researchers analyzed it in accordance with the method (3), categorizing the findings in order to answer the thesis' RQs.
6	Discussion	Following (5), the researchers then discussed the findings in light of the theory reviewed in (1).
7	Concluding remarks	Taking the limitations reflected from (1) and (3), the researchers concluded the master thesis and accounted for its theoretical- and practical implications.
8	Main finding	The ZHB-model revised showing both the process of being acquired from the sellers point of view, and how firm metrics' affect acquisition performance.

Appendix C - Theoretical construct

Type	**Description**	**Weighted points (0-10)**	**Rationale / Comments**
Alliance Capital [aggregated percentage]			
AC	Social resources		
AC	Foreign stakeholders		
AC	VC backing		
AC	VCs previous experience with exit by acquisition		
AC	Firm size		
AC	Firm age		
Human Capital [aggregated percentage]			
HC	Hiring/having experienced managers		
HC	Founder's previous managerial or startup experience		
HC	Large networks of formal industry relationships		
HC	Education of founders		
HC	Academic founders		
HC	Hard work and grit from the founders		
Business Resources [aggregated percentage]			
BR	Proprietary technology (especially patents)		
BR	Innovation		
BR	Revenues		
BR	Inferior profitability without liquidity issues		

BR	Product in market		
Explicit Signaling [aggregated percentage]			
ES	Signaling of prestigious affiliates		
ES	Signaling of previous IPO		

Appendix D - Semi-structured literature review of the ZHB-model

Table D: List of read articles and their topics. M&A = Mergers and Acquisitions, B/S = Buyer/Seller, So = Social resources, Hu = Human resources, Te = Technological resources, Fi = Financial resources, RC = Resource configuration

Taken from (Belboe et al., 2021)

Article (Arranged by topic)	**M&A**	**B/S**	**So**	**Hu**	**Te**	**Fi**	**RC**
Total number (88)	**11**	**37**	**19**	**27**	**4**	**8**	**5**
Bobelyn (2012)	x	x	x	x	x	x	
DeTienne & Cardon (2012)	x	x		x			
Pisoni & Onetti (2018)	x	x					
Ranft & Lord (2002)	x	x					
Gomes et al. (2013)	x	x					
Balcaen et al. (2012)	x						
Hagedoorn & Sadowski (1999)	x						
Mathisen (2017)	x						
Periu (2013)	x						
Prisciotta & Weber (2005)	x						
Puranam (2001)	x						
Rossi et al. (2013)	x						
Sirmon et al. (2021)		x	x			x	**x**
Anand et al. (2005)		x	x				
Dashti & Schwartz (2018)		x	x				
Albert & DeTienne (2016)		x		x	x		
Colombo & Piva (2012)		x		x			
Gompers & Lerner (2004)		x		x			

Graebner (2004)		x		x			
Keyhani et al. (2021)		x			x		
Arora et al. (2021)		x					**x**
Adegbesan (2009)		x					
Ahuja & Katila (2001)		x					
Arora et al. (2001)		x					
Barrow (1990)		x					
Brueller & Capron (2021)		x					
Brush et al. (2008)		x					
Carsrud & Brännback (2011)		x					
Collins (2000),		x					
Colombo & Piva (2008)		x					
Colombo et al. (2009)		x					
Eisenhardt & Schoonhoven (1996)		x					
Gans & Stern (2003)		x					
Graebner & Eisenhardt (2004)		x					
Graebner et al. (2010)		x					
Hoehn-Weiss & Karim (2014)		x					
Lerner & Nanda (2020)		x					
Rahman et al (2016)		x					
Santos & Eisenhardt (2004)		x					
Simsek et al. (2015)		x					
Vermeulen & Barkema (2001)		x					
Watson et al. (1996)		x					
Wennberg & DeTienne (2014)		x					

