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# **Enhancing SMEs' Organizational Resilience through Business Model Innovation and Ambidexterity Capability**

Master's thesis  
in International Business

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Companies, today, are operating in an environment, where the need for change is continuous. Past decade has shown, how companies can face any kind of unexpected events, that may threaten their survival. Furthermore, ever-changing market needs and customer demands are forcing organizations to be more innovative than ever before. To ensure the longevity of the business, companies need to develop capacity to effectively cope in turbulence, successfully bounce back from crises, and even foster future success. This can be gained through organizational resilience, which means that an organization has the ability to anticipate potential threats, cope effectively with adverse events, and adapt to changing conditions. Compared to large firms, small and medium-sized enterprises are in a greater risk to ensure their viability, when facing crises and unexpected events. Furthermore, SMEs have more challenges in terms of growth and innovation. To provide more insight in this respect, this research focuses on SMEs.

This thesis answers to the research question of how organizational resilience can be enhanced in SMEs through business model innovation and ambidexterity capability. The research was conducted qualitatively as an extensive multiple-case study. Two case companies were selected, and semi-structured interviews were used as a data collection method. In total, four individuals were interviewed. The individual cases were first examined separately in a thematic order, followed by a cross-case analysis.

Organizational resilience is characterized by two dimensions, robustness, and adaptability. On the one hand, to survive over stressful periods and unexpected events, companies need to be robust enough to remain safe and stable. This is supported by routines, consistency, and control. On the other hand, companies need to be flexible enough to be able to adapt to changing surroundings. Innovation, variety, and experimentation are needed in the endeavours to search for new opportunities from the environment. Balancing between robustness and adaptability, however, is not simple. Certain elements are required to be able to foster both dimensions. Here, ambidexterity capability is needed, allowing organizations to balance between exploitation of their current business and exploration of new business models.

The findings of the empirical research support the theoretical framework of this study. Furthermore, the empirical findings argue that SMEs should foster organizational culture that is supportive towards contradicting activities of exploration and exploitation. The empirical findings also highlight the importance of high-quality leadership and management. Companies should approach organizational resilience in a proactive manner by anticipating potential threats or opportunities in the environment before the crisis occurs. Specialized human resources, and internal and external knowledge management are critical factors supporting successful business model innovation. Moreover, close customer relationships and other collaborative partnerships, as well as digitalization are beneficial in organization's endeavours towards resilience. Business model innovation and ambidexterity capability enhance organizational resilience, by supporting the viability of the company in the long run through new, innovative openings, while ensuring stability through current business operations.

**Key words:** organizational resilience, business model, business model innovation, organizational ambidexterity, ambidexterity capability, exploration, exploitation, innovation management

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Jatkuva muutos on vakiintunut ilmiö tämän päivän liiketoimintaympäristössä. Viimeinen vuosikymmen on osoittanut, miten monenlaiset yllättävät tapahtumat voivat uhata organisaatioiden selviytymistä. Lisäksi organisaatioilta vaaditaan entistä vahvempaa innovatiivisuutta, kyetäkseen vastaamaan jatkuvasti muuttuvaan kysyntään markkinoilla. Jotta yritykset voivat säilyttää elinkelpoisuutensa, niiden tulee kehittää kyvykkyytään selviytyä turbulenssissa, toipua kriiseistä ja edistää menestyksestä tulevaisuutta. Tätä voidaan tukea organisaation resilienssillä, joka tarkoittaa organisaation kykyä ennakoida mahdollisia uhkia, selviytyä tehokkaasti epäsuotuisista tilanteista, ja mukautua muuttuviin olosuhteisiin. Verrattuna suuriin yrityksiin, pienten ja keskisuurten yritysten elinkelpoisuus on suuremmissa riskissä kriisien ja yllättävien tapahtumien kohdatessa. Lisäksi pk-yrityksillä on enemmän haasteita kasvun ja innovaatioiden suhteen. Tästä syystä tässä tutkimuksessa keskitytään pk-yrityksiin.

Tämä tutkimus vastaa tutkimuskysymykseen, miten pk-yritykset voivat vahvistaa resilienssiään liiketoimintamallin innovoinnilla ja ambideksteerisyys-kyvykkyydellä. Tutkimus toteutettiin kvalitatiivisesti ekstensiivisenä monitapaustutkimuksena. Kaksi case-yritystä valikoitiin, ja tiedonkeruumenetelmänä hyödynnettiin puolistrukturoitua haastattelua. Yhteensä neljä yksilöhaastattelua toteutettiin. Case-yritysten tulokset kuvailtiin ensin erillisinä tapauksina, jonka jälkeen tehtiin ristikkäisanalyysi.

Organisaation resilienssi koostuu kahdesta ulottuvuudesta, vakauudesta ja mukautuvuudesta. Selvitäkseen stressaavista aikajaksoista ja yllättävistä tilanteista, yritysten täytyy olla riittävän vakaita ja horjumattomia. Tätä ominaisuutta tukevat rutiinit, johdonmukaisuus ja kontrolli. Toisaalta yritysten täytyy olla riittävän joustavia kyetäkseen mukautumaan muuttuviin olosuhteisiin. Tässä suhteessa, ja etsittäessä uusia mahdollisuuksia ympäristöstä, yrityksiltä vaaditaan innovatiivisuutta, monipuolisuutta ja kokeiluja. Tasapainottelu vakauden ja mukautuvuuden välillä ei kuitenkaan ole helppoa, ja tiettyjä elementtejä tarvitaan tasapainottelun mahdollistamiseksi. Ambideksteerisyys-kyvykkyys mahdollistaa organisaatioiden tasapainottelemisen nykyisen liiketoiminnan ja uuden liiketoiminnan innovoinnin välillä.

Tutkimuksen empiiriset tulokset tukevat teoreettista viitekehystä. Lisäksi empiiristen tulosten mukaan pk-yritysten tulisi vaalia organisaatiokulttuuria, joka tukee sekä vanhan liiketoiminnan ylläpitämistä että uuden kehittämistä. Empiiriset tulokset myös korostavat laadukkaan johtajuuden merkitystä. Yritysten tulisi lähestyä resilienssiä proaktiivisesti, ennakoiden potentiaalisia uhkia ja mahdollisuuksia ympäristössä ennen kriisin ilmenemistä. Osaava, asiantunteva henkilöstö sekä sisäisen ja ulkoisen tiedon hallinta ovat merkittäviä liiketoimintamallin innovointia tukevia tekijöitä. Lisäksi läheisten asiakassuhteiden ja muiden kumppanuuksien vaaliminen sekä digitalisaatio tukevat uuden liiketoimintamallin innovointia. Liiketoimintamallin innovointi ja ambideksteerisyys-kyvykkyys vahvistavat organisaation resilienssiä, tukemalla yrityksen elinkelpoisuutta pitkällä aikajänteellä uusien, innovatiivisten avauksien kautta samalla, kun riittävä vakaus taataan nykyisen liiketoiminnan ylläpitämisellä.

**Avainsanat:** organizational resilience, business model, business model innovation, organizational ambidexterity, ambidexterity capability, exploration, exploitation, innovation management

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# 1 INTRODUCTION

## 1.1 Background of the study

“Any company that can make sense of its environment, generate strategic options, and re-align its resources faster than its rivals will enjoy a decisive advantage. This is the essence of resilience. And it will prove to be the ultimate competitive advantage in the age of turbulence – when companies are being challenged to change more profoundly, and more rapidly, than ever before.” – Gary Hamel and Liisa Välikangas (2003, 63.)

As the saying goes, “nothing is permanent but change”. This describes well today’s complex business environment, where fast-paced and continual changes are forcing companies to react in a way to better cope and thrive amidst turbulence. (Eriksson et al. 2022, 205.) Firstly, everchanging market needs and customer demands are urging companies to be more innovative than ever before, with greater agility, speed, and creativity (Tidd & Bessant 2013, 9). Secondly, past decades have shown, how any kind of unexpected events from natural disasters and pandemic diseases to war, economic recession or technical malfunctions are possible (OECD 2023). Thirdly, due to globalization, organizations operate in an increasingly interconnected world, where many issues and many companies are tightly interlinked both socially and technologically. Thus, initially a minor challenge in a wide inter-connected network of companies can lead to a massive disruption, forming a so-called “butterfly effect”. Maintaining an independent position and avoiding or resisting shocks, impacts or disasters while remaining competitive is becoming increasingly difficult for companies. (Annarelli & Nonino 2016, 2.) These matters further increase the prevalence of challenges, interruptions, or major shocks – forcing organizations to enhance their capacity to effectively cope in times of unexpected events, successfully bounce back from crises, and even foster future success. This capacity, in other words, is called organizational resilience. (Duchek 2020, 215.)

During the past years, “resilience” in business domain has gained major visibility as a fundamental organizational ability that can – and should be deliberately developed in order to obtain a sustainable competitive advantage (Duchek 2020, 238). Recently, COVID-19 pandemic in the beginning of 2020 put organizations worldwide into a serious trouble, threatening companies, and the continuity of their business processes (Margherita & Heikkilä 2021, 683). This accelerated the research in the field giving it a “new

momentum” to understand, why some organizations survive and even thrive in times of turbulence or major crises, while others cannot find a way to overcome challenges (Duchek 2020, 224-225). Organizational resilience means “an organization’s ability to anticipate potential threats, to cope effectively with adverse events, and to adapt to changing conditions” (Duchek 2020, 220). For instance, resilient organizations can better tolerate over stressful periods, and have the capability to innovate and adapt quickly to changes (Duchek 2020, 238). Recent findings at the context of pandemic have shown that those firms with the agility to adapt quickly amidst turbulence have managed to ensure their business continuity. However, to better understand the transition path the firms have taken and how they have adapted their business models, is worth exploring. (Seetharaman 2020, 4.)

To be able to respond to internal and external challenges and emerging trends, organizations need to modify, change or re-design their business models (Granig & Hilgarter 2020, 525; Ramdani et al. 2022, 51). In fact, existing literature addresses that organizational resilience can be achieved with business model innovation (Carayannis et al. 2014, 440). Business model innovation means searching for new logics and ways to create and capture value for company’s stakeholders (Casadesus-Masanell & Zhu 2013, 464). Some scholars (see, for example, Buliga et al. 2016, 648, 661) argue that, combining the two concepts and research streams of organizational resilience and business model innovation would significantly increase organizational understanding of adequate responses to environmental changes. This is supported by the fact that these concepts share major decisive components, which are strongly indicating an underlying, inherent, and logical connection.

Whereas large companies may have accumulated some kind of buffers against potential threats or risks, majority of small and medium-sized enterprises (SMEs) are not prepared as such. This often leads to weaker performance of SMEs during crises. (Lai et al. 2016, 117.) On the other hand, compared to larger firms, SMEs are typically more flexible and adaptable, which can be linked to a better resilience (Arbussa et al. 2017, 285). Though the first response to crises is handled particularly well by SMEs, their growth and innovation seem to be at risk in the long run (Kuckertz et al. 2020, 1). In order to achieve resilience, some scholars (see, for example, Weick 1993, 644-645) pay attention to the antecedents that improve reliability through routines, consistency and control, while other researchers (see, for example, Hamel & Välikangas 2003, 54) highlight the importance

of adaptability and flexibility through innovation, variety and experimentation. As a result, to enable organizational resilience, especially in SMEs, the focus should be on capabilities that allow both flexibility in terms of coping and adapting, as well as robustness to remain safe and stable under distress (Iborra et al. 2020, 2). The question of how to find the parallel management of activities to improve robustness and accelerate adaptability leads us to the discussion of ambidexterity (Buliga et al. 2016, 661).

Ambidexterity means that an organization is capable to manage today's business demands, while simultaneously remain adaptive to environmental changes (Iborra et al. 2020, 2<sup>1</sup>). Whereas some scholars have defined ambidexterity as the ability to simultaneously explore and exploit (O'Reilly & Tushman 2013, 330), others find it as the ability to balance between exploration and exploitation, dynamically (Luger et al. 2018, 466). The variation between definitions stems from the different perspectives how ambidexterity is viewed. Iborra et al. (2020, 2) argue that SME's ambidexterity is a dynamic capability that influences SME's resilience. In the context of SMEs, organizational ambidexterity occurs particularly interesting, as some scholars (see, for example, Wenke et al. 2021, 653) have investigated whether SMEs are "too small to do it all".

However, the interconnection of all these three constructs; organizational resilience, business model innovation and organizational ambidexterity in the context of SMEs remains unstudied. Responding to this research gap would be important, because these three concepts seem to be sharing many similar characteristics and together, they may potentially build an entity that helps to understand how SMEs can obtain and enhance their resilience. Focusing particularly on how SMEs can enhance their resilience has a great significance because according to studies, when facing crises, SMEs have more challenges in terms of their continuity and survival compared to larger firms (Davidsson & Gordon 2016, 916). Thus, searching for novel explanations in this matter has a great value potential both for theory and practice. This research contributes to the literature by investigating how SMEs' organizational resilience can be enhanced through business

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<sup>1</sup> Duncan RB (1976) The ambidextrous organization: designing dual structures for innovation. In: Kilmann RH, Pondy LR, Selvin D (eds) The management of organization, vol 1. North-Holland, New York, pp 167–188.

model innovation and ambidexterity capability, examining the underlying capabilities and mechanisms that are critical in this endeavour.

## **1.2 Problematization of the study**

Some research is available regarding the interconnection of organizational resilience and business model innovation (see, for example, Hamel & Välikangas 2003; Dewald & Bowen 2010; Carayannis et al. 2014; Buliga et al. 2016). Similarly, the interlinkage of organizational resilience and ambidexterity has been studied by few scholars (see, for example, Iborra et al. 2020; Gayed & El Ebrashi 2023; Trieu et al. 2023). However, the interconnection of all the three constructs; organizational resilience, business model innovation, and ambidexterity capability, remains unstudied. The nonexistence of studies combining organizational resilience, ambidexterity capability and business model innovation is calling for more research, forming the research gap to be contributed in this study. In consequence, the main research question guiding this research is: How organizational resilience can be enhanced in SMEs through business model innovation and organizational ambidexterity?

The main research question is approached through the following three sub-questions:

- 1) What are the main challenges SMEs face when seeking for organizational resilience?
- 2) What resources are needed for successful business model innovation contributing to organizational resilience?
- 3) How can ambidexterity capability help to achieve organizational resilience?

The first sub-question examines what kind of challenges particularly SMEs face in their endeavours to enhance organizational resilience. The second sub-question leads the discussion towards business model innovation as means to enhance organizational resilience. This sub-question will be approached from the aspect of needed resources to allow successful business model innovation that could lead to enhanced organizational resilience. The third, and last, sub-question adds the notion of organizational ambidexterity. The focus will be on how ambidexterity capability can facilitate the achievement of organizational resilience.

As argued by Duchek (2020, 238), novel insights could be gained by examining what are the underlying mechanisms that may help the development of organizational resilience. In this research, Duchek's (2020) proposal is followed, and the focus in this study is examining the underlying mechanisms that may be helpful in enhancing organizational resilience. Based on the literature review, a novel conceptual framework is developed, building on business model innovation and organizational ambidexterity capability as prominent mechanisms of organizational resilience particularly in the context of SMEs.

This thesis is structured in the following way. Chapter 1 introduces background of the research, problematization of the study, and research questions. Chapter 2 consists of the literature review, through which the initial theoretical framework is constructed. The literature of organizational resilience, business model innovation, and organizational ambidexterity is discussed throughout. Chapter 3 describes the research design of this study, including discussion of the research approach and strategy, data collection and data analysis. Furthermore, the trustworthiness of the study is evaluated. This research is conducted as an extensive multiple-case study. Two case companies were selected, and the data was collected qualitatively with semi-structured interviews by interviewing four individuals from the case companies. In chapter 4, the empirical findings are described and analysed, further bridging the theoretical and empirical part towards the revised theoretical framework. Chapter 5 focuses on theoretical contribution and managerial implications of this study. Furthermore, limitations of the research and future research recommendations are discussed. Chapter 6 finalizes the study with a summary.

## 2 LITERATURE REVIEW

In this chapter, relevant literature, conceptual definitions, and existing theories are introduced. The first sub-chapter 2.1. discourses organizational resilience, the second sub-chapter 2.2. focuses on business model innovation, and the third sub-chapter 2.3. deals with organizational ambidexterity. Finally, based on the literature review, the last sub-chapter 2.4. will introduce the initial theoretical framework of this research, synthesizing the literature on organizational resilience, business model innovation and ambidexterity capability.

### 2.1 Organizational resilience

#### 2.1.1 Background of the organizational resilience research

Resilience was first introduced in ecology by Holling (1973) as a “measure of the persistence of systems and of their ability to absorb change and disturbance and still maintain the same relationships between populations or state variables” (Holling 1973, 14). Following the use of the concept in the field of ecology, it has been later applied in several fields, such as engineering, medicine, human resource management (Lengnick-Hall et al. 2011), supply chain management (Christopher & Peck 2004), individual (Luthar et al. 2000) and organizational psychology (Barnett & Pratt 2000).

In business and management research, resilience has recently gained a new momentum with an increasing amount of new literature, yet the subject still remains rather scarce (Duchek 2020, 217) and fragmented in this research domain, consisting of several different research streams (Linnenluecke 2017, 14). According to Linnenluecke (2017, 9) resilience in business and management literature has its origins in two seminal papers written by Staw et al. (1981) and Meyer (1982), with a focus on organizational responses to external threats. Albeit both studies are based on variation-selection-retention mechanism (evolutionary theory by Campbell 1965), their propositions of how organizations respond to external threats differ substantially from each other.

The theory introduced by Staw et al. (1981, 502) explains how threatening situations cause risk avoidance and maladaptive outcomes, called ‘threat-rigidity effects’”. As a result, instead of flexible and adaptable learning, individuals, groups, and organizations tend to emphasize well-learned or dominating responses when facing adverse situations.

As a contradiction, Meyer (1982, 519-520) suggests that adaptability can be displayed by organizations through two kinds of responses: they can either absorb the impact of the environmental jolt by undergoing first-order change and single-loop learning (labelled 'resiliency'), or they can adopt new practices or configurations through second-order change and double-loop learning (labelled 'retention'). In addition to that, Meyer (1982, 529-530) stated that organization's strategy and its slack resources also influence on resilience, whereas organization's ideologies are shaping, and organizational structures constraining retention. Staw et al. (1981) and Meyer (1982) both contributed to the literature by showing that the way how organizations respond to external threats triggers organizational processes in a way that can lead to either successful or unsuccessful response, having an impact on organization's strategic positioning or even its survival (Linnenluecke 2017, 9).

From the 1980 onwards, major disasters, such as Chernobyl, Exxon Valdez, Bhopal, and Space Shuttle Challenger accident, gained a lot of attention, and researchers started to focus on causes and consequences of such disasters. When the focus on research had previously been in external events and their effects for organizations, it now shifted towards internal organizational reliability. (Linnenluecke 2017, 9.) Topics such as risk and crisis management, emergency planning and business continuity started to gain increasing interest among scholars (see, for example, Shrivastava 1994, 237; Shrivastava 1995, 118; Pearson & Clair 1998, 59).

In 2001, the terrorist attacks in the US had remarkable impacts on resilience research, and the focus from intra-organizational reliability changed towards coping mechanisms and response strategies under environmental uncertainty. This new research stream on resilience was brought into light by Coutu (2002) and Luthans (2002a), developing towards a new direction with a focus on building resilience through employee strengths. (Linnenluecke 2017, 11.) Coutu (2002, 47) highlighted the importance of employee capabilities in building resilience. This research stream has its origins in the clinical and developmental psychology, drawing on Bandura's (1997) study on self-efficacy, and Seligman's (1998) work regarding learned optimism, which further reflects Cameron et

al. (2003) on the positive scholarship movement (Linnenluecke 2017, 11<sup>234</sup>). Luthans (2002a, 702) further contributed to this research stream by studying on how to develop and manage employees' psychological strength, proposing resiliency, "the capability of individuals to cope successfully in the face of significant change, adversity, or risk", as one of the variables. A remarkable body of research discussed psychological capital development, drawing on Luthans (2002b, 57) and Luthans et al. (2006, 387).

After 9/11 terrorist attacks, a second research stream was evolving, with a focus on understanding the ways companies adjust, adapt, and reinvent their business models in ever-changing surroundings – preferably before they are forced to do so (Linnenluecke 2017, 12-13). This brought the focus back to organizational processes and paying attention to enabling conditions that allow companies to be resilient (Hamel & Välikangas 2003, 53; Sutcliffe & Vogus 2003, 94-95; Gittell et al 2006, 300). Terrorist attacks in 2001 also revealed the inherent vulnerability of strongly interdependent supply networks, building a third post-9/11 research stream, with a focus on resilient supply chain design (Linnenluecke 2017, 12-13). Some scholars (see, for example, Craighead et al. 2007, 131; Jüttner & Maklan 2011, 246) have contributed to this research stream by conceptualizing principles to promote resilience with supply chains.

In summary, according to Linnenluecke's (2017, 5) systematic literature review, five lines of inquiry can be classified in organizational resilience research: 1) organizational responses to external threats, 2) organizational reliability, 3) employee strengths, 4) the adaptability of business models, and 5) design principles that reduce supply chain vulnerabilities and disruptions.

### 2.1.2 Definitions of organizational resilience

Organizational resilience research has increased remarkably since the beginning of 21<sup>st</sup> century. Despite of the increased interest towards the subject, the construct of organizational resilience has still not gained a clear, coherent description. Probably due to the fragmented research of the phenomenon, there exists various independent, ambiguous, partly inconsistent definitions of the construct. Researchers often use their

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<sup>2</sup> Bandura, A. (1997). *Self-Efficacy: The Exercise of Control*. Freeman: New York.

<sup>3</sup> Seligman, M. (1998). *Learned Optimism: How to Change Your Mind and Your Life*. NY Pocket Books: New York.

<sup>4</sup> Cameron, K. – Dutton, J. – Quinn, R. 1<sup>st</sup> ed. (2003). *Positive Organizational Scholarship: Foundations of a New Discipline*. Berrett-Koehler: San Francisco, CA.



own labelling, for instance, organizational resilience, resilient organization, resilience potential, or resilience capacity. (Duchek 2020, 217-218.) Resilience is often called as an “umbrella concept”. This means, that the concept has been constructed over variety of different loosely connected disciplinary perspectives of how resilience is understood (Hillmann 2021, 879.) The ambiguity and unclarity of the concept, its definition and measurement also challenge the research of organizational resilience (Linnenluecke 2017, 4-5). However, three main perspectives that the existing literature follows in dividing organizational resilience, can be identified (Duchek 2020, 216-217). These perspectives will be introduced next.

In the first group, following rebound-oriented perspective, resilience is understood as an organization’s ability to withstand environmental stresses, response to significant changes and return to a normal state (Horne 1997, 27). This view is similar to definitions of resilience in the physical sciences, which explains that if a material is capable to regain its original shape and characteristics after being pounded or stretched, it can be called resilient. Looking at organizational resilience from this aspect, coping strategies, and an ability to resume expected levels of performance relatively quickly are at the core. (Lengnick-Hall et al. 2011, 244.)

A second group extends the perspective beyond maintenance and restoration of organizational functionality. In this group, the aspect of developing new organizational processes and capabilities to keep pace with and even create new opportunities, is included. (Lengnick-Hall & Beck 2005, 752-753.) Following this perspective, organizational resilience is not only seen as an ability of an organization to bounce back to its normal state. Moreover, it is seen as an ability to leverage organizational resources and capabilities to resolve current dilemmas, exploit multiple opportunities and build a successful future. This transformational view of organizational resilience builds on a firm’s ability to absorb complexity and after a challenging situation, emerge stronger than before the disruptive event with a greater set of actions to utilize. (Lengnick-Hall et al. 2011, 244.) Following Coutu 2002 and, Lengnick-Hall and Beck 2005, this perspective defines organizational resilience as “a firm’s ability to effectively absorb, develop situation-specific responses to, and ultimately engage in transformative activities to capitalize on disruptive surprises that potentially threaten organization survival” (Lengnick-Hall et al. 2011, 244).

Where some scholars (see, for example, Lengnick-Hall 2011, 244) identify two differing perspectives on organizational resilience, Duchek (2020, 218) has recognized a third perspective in addition. Followed by few scholars (see, for example, McManus et al. 2008; Somers 2009, 21), the third perspective goes one step further by encompassing the notion of anticipation into the description of organizational resilience (Duchek 2020, 219<sup>5</sup>). According to Wildavsky (1991, 77) anticipation means the “prediction and prevention of potential dangers before damage is done”, contrasting it with resilience by defining it as the “capacity to cope with unanticipated dangers after they have become manifest, learning to bounce back”. This indicates that Wildavsky (1991) sees resilience as an alternative to crisis prevention (Duchek 2020, 219). Furthermore, Somers (2009, 13) has argued that “resilience is more than mere survival; it involves identifying potential risks and taking proactive steps to ensure that an organization thrives in the face of adversity”.

Duchek (2020, 220) further argues that despite the prevalent perspective viewing organizational resilience as a defensive response (resistance and/or recovery), there is a perspective shift occurring. Particularly recent studies have expanded their perspective, describing resilience rather as an offensive response (adaptation), even including the notion of anticipation. Yet majority of the studies are focusing only on a single perspective among the three, few scholars (see, for example, Burnard & Bhamra 2011, 5588-5589; Ortiz-de-Mandojana & Bansal 2016, 1627) have started to include two or even more perspectives in one resilience definition, aiming that these different perspectives are all part of resilience and only in combination can lead to growth in the face of crisis (Duchek 2020, 220). This combination-perspective is also followed by Duchek (2020, 220) who combines the active response perspective with the anticipation perspective and defines organizational resilience as “an organization’s ability to anticipate potential threats, to cope effectively with adverse events, and to adapt to changing conditions”. In this research, Duchek’s (2020) definition of organizational resilience will be followed, as in addition to coping and adaptation it includes the notion of anticipation (see figure 1).

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<sup>5</sup> McManus, S. – Seville, E. – Vargo, J. – Brunson, D. (2008). A facilitated process for improving organizational resilience. *Natural Hazards Review*, Vol. 9, 81–90.

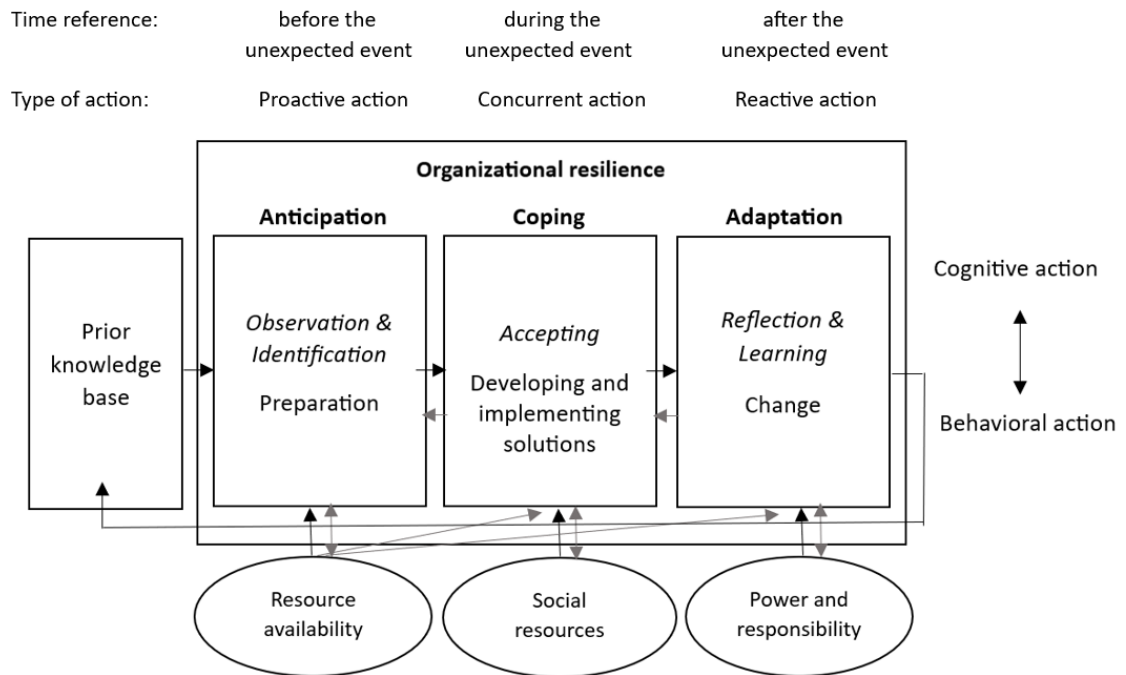


Figure 1 A capability-based conceptualization of organizational resilience (Modified from Duchek 2020, 224)

Figure 1 illustrates the process of organizational resilience, consisting of three successive stages. Accordingly, in addition to responding reactively (reactive action) to the past or to current issues (concurrent action), resilient organizations also anticipate the future (proactive action). All three process stages require specific capabilities that together support organizational resilience. (Duchek 2020, 223-224.) As this research is focusing on organizational resilience from the perspective of business model innovation, the inclusion of anticipation is particularly important. The reason behind the importance is that innovating business models should not be done only at the moment of crisis or disruptive event, but rather proactively looking at the future and reflecting on the potential scenarios or threats. Preparing for potential threats or disruptions would increase organizational ability to respond to these challenges as quickly and agile as possible.

Due to diverse definitions of organizational resilience, there is a lack of consensus regarding the conceptualization of organizational resilience (Linnenluecke 2017, 5). Scholars tend to develop their own perspectives based on the specific definition of the construct. As a result, scholars are oriented towards certain goals in their investigations. An overarching theoretical framework of organizational resilience is missing. Nevertheless, the perspective of organizational resilience can be distinguished into three

categories: those that treat 1) resilience as an outcome, those that explain 2) resilience as a process, and those that focus on 3) resilience capabilities. (Duchek 2020, 220.) These categories will be further investigated in the next sub-chapter.

### 2.1.3 Diverse approaches to organizational resilience research

Duchek (2020, 220) argues that most often researchers study organizational resilience as an outcome, focusing on situations where organizations perform well during a crisis or bounce back from interruptions (see, for example, Horne & Orr 1998). In this category, the focus is on sources and factors, which can be identified in resilient organizations but are lacking from less resilient ones. Some scholars focus only on general attributes potentially facilitating organizational resilience, which generally are adequate resources, redundancy (see, for example, Kendra & Wachtendorf 2003, 37), and positive relationships (see, for example, Gittell et al. 2006, 303). Other scholars focus on collective behaviours as sources of organizational resilience (see, for example, Weick 1993; Horne 1997; Mallak 1998). One of the first and most important conceptualizations is argued by Weick (1993, 628), who identified improvisation and bricolage, virtual role systems, an attitude of wisdom and norms of respectful interaction, as four potential sources of resilience. Accordingly, collective sensemaking is facilitated by these four principles and thus, may help to avoid dramatic consequences from unexpected events. This conceptualization is referred by many studies (see, for example, Mallak 1998; Kendra & Wachtendorf 2003) in which the scholars particularly build on it to operationalize and measure resilience.

Later on, specific organizational strategies (see, for example Carmeli & Markman 2011, 322) or processes (see, for example, Demmer et al. 2011, 5400) as a source of organizational resilience have been at the centre of some studies. Overall, the focus in these studies is on what organizations must have, to be able to respond effectively to different changes and crises. These studies identify resources, behaviours, strategies, and processes that might positively impact on organizational resilience. Majority of the empirical studies focus on organizations that show, or do not show, resilient outcomes when facing a crisis. Furthermore, these studies identify factors that have impacted positively or negatively on resilience in a particular context, by using retrospective case analyses. Instead, less knowledge about how organizational resilience actually works and which elements it contains, has been provided. (Duchek 2020, 221.)

As argued by Sutcliffe and Vogus (2003, 94-95), the second, process perspective of organizational resilience can be seen as a complementary, enriching aspect towards prior theories explaining what organizations that survive have or do in order to succeed. Due to the large scale of existing definitions of organizational resilience, there are also as many process approach suggestions (Duchek 2020, 221-222). Linnenluecke et al. (2012, 24), for instance, discover resilience as impact resistance and recovery and thus, separate anticipatory adaptation from resilience. This process-oriented framework of organizational adaptation and resilience has five stages: 1) anticipatory adaptation, 2) exposure, 3) recovery and restoration, 4) post-impact determination of the organization's overall resilience and, 5) future adaptation, where only the third and fourth stage refer to resilience. In turn, Burnard & Bhamra (2011, 5589-5590) integrate organizational adaptation into resilience definition, building a conceptual framework for resilient organizational responses to unspecified disruptions with a major focus on threat detection and response activation. This process has three main phases: 1) detection and activation, 2) (resilient) response, and 3) organizational learning.

Referring to a third category, resilience has been defined as an organizational ability by many scholars (see, for example, Linnenluecke et al. 2012, 18). However, only few of them provide in-depth knowledge of the specific capabilities that underlie organizational resilience (Duchek 2020, 222). For instance, Ismail (2011, 5469) argues that resilience is built from the development of both operational and strategic capabilities. Lengnick-Hall and Beck (2005, 752-753) state that cognitive, behavioural, and contextual elements form a firm's resilience capacity, resulting from the use of different organizational routines when dealing with uncertainty and complexity. Based on this paper, Lengnick-Hall et al. (2011, 245) viewed organizational resilience from the perspective of strategic human resource management practices and argued that a resilience capacity of a firm "is derived from a set of specific organizational capabilities, routines, practices and processes by which a firm conceptually orients itself, acts to move forward, and creates a setting of diversity and adjustable integration". The studies in capability-category provide useful insights regarding how resilience can be achieved in practice (Duchek 2020, 222).

As said, most of the empirical studies have been focusing on organizational resilience through retrospective analyses in a descriptive, outcome focused way. Duchek (2020, 223) wanted to contribute to this research gap and bring more insights into the phenomenon by investigating the underlying mechanisms that foster the development of

organizational resilience. Duchek (2020, 223) combines processual approach with a focus on both proactive and reactive resilience capabilities, which are illustrated as part of three successive stages: anticipation, coping and adaptation, building a meta-capacity of organizational resilience (see figure 1 in sub-chapter 2.1.2). This aspect further supports the decision to follow Duchek's definition on organizational resilience in this research, as the focus here is on the underlying mechanisms that foster the development of organizational resilience.

Furthermore, many scholars find two fundamental characteristics – robustness and adaptability – as main integral parts of resilience (see, for example, Horne & Orr 1998, 30; Lengnick-Hall & Beck 2005, 738). Robustness in an organizational context means that an organization is capable of withstand stress and avoid loss of function (Bruneau et al. 2003, 737). Good examples of these kind of robust organizations are high reliability organizations, such as air traffic control systems and emergency medical centres (Buliga et al. 2016, 653). These kinds of organizations employ a wide scale of resources which can be mobilized promptly after a crisis, and the resources that are missing can be promptly substituted (Bruneau et al. 2003, 737). Those organizations that are resilient have the ability to absorb complexities and adversity (Mallak 1998, 151). This is done by reducing the organizational vulnerabilities to risk environments (Burnard & Bhamra 2011, 5583), coping with the unexpected difficulties or complexities, and recovering from these situations (Sutcliffe & Vogus 2003, 96).

Adaptability, again, refers to an effective and fast action during crises (Horne & Orr 1998, 29-30; Mallak 1998, 149). Furthermore, it includes the aspect of developing mechanisms for learning and innovation (Carpenter 2001, 765), allowing organizations to grow and acquire new opportunities after adversities (Lengnick-Hall & Beck 2005, 755). Buliga et al. (2016, 653) argue, that both robustness and adaptability are the two pillars of resilience continuum. Whereas robustness is interlinked with damage avoidance, continuity, stress endurance and recovery (Bruneau 2003, 737, 746), adaptability associates with continuous learning and innovation (Carpenter 2001, 765), and capturing new opportunities from the changing environment (Lengnick-Hall & Beck 2005, 740).

In times of environmental turbulence, by employing different strategies and activities, resilient organizations aim at finding a suitable level of robustness and adaptability to survive (Buliga et al. 2016, 653-654). Many scholars (see, for example, Chesbrough 2010;

Johnson 2010, 9) have argued that business model innovation, in itself, illustrates an adaptable organizational behaviour as it dives into actions beyond the traditional scope of the business, showing the preparedness to adapt to the changing environment (Buliga et al. 2016, 654). As said, organizational resilience consists of two dimensions, robustness, and adaptability. Because business model innovation clearly indicates an organizational readiness for adaptation, business model innovation can be understood as a manifestation and part of resilience (Buliga et al. 2016, 654). Next, the concepts of business model and business model innovation will be investigated more closely.

## 2.2 Business model innovation

### 2.2.1 The definition of business model

The concept of business model was first mentioned by Bellman et al. (1957) and Jones (1960) in scientific discussions in the late 1950s (Andreini & Bettinelli 2017, 27<sup>67</sup>). In the 1990s, with the rise of the Internet, business model concept received increasing attention (Buliga et al. 2016, 650). Since then, the business model research has continued to grow (Andreini & Bettinelli 2017, 27). In fact, business models have been commonly used in the context of information technology, in the sense of business or process modelling. Business model maintained its position as an operative activity for system modelling for many years. Following the technological development and the creation of electronic business, business models started to be seen in a wider purpose, as an integrated presentation of the company organization, to support management in the decision-making process. (Wirtz et al. 2016, 37.)

Depending on the context in question, there are slight differences regarding the definition of a business model. Shafer et al. (2005, 202) define business model as “a representation of a firm’s underlying core logic and strategic choices for creating and capturing value within a value network”. Osterwalder and Pigneur (2010, 14) have taken a more practical approach, arguing that, “a business model describes the rationale of how an organization creates, delivers, and captures value”. According to Teece (2018, 40) business model means an “architecture for how a firm creates and delivers value to customers and the

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<sup>6</sup> Bellman, R. – Clark, C. E. – Malcolm, D. G. – Craft, C. J. – Ricciardi, F. M. (1957) On The construction of a multi-stage, multi-person business game. *Operations Research*, Vol. 5, 469-503.

<sup>7</sup> Jones, G. M. (1960) Educators, electrons, and business models: A problem in synthesis. *Accounting Review*, Vol. 35, 619-626.

mechanisms employed to capture a share of that value”. Regardless of the wide variety of slightly differing definitions of a business model, many of them (Osterwalder & Pigneur 2010, 14; Zott et al. 2011, 1019; Teece 2018, 40) share the common view that business model offers a framework to show how organizations create, deliver and capture value (Andreini & Bettinelli 2017, 29).

In their publications, many scholars (see, for example, Casadesus-Masanell & Ricart 2010, 204; Carayannis et al. 2014, 443) have articulated the differences between business model and strategy (Bettinelli 2017, 31). Carayannis et al. (2014, 443) for instance argue, that instead business model being a strategy itself, it rather forms the core and driver of a strategy. Furthermore, business model constitutes a key for decoding, understanding and effectively communicating the strategy both internally within an organization, and externally across all its stakeholders. Alternatively, Casadesus-Masanell & Ricart (2010, 201, 204-205) find strategy and business model overlapping, where business model reflects the realized strategy of an organization and thus helps the external observers to understand a company’s strategy. In other words, they argue that a business model represents the “logic of the firm”, illustrating how the company operates and creates value for its stakeholders. In this research, the definition of Carayannis et al. (2014) is followed and thus it is argued that business model cannot be used interchangeably with strategy, but business model rather helps to decode, understand, and communicate the strategy.

Based on the existing literature on business models, Osterwalder et al. (2005, 10) have synthesized nine building blocks. These stem from four core pillars for business: product, customer interface, infrastructure management and financial aspects. Based on the nine building blocks, Osterwalder and Pigneur (2010, 15) have created a blueprint for a strategy, a business model canvas, which facilitates the illustration of the business logic. The business model canvas lays the foundation for a shared language to describe, visualize, assess, and change business models. Furthermore, it serves as a tool to foster understanding, discussion, creativity, and analysis around new or existing business models. (Osterwalder & Pigneur 2010, 12, 42.) The business model canvas is illustrated in figure 2.



<b>Key Partners</b>	<b>Key Activities</b>	<b>Value Proposition</b>	<b>Customer Relationships</b>	<b>Customer Segments</b>
	<b>Key Resources</b>		<b>Channels</b>	
<b>Cost Structure</b>		<b>Revenue Streams</b>		

Figure 2 Business Model Canvas (Modified from Osterwalder & Pigneur 2010, 44)

The first core pillar of a business model, product, refers to the value proposition of the company (Osterwalder & Pigneur 2005, 10). Value proposition describes the value offered through the company's products and services to the customers (Osterwalder & Pigneur 2010, 23). The second core pillar of a business model, customer interface, includes target customers, distribution channels, and relationships (Osterwalder & Pigneur 2005, 10). Customer segment (aka target customers), again, refers to the groups of people or organizations the company aims to reach and serve. Channels, referring to communication, distribution, and sales channels, describe how the company reaches its customers with the purpose to deliver the proposed value. Finally, customer relationships, illustrate the type of customer relationship the company wishes to build with each customer segment. (Osterwalder & Pigneur 2010, 21, 26-29.)

The third core pillar of a business model is infrastructure management. This refers to core competencies, value configuration and partner network. (Osterwalder & Pigneur 2005, 10.) Value competencies refer to critical assets that are required to enable the function of the business model. These resources allow the company to create and offer a value proposition, assess markets, foster customer relationships, and earn revenues. Value configuration refers to key activities, that are required due to similar reasons than key resources, referring to the most important things to do to make the business model work. These activities can be related to production, problem solving or platform/network. Key partnerships, in other words, network of suppliers and partners, are often a cornerstone of

many business models, being beneficial for instance in terms of optimizing the business models, reducing risk, or acquiring resources. (Osterwalder & Pigneur 2010, 35-39.)

The fourth, and last, core pillar of a business model includes the revenue model and the cost structure (Osterwalder & Pigneur 2005, 10). Revenue streams refer to the generated cash from each customer segment. These can be either transaction revenues from one-time payments or, recurring revenues from ongoing payments. Four types of partnerships have been recognized by Osterwalder & Pigneur (2010, 38), which are strategic alliances between non-competitors, strategic partnerships between competitors, joint ventures, and buyer-supplier relationships. Finally, the cost structure refers to all the costs required to run the business. (Osterwalder & Pigneur 2010, 30-31, 40-41.)

### 2.2.2 Innovating business models

In the past, during the industrial era, business models were rarely changed. Once the decision of how a company creates, deliver, and captures value was decided, it remained unchanged. Companies with nearly identical business models were competing for the market share. The focus was on scaling the business model and winning the competition with an aim to execute the same business model even more effectively. (Kaplan 2012, 3-4.) Consequently, innovation research mainly focused on product and process innovation and issues related to business model innovation remained unstudied. Today, the situation is different. Organizations are forced to adapt and change their business models faster, more often and more extensively than ever before. This is required in the age of discontinuities, disruptions, and intense global competition. Without adequate response to the changing surroundings, companies become victims of their rigid business models. (Doz & Kosonen 2010, 370.) When notable changes in the business environment occur, the business model should be critically examined, and potential changes done to ensure its viability (Johnson 2019, 7; Eriksson et al. 2022, 4). Yet the importance of business model innovation has been acknowledged and the amount of scientific research is constantly growing, companies tend to have multiple processes and significantly stronger shared sense of how to innovate new products, for example technology, than new business models (Chesbrough 2010, 356). Next, the concept of business model innovation will be investigated in more detailed.

The concept of business model innovation has gained considerable attention in the academic literature during the past decade (see, for example, Zott et al. 2011, 1019;

Casadesus-Masanell & Zhu 2013, 464; Eriksson et al. 2022, 206). Regardless of the increased interest towards the concept, the definition of business model innovation still has not reached a clear consensus among academicians and practitioners (Zott et al. 2011, 1034). In fact, there is an ongoing debate regarding the formulation of business model innovation (Ramdani et al. 2022, 52). Markides (2006, 20) has defined business model innovation as “the discovery of a fundamentally different business model in an existing business”. Casadesus-Masanell & Zhu (2013, 464) argue that “at root, business model innovation refers to the search for new logics of the firm and new ways to create and capture value for its stakeholders; it focuses primarily on finding new ways to generate revenues and define value propositions for customers, suppliers, and partners.” According to Khanagha et al. (2014, 324), in business model innovation “activities can range from incremental changes in individual components of business models, extension of the existing business model, introduction of parallel business models, right through to disruption of the business model, which may potentially entail replacing the existing model with a fundamentally different one”.

Foss and Saebi (2017, 216-217) use two dimensions of business model innovation; the degree of novelty and the scope of innovation. Based on these dimensions, they classify business model innovation into four types. The first type is “evolutionary”, which means fine-tuning the existing processes of the current business model. The second type is “adaptive”, referring to changes in the overall business model being new to a firm. The third type is “focussed”, referring to changes regarding one specific area of the business model. The fourth and last type is “complex”, which means a change of the entire business model. According to Buliga et al. (2016, 650), “the aim of the business model innovation, as a strategic measure, is to ensure company survival in times of environmental change and turbulence”. Business model innovations are seen as a powerful source of company performance and growth.

Business model innovation is critical for companies to ensure their survival. However, innovating business models is not simple. (Chesbrough 2010, 362.) Mature companies often have challenges in reinventing their core offerings or in launching new and different growth initiatives. These challenges stem from company’s lack of explicit understanding of how the existing business model works and thus, imagining and building out a new model becomes unfeasible. Similarly, the company may have become too wedded to its current business model. (Johnson 2019, 7.)

### 2.2.3 Enhancing organizational resilience through business model innovation

As a result of the Global Financial Crisis (GFC) in 2007-2009, economic recessions and global trade conditions created major challenges for many Western economies and their embedded industries (Pal, Torstensson & Mattila 2014, 410). Similarly, the COVID-19 pandemic in 2020 caused an unprecedented exogenous shock around the world and will likely have long-term impacts on global economy (OECD 2020; OECD 2021, 3). In times of these kind of crises, particularly small and medium-sized enterprises (SMEs) are often in the worst risk in terms of their viability and survival. This is due to the liability of smallness and newness. (Davidsson & Gordon 2016, 916; OECD 2021, 3.) On the other hand, SMEs may be more resilient than large firms, due to their greater flexibility and adaptability (Davidsson & Gordon 2016, 916). Both GFC and COVID-19 pandemic have offered notable research possibilities in this matter. For instance, Smallbone et al. (2012, 773) conducted a study on SME responses to the economic downturn in 2008-2009 showing, that the global recession had such severe impacts that only resilient SMEs, with a high flexibility and adaptability, were able to survive. By generating new revenue streams and, investing in human capital instead of cost-cutting policy are some of the examples how resilient SMEs can adapt to crises (Bivona & Cruz 2021, 3640<sup>8</sup>). Some SMEs have successfully adopted a bricolage approach as a response to crises, meaning that an enterprise utilizes its current tangible and intangible resources to new problems or opportunities, and reconfigures innovation processes to create new products and services (Senyard et al. 2014, 211).

A variety of different resources constitute the competitive advantages of a firm, one of them being intangible resources, such as knowledge. However, lack of formal knowledge management procedures, specialized human resources and clear knowledge-oriented leadership may become barriers for developing new innovations and gaining increased competitiveness. (Bivona & Cruz 2021, 640.) In fact, effective knowledge management is critical for enterprises to be able to respond to the changing environment (Zhao et al. 2013, 908). Both formal and informal collaborative partnerships may help SMEs to overcome barriers towards innovation processes. Managers should organize external knowledge management as conscientiously as internal knowledge management to

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<sup>8</sup> Manfield, R. C. – Newey, L. R. (2018) Resilience as an entrepreneurial capability: integrating insights from a cross-disciplinary comparison. *International journal of entrepreneurial behaviour & research*, Vol. 24 (7), 1155-1180.

enhance innovation capability within an organization. In other words, external knowledge such as customers' problems, needs, ideas, and information should be acknowledged where internal knowledge, such as employees' ideas, information, knowledge, and experiences. (Usai et al. 2018, 1647.) Combining knowledge management and customer relationship management can lead to significant organizational benefits in terms of innovation. Thus, organizations should invest in proper technological infrastructure of customer relationship management (CRM). This refers to software, hardware, and analytical capabilities. Investing in CRM allows organization to capture relevant customer information and data and build customer knowledge from them. (Migdadi 2021, 120.)

Furthermore, higher innovation performance seems to be related to SMEs that are able to establish relationships with external stakeholders, such as local partners, and thus also leverage the external stakeholders' knowledge. The utilization of external knowledge can lead to increased ambidexterity if the organization has suitable, effective knowledge management tools, platforms, and processes. Advanced knowledge management systems support the creation of tacit knowledge, its sharing and leveraging within an organization. (Dezi et al. 2021, 366-367.) As a conclusion, resilient and more flexible SMEs that are leveraging external relationships with partners and key actors of their ecosystem seem to have greater ability to adapt to changing and turbulent environments quickly, strengthening their competitive advantage. Business model innovation could provide a great way particularly for SMEs to utilize the internal and external resources when mapping out potential changes regarding their current products or services. (Bivona & Cruz 2021, 3641.)

In their study, Bivona & Cruz (2021, 3639) investigated how SMEs operating in food and beverage industry benefit from business model innovations in turbulent and uncertain environments, such as COVID-19 pandemic and the following economic crisis. Based on the findings, they developed an interactive business model framework to help SME entrepreneurs to navigate a crisis by implementing changes in their business models. This framework is illustrated in figure 3.

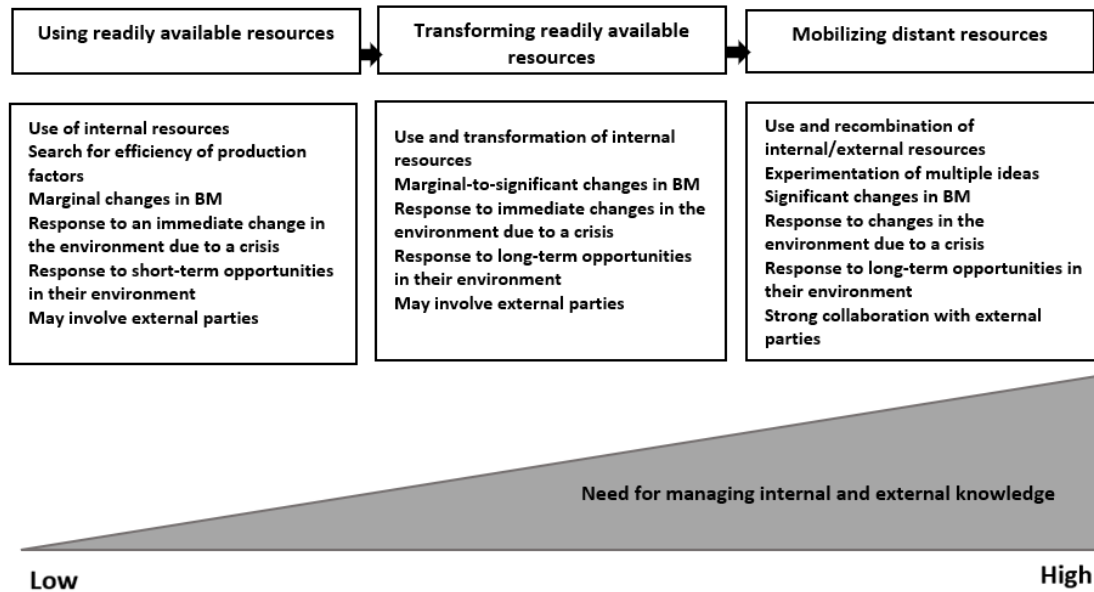


Figure 3 Interactive business model for SMEs in times of crisis (Modified from Bivona & Cruz 2021, 3653)

The findings of their case study suggest that SMEs can effectively engage in business model innovation in times of crises by developing and fostering strong collaboration with business partners. Furthermore, they argue that the use of readily available resources allows SMEs to make rapid changes in their business model and for instance, create new revenue streams. The use of readily available resources is often the first step taken when exploring quick solutions to respond to a crisis, leading to marginal changes in business model. In addition, SMEs aiming at more innovative business model changes should transform existing resources and mobilize distant resources for instance from their business partners. These actions usually lead to larger implications on a firm's business model and can be utilized in endeavours to new product innovations. Additionally, the ability to absorb external knowledge that can be reached through these partnerships can greatly benefit SMEs implementing business model innovations. (Bivona & Cruz 2021, 3650-3653.)

In their recent study, Eriksson et al. (2022, 221-223) investigated how SMEs innovate their business models when seeking organizational resilience through international growth. The findings of a multiple-case study of three Finnish SMEs show that internationalizing SMEs were able to improve their resilience by innovating business models. Based on these results, the authors proposed a new construct of SME international resilience, which is illustrated in figure 4. Eriksson et al. (2022, 209) point

out four key sources of resilience, which are 1) digitalization to enhance the products and production with data, 2) strategic collaboration, 3) stronger customer relationships, 4) agile use of resources and expertise. Finally, they included 5) improved revenue model, as a fifth source, to cover the entire business model concept holistically.



Figure 4 Construction of SME international resilience (Modified from Eriksson et al. 2022, 221)

Firstly, the findings highlight, that when redesigning or adapting existing business processes, the adoption of digital technologies and smart utilization of data is an important source of international resilience for both small and large companies. New services models that are based on data, open new kind of possibilities for SMEs. For instance, these novel kinds of service models may potentially open new strategic collaborations or help companies to respond better to the changing customer needs and customer demand. Secondly, new, alternative ways for strategic collaboration may prove to be necessary in enhancing resilience through business model changes. Thirdly, high level of customer intimacy is essential. Close customer relationships help companies to gather relevant information from the customer and foresee potential changes in customer needs, as well as identify additional customer groups similar to their existing ones. Fourthly, enhancing resilience may require changes in the resource base of the company to make the potential changes in the business model viable. Finally, improvements in the revenue model, for instance shifting from a fluctuated revenue flow towards constant income increases the stability of SMEs' operations and their predictability. (Eriksson et al. 2022, 220.)

Eriksson et al. (2022, 222) research builds on intertwined processes of business model innovation and internationalization as a force to drive organizational resilience. Even though in this thesis the focus is not on internationalizing SMEs, the findings of Eriksson et al. (2022) study can offer beneficial insights in terms of enhancing organizational resilience of SMEs in general, yet it is important to notice that home market context may have an impact on the applicability of these findings.

Furthermore, Eriksson et al. (2022, 207) have argued that two fundamental characteristics of robustness and adaptability can both be identified as part of organizational resilience and business model innovation. For instance, if the current, existing business model of a company is robust enough and helps to cope with changes in the surrounding environment, it enhances organizational resilience (Haaker et al. 2017, 14). Similarly, capturing new, emerging opportunities arising from the changing environment and innovating business model accordingly can be seen as adaptation, which again impacts positively on organizational resilience (Buliga et al. 2016, 648).

Based on these findings it can be argued, that in order to survive over turbulent times, companies should involve in two critical activities, that foster robustness and adaptability, and manage them properly. Firstly, companies should take care of their current business, which strengthens their robustness. Secondly, companies should search for new opportunities and innovate their business models, which strengthens their adaptability. Through the combination of these two activities, companies could increase their probability to maintain their business relevant. To foster robustness and adaptability, companies should have a solid foundation to both exploit and explore – take care of the current business while innovating new business models. Thus, organizational ambidexterity will be the subject of discussion, next.

## **2.3 Organizational ambidexterity**

### **2.3.1 Exploration and exploitation as dimensions of ambidexterity**

Due to the increasing interest towards organizational resilience, scholars (see, for example, Bhamra et al. 2011; Linnenluecke 2017) have been investigating the underlying reasons behind resilience, referring to variety of resources, organizational structures, practices, or systems (Iborra et al. 2020, 2). Whereas some scholars (see, for example, Weick 1993, 644-645) highlight the importance of seeking stability and reliability through routines, consistency and control, other scholars (see, for example, Hamel & Välikangas 2003, 54) find adaptability and flexibility more important, emphasizing innovation, variety, and experimentation. Iborra et al. (2020, 2) argue, that companies seeking for resilience need to develop capabilities that are beneficial both in terms of flexibility, to allow coping and adapting, as well as robustness, to remain safe and stable when facing difficulties. In other words, companies must develop the ability to



simultaneously engage in exploitation and exploration (O'Reilly & Tushman 2008, 190). Exploitation means that an organization focuses on its current activities, especially on the efficiency and refinement. Exploration, again, refers to experimentation, variation and discovering of new opportunities. (March 1991, 71.) This contemporary balancing between these two activities is also called organizational ambidexterity (O'Reilly & Tushman 2008, 185).

Ambidexterity is defined as an organizational ability to effectively manage today's business demands – also called exploitation orientation – while simultaneously staying adaptive towards environmental changes – known as exploration orientation (Duncan 1976). Some scholars (see, for example, Luger et al. 2018, 466) argue that ambidexterity is a dynamic capability that requires the development of sensing, seizing, and transforming activities. Sensing means that firms actively analyse their environment, prioritize specific areas, and identify new opportunities such as underserved markets or complementary revenue streams. Seizing, again, means that firms react on opportunities and threats quickly and effectively. Finally, transforming, or reconfiguring means that in order to innovate new products, services, markets or business models to replace the existing ones, firms have the capability to restructure themselves. (Teece 2020, 11.)

Exploration and exploitation separately, as well as together as dimensions of ambidexterity, improve firm performance. The impacts on firm performance through exploitation are achieved through refinement and variance reduction and further penetration of the firm's existing markets. Exploration on the other hand enhances firm performance as it allows the creation of new opportunities and enables targeting of new markets. Ambidexterity, again, fosters firm performance through combining and balancing between exploration and exploitation. (Wenke et al. 2021, 654.)

As argued by March (1991, 105), organizations often face the dilemma of ensuring the company's current viability by sufficient exploitation, while simultaneously reserving enough energy for exploration for future viability. Finding the balance, however, is challenging due to the distinct causations of exploitation and exploration. In many cases, companies easily fall in focusing solely on exploitation due to its liability of short-term success. Contrary, exploration is highly interconnected with trial and error and higher uncertainty, making it riskier action to involve in. Nevertheless, without any investments in exploration, companies are likely to fail in the face of change. Thus, to support long-

term survival, organizations should accommodate two different types of structures to allow both exploration and exploitation. (O'Reilly & Tushman 2013, 325.)

The term “ambidextrous” was first introduced by Robert Duncan (1976). Duncan argued that to achieve ambidexterity, firms should have the capability to shift organizational structures to initiate and execute innovation – in other words, to sequentially shift between exploration and exploitation. Tushman & O'Reilly (1996, 11) introduced an alternative approach arguing that, ambidexterity would require simultaneous exploration and exploitation. This would be enabled by having two structurally separated autonomous subunits, one for exploitation and one for exploration. Both subunits would have individual alignment of people, cultures, processes, and structures and, in addition, a targeted integration to ensure efficient use of resources and capabilities. (O'Reilly & Tushman 2013, 325.) During the past decades, there has been a lot of discussion whether ambidexterity can be achieved through architecturally separate units as originally argued (O'Reilly & Tushman 2013, 325), or by allowing individuals within an organization to decide how they use their time between exploration and exploitation (Gibson & Birkinshaw 2004, 201). This leads us to the discussion of the three primary ways to achieve ambidexterity; structural, sequential, and contextual ambidexterity (see, for example, Buliga et al. 2016, 655; Fourné et al. 2019, 564).

### 2.3.2 Structural ambidexterity

Structural (aka simultaneous) ambidexterity means that an organization has distinct strategic units for exploration and exploitation, where both business units are having their own alignments and capabilities (Tushman & O'Reilly 1996, 11; O'Reilly & Tushman 2008, 192). Regarding structural ambidexterity, researchers mention temporal separation as well as spatial separation (Fourné et al. 2019, 565, 568). Particularly in cases where organization has two weakly linked business models, spatial separation is seen as a viable solution (Harren et al. 2022, 258). This is the case for instance in business model innovations, where organization maintains the old business model alongside the new, innovative business model, which can be significantly different from the original one (Buliga et al. 2016, 655). However, due to the limited resources, SMEs usually cannot develop structural ambidexterity through separate distinct units for exploration and exploitation. Instead, large, multi-unit firms often favour structural ambidexterity. (Parida et al. 2016, 1150.)

Structural ambidexterity can be organized altogether within a single organization, or the activities of exploration and exploitation can be separated in a way, that either one of the activities occurs outside the firm's boundaries, for example through alliances (Fourné et al. 2019, 568). If both activities occur within a single organization, it means that some business units are focusing solely on exploitation, whereas other business units are focusing only on exploration. The top management is responsible of coordinating both activities. Furthermore, through structural ambidexterity, separate business units can have different strategies, structures, and processes. However, because the entity needs to be managed by the top management, the heavy workload cumulates to top executives as they need to manage the business units with different structures, they need to build separate units when necessary, and they need to intervene in the operations of the business units when needed. Overall, top executives must manage the entity to be able to obtain organizational ambidexterity through structurally separate business units focusing either exploration or exploitation. (Chen 2017, 388.) Furthermore, structural ambidexterity can lead to integration challenges between the two units which may have formed their own cultures – imbedding the collaboration between the units (Fourné et al. 2019, 565).

### 2.3.3 Sequential ambidexterity

Sequential ambidexterity means, that focusing on exploration and exploitation happens in cyclic periods (Gupta, Smith & Shalley 2006, 693-694), in different times (Chou et al. 2018, 753). After various challenges being identified in structural (aka simultaneous) ambidexterity, related to for instance knowledge processes, managerial behaviour, administrative routines, and structured coordination mechanisms (Lubatkin et al. 2006, 648), many scholars diverted the attention to sequential ambidexterity (Siggelkow & Levinthal 2003, 666). In sequential ambidexterity, the focus is on the switching capabilities instead of required mechanisms to allow balancing between exploitation and exploration (Chou et al. 2018, 753).

Scholars (see, for example, Tushman & Romanelli 1985) raised the discussion of temporal separation meaning, that firms adapt to environmental changes punctually, by realigning their structures and processes following a sequential process (Chou et al. 2018, 755<sup>9</sup>). Some scholars (see, for example, Siggelkow & Levinthal 2003, 666) identified that

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<sup>9</sup> Tushman, M. L. – Romanelli, E. (1985) Organizational Evolution: Interactions Between External and Emergent Processes and Strategic Choice. *Research in organizational behavior*, Vol. 8, 171-222.

within a single unit or company, two different activities of exploration and exploitation can be undertaken in different times. Tushman & Romanelli (1985) have described sequential ambidexterity as a practice, where long periods of incremental change are followed by short bursts of radical change, forming a balanced, punctuated entity (Wenke et al. 2021, 660). For instance, in project level, sequential ambidexterity can be particularly effective (Chen 2017, 388).

Through temporal separation of exploitation and exploration, ambidexterity can be achieved in the long run. The motive for sequential ambidexterity is to avoid conflicts between exploration and exploitation, which stem from contradicting required skills, processes, and performance appraisals (March 1991, 71). However, despite the advantages that can be achieved through sequential ambidexterity, there are also disadvantages particularly at the organizational level. Sequential ambidexterity requires continuous switching between different modes of exploration and exploitation. Also, strategies, structures and processes need to be reconfigured accordingly. This may lead to dislocation within an organization and be even detrimental to core capabilities, at worst threatening short run – and long run survival of the firm. (Chen 2017, 388.)

#### 2.3.4 Contextual ambidexterity

Whereas structural and sequential ambidexterity are both taking a structural approach towards exploitation and exploration (O'Reilly & Tushman 2013, 328), contextual ambidexterity focuses on creating an organizational context that is supportive and allows ambidexterity to occur within a one single unit (Gibson & Birkinshaw 2004, 209). Contextual ambidexterity, in fact, has gained strong interest among many scholars (see, for example, O'Reilly & Tushman 2008; Markides 2013). Gibson and Birkinshaw (2004, 209) have defined contextual ambidexterity as “the behavioural capacity to simultaneously demonstrate alignment and adaptability across an entire business unit”. Following their definition, characteristics such as stretch, discipline and trust are well describing the supportive organizational context, which allows individuals to decide how to divide their own time in the best possible manner for these two conflicting demands for alignment and adaptability (Gibson & Birkinshaw 2004, 211).

In contextual ambidexterity, it is the decision of individuals rather than organizational units to balance between exploitation and exploration (O'Reilly & Tushman 2013, 329). When seeking for contextual ambidexterity, organizational culture, vision, values and

especially the members of the organization play an important role, supporting the achievement of this capability (Markides 2013, 318-319). In other words, organization internally builds an adequate environment to support ambidextrous behaviour among employees (Gibson & Birkinshaw 2004, 210).

Albeit some scholars find structural ambidexterity as a suitable option for organizations engaged in business model innovation, other scholars shed light on the limited resources of SMEs in terms of separate exploration and exploitation. Thus, contextual ambidexterity may be more applicable for SMEs to be followed. This view is also supported by the fact, that contextual ambidexterity allows better utilization of the existing knowledge, and thus the existing knowledge can be better leveraged to develop new kinds of innovations (Fourné et al. 2019, 572). Following this view, ambidexterity