

Changing your game, a look at Business Model Innovation.

Investigating the key capabilities needed to successfully innovate your business model.

31-10-2018

Lisa Postma

University of Twente

Business Administration

Technische Universität Berlin

Innovation Management, Entrepreneurship and Sustainability

First supervisor: Dr. K. Zalewska

Second supervisor: Dr. R. P. A. Loohuis

Authors note: *For all questions and remarks regarding this paper, please contact me at l.postma.prive@gmail.com.*

Acknowledgements

This master thesis acts as the completion of the Master Business Administration at the University of Twente and the Master Innovation Management, Entrepreneurship and Sustainability at the Technical University of Berlin.

Firstly, I would like to thank my supervisors: Dr. K. Zalewska who helped and guided me through this thesis. Without her support and feedback I would have never managed to write this thesis. Furthermore, I would like to thank Dr. L. Loohuis from the University of Twente and Mrs. N. Strobel from the Technische Universität Berlin for their supervision.

Second, I would love to thank everyone at Incentro Business Acceleration, who welcomed me into their family of Incentronauts for the better part of half a year. Writing my thesis at Incentro was a great learning experience, both on an academic and personal level. I especially want to thank Mr. X. Theijl and Mr. F. Weegink, who helped me navigate through the company and get access to anything I wished to know. I would also like to thank the interviewees for their openness and willingness to share information. Finally, I want to thank Mrs. S. van Alem, all of the hours we spent together in meeting rooms, writing down all our relevant and irrelevant ideas are what helped me to get much needed insights in this project.

Thirdly and finally, I want to thank all the people who supported me during the writing of this thesis. My friends and family who continued to listen to my complaining and stress. It is a privilege to be surrounded by so many helpful and loving people. And finally, a special notion for my boyfriend, who of all people had to endure the most. Thank you, for doing anything in your power to keep me sane, even if it includes a late (sunday) night trip to the Albert Heijn.

Management Summary

For as long as we know, companies have been redesigning and reshaping their business models, with varying success. However, it is still a question why some companies fail at these transformation projects, while others succeed. To see why this is the case, this research looks at the key capabilities to Business Model Innovation. The question to be answered is: “***What are the key capabilities to ensure a successful Business Model Innovation project?***” The research focuses on Business Model Innovation as being a project, which can either end as a success, or as a failure, rather than an ongoing process. It looks at three groups of capabilities which are expected to influence the successfulness of a Business Model Innovation project. These three groups are based on existing literature on Strategic Agility.

To answer the research question, a qualitative study was performed. By conducting in depth semi-structured interviews at three companies, the key capabilities were uncovered. The interviewees were all part of the change process, and were therefore able to recall the capabilities which most influenced the successfulness of their companies transformation.

The results show 16 key capabilities to ensure Business Model Innovation success. These capabilities were grouped in three groups: 1. Strategy Innovation, 2. Resource Capitalisation and 3. Networking. It shows that the framework of capabilities influencing strategic agility, can be applied to Business Model Innovation. However, the underlying micro-capabilities only partly overlap. In the end, the group of strategy innovation consist of the following capabilities: *Sensing opportunities and challenges, Seizing opportunities, Experimentation and Research, Business model fit, Learning, Goal setting and evaluation, Change management, Leadership involvement*. There were five capabilities found for Resource Capitalisation: *Utilisation of existing resources, Acquisition of new resources, Company culture, Ambidexterity, Commitment*. Three capabilities were found for Networking: *Using the current network, Growing the network, Stakeholder management*.

This study contributes to existing literature by showing that, with some adaptations, the framework of capabilities for Strategic Agility can be applied to single Business Model Innovation projects. Furthermore, it expands knowledge on which capabilities underly Business Model Innovation Success. This knowledge also benefits the companies researched, and businesses in general, since the capabilities found can help companies to see which capabilities they may lack when they decide to undertake a Business Model Innovation project. Thus, when a company would express the desire to change their Business Model, they could refer back to these capabilities and see which capabilities they should develop.

Table of contents

1 Introduction	5
2 Literature Review	8
2.1 Defining business models	8
2.2 Business Model Innovation	9
2.2.1 Antecedents and Risks to Business Model Innovation	10
2.2.2 What will lead to successful Business Model Innovation?	11
2.3 Strategic Agility	13
2.4 Meta capabilities for strategic agility	13
3 Method	16
3.1 Research design/setting	16
3.2 Selection of companies	16
3.2.2 Company A	17
3.2.3 Company B	17
3.2.4 Company C	18
3.3 Measurement	18
3.3.1 Strategy Innovation	19
3.3.2 Resource Capitalization	20
3.3.3 Networking	22
3.4 Data Collection	23
3.5 Analysis	24
4 Results	25
4.1 Changes in the Business Models	25
4.2 Goal of the Business Model Innovation	26
4.3 Successfulness of the Business Model Innovation	27
4.4 Key Capabilities for Business Model Innovation (success)	29
4.4.1 Capabilities for Strategy Innovation	29
4.4.2 Capabilities for Resource Capitalisation	33
4.4.3 Capabilities for Networking	36
4.5 Table of Results	36
5 Discussion and Conclusion	37
5.1 Key findings	38
5.1.1 Strategy Innovation	38
5.1.2 Resource Capitalisation	39
5.1.3 Networking	40
5.2 Refined framework	40
5.3 Implications of key findings	41
5.4 Limitations	42
6 References	43

1 Introduction

One of the reasons companies fail is in fact, not because they do something wrong or even mediocre, but because they keep doing the same thing right for too long. Business model change is seen as an essential factor for company success since it, on the one hand, allows companies to take advantage of new opportunities while at the same time reducing the risk of becoming obsolete (Achtenhagen et al., 2013). This research dives into the topic of Business Model Change or Business Model Innovation ("Business Model Innovation").

Over the years, different research streams emerged in the field of Business Model research and more specific, Business Model Innovation Research. In this field, there are roughly four different literature streams present. The first of which focus on the conceptualization of Business Model Innovation. The other three focus on the prerequisites of conducting Business Model Innovation, Business Model Innovation as a process and the elements of this process and finally the effects achieved through Business Model Innovation.

Looking at the prerequisites of Business Model Innovation, scholars look at macro-level developments as globalization, as globalization, environmental issues and changes in consumer behaviour (Wirtz et al., 2010). Also, industry developments can influence the overall level of Business Model Innovation. For example, new technologies can change the industry and reconfigure the value creation logic in an entire market (Wirtz et al. 2010, Berman et al. 2012). However, also stakeholders can play this role, taking actions which increased the need for Business Model Innovation. If value chain partners change, or regulatory pressure rises, companies might need a change in their course of action (Miller et al., 2014). These factors are even argued to be more important than the technological and market forces in facilitating Business Model Innovation (De Reuver et al., 2009).

On a company level, there are also several factors that influence the propensity to undertake Business Model Innovation. A reason to undertake Business Model Innovation is the fact that it can be beneficial to a company's success. Effects that can be achieved through the act of Business Model Innovation are countless, and the reasons to do so might differ from one company to the next. However, scholars found that Business Model Innovation projects reward the company with higher than average results (Aspara, Hietanen and Tikkanen, 2010). Other researchers differentiated between the act of Business Model Innovation and the actual new business models while looking at its effect on firm performance. Regardless of the differences in the actual new Business Model introduced, companies who undertake Business Model Innovation projects see a positive effect on their performance (Bock et al., 2010; Aspara et al., 2010). The differentiation between characteristics of the new Business Model Innovation or the novelty of the new Business Model and its respective success is not proven (Bock et al., 2010; Aspara et al., 2010)

There are several barriers which hinder companies in undertaking Business Model Innovation. Business Model Innovation is an inherently tricky process for new ventures and incumbent firms (Schneckenberg et al., 2016). It is proven to be challenging, for example, to identify the need for change, overcome inertia in the company and to accept the changes in company structures when dealing with Business Model Innovation. Chesbrough (2010) investigated some of the barriers to Business Model Innovation. Two types of barriers were found: *confusion* and *obstruction*. The confusion barrier is caused by the inability of a manager to see the value of a new Business Model compared to the old situation. Obstruction is a result of by more practical issues, examples of which are difficulties in the allocation and acquisition of resources and inertia in the process.

To deal with these challenges, scholars have identified several capabilities which help companies to reach a successful Business Model Innovation. One company level capability could be the strategic orientation of the companies. Companies which have a flexible strategy, which comprises the capability to adequately respond to changes and developments in a company's external environment, are found to show higher levels of Business Model Innovation. It is argued that Business Model Innovation is not necessarily a determinant of strategic flexibility, but rather a result of this flexible orientation (Bock et al., 2012).

In literature, there are several capabilities proposed as being key to reaching strategic agility. As mentioned before, strategic agility is strongly related to Business Model Innovation. However, it is not necessary for a company to be strategically agile to undertake a Business Model Innovation process since strategic agility takes Business Model Innovation a step further to continuous improvement and change.

This research focuses on Business Model Innovation on its own. Looking at companies who undertook such a project, this research tries to uncover which capabilities are needed to ensure a successful transformation. The research goal is, therefore, to identify which key capabilities are important to firms undertaking a Business Model Innovation. Using the framework proposed by Battistella et al.(2017) we will investigate which capabilities are key during a Business Model Innovation project. The research question is:

What are the key capabilities to ensure a successful Business Model Innovation project?

As the field of Business Model Innovation research is a relatively new research field, with first publications starting at around 15 years ago, several scholars pledge for more research in this field, to conceptualize and create a more comprehensive theory. This research will add to the field of Business Model Innovation research in a number of ways.

By evaluating existing literature on capabilities needed to perform Business Model Innovation projects inside firms and using the proposed capabilities as a framework to uncover the key capabilities in real-world instances of Business Model Innovation. In this way, a unified model of key business capabilities needed to pursue Business Model Innovation will be developed.

The practical relevance of this thesis mainly originates from the identification of key firm capabilities leading to successful Business Model Innovation. Once companies have expressed the ambition to engage in Business Model Innovation, this paper will be able to offer insights in the capabilities needed to successfully implement the Business Model Innovation as well as point out possible risks which then could be mitigated.

When the key capabilities needed for successful implementation of Business Model Innovation are identified, companies can use this as a checklist. Besides that, the identification of the risks will help companies in the strategic planning process. Furthermore, in the specific companies cases, the insights from the interviews can be used to assess the status quo of their strategic agility and efforts in Business Model Innovation.

By interviewing companies who succeeded and failed in Business Model Innovation, this research can compare the differences in capabilities employed that might have led to success. It allows the companies to learn from each other, and other companies to learn from this, by actually showing where and why things went right or wrong in the first place.

To answer the research question, a qualitative study will be executed by researching three companies who recently performed an act of Business Model Innovation. The study will take an explorative approach, gathering knowledge on which capabilities are crucial during the Business Model Innovation process. By combining inductive and deductive research, this research will use existing literature to create an initial framework, which will guide the researcher. Moreover, the gathered data will be used to build a theory inductively after collecting the data.

In the next chapters, first, the existing literature will be discussed, after which a framework is created based on existing knowledge. This conceptual framework will be used to research the key capabilities in three sample firms. The results will be displayed and discussed, and finally, conclusions will be drawn.

2 Literature Review

2.1 Defining business models

When looking at Business Model Innovation, the natural start is to examine the concept of business models itself. There is no widely reached consensus on the definition of Business Models, and the definition of a Business Model is highly subjective. In different researches, business models are defined in numerous ways. A Business model is for example: *a representation of a set of decision variables to create sustainable competitive advantage* (Morris et al., 2005), *a way to describe a system of how pieces of a business fit together* (Magretta, 2002), *a collection of different elements when taken together create and deliver value* (Johnson et al. 2008), *the design or architecture of value creation, delivery and capture mechanisms* (Teece, 2010) or *a conceptual tool containing a set of objects, concepts and their relationships with the objective to express the business logic of a specific firm* (Osterwalder et al., 2005).

The definitions used in the literature differ with regard to the role or purpose of the Business Model in the literature (Lambert and Davidson, 2013). However, an increasingly uniform understanding of the Business Model is developed in recent years (Wirtz et al. 2015). Wirtz et al. (2015) define three different orientations on Business Models, in which researchers employ different definitions of Business Models. *Where the technology orientation sees business models as an abstract representation of a company, the organization orientation as a painting a picture of the competitive situation and the strategic orientation as a way to operationalize strategy or as the link between strategy and operations.* Furthermore, in the past, business models were often seen with the static view, looking at the business models as is, while currently, the dynamic view is gaining importance.

The definition reached by Wirtz et al. (2015), is as follows: *“A business model is a simplified and aggregated representation of the relevant activities of a company. It describes how marketable information, products and/or services are generated by means of a company's value-added component. In addition to the architecture of value creation, strategic as well as customer and market components are taken into consideration, in order to achieve the superordinate goal of generating, or rather, securing the competitive advantage. (...) a current business model should always be critically regarded from a dynamic perspective, thus within the consciousness that there may be the need for business model evolution or business model innovation, due to internal or external changes over time. (Wirtz et al., 2015 p. 6)”*

This paper will build upon the definition formulated by Wirtz et al. (2015, p. 6) while paying specific attention to the dynamic perspective. The reason to use this definition is that it captures the logic of a Business Model, regardless of the research goal. The term Business Model is defined as *a dynamic representation of the relevant activities of a company, showing how a company creates value and secures a competitive advantage.*

2.2 Business Model Innovation

Moving from Business Models to Business Model Innovation, we stress the importance of the dynamic view on Business Models. Business Model Innovation can be defined as "*designed, novel, nontrivial changes to the key elements of a firm's Business Model and the architecture linking these elements.*" (Foss and Saebi, 2017). Just as a product or process innovation, Business Model Innovation can vary in 'scope', ranging from modular to architectural and 'novelty' (Foss and Saebi, 2017), where an innovation is either new to the firm or new to the market (Zott and Amit, 2017, see also Foss and Saebi, 2017). An overview of the Business Model Innovation typology can be found in Table 1.

Table 1: Business Model Innovation (Business Model Innovation) Typology

Novelty	Scope		
		Modular	Architectural
	New to firm	Evolutionary Business Model Innovation	Adaptive Business Model Innovation
New to industry	Focused Business Model Innovation	Complex Business Model Innovation	

While some researchers investigated the emergence of new types of Business Models in specific industries or markets (Abdelkafi, et al., 2013; Souto, 2015), or at Innovative Business Models, such as the Nescafé model by Nestlé (Matzler, Bailom, den Eichen, & Kohler, 2013). This paper will focus on Business Model Innovations that are new to the firm and not on Business Model Innovations that are new to the market or world, an approach that is prevalent in Business Model Innovation research (Foss and Saebi, 2017). An example of such an innovation could be a consulting company deciding to create products next to their day to day business or a firm completely changing their product offering.

Since this research focuses solely on Business Model Innovation that is new to the firm, a change in Business Model can also be referred to as Business Model Transformations, Renewal or other concepts indicating a change in one or more critical components of a firm's Business Model.

In the field of Business Model Innovation, there are roughly four different literature streams present of which the first solely focuses on classifying and conceptualizing Business Model Innovation (Foss and Saebi, 2017). The other three research streams focus on 1) the prerequisites of conducting Business Model Innovation, 2) Business Model Innovation as a process, or the elements of processes of

Business Model Innovation, 3) the effects achieved through Business Model Innovation (Schneider and Spieth, 2013; Foss and Saebi 2017).

2.2.1 Antecedents and Risks to Business Model Innovation

Looking at the factors leading to an increase in levels of Business Model Innovation, researchers found that there are specific large-scale macroeconomic developments which lead to an increase in the level of Business Model Innovation, including, globalisation, environmental issues and changes in consumer behaviour. (Lee et al., 2012; Wirtz et al. 2010).

Furthermore, industry developments can be drivers of Business Model Innovation. Furthermore, new technologies that drastically change the industry logic positively influence the level of Business Model Innovation, since new technologies have the power to reconfigure value creation logic in the entire market (Sabatier et al. 2012). For example, the development of the internet and later cloud computing acted as a trigger to Business Model Innovation, since this new platform allowed companies to create new Business Models to tap into this market (Wirtz et al. 2010, Berman et al. 2012).

Next to changes in the industry, changes or actions undertaken by stakeholders can increase the need for Business Model Innovation. When value chain partners change, or new regulation is implemented, new opportunities might arise (Ferreira et al., 2013, Miller et al., 2014). Regulatory factors are even found to be more relevant than technological and market forces in facilitating Business Model Innovation (de Reuver et al., 2009).

Besides the fact that Business Model Innovation can be promoted by the factors mentioned before, firms might also undertake Business Model Innovation to reap the benefits of it. Several effects that can be achieved from the act of Business Model Innovation. Schneider and Spieth (2013) identify three types of such effects. These types are 1) the effects of Business Model Innovation on industry and market structures, 2) effects of Business Model Innovation on individual firm results, and 3) effects of Business Model Innovation on a firm's capabilities.

Casadesus-Masanell and Zhu (2010) researched the competitive reactions to a company conducting Business Model Innovation using game theoretic experiments. Furthermore, researchers investigated the financial performance of companies using Business Model Innovation and found that, indeed, Business Model Innovation leads to higher than average business results (Aspara, Hietanen and Tikkanen, 2010).

Moreover, a differentiation can be made between results stemming from the act of Business Model Innovation (Bock et al., 2012) and the actual new Business Models introduced (Zott & Amit, 2007). In the first case, several studies found a positive effect from Business Model Innovation on performance, regardless of different assumptions. (Aspara et al., 2010; Cucculelli and Bettinelli, 2015).

In the second case, studies searched for the effect of different Business Model designs on innovative performance. For example, Zott and Amit (2007) concluded that novelty-centred Business Models are positively related to firm performance in entrepreneurial firms. Thus indicating that a change in the Business Model will positively relate to firm performance when the new Business Model is more innovative or novelty-centred than the former Business Model. However, it is essential to acknowledge that this relationship is not indisputably proven. For example, Giesen et al. (2007) found no financial performance variations amongst different types of Business Model Innovation activities, so a Business Model Innovation which is new to the industry does not lead to superior performance compared to the effect of Business Model Innovation which is new to the firm.

Finally, scholars looked at the effect Business Model Innovation has on the strategic flexibility of companies, which comprises the capability to adequately respond to changes and developments in a company's external environment. However, it can be argued that Business Model Innovation is a result of this flexible strategy, not a determinant (Bock et al., 2012).

2.2.2 What will lead to successful Business Model Innovation?

Looking at the benefits of Business Model Innovation, the question remains why, if Business Model Innovation leads to increased performance companies are not continuously changing their Business Models. An explanation may be that undertaking Business Model Innovation is not an easy task for both new ventures (who might engage in Business Model Innovation in early stages or step into the market with a novel Business Model), and incumbent firms (where a Business Model Innovation takes a more transformational role and changes a business to its core) (Spieth et al., 2016).

Some risks and challenges related to Business Model Innovation are identified. For example, difficulties as 1) identifying change needs, 2) overcoming inertia, 3) accepting new company structures arise when companies deal with Business Model Innovation (Wirtz et al. 2010). Furthermore, Chesbrough (2010) identified two types of barriers; the first is confusion and second is obstruction. The confusion barrier is mostly a cognitive barrier since it caused by the inability of managers to see the potential value of a new Business Model compared to the old situation. Obstruction is caused by more practical issues, such as difficulties in the allocation and acquisition of resources and process inertia.

In order to deal with the difficulties of Business Model Innovation, several scholars have identified different (dynamic) capabilities employed to reach successful Business Model Innovation. A capability can be defined as *'the ability to perform a particular task or activity'* (Helfat et al., 2007, page 1). A change in a firm's business model is a structural change, affecting the business immensely. Dynamic capabilities are the capabilities which stay intact and are needed to during changing times (Wang & Ahmed, 2007).

The first known instance of the notion of dynamic capabilities in literature is a paper by Teece and Pisano (1994). Teece and Pisano found that solely a resource-based strategy approach is not enough to ensure sustained company success. They found that successful companies demonstrate a set of dynamic capabilities. Where dynamic is referring to the shifting character of the surrounding environment and capabilities refers to the role of strategic management.

Dynamic capabilities differ strongly from 'ordinary' capabilities (also called zero-order capabilities or operational capabilities) and a firm's resource base. Ordinary capabilities and firm's resources are the keys to how a firm is creating value at the moment, while dynamic capabilities are the capabilities that will allow a firm to change. (Laaksonen and Peltoniemi 2018, (based on Winter 2003, Zollo and Winter 2002)).

Over the years, research has been done to find which (dynamic) capabilities are crucial to Business Model Innovation, several capabilities are proposed. For example, specific leadership capabilities were found beneficial during the process of decision making in Business Model Innovation. These characteristics include leadership allowing for dynamic decision-making, commitment building, engagement in conflicts and active learning (Smith et al., 2010). Furthermore, "dynamic consistency," which is the capability to build and sustain firm performance during the Business Model transformation is proposed as an essential capability. (Demil & Lecqoc, 2010).

Achtenhagen et al. (2013) researched which capabilities were critical to sustained value creation. He proposed three critical capabilities: 1) Creating, identifying and experimenting with new business opportunities, 2) Using resources and capabilities in a balanced way, 3) Achieving active and clear leadership, and a strong corporate culture and employee commitment.

Building upon the existing Dynamic Capabilities framework, Doz and Kosonen (2010) constructed the strategic agility concept as a source of Business Model Innovation success. Strategic Agility is defined as the ability to have a flexible strategy when facing new developments, both threats and opportunities (Weber and Tarba, 2014). This research was based on their earlier research, outlining the three meta-capabilities of strategic agility (Doz and Kosonen, 2008). Doz and Kosonen (2008) see strategic agility as the primary enabler of Business Model Innovation. Building on this, Battistella et al. (2017) developed a framework of capabilities influencing Business Model Innovation, using the concept of strategic agility.

Strategic agility is related to Business Model Innovation in the sense that Business Model Innovation is expected to be an outcome of being a strategically agile company. Business Models will change in response to changes in the company environment. Therefore, aiming for strategic agility could lead to increased success in Business Model Innovation. Furthermore, strategic agility takes Business Model Innovation one step further, since it is not concerned with a one time change, dictated by the market, but instead with the ability to keep changing if needed. Therefore, to be truly capable of Business

Model Innovation or transformation, it can be expected that possessing capabilities leading to strategic agility, will also allow companies to perform Business Model Innovation. (Doz and Kosonen, 2008; 2010; Battistella et al., 2017). Therefore, this research will take the capabilities indicated to be important for strategic agility as a starting point, using the framework to shape the research.

2.3 Strategic Agility

Strategic agility is the ability to have a flexible strategy when facing new developments, both threats and opportunities (Weber and Tarba, 2014). Furthermore, it allows a company to stay adaptable and to monitor and respond to changes in the environment (Lewis et al., 2014). However, the nature of strategic agility is contradictory. Since strategising works with a long-term vision and goal, to which specific strategic actions over time. Agility in its essence asks for a company to be flexible and ready to defer from its predefined goals when opportunities or crises arise.

Strategic agility does not mean that a company changes in response to a crisis or a significant threat. This type of ad-hoc problem solving is a capability on its own but does not indicate strategic agility. Strategic agility is based on the ability to continually evaluate and evolve the firm to sustain competitive advantage (Goldman et al. 1995).

2.4 Meta capabilities for strategic agility

Battistella et al. (2017) conducted two different literature review, where the first focuses on the business model and its components and the second on strategic agility and related capabilities. Furthermore, these were linked in relation to Business Model Innovation. In the second part of their paper, using a multiple case study, Battistella et al. (2017) aimed to answer the question of what capabilities a company should use and in which business model component they should apply them to ensure Strategic Agility and as a result, ongoing business model reconfiguration. These four companies based their successful business model reconfiguration on different classes of capabilities:

1. Strategy Innovation: Perceiving opportunities and quickly responding to them
2. Resource Capitalisation: Acquiring, developing and integrating key resources
3. Networking: Connecting the internal and external organisational environment

The capabilities found in the *strategy innovation* class mainly refer to the sharpness in perceiving, the intensity in internalising and the attention in implementing the strategic developments. Battistella et al. divided the capabilities for strategy innovation in the capabilities to *anticipate and look* for strategy innovation, and capabilities to *realise strategy innovation*. These capabilities mainly affected and caused strategic agility in three areas of the business model: 1) motto and value offer, 2) research and development and 3) social responsibility.

The main *research capitalization* capabilities include the capabilities to acquire, develop deploy and capitalize on resources to quickly reach competitive advantage relative to other firms. The research capitalization capabilities found by Battistella et al. relate to the notion of resource fluidity mentioned by Doz and Kosonen (2010). Resource capitalization capabilities also include capabilities linked to human resources like teamwork or knowledge sharing or to intangible assets as “technological competencies” such as the ability to generate and transform knowledge. Finally, this class of capabilities also includes the company culture, leadership, shared mindset and strategic unity.

Networking capabilities are focused on the ability to connect and create interdependencies inside the organization and its surroundings. This group of capabilities includes the capabilities of coordination, customer connectivity, stakeholder integration and interconnectivity.

In earlier work, Doz and Kosonen (2008) identified three meta (dynamic) capabilities which, when pursued and achieved together, lead to strategic agility. These three capabilities are:

1. Strategic sensitivity: the ability to perceive and be aware of strategic developments around the firm.
2. Leadership unity: the ability to effectively make decisions without being influenced or held back by corporate politics.
3. Resource fluidity: the capability to reconfigure the current capabilities and resources.

These three capabilities are closely related to the model proposed by Battistella et al. Furthermore, Doz and Kosonen (2010) developed an action agenda for leadership. Consisting of fifteen actions to reach the three meta capabilities needed for strategic agility.

Strategic agility must include both the ability to sense and identify opportunities and threats in the market, as well as being able to respond to this environment. (O’Reilly and Tushman, 2013) Moreover, the strategic agility process asks for a well-balanced approach, since resources have to be divided between the current and routine business processes and the development and investigation of new business models. This even increases in complexity if one takes into account the different levels and amounts of change that require a balanced set of resources. This balancing act can be called organizational ambidexterity, summarised as an organization's capacity to address two incompatible (or mutually exclusive) aims or processes equally well. (O’Reilly and Tushman, 2013).

Both Doz and Kosonen (2012) and Battistella et al. (2017) created a framework of capabilities needed for strategic agility and in turn Business Model Innovation. Furthermore, other writers also indicated several capabilities. Analysing these, it can be concluded that the model created by Battistella is a good representation of the capabilities needed according to literature. However, their paper omits the capability for ambidexterity design proposed by O’reilly and Tushmann (2013), the so-called balancing act would be part of the resource capitalization group and is therefore added to the model. Furthermore, Battistella et al. do not stress the need for leadership unity, as proposed by Doz and Kosonen (2010).

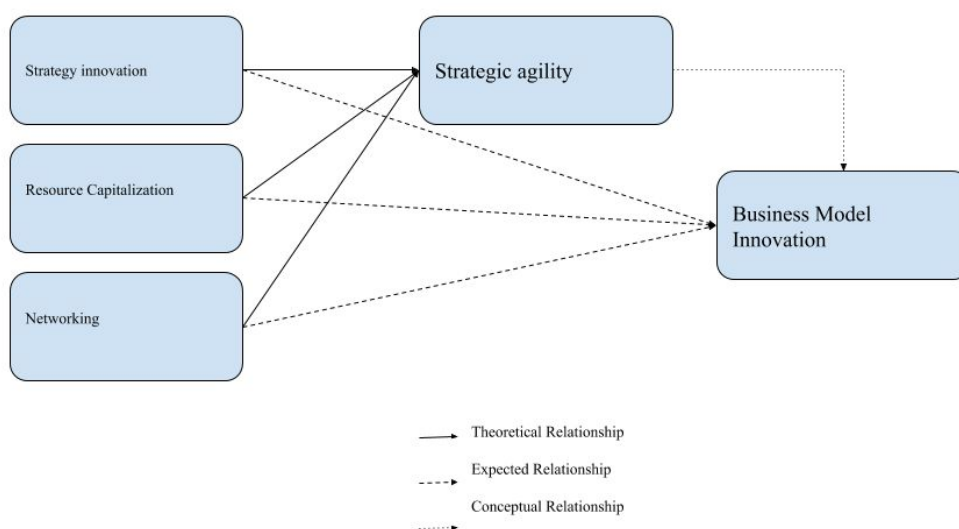
Because of the completeness of the framework, this paper uses the three classes of capabilities as indicated by Battistella et al, adding the capability for ambidexterity design (O'reilly and Tuschmann, 2013) and leadership unity (Doz and Kosonen, 2010).

To illustrate, the theory can be visualized in a theoretical/conceptual framework. As mentioned before, it is expected that the key meta capabilities for strategic agility are expected to also translate to what is needed to undertake Business Model Innovation. It is expected that the three types of capabilities for strategic agility are also the three global characterizations to assign to the key capabilities for Business Model Innovation. The three capabilities, building upon different meta-capabilities, according to Battistella et al. are:

1. Strategy Innovation: Perceiving opportunities and quickly responding to them
2. Resource Capitalisation: Acquiring, developing and integrating key resources
3. Networking: Connecting the internal and external organisational environment

It is expected that the capabilities affecting Business Model Innovation can be grouped in these three main capabilities as indicated by Battistella et al. (2017) Therefore, this framework is used as a guideline to guide the researcher in uncovering the underlying capabilities to Business Model Innovation. This is because current literature dictates that processing these three capabilities are key to reaching strategic agility, of which Business Model Innovation is one of the results from becoming strategically agile (Doz and Kosonen, 2010; Battistella et al., 2017). This research will find out which capabilities are needed when a company undertakes Business Model Innovation and whether or not the strategic agility framework extends to Business Model Innovation on its own and which capabilities underlie the three determining capabilities. The framework is visualised in the following manner:

Figure 1: theoretical framework visualised



3 Method

This research will answer the following question: "what are the key capabilities to ensure a successful Business Model Innovation?" We will see in which way the Business Model Innovation process is influenced by the capabilities following from the strategic agility concept. Using a set of semi-structured interviews, this research will explore which capabilities and processes were key in the process of Business Model Innovation or transformation. The research will be based on interviews held at three companies, which have undertaken a change in their business model. Two of which were successful in doing so, eg. Transforming from an offline to an online store (Company B) and changing from consultancy to selling a SAAS product (Company C). The third company was not successful in changing the business model. This was in the case of Company A, an ICT consulting firm which ran several trials over the years to try and succeed in product development and selling their software products or apps.

3.1 Research design/setting

As the literature on success factors and the process of Business Model Innovation is still a relatively scarce (Schneider and Spieth, 2013; Foss and Saebi 2017), it requires further investigation and exploration. This research aims to elaborate on the capabilities needed during the Business Model Innovation process. The purpose of this study can, therefore, be characterised as exploratory, aiming to find out 'what is happening; to seek new insights and to ask questions to assess phenomena in a new light' (Robson 2002, pg. 59).

The research goal is to identify which key capabilities inside firms will lead to Business Model Innovation. Due to current gaps in the literature, the research question cannot be answered based on theory exclusively. Therefore, this research will utilise existing literature while additionally investigate a set of companies. These companies decided to create new products and services parallel to their day to day business at some point. The research takes a deductive approach. Current literature is used to create an initial framework, which will be the basis of the theory and guide the factors researched. Furthermore, qualitative research is used to find additional capabilities and expand the initial framework.

3.2 Selection of companies

As mentioned before, this research looks at three different companies who have undergone a change in Business Model. The companies were selected by using purposive sampling also referred to as judgemental sampling, a non-probability sampling method. In this method, interviewees are purposely selected because of their characteristics which you feel that would help answer your research questions best (Saunders et al., 2009). This method is often used when working with very small samples, as you

can select the most information-rich cases (Neuman, 2005). A sample of three companies might seem small, but it is a choice that fits the research approach since a small sample is fit for the inductive approach this thesis takes (Saunders et al., 2009).

The three companies that were purposively selected were selected based on two characteristics, of which the situation characteristic is most important.

1. Situation: The company is undertaking or has undertaken at least one Business Model Innovation
2. Availability: The company is available to offer at least one person to interview. This person is someone who was directly involved with the project.

Based on the first two characteristics, three companies were selected. However, after contacting these companies, it became apparent that one of the three companies was not willing to partake in this research. Therefore a different, third, company was selected, following a recommendation of one of the other interviewees. At each company, the goal was to interview two persons, both in a different role.

3.2.2 Company A

Company A is an IT consultancy company specialised in delivering high quality and rapidly developed solutions. Their current revenue streams stem from detachment and doing IT work on a project basis. These revenue streams are leading, and have led to sound financial results and a healthy profit margin. However, given the nature of consultancy and project-oriented work, there is an upper limit to profit and revenue growth. In order to continue growing, the company aspired to develop software products and sell these directly to end customers.

In the past, Company A already experimented with setting up a new business model creating products as an addition to their core business. Over the past five to ten years, some products have been developed, with varying success. These products represent vastly different Business Models and strategic orientation but are part of the same company as the core Business Model of consultancy and detachment.

3.2.3 Company B

Company B is a company which specialises in the sales of highly technical construction materials. Over the years, they have been the market leader in their segment. Over the years, this company managed to stay ahead of their competition by continues R&D and investment in new, often digital, opportunities as well as ensuring that their products are of high quality. As a family-owned company, the company places great weight in upholding their current standards and ensuring that the companies will remain relevant in the future.

Company B is aware of their role in the value chain, using dealers rather than directly contacting their end customers. However, they felt that by only working with dealers, Company B lacked insight in

their end customers wants and needs, which they see as a future threat. Furthermore, their dealer system caused ambiguous pricing by their resellers, where the company is often left guessing at which price their products are sold.

3.2.4 Company C

Company C is an innovation consultancy company, which by the use of their own methods, helps companies to be successful in their innovation strategy. Over the past years, they continuously evolved their business model, first by changing their consultancy approach to a more productized method in which consultants can independently apply the prior developed methods, but also teach them to their clients.

The company is owned by the founder of the company who is still in charge as leader of the company. He is an entrepreneur with experience in setting up and running his own businesses. The most recent and impactful change was the development and subsequent sales of a SAAS product which is sold using a licences model. This product can be used by their clients independently.

3.3 Measurement

Data were collected using semi-structured interviews. The reason why a qualitative method is chosen is in the simplest sense, the fact that it fits the overall research goal, of finding out why certain undertakings were successful while others were not, and especially, which capabilities were necessary during this process. Furthermore, it allows the research to determine where these capabilities come from and to discover rather than test variables.

In qualitative research, there are numerous ways to collect data. In this research, the data is collected by conducting semi-structured interviews. The interviews were conducted in two rounds, starting with a set of unstructured interviews during the first stages. These interviews were held for two reasons. First, to gain insight into the nature of the problem at hand. Second, to allow the interviewer to get acquainted with the interviewing process.

To research the capabilities for strategic agility and actually compare the different cases, it is important to operationalize and define the concepts used. As mentioned, this research uses the framework as proposed by Batistella et al. (2017). This framework groups capabilities in three separate themes, furthermore, they propose different capabilities which they assign to each group. These capabilities are based on their extensive literature review, and represent the key capabilities as indicated by researchers focused on researching Strategic Agility. In order to make it possible to ask the right questions and give meaning to the interviews, these three themes were further defined and used as thematic groups to aid in the formulation of the interview questions.

The interview questions are linked to the different groups, however, given the semi-structured nature of the interview, not all questions were asked in all situations. Most of the questions were used as prompts to ensure that the proper topics were discussed.

3.3.1 Strategy Innovation

Looks at how and why the company made a strategic choice to change. This relates to the initiation and change phase of the project. This concept can be broken down into two themes which might partially overlap:

1. Anticipate and look for new Business Models
2. Realisation of the new Business Model

To find the capabilities related to this group, questions will be asked about how they prepared for the business model change and whether or not they actively sought out and investigated different strategies. If needed, questions are also asked about how the new Business Model was realised, which steps were undertaken and what important during the project.

In the following table, the groups are summarised, together with some possible capabilities and keywords that signal a capability related to strategy innovation as well as the possible interview questions asked to investigate this group of capabilities.

Table 2: overview of capabilities, indicators and interview questions for Strategy Innovation

Concept	Description	Potential capabilities/indicators	Related interview Question
Strategy Innovation: how and why did the company made a strategic choice to change?			<ul style="list-style-type: none"> - What was the goal of the research? - Why did you decide to implement a new Business Model?
1. Anticipate and Look for new Business Models	The ability to be prepared for a Business Model change, but also to actively and passively look for new Business Models and select the appropriate new Business Model that helps reach the underlying goals.	<ul style="list-style-type: none"> - Experimentation - Constant monitoring - Goal Clarity 	<ul style="list-style-type: none"> - Why did you choose to make a transformation? - When would the transformation be successful? - Did you look at different possible Business models? And

2. Realisation of the new Business Model	The ability to actually implement or realise a new Business Model	<ul style="list-style-type: none"> - Grafting, buying another company - Learning 	<p>was the choice based on research or experimentation?</p> <ul style="list-style-type: none"> - Who made this decision? - Did the company set measurable goals?
--	---	--	--

An example based on a quote which indicated a capability for strategy innovation:

We went on to research how we can ensure that a dealer would be more committed to us, and we found out that we needed to change our strategy and business model to do so. [...] then we went on and actually asked our dealers what they thought of our idea, the new business model. (B)

This quote indicated the possession capability for *researching and experimentation* with their new Business Models.

3.3.2 Resource Capitalization

Looks at all capabilities related to the resources of a company. This theme encompasses all capabilities which relate to use of resources in any stage of the process. This concept is broken down in three themes, which might partially overlap:

1. Ambidexterity/balance
2. Culture
3. Leadership

To find the capabilities related to this group, the same approach will be used as with the former group. However, in this case, questions will be specifically geared towards the role of the company resources and management of these resources during the change process. Again, in the following table, some possible capabilities and keywords signalling a capability related to resource capitalisation are displayed, as well as the possible interview questions asked.

Table 3: overview of capabilities, indicators and interview questions for Resource capitalisation

Concept	Description	Potential capabilities/indicators	Related interview Question
Resource Capitalization: all capabilities which relate to use of resources in any stage of the process.			Which role did the company resources play during the

			Business Model Innovation project?
1. Ambidexterity/ Balance	The ability to perform a balancing act with your resources, keeping an eye on day to day business while also investing in the new Business Model.	<ul style="list-style-type: none"> - Separation of funds - Long term vision 	<ul style="list-style-type: none"> - Which resources were most important during the Business Model Innovation process, and in the new Business Model? - How did you balance investing in the new model, while upholding the old one? - In what way was the culture of influence on the change process and success? - Which role did the leadership play in this process? Would you say it had a positive or negative influence?
2. Culture	The supportiveness of the culture on the Business Model change process.	<ul style="list-style-type: none"> - Forgiving culture (ok to make mistakes) - Entrepreneurial culture 	
3. Leadership	The way leadership deals with difficult situations arising in the acquisition or sharing of resources.	<ul style="list-style-type: none"> - Leadership unity 	

An example of such a capability is the importance of a *long-term vision*, which for example comes forward in the interview with company C.

People are really bad in separating the short from the long term, and you need people who can do that, but also dare to act accordingly. Which might mean that sometimes you miss out on a client in the old Business Model which would be beneficial in the short run, to focus on your long-term goal. However, it is crucial to do so in order to succeed. (C)

Since one of the companies investigated did not succeed in transforming their business model, this research also searches for instances where a company lacks a certain capability. Taking the capability for *long-term vision* as an example, the contrast is clear.

Well, it is a no-brainer for me. If we have paying customers on the one hand and a project that is costing us money on the other, I will always choose to dedicate my resources and time to the first. (A)

In the table in appendix A, the groups are summarised, together with some possible capabilities

and keywords that signal a capability related to resource capitalization.

3.3.3 Networking

Finally, the group of Networking capability relates to the role of the companies network in a Business Model change. It encompasses both the changes made to the network as well as the usage of the current partners in the network. This is once again broken down in two partially overlapping themes:

1. Use of the current network
2. Adaptations to the network.

To find the capabilities related to this group, this research took the same approach once again. Asking the different companies and interviewees about what they thought about the role of their network in the Business Model Innovation process. Further probing questions were asked to uncover whether they used their current network or found a need to adapt and broaden the company network during the Business Model Innovation process.

An example of a capability found to be important in the Networking category was the capability to grow the network when needed, as indicated by Company B:

They hired me, partly because I brought in a network of key technological partners, however, we also actively sought out new partners to assist us in the parts we lacked knowledge and skills. (B)

Table 4: overview of capabilities, indicators and interview questions for Resource capitalisation

Network: the role of the companies network in a Business Model change			To what extent did you use the network of the company to ensure the successfulness of the transformation?
1. Use of current network	The way a company uses its existing network in the Business Model process	<ul style="list-style-type: none"> - Customer connectivity - Stakeholder integration 	<ul style="list-style-type: none"> - How did you utilise your current network? - Did you have to expand your network? - In what way influenced your relation with clients, competition, partners etc. the Business Model Innovation?
2. Adapting the network	The way a company adapts or grows its network to deal with the changes stemming from Business Model Innovation	<ul style="list-style-type: none"> - Coordination - Partner selection 	

Furthermore, in order to answer the research question, which looks at what leads to a

successful transformation, it is important to agree upon when a change is categorised as a Business Model Innovation, and what constitutes successfulness in a Business Model change. This research classifies a business model innovation as such, when it is, in the simplest sense, a company which starts up a different business model, compared to the old one. This could either replace the old business model or run in parallel with the existing one. A business model innovation is an innovation when it substantially changes one or more of the three components of the business model, either the value creation, delivery or capture components.

Thus in the simplest sense, targeting substantially different customers would be a Business Model Innovation.

To measure successfulness, In this research, a self-reported measure is used, in which the researcher asks whether the innovation was successful or not. Furthermore, internal communication from the companies about these changes were used where possible to either classify a Business Model Innovation as successful or not.

Company A: I would say the transformation was not successful in the end, however, it was a great learning experience, but no it was not successful. → Unsuccessful

Company B: This transformation is a success, yes, we manage to change and achieve things that no one has done before. → Successful

Company C: Yes, this transformation was successful, we got our product up and running and are able to expand the team. → Successful

3.4 Data Collection

To collect the data and answer the research questions, four interviews were held at three different companies. In the interview, a semi-structured approach was employed. Afterwards, these interviews were transcribed and saved. The interviewer made use of an interview guide to make sure that the three themes were covered during the interview. Probing questions were asked where needed. Prior to the research, the interviewees got sent a short description of what the interview would be about, the research goal and some other general information, as well as the consent form. A detailed interview guide was not sent, in order to keep the rather unstructured nature of the interview.

The interviewees were selected based on their role in the company and their involvement in the change process. Three interviews were conducted in person and one via telephone. The average duration of the interviews was about 30 minutes, this excludes the time spent in which the consent form was signed and other non-related topics were discussed.

Each interview started by asking about the change, in order to give the interviewee the chance to openly speak about the transformation. Afterwards, the interviewees were asked whether or not the

transformation was successful in their eyes. In three of the four interviews, the first question naturally led to a talk about the goal of the transformation, in one instance it was necessary to directly ask this question. Where possible, the interviewer aimed to let the conversation flow naturally, and not to limit the interviewee by asking questions which were too specific. However, when certain themes did not arise naturally, the interviewer had to intervene and deliberately ask about certain aspects.

3.5 Analysis

To analyse the data gathered by the interviews, the programme Atlas TI was used. The transcribed interviews are first cleaned up before they are uploaded in the programme. The data is first disaggregated into units by the process of *open coding*. Then, the relationships between the categories are analysed and uncovered using *axial coding*. and Finally these categories are integrated to create and develop a theory by the means of *selective coding*.

To structure this coding stage, the conceptual framework, which can be found in appendix A, is used. Furthermore, some potential indicators are taken from literature to guide the coding. However, these current indicators were not exclusively used to create the actual codes. The actual codes were created based on the data and then matched to the correct theme. In the open coding stage, both in vivo as well as descriptive coding was used. The open coding stage resulted in the creation of 123 codes. After the open coding stage, axial coding was performed to distill overarching concepts and group the codes into workable concepts. After this stage, 30 codes remained. Finally, the selective coding stage was performed, in this stage, the 30 remaining codes were grouped into 16 overarching concepts categorised in three distinct groups. The groups and overarching concepts in the selective coding stage were based on the framework by Battistella et al. (2017) and several codes were directly based on the theoretical model. The following codes were taken from literature and used in the selective coding stage:

1. Strategy innovation
 - a. Learning (Smith et al. 2010, Battistella et al., 2017)
 - b. Creating and experimenting with new BMs (Achtenhagen et al., 2013, Battistella et al., 2017)
 - c. Sensing opportunities (O'Reilly and Tushman, 2013; Battistella et al., 2017)
 - d. Seizing opportunities (Battistella et al., 2017)
2. Resource capitalisation
 - a. Commitment by leadership (Smith et al., 2010; Achtenhagen et al., 2013)
 - b. Company Culture (Achtenhagen et al., 2013; Battistella et al., 2017)
 - c. Organisational Ambidexterity (O'Reilly and Tuschman, 2013)
3. Networking
 - a. Stakeholder Integration (Battistella et al., 2017)

4 Results

To assess the relative impact of the change in Business Model, the interviewees were asked about the scope and novelty of the new Business Model employed. Furthermore, the changes in Value creation, Delivery and Capture were discussed where applicable. Furthermore, interviewees were asked about the goal of the change in Business Model. Additional information about changes in the Business Model stemmed from secondary sources eg. internal communication and publicly available information. Moreover, since there is one company which was not successful in their Business Model Transformation, while two others were, each segment will compare the failed company to its counterparts which did succeed.

4.1 Changes in the Business Models

To see what the impact was and to what extent the new business model differs from the existing one, the old and new model were compared based on three subjects. The interviewees explained the changes in the value creation, delivery and capture process. This differentiation was made to see what the change actually consisted of and to what extent the old and new business model might overlap. During the interviews, it became apparent that there were differences between the extent to which the new Business Model deviates from the old one.

Looking at Company A, we see that the value creation logic differs strongly between the new and old model. Where the existing business takes the fact that they offer a full-service project and are capable of a concept minded approach as their USP, the new business model mainly creates value by offering products based on their superior and existing technical knowledge.

The value delivery model also changed. In the existing model, the client and channels as well as the product offering are well thought out and well known. The company mainly targets Medium-sized companies, as well as the product offering, large-scale projects, companies are mainly found and reached through the network of the Sales team. In the new model, it is unclear what exactly would be sold, it is also unknown who the target clients would be. Since the new business model would be centred around product development, no clear choices were made which clients these new products would target, furthermore, it remained unclear how these clients would be reached.

The value capture logic of Company A also differs drastically between the existing and the new model. Where in the existing model the company charges their clients for every billed hour, the revenue streams in the new model are still unclear. The company chose to make money off the exploitation of their products, however, the form in how this should happen differed per product.

Looking at Company B we see a different image. Company B changed their Business Model from being a wholesaler, selling exclusively through partners, to set up a platform targeting their end users immediately. Their value creation logic is the main thing that will change. Currently, their USP is the fact

that their materials are of superior quality to their competitors, in the new situation this is supplemented by their platform approach. By targeting the end user immediately, Company B gains critical insight in end-user behaviour and thus better suited to meet their needs.

Their value delivery also changed, even though the solution stayed the same, the channels through which customers are met changed drastically from the use of resellers to their own sales platform. In the old situation, the company had no influence on the final steps of the value chain, since they had no influence on their resellers. In this new model, their platform approach ensures that they are in control of the entire value chain, by, for example, setting fixed prices for their products and charging fixed transport costs.

In the value capture domain, barely anything changes. The revenue streams will continue to stem from the sales of their product, however, there is the ambition to add different revenue streams in the future by the exploitation of the gathered customer data. However, in the current situation, the old and new value capture approach is the same.

Finally, Company C ensured that their new Business Model is as close as possible to its existing one. In their value creation, their USP barely changed. In the existing Business Model, the company aimed to 'productize' their methods. Even though they are called Innovation Consultants, the company only works on a project basis, in which their standardized methods are applied by one of their consultants. This method and their extensive knowledge in the innovation process is their USP. In the new situation, a product was developed, a situation in which their USP stems from a combination of their experience with innovative methods and the specific characteristics of the SAAS product.

Their value delivery model did change in a similar way to company A. However, they ensured that their clients stayed exactly the same, continuing to focus on large-scale companies, willing to stimulate innovation. However, their channels did drastically change, increasing the focus to online sales compared to cold acquisition.

Finally, the revenue model was indeed impacted during the change. The company changed from being paid per project, to a licences based model. However, in a number of cases, the product is still sold in the same way as their normal projects, by selling the product as a method in combination with a workshop or training.

4.2 Goal of the Business Model Innovation

The overarching goal of these changes differed across the three companies researched. All companies mentioned that the change was a way to increase their company success and be better prepared for what the future would bring. However, the more specific goals differed per company. Company A named the increase of recurring revenues as their goal, however, another reason was the fact that this change would allow their employees to work on projects they are passionate about.

"Our main goal was to create a passive income, with recurring revenues. '...' our people like to work on new things, this new business model gives us the freedom to experiment with the available technologies." (A)

Next, Company B initiated their change to finally reach and get to know their end customers. All to make sure that they would continue to stay competitive in the future.

"Our goal is to reach our end customer and get to know them, all to better our competitive position in the market" (B)

Similarly to Company A, Company C mentioned their growth goals as the main initiator of the change. To reach their growth goals, they had to become scalable, for which selling products was a great option.

"Our ultimate goal is to grow and keep growing, however in order to ensure sustainable growth we need to become scalable" (C)

4.3 Successfulness of the Business Model Innovation

The business model innovation was successful in two out of three instances. Both company B and C rated the change as successful, both without any hesitation. This is different for company A, for which the change did not succeed. To be more specific, the change project was recently terminated. It was deemed unsuccessful because the product development department did not succeed in launching any products, thus resulting in no recurring revenues from this source in their first two years of existence. This lack of incoming revenues lead to the decision to change the company back to purely consulting. The changes in Business Model, goals and successfulness of the Business Model are summarised in the following table:

Table 5: Changes in Business Model, Change Goal and Success

Component of Business Model	Old	New	Change
Company A (From Consulting to Product development)			
Value Creation - USP	<i>We offer Projects, Frontend and Design, we can truly fulfill our clients need</i>	We have the knowledge 'in house' we can create top notch products since we have the technical skills available	Change from "concept minded approach" to "superior technical knowledge and creating the best"
Value Delivery - Solution	Enterprise level clients, always B2B.	B2B and B2C clients. Not sure how to reach	Change from a very strong focus on a

- Channels - Clients	Clients are reached via the network of the Sales guys.	the B2C clients.	specific type of client to a less focused and more uncertain approach.
Value Capture - Revenues	For every hour a consultant works, the client pays	Variable, but possibly: Licences, pay per use, subscription models etc.	Change from one type of revenues to a mix of different types.
Change Goal	Increase recurring revenues		
Successful	No - terminated		
Company B (From Wholesaler to End customer platform)			
Value Creation - USP	Seller of highest quality materials	Superior insight in end customer behavior and wishes	From a focus on quality to focus on best fit.
Value Delivery - Solution - Channels - Clients	Sale exclusively via resellers	Targeting end customers, while making use of their resellers	Integration in the value chain
Value Capture - Revenues	Value captured from resale partners	Value captured from resale partners	X
Change Goal	Better understanding of end customer		
Successful	Yes		
Company C (From Consulting to Product Development)			
Value Creation - USP	Productized methods combined with workshops by high level innovation consultant	SaaS product, incorporating psychological methods to stimulate innovation	Eliminating the need for a consultant.
Value Delivery	Large scale clients with	Large scale clients with	Change in channels

- Solution - Channels - Clients	a need for innovation. Customers are actively sought out via various channels	a need for innovation. Customers are acquired passively via their website.	used.
Value Capture - Revenues	Pay per project	Licence model	Change from buying a product to purchasing a licence based on the amount of users.
Change Goal	Growth through scalability		
Successful	Yes		

4.4 Key Capabilities for Business Model Innovation (success)

During the research, it became apparent that while most capabilities were important or crucial on a company-wide level, such as the *capability to identify the need to change, balancing resources or educating suppliers*. There were also certain capabilities which are specifically important for the leadership team to possess. Examples are: *focus and belief* by the leadership team and *involvement* of the leadership team in the change.

Since this research focused on three companies, two who were successful in their Business Model Innovation project and one that was not, the results show both capabilities that are important to Business Model Innovation success, as well as the fact that absence of a number of these capabilities was indicated as critical factors in the failure of a Business Model Innovation project.

4.4.1 Capabilities for Strategy Innovation

In line with Battistella et al., several capabilities for strategy Innovation were found to be important during the Business Model Innovation process. The concept of strategy innovation stands for the capabilities related to innovating your strategy. Battistella et al. (2017) divided the capabilities for strategy innovation into two groups, since they refer to two different stages of the project, 1. capabilities for anticipating and looking for strategy innovation and 2. capabilities to realise strategy innovation. Thus the capabilities in the first group are important prior to the projects starts. The second group are the capabilities related to the strategy implementation part of the Business Model Innovation process. However, since this research focuses only on Business Model Innovation as a project, rather than an ongoing process of continuous change, these two groups will show more overlap. For example, the capability *sensing of opportunities* is clearly related to the first group, capabilities for anticipating and

looking for strategy innovation. However, the capability **seizing opportunities** is assigned to the first group by Battistella et al., (2017) but would fit better in the capabilities to realise strategy innovation in this research. To simplify the findings, the separation into two groups is not used in this research, and all the capabilities assigned to the strategy innovation group will be assessed together.

There were several capabilities found which were related to strategy innovation. It is important to be able to **sense opportunities and challenges** and subsequently **seize opportunities**. When the situation in the market changes or a push from competition emerges, it is crucial to be able to sense opportunities or challenges that arise from these changing situations. Sensing these opportunities and challenges will allow a company to notice if and when their current strategy should be adapted or supplemented. This first step of strategy innovation is an important part of the Business Model Innovation process since it dictates the logic of why a company chooses to change their Business Model. All three companies researched succeeded in this capability of sensing opportunities or challenges leading to a decision to change.

Company A decided to take a *bottom-up approach* to **sensing opportunities and challenges** by sharing the company goals for the future to allow their employees to come up with opportunities to reach the goal. This allowed the employees to sense an opportunity to change when one arose. Employees saw an opportunity in the fact that they had a surplus of resources in their company, which was a challenge and opportunity in one. Company A subsequently was capable of **seizing this opportunity** by deciding to set up a new business model, focused on developing products which used the resources which were readily available. Company C ended up in the opposite situation of company A, noticing that a scarcity of (human) resources in the market would limit their growth goals in the future. Furthermore, they noticed a trend in the market, seeing changes that other, comparable, companies made and decided to take action and adapt their strategy in order to reach their goal for the future.

Company B took a different approach to sensing opportunities and challenges in the market. They mainly look at what their competition is doing and planning their actions in response to that. Company B, for example, experienced fierce competition and noticed that they should change their strategy to overcome this challenge.

We know that our competition is fierce, and we believe that we can differentiate by taking a different approach. (B)

Furthermore, after realising and deciding that you should change your strategy, the correct strategy has to be chosen. Companies should possess capabilities related to **experimentation and research** and **business model fit**, to ensure that the strategy they choose is in line with what the market demands, but also fits the current business model and strategy in the company. Where experimentation and research mainly focus on gathering information from outside of the company for example, by talking to customers or other parties in the market and business model fit mainly relates to critically assess your

own company and see how the new strategy would fit into this. Possessing the **learning** capability can be of great help in this stage, building upon existing knowledge from the past, or learning from your competitors, clients and partners can be a great way to gather knowledge to make decisions about changing your strategy and business model.

By immediately seizing this opportunity, Company A skipped the step of **experimentation and research** of their new Business Models. They took the first opportunity that was presented to them and did not engage in researching other business models and experimenting with these. They did indicate **learning** in one instance, where they looked at a product developed by a sister company, however, it was admitted that there was little attention given to **learning** from others. Furthermore, there were no actions undertaken to ensure **business model fit**.

However, in both successful cases of Company B and C, extensive **experimentation and research** projects were undertaken. These companies experimented with and researched different business models, to identify if the transformation they were planning to undertake would be successful. In the case of company B and C, several types of Business Models were investigated prior to choosing the actual new Business Model. An example of a field research project is the research undertaken by company B. Who, after selecting a new value proposition based on the experience of the leadership team, took off to a trade show to meet his clients and ask them about the intended Business Model Innovation. Based on the response he got, which were rather positive, some small adjustments were made and the project took off.

Company B and C also did engage in **learning**. Learning can take several forms. Examples are, learning from company experience, thus learning from the past and learning from personal experiences from the leader of the company. It is found that this second type of learning is especially important to company B and C. Mentioning that is prior experience as entrepreneur performing Business Model Innovation projects helped him to make better choices about the type of Business Model to choose. Company B had a similar story, utilising its past changes to distil what type of Business Model change worked and which did not.

As mentioned before, the complexity of changes for Company A, B and C differed from each other. There could be several different reasons for this, but both Company B and C mentioned that they purposely designed and chose a new Business Model which would be aligned with their existing company, thus showing the capability to ensure **business model fit** Company C described that they chose to ensure that the clients they would reach in their new Business Model, would be exactly the same as they serve in their current Business Model a choice based on personal experience of their leader.

'Choosing to develop our own products actually kind of happened, we did not analyse or research this.' (A)

'We did look at another project, which was successful, however, I don't feel we gave it a great deal of attention.' (A)

'As an entrepreneur, I have had more companies in the same location before, and it never worked out well. I learned that if you want to work with two different business models, you need some sort of similarity between the two. ... in this case, our clients are the same' (C)

During the actual implementation stage of a new strategy, it is important to first engage in a clear and concise **goal setting and evaluation**. Setting goals and subsequently plan evaluation moments to see whether you are on track helps to give structure to the process, it also ensures that if a new business model or strategy turned out not to fit it can be adjusted before the transformation is complete. Secondly, during and after the process, it is important for companies to have capabilities related to **change management**. Actively managing the stakeholders and employees during and after the change ensures that the transformation will stick and that people know what is going on, besides that, good change management relieves uncertainty amongst the employees.

Company B and C both mentioned that they started their Business Model Innovation project by *setting measurable goals* and that they used these goals as a measure to *evaluate* the project. These goals were set for two reasons, first to ensure that all the parties involved knew what the ultimate goal of the project was, and second, to benchmark when the project would be seen as a success. The goals were formulated in a clear and concise manner and its progress was evaluated regularly. Company A mentioned that they started their project without setting any clear and concise goals, however, they also noted that after a few months in, goals were needed to create some credibility for the project. However, in the end, the goals set were rather ambiguous and not clearly described.

The capability of **change management** is only noticed in company B, who mentioned that they took specific actions to ensure that the companies employees keep up with the changes. They hired a change manager to guide the company through the process, but also incorporated the mid-level managers in the 'change task force'. It was their responsibility to prepare, train and brief their colleagues to work with the new programs that were developed. They were also responsible for managing the transitions in job functions of the employees, whose job in some cases became obsolete after the change.

Every employee has its skills, everyone is also hired based on these skills, however in this new Business Model, their functions shift and they will be trained accordingly. (B)

A relief of uncertainty can also be attributed to **leadership involvement**. The involvement of leadership in the strategy innovation process has a great impact on how the process takes place. Leadership can be helpful during the change process, for example by making funds available or by acting as an advocate of the change. Both actions will relieve uncertainty in the company and allow for easier implementation of the new strategy and business model. However, leadership involvement, if not managed correctly, can be detrimental to the process. This is especially the case if leadership sends so-called mixed signals, which increases uncertainty and ambiguity about the change.

Leadership involvement played a crucial part in the situation of all three companies, as a positive influence in the situation of company B and C, but also in a negative manner in company A. Their main role was to enable the change, however, the specifics of their roles differed across the three companies. In company C the leader was the sole initiator of the Business Model Innovation project, starting off the new business model independently. The company leader gave *direction* and was able to make the difficult choices by *focussing on a long-term vision*.

In company B, the leadership team was partially involved in the change process, it *invested* in the Business Model Innovation project, allowing it to be undertaken. Furthermore, the leadership team of company B played an important role in the selection of the new Business Model to develop by first creating the reasoning behind transforming their business model, but also by continuously monitoring the market to see in what way the Business Model would change. Furthermore, they shared their vision about this transformation but stopped actively interfering when they put someone else in charge, indicating *trust* in their employees.

Finally, company A shows a similar situation. The leadership team at Company A set the goal for the transformation but led the employees themselves come up with ideas to actually reach that goal in a *bottom-up approach*. Furthermore, the leadership team (consisting of a sales and operational director) showed different attitudes towards the project. While the sales director was extremely enthusiastic about the new Business Model and actively participated, the operational director did not interfere in this project and admittedly, did not believe in it from the start. This misalignment of belief in the project and willingness to invest caused the management team to send mixed signals about the project which was a limiting factor. Furthermore, the active involvement of one part of the leadership team is seen as detrimental to the project. While stemming from good intentions and enthusiasm, the direct involvement made it difficult for the team members to make progress in the project, since the sales director wanted to be involved in all decisions but did not have the time to fully dedicate himself to the project.

The severity of the problem of 'sending of mixed signals' became even more clear after the new business model was cancelled, when one of the two leaders, who seemed to have collectively decided to terminate this business model, asked the former team about the status of one of the projects. This indicates that it is not only the sending of mixed signals that is a problem, but also communication in the leadership team

4.4.2 Capabilities for Resource Capitalisation

Resource Capitalisation refers to all capabilities employed when managing the companies resources in a Business Model Innovation process including the capabilities needed to manage the resource base in the situation where both the new and old Business Models are in place. All three

companies mentioned the **utilisation of existing resources** as an important capability in the Business Model Innovation process as well as the capability to **acquire new resources**. Company A mentioned the importance of the specific (human) resources needed in their new Business Model. It was concluded that, even though they possessed a large part of the human resources needed to set up the new Business Model, there were key components that they missed. Changing from working on projects for clients as IT consultants, is completely different from working on developing a new product from scratch.

Well, that is where you miss something. You need different skills and that is not something where our people want to specialise in. (A)

We are really good in one part, but not in the other and that stems from the people we hire, they are technics, not marketers nor commercial people. (A)

Ultimately, it was not possible to access and develop the human resources needed. It was noticed that this is partly due to the **company culture**. Company A's culture is based on three pillars, happiness, ambition and expertise. While a focus on happiness and ambition were key drivers to start off the Business Model Innovation project, and in that sense had a positive influence, company A's focus on expertise had a negative influence. Since the new business model deviates strongly from the old one, new knowledge and skills are needed. However, a focus on expertise means that the employees that are hired want to develop themselves by becoming experts in the field they are working in or technology they are working with, not by broadening their skill set to that what would be needed to succeed in the new Business Model. Even though company culture is not mentioned as a critical capability by the other two (successful) companies, the fact that it only comes up at company A shows that a company's culture can actually have a negative effect on the success of a Business Model Innovation. Furthermore, the company did not invest in *acquiring new resources*.

Company B used their existing resources and also actively searching for additional resources needed and acquiring these. Company B mentioned possessing funds to invest in projects like these. It was mentioned that the company selected and made use of employees with specific skills needed to work on the new business model. Furthermore, they decided to hire new employees where they found they lacked the skills to ensure a successful transformation. Finally, the company paid great attention to the effect the transformation would have on their employees. Employees who were affected by the transformation are trained and coached to perform a different function in the new Business Model.

Every employee has its skills, everyone is also hired based on these skills, however in this new Business Model, their functions shift and they will be trained accordingly. (B)

Company C stressed that in order to succeed in their new Business model, they needed to identify 'the right kind of people' and allow them to work on the new Business Model. As mentioned before, when this project started, it was primarily the owner of the company itself who worked on it. With his experience in developing a business, he had the right experience in-house to successfully

transform its business model. He used the available resources in his company effectively to build the new Business Model. Furthermore, the current employees were trained to work with the new Business Model and increase their skill level where needed. When the project took off, other resources and skills were needed. Since company C did not possess these skills, they decided to form a partnership with a party who could help them succeed.

One of the biggest challenges that came up in the interviews with company A and C is what can be referred to as the need to be *Ambidextrous*. When changing your Business Model, while simultaneously upholding the existing Business Model, a company needs to balance its resources between the two Business Models. In addition to that, in both cases, the new business model was paired with uncertain outcomes. Interestingly, company B did not see the ambidexterity as a problem or a challenge, noting that the company was completely committed to the new Business Model and that they had the needed funds available which had been set aside to be spent on innovation. Therefore it has to be noted that the capability to be Ambidextrous is only of key importance when a company aims to uphold the old and new business model.

Company A admittedly struggled with balancing the resources between the two business models. Over the course of the interviews it was often mentioned that the focus remained on the old Business Model and that, even though they wanted the new Business Model to succeed, if circumstances asked for it, they would always choose the old Business Model. This could be due to the reasons mentioned earlier, as lack of belief from the management team. However, during the interview, it mainly boiled down to a *lack of commitment*. Even though people believed in the transformation, they were not willing or capable to commit to the new Business Model.

This lack of commitment at least partly stems from the fact that the new business model comes with a lot of uncertainty, and needs an investment without generating any profit in the short run. If a choice has to be made between investing in the new Business Model or utilising resources to work on a client in the existing model, company A would always choose for the latter.

Well, it is a no-brainer for me. If we have to pay customers on the one hand and a project that costs us money on the other, I will always choose to dedicate my resources to the first. (A)

Company C faced a similar problem, mentioning that balancing the 'old' and 'new' model was the hardest thing there is. However, Company C overcame this problem by fully committing to the new Business Model. This was possible since leadership fully believed in the change they would make. This is one of the key points, since the investment needed is high, especially the time that needs to be invested. Furthermore, he mentioned the importance of having a *long-term vision* and actually committing to that vision. It is this long-term vision which separates Company B and C from company A.

People are really bad in separating the short from the long term, and you need people who can do that, but also dare to act accordingly. Which might mean that sometimes you miss out on a client in the old Business Model which would be beneficial in the short run, to focus on your long-term goal. (C)

4.4.3 Capabilities for Networking

In the networking capabilities group, we discuss how the three companies did *use the current network* and *expand the network* as well as *stakeholder management*. Company A mainly used their existing network to try to test and validate the new concept in the market. However, this happened minimally. Company A also did not grow their network during the Business Model Innovation process.

Company B mentioned the importance of their network before when discussing conducting research and experimenting. To do so, they utilised their current network of dealers and partners to research and validate their new business idea. This result of this action was twofold, first it gave them great insight in what their partners and dealers would want, and second, it allowed them to already inform the dealers about the changes that would happen. Finally, company B mentioned that they actively sought out to grow their network, for example by hiring people with the right connections.

Company C combined using their current network and growing it during the different stages of the Business Model Innovation process. They mentioned that in the early phases, they mainly worked together with existing partners. After the process furthered and became more complex, they sought out new partners to assist them in these new steps.

4.5 Table of Results

The results are summarised in the following table, where each (+) means that the company possesses the capability and that it has a positive effect on the successfulness of their Business Model Innovation. A (-) indicates a lack of the capability, or the fact that it has a negative influence on the successfulness of the Business Model Innovation. Where a (-/+) sign is seen, the company did mention this capability, however, there is no positive or negative effect on the successfulness of the Business Model Innovation. Finally, an (x) indicates that the company did not mention anything related to this capability.

Table 2 overview of results:

Topic	Capabilities	Company A	Company B	Company C
Strategy Innovation	Sensing opportunities and challenges	+	+	+

	Seizing opportunities	+	+	+
	Experimentation and Research	-	+	+
	Business model fit	-	+	+
	Learning	x	+	+
	Goal setting and evaluation	-/+	+	+
	Change management	x	+	x
	Leadership involvement	-	+	+
Resource Capitalisation	Utilisation of existing resources	-/+	+	+
	Acquisition of new resources	-	+	+
	Company culture	-	x	x
	Ambidexterity	-	+	+
	Commitment	-	+	+
Networking	Using the current network	-/+	+	+
	Growing the network	-	+	-/+
	Stakeholder management	x	+	x

5 Discussion and Conclusion

The aim of this research was to investigate which capabilities are needed when a company changes their business model. It was found that there are a number of capabilities a company needs to possess when changing their Business Model. These capabilities are grouped in three groups, which were proposed by Battistella et al. (2017), to influence the level of strategic agility and in turn, Business Model Innovation.

5.1 Key findings

The key findings of this paper are expressed in the framework of capabilities found to be important during a Business Model Innovation project. It was found that, capabilities for Strategy Innovation, Resource Capitalisation and Networking played a crucial role during the Business Model Innovation process. Thus the framework is extendable to Business Model Innovation, however, not all mentioned micro-capabilities were observed and a number of new micro-capabilities came up. The capabilities needed for Business Model Innovation were divided in three distinct groups.

Furthermore, in the theoretical framework, there were certain capabilities mentioned which were expected to influence the success of a Business Model Innovation project, some of these capabilities were indeed found to influence Business Model Innovation success, while others were not validated in this research.

5.1.1 Strategy Innovation

There were a number of capabilities found to be important for strategy innovation. These capabilities were 1) Sensing opportunities and challenges , 2) Seizing opportunities 3) Experimentation and Research 4) Business model fit 5) Learning 6) Goal setting and evaluation 7) Change management 8) Leadership involvement. The possession of these capabilities revealed themselves by actions that were undertaken by the company.

It was found that being able to 1) sense opportunities and challenges, and subsequently, 2) seizing these opportunities were especially important in the start of the project. All three companies under investigation showed they possessed these two capabilities. The observation of the importance two capabilities is in line with the theoretical framework which mentioned Sensing Opportunities (O'Reilly and Tushman, 2013; Battistella et al., 2017), Seizing opportunities (Battistella et al., 2017) and more broadly, Strategic Sensitivity (Doz & Kosonen, 2008).

The capabilities for 3) Experimentation and Research, 4) Business model fit, 6) goal setting and evaluation and 8) Leadership involvement are found to be present in the two companies who were successful in their Business Model innovation, and are indicated by those companies as crucial to their Business Model Innovation project. These capabilities were not, or only partially present in company A, the absence of these capabilities is said to be part of the reasons for the failure of their Business Model Innovation.

The importance of Experimentation and Research was already mentioned by Achtenhagen et al., (2013) and Battistella et al., (2017), stressing the need for this capability in order to decrease uncertainty. Similarly, this research confirmed the need for Leadership Unity (Doz & Kosonen, 2008; Achtenhagen et al., 2013), which is part of the capability for Leadership Involvement that was found. Lack of leadership unity was mentioned to be one of the key reasons why the project of company A failed. The capabilities

for Business model fit and Goal setting and Evaluation were not mentioned in the initial framework, however, proved to be important based on the observations.

Furthermore, it is found that both successful companies employ 5) learning in several stages of their projects, while this capability was not mentioned by company A. This, again, is in line with observations in existing literature (Smith et al. 2010, Battistella et al., 2017). Finally, the capability for 7) change management was presented by Company B as one of the most important reasons for success, this capability is not observed at the other two companies, however, this could also be due to the nature of the Business Model innovation. Since at company B, the entire company would change, while at company A and C the new Business Model would run parallel to the old Business Model. The capability for change management can be seen as a capability for overcoming inertia (Wirtz et al., 2010).

The theoretical framework proposed three more capabilities which were not observed in this research. These were the capabilities for dynamic decision making (Smith et al., 2010), overcoming inertia (Wirtz et al., 2010) and grafting (Battistella et al., 2017). This could be because these capabilities, while important for Strategic agility, are not necessary for a single Business Model Innovation project.

5.1.2 Resource Capitalisation

There were 5 capabilities found belonging to the class of Resource Capitalisation. 1) Utilisation of existing resources, 2) Acquisition of new resources 3) Company culture 4) Ambidexterity 5) Commitment. The capabilities 1) Utilisation of existing resources 2), Acquisition of new resources, 4) Ambidexterity and 5) Commitment were found to be of key importance in both successful companies. Similarly, they were found to be lacking in the company that was not successful. The capabilities for Utilising existing resources and Acquisition of new resources is in line with the capability of Resource Fluidity mentioned by Doz & Kosonen (2010). It is the capability to actually utilise the resources which are already available in the company and the ease of which they can be reconfigured to be used in the new Business Model, this also includes the acquisition of new resources since employing more people asks for a change in allocation of monetary resources.

Ambidexterity was mentioned to be one of the most important factors to Business Model Innovation success in this research. This capability is in line with the capabilities mentioned in the theoretical framework, where Organisational Ambidexterity, Balancing Resources and Conflict management are mentioned (O'Reilly and Tuschman, 2013; Achtenhagen et al., 2013; Smith et al., 2010).

The importance of Commitment by Leadership, which was proposed by Smith et al., (2010) and Achtenhagen et al., (2013) was observed in this research as well. The two successful companies both had leadership teams which were completely committed to the execution of the Business Model Innovation project, which, in contrary, was not the case in Company A.

The final capability related to 3) company culture, only came up at company A. However, company culture was expected to be an important capability based on the existing literature (Achtenhagen et al., 2013; Battistella et al., 2017). This indicates that if not aligned correctly, a company's culture can have a negative influence on the success of a Business Model Innovation.

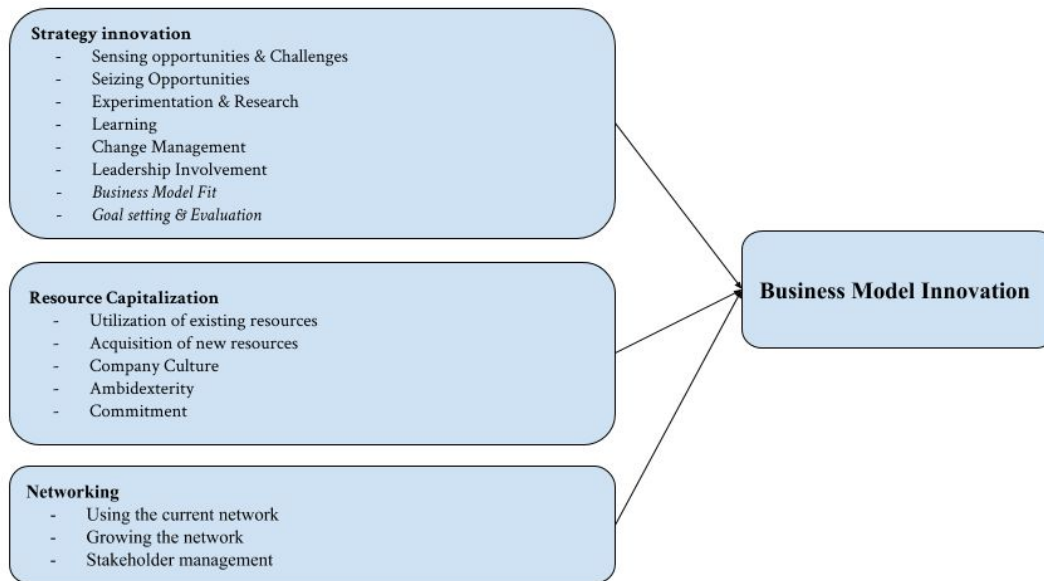
5.1.3 Networking

In the class of networking, three capabilities were found: 1) Using the current network; 2) growing the network; 3) stakeholder management. These three capabilities were not given as much weight in the interviews as the capabilities for Strategy Innovation and Resource Capitalisation. However, two capabilities came up at all three companies. First, 1) Using the current network was found to be crucial in company B and C, company A did mention using their network, but would not classify it as having a positive or negative effect on the successfulness of their Business Model Innovation. Only company B placed great importance in the capability of 2) growing their network and 3) stakeholder management, mentioning that those two capabilities were employed during the Business Model Innovation process. This final capability of Stakeholder management was also mentioned by Battistella et al., (2017).

5.2 Refined framework

Looking at the key findings, it can be concluded that, indeed the three groups of capabilities which are key to achieving Strategic agility are also important to Business Model Innovation. However, not all micro-capabilities proposed in these groups are found to be key to Business Model Innovation success, while others were not mentioned in literature, but did come up as key capabilities during the research. The refined framework proposes three groups of capabilities, in line with the framework based on Battistella et al., (2017), each consisting of different underlying capabilities.

Figure 2: refined theoretical framework



5.3 Implications of key findings

This research has quite some implications to practice. First of all, this research stresses the fact that Business Model Innovation is not an easy or straightforward task. There are different risks and challenges to overcome, and not acknowledging these would be foolish. Secondly, this research gives companies an impression of which capabilities they should possess when undertaking a Business Model Innovation project. The capabilities described can act as a sort of checklist for companies, to see where they should focus their attention when aiming to undertake a Business Model Innovation project.

Organizations should for example focus their efforts on acquiring the capabilities needed to Innovate their strategy, by for example investing in the capability to experiment with different business model, or by paying close attention to ensuring business model fit. Furthermore, it is important that if a new business model is chosen, and realised, the company can actually capitalise on their resources and use these to successfully employ the new Business Model. For example by building commitment amongst the management team, and pursuing organisational ambidexterity. Finally, companies should pay close attention to their network, and how they use this during the Business Model Innovation process, as well as after the project is finished. By indicating these capabilities that are needed, companies can critically assess themselves when deciding to or in the process of innovating their business model.

This research adds to the field of Business Model Innovation, by broadening the knowledge base on the key capabilities important to succeeding in a Business Model Innovation project. Literature on Business Model Innovation as a topic, as well as the company level characteristic influencing its success was rather scarce. Moreover, in the existing literature, scholars mainly focused on either the results of

undertaking a project or the antecedents that would lead a firm to undertake such a project. However, this research was able to look at three instances of Business Model Innovation on a more detailed level, by actually investigating how this process takes place inside an organization.

The main implication, is the fact that this research formed a theory on which capabilities are important during a Business Model Innovation. It builds upon the strategic agility framework and shows how that is applied to instances of Business Model Innovation. This research found that, indeed the framework of capabilities for strategic agility can be applied to single cases of Business Model Innovation, with the notion that some of the underlying micro-capabilities differ. These differences are especially apparent in the first group of capabilities, the capabilities for Strategy Innovation. Where this research stresses the importance of setting clear goals and evaluating them, as well as ensuring business model fit. Both of these capabilities were not part of the initial theoretical framework.

5.4 Limitations and future research

As any research, this research has some limitations. To start of, this research used a rather small sample. To create a more generalizable conclusion, it would have been better to work with a larger set of companies facing a similar situation. Furthermore, time constraints caused the fact that this research had to be performed after the companies attempted their Business Model Innovation. It was not possible to look at the situation as it was happening, but had to be based on the stories told by the interviewees. Moreover, since this study was conducted in the Netherlands, the importance of the capabilities found might not translate directly to other geographies. It would therefore be a great research path to take and see how the capabilities for Business Model Innovation differ across countries and cultures.

As mentioned before, this research can be taken further. Next to looking at different geographies and cultures, it would be interesting to see whether the capabilities that were found, also hold if they are tested in a larger sample. The conceptual framework developed could act as a guiding measure to develop testable hypotheses, to be researched at different companies.

Next to that, it would be interesting to research the Business Model Innovation process and the underlying capabilities in a longitudinal study, to uncover when certain capabilities are most important and how the needs develop over time. Finally, future research could go into the path of how these identified capabilities can actually be acquired.

6 References

- Abdelkafi, N., Makhotin, S., & Posselt, T. 2013. Business Model Innovations for electric mobility: What can be learned from existing Business Model patterns? *International Journal of Innovation Management*, 17: 1-42.
- Achtenhagen, L., Melin, L., Naldi, L. 2013. Dynamics of Business Models – strategizing, critical capabilities and activities for sustained value creation. *Long Range Planning*, 46(6), 427–442.
- Aspara, J, J Hietanen and H Tikkanen (2010). Business Model Innovation vs. replication: Financial performance implications of strategic emphases. *Journal of Strategic Marketing* , 18(1), 39– 56.
- Battistella, C., De Toni, A. F., De Zan, G., & Pessot, E. (2017). Cultivating business model agility through focused capabilities: A multiple case study. *Journal of Business Research*, 73, 65-82.
- Bock, A, T Opsahl, G George and DM Gann (2012). The effects of culture and structure on strategic flexibility during Business Model Innovation. *Journal of Management Studies*, 49(2), 279– 305.
- Berman, B. (2012). 3-D printing: The new industrial revolution. *Business horizons*, 55(2), 155-162.
- Bucherer, E, U Eisert and O Gassmann (2012). Towards systematic Business Model Innovation: Lessons from product innovation management. *Creativity and Innovation Management* , 21(2), 183– 198.(2)
- Casadesus-Masanell, R and F Zhu (2010). Strategies to fight ad-sponsored rivals. *Management Science* , 56(9), 1484– 1499.
- Chesbrough, H (2010). Business Model Innovation: Opportunities and barriers. *Long Range Planning*, 43(2/3), 354– 363.
- Corbin, J., & Strauss, A. (2008). Basics of qualitative research: Techniques and procedures for developing grounded theory.
- Cucculelli, M., & Bettinelli, C. 2015. Business Models, intangibles and firm performance: Evidence on corporate entrepreneurship from Italian manufacturing SMEs. *Small Business Economics*, 45: 329-350.
- Demil, B., Lecocq, X. 2010. Business Model evolution: In search of dynamic consistency. *Long Range planning*, 43(2/3), 227-246.
- Doz, YL and M Kosonen (2008b). Fast Strategy: How Strategic Agility Will Help You Stay Ahead of the Game, London, UK: *Wharton School Publishing*.

- Doz, YL and M Kosonen (2010). Embedding strategic agility: A leadership agenda for accelerating Business Model renewal. *Long Range Planning*, 43(2/3), 370– 382.
- Dunford, R, I Palmer and J Benviste (2010). Business Model replication for early and rapid internationalisation: The ING direct experience. *Long Range Planning*, 43(5/6), 655– 674.
- Easterby-Smith, M., Thorpe, R., & Jackson, P. R. (2012). *Management research*. Sage.
- Evans, J. D., & Johnson, R. O. 2013. Tools for managing early-stage Business Model Innovation. *Research Technology Management*, 56: 52-56.
- Foss, N. J., & Saebi, T. (2017). Fifteen years of research on Business Model Innovation: how far have we come, and where should we go?. *Journal of Management*, 43(1), 200-227.
- Giesen, E., Berman, S. J., Bell, R., & Blitz, A. 2007. Three ways to successfully innovate your Business Model. *Strategy & Leadership*, 35(6): 27-33.
- Glaser, B. and Strauss, A. (1967) *The Discovery of Grounded Theory*. Chicago, IL: Aldine.
- Goldman, S. L., Nagel, R. N., & Preiss, K. (1995). *Agile competitors and virtual organizations: strategies for enriching the customer* (Vol. 8). New York: *Van Nostrand Reinhold*.
- Johnson, M. W., Christensen, C. C., & Kagermann, H. 2008. Reinventing your business model. *Harvard Business Review*, 86: 50-59.
- Laaksonen, O., & Peltoniemi, M. (2018). The essence of dynamic capabilities and their measurement. *International Journal of Management Reviews*, 20(2), 184-205.
- Lambert, S. C., & Davidson, R. A. (2013). Applications of the business model in studies of enterprise success, innovation and classification: An analysis of empirical research from 1996 to 2010. *European Management Journal*, 31(6), 668-681.
- Lewis, M. W., Andriopoulos, C., & Smith, W. K. (2014). Paradoxical leadership to enable strategic agility. *California Management Review*, 56(3), 58-77.
- Magretta, J. 2002. Why business models matter. *Harvard Business Review*, 80: 3-8.
- Matzler, K., Bailom, F., den Eichen, S. F., & Kohler, T. 2013. Business Model Innovation: Coffee triumphs for Nespresso. *Journal of Business Strategy*, 34: 30-37.

- McGrath, RG (2010). Business Models: A discovery-driven approach. *Long Range Planning* 43(2/3), 247–261.
- Miller, K., McAdam, M., & McAdam, R. (2014). The changing university business model: a stakeholder perspective. *R&D*
- Morris, M., Schindehutte, M., & Allen, J. (2005). The entrepreneur's business model: toward a unified perspective. *Journal of business research*, 58(6), 726-735. *Management*, 44(3), 265-287.
- Neuman, W. L. (2013). *Social research methods: Qualitative and quantitative approaches*. Pearson education.
- O'Reilly III, C. A., & Tushman, M. L. (2013). Organizational ambidexterity: Past, present, and future. *Academy of management Perspectives*, 27(4), 324-338.
- Osterwalder, A., Pigneur, Y., & Tucci, C. L. 2005. Clarifying business models: Origins, present and future of the concept. *Communications of the Association for Information Science (CAIS)*, 16: 1-25.
- Reuver de, M., Bouwman, H., & MacInnes, I. (2009). Business model dynamics: a case survey. *Journal of theoretical and applied electronic commerce research*, 4(1), 1-11.
- Saunders, M., Lewis, P., & Thornhill, A. (2009). *Research methods for business students*. Pearson education.
- Spieth, P., Schneckenberg, D., & Matzler, K. (2016). Exploring the linkage between business model (&) innovation and the strategy of the firm. *R&D Management*, 46(3), 403-413.
- Schneider, S., & Spieth, P. (2013). Business Model Innovation: Towards an integrated future research agenda. *International Journal of Innovation Management*, 17(01), 1340001.
- Smith, WK, A Binns and ML Tushman (2010). Complex Business Models: Managing strategic paradoxes simultaneously. *Long Range Planning*, 43(2/3), 448– 461.
- Souto, J. E. 2015. Business Model Innovation and business concept innovation as the context of incremental innovation and radical innovation. *Tourism Management*, 51: 142-155.
- Teece, D.J. 2010. Business Models, Business Strategy and Innovation, *Long Range Planning*. 43(2/3), 172-194.
- Teece, D., & Pisano, G. (1994). The dynamic capabilities of firms: an introduction. *Industrial and corporate change*, 3(3), 537-556.

- Wang, C. L., & Ahmed, P. K. (2007). Dynamic capabilities: A review and research agenda. *International journal of management reviews*, 9(1), 31-51.
- Weber, Y., & Tarba, S. Y. (2014). Strategic Agility: A State of the Art Introduction to the Special Section on Strategic Agility. *California Management Review*, 56(3), 5-12.
- Winter, S. G. (2003). Understanding dynamic capabilities. *Strategic management journal*, 24(10), 991-995.
- Wirtz, BW, O Schilke and S Ullrich (2010). Strategic development of Business Models: Implications of the Web 2.0 for creating value on the internet. *Long Range Planning* 43(2/3), 272– 290.
- Zollo, M., & Winter, S. G. (2002). Deliberate learning and the evolution of dynamic capabilities. *Organization science*, 13(3), 339-351.
- Zott, C., & Amit, R. 2007. Business Model design and the performance of entrepreneurial firms. *Organization Science*, 18: 181-19

7 Appendices

Appendix A: Conceptual framework and interview questions

Since the interview took a semi-structured approach, some talking points were established, even though the questions were not all asked word for word, it was made sure that each of these questions could be answered from the recorded interview afterwards.

Concept	Description	Potential capabilities/indicators	Related interview Question
Strategy Innovation: how and why did the company made a strategic choice to change?			<ul style="list-style-type: none"> - What was the goal of the research? - Why did you decide to implement a new Business Model?
1. Anticipate and Look for new Business Models	The ability to be prepared for a Business Model change, but also to actively and passively look for new Business Models and select the appropriate new Business Model that helps reach the underlying goals.	<ul style="list-style-type: none"> - Experimentation - Constant monitoring - Goal Clarity 	<ul style="list-style-type: none"> - Why did you choose to make a transformation? - When would the transformation be successful? - Did you look at different possible Business models? And was the choice based on research or experimentation? - Who made this decision? - Did the company set measurable goals?
2. Realisation of the new Business Model	The ability to actually implement or realise a new Business Model	<ul style="list-style-type: none"> - Grafting, buying another company - Learning 	
Resource Capitalization: all capabilities which relate to use of resources in any stage of the process.			Which role did the company resources play during the Business Model Innovation project?
1.Ambidexte	The ability to perform a	<ul style="list-style-type: none"> - Seperation of 	<ul style="list-style-type: none"> - Which resources were

rity/ Balance	balancing act with your resources, keeping an eye on day to day business while also investing in the new Business Model.	funds - Long term vision	most important during the Business Model Innovation process, and in the new Business Model?
2.Culture	The supportiveness of the culture on the Business Model change process.	- Forgiving culture (ok to make mistakes) - Entrepreneurial culture	- How did you balance investing in the new model, while upholding the old one? - In what way was the culture of influence on the change process and succes?
3. Leadership	The way leadership deals with difficult situations arising in the acquisition or sharing of resources.	- Leadership unity	- Which role did the leadership play in this process? Would you say it had a positive or negative influence?
Network: the role of the companies network in a Business Model change			To what extent did you use the network of the company to ensure the successfulness of the transformation?
1. Use of current network	The way a company uses its existing network in the Business Model process	- Customer connectivity - Stakeholder integration	- How did you utilise your current network? - Did you have to expend your network?
2. Adapting the network	The way a company adapts or grows its network to deal with the changes stemming from Business Model Innovation	- Coordination - Partner selection	- In what way influenced your relation with clients, competition, partners etc. the Business Model Innovation?

Appendix B: changes in Business model, Business Model Innovation goals, Successfulness

Changes in Business Model

Component of Business Model	Old	New	Change
Company A (From Consulting to Product development)			
Value Creation - USP	<i>We offer Projects, Frontend and Design, we can truly fulfill our clients need</i>	We have the knowledge 'in house' we can create top notch products since we have the technical skills available	Change from "concept minded approach" TO "superior technical knowledge and creating the best"
Value Delivery - Solution - Channels - Clients	Enterprise level clients, always B2B. Clients are reached via the network of the Sales guys.	B2B and B2C clients. Not sure how to reach the B2C clients.	Change from a very strong focus on a specific type of client to a less focused and more uncertain approach.
Value Capture - Revenues	For every hour a consultant works, the client pays	Variable, but possibly: Licences, pay per use, subscription models etc.	Change from one type of revenues to a mix of different types.
Change Goal	Increase recurring revenues		
Successful	No - terminated		
Company B (From Wholesaler to End customer platform)			
Value Creation - USP	Seller of highest quality materials	Superior insight in end customer behavior and wishes	From a focus on quality to focus on best fit.
Value Delivery - Solution - Channels - Clients	Sale exclusively via resellers	Targeting end customers, while making use of their resellers	Integration in the value chain

Value Capture - Revenues	Value captured from resale partners	Value captured from resale partners	X
Change Goal	Better understanding of end customer		
Successful	Yes		
Compnay C (From Consulting to Product Development)			
Value Creation - USP	Productized methods combined with workshop by high level innovation consultant	SaaS product, incorporating psychological methods to stimulate innovation	Eliminating the need for a consultant.
Value Delivery - Solution - Channels - Clients	Large scale clients with a need for innovation. Customers are actively sought out via various channels	Large scale clients with a need for innovation. Customers are acquired passively via their website.	Change in channels used.
Value Capture - Revenues	Pay per project	Licence model	Change from buying a product to purchasing a licence based on the amount of users.
Change Goal	Growth through scalability		
Successful	Yes		