Zaks et al. (2018)		x					
Zollo & Singh (2004)		x					
Pollock et al. (2010)			x	x			
Adler & Kwon (2002)			x				
Audretsch & Feldman (2004)			x				
Batjargal (2000)			x				
Batjargal et al. (2013)			x				
Colombo et al. (2006)			x				
Dashti (2009)			x				
Florin et al. (2003)			x				
Lippman & Rumelt (1982)			x				
Maital (2008)			x				
Pahnke et al. (2015a)			x				
Pahnke et al. (2015b)			x				
Ragozzino (2016)			x				
Sørensen (2007)			x				
Torstila & Laine (2005)			x				
Cooper et al. (1994)				x		x	
Hellmann & Puri (2000)				x		x	
Aghion & Stein (2008)				x			
Bates (1990)				x			
Colombo & Grilli (2005)				x			
Crook et al. (2011)				x			
Duckworth et al. (2007)				x			
Galton (1869)				x			

Gompers et al (2005)				x			
Hellmann & Puri (2002)				x			
Johansson (2007)				x			
Lee & Lee (2015)				x			
Maddi et al. (2012)				x			
Marino & De Noble (1997)				x			
Mason & Harrison (2006)				x			
Roche et al. (2020)				x			
Stam et al. (2008)				x			
Ucbasaran et al. (2003)				x			
Wasserman (2003)				x			
Westhead et al. (2003)				x			
Benner & Tushman (2003)					x		
Gorman & Sahlman (1989)						x	
Hofer & Schendel (1978)						x	
Ponikvar et at. (2018)						x	
Ragozzino & Reuer (2007)						x	
Clarysse et al. (2011)							**x**
Gruber et al. (2010)							**x**
Penrose (1959)							**x**

To clarify, Table D is added directly from the previously conducted literature review by Belboe et al (2021).

"Having a topic checked off implies notable inclusion of the topic(s) in question. Of the 88 articles listed in Table D, 12 mainly focused on M&A and 38 were used to discuss the buyer/seller perspective. Of the different resource categories, 19 takes on social resources, 27 takes on human resources, 4 takes on technological resources, 8 takes on financial resources, and 5 deals with the configuration of these. What appeared was that there are few articles that thoroughly deal with multiple topics, and only two dealing with four topics (those being Bobelyn (2012) and Sirmon et al. (2021).)" (Belboe et al., 2021, p. 14-17).

Appendix E - Quality assurance through database search of the ZHB-model

Table E: List of search words and selected articles. WoS = Web of Science, S = Scopus. (Belboe et al., 2021).

Search word(s)	Data base	Results	Read abstracts	Read articles	Selection of articles
Merger + Acquisition *Categories: Management, economics, business*	WoS	163	13	5	Hagedoorn & Sadowski (1999) Mathisen (2017) Santos & Eisenhardt (2004)
M&A + new venture *Categories: Management, economics, business*	WoS	48	22	8	Appelbaum et al., (2017a) Keyhani et al., (2021)
Pre- merger&acquisition	WoS	75	3	0	None
Post- merger&acquisition	WoS	240	5	3	Sales et al (2021) Lehmann & Schwerdtfeger (2016)
Exit route *Categories: Management, economics, business*	WoS	66	7	1	Ponikvar et al., (2018)
Exit strategy *Categories: Management, economics, business*	WoS	34	5	2	Eisenhardt & Schoonhoven (1996)
Exit strategy *Categories: Management, economics, business*	S	73	5	3	Collins (2000)
Exit sale strategy *Categories: Management,*	WoS	51	5	2	Albert & DeTienne (2016) Balcaen et al., (2012)

economics, business					
New Venture + Exit *Categories: Management, economics, business*	WoS	38	3	3	Wennberg & DeTienne (2014) Periu (2013)
New Venture + Exit *Categories: Management, economics, business*	S	166	10	1	Gans & Stern (2003),
Resource configuration* + venture *Categories: Management, economics, business*	WoS	75	13	2	Gruber et al., (2010) Colombo & Piva (2021)
Complementary resource* + venture *Categories: Management, economics, business*	WoS	136	9	1	Colombo et al., (2006)
Entrepreneur + motivation *Categories: Management, economics, business*	WoS	46	4	3	Carsrud & Brännback (2011)
Growth strategy + exit *Categories: Management, economics, business*	WoS	153	15	3	Aghion & Stein (2008)

To clarify, Table E is added directly from the previously conducted literature review by Belboe et al (2021).

"We found 20 articles by doing the database searches. Out of those, only four were articles which we had not discovered through the snowball sampling. This indicated convergence towards the same literature, leading towards a logical where crucial literature had been covered" (Belboe et al., 2021, p. 18-20).

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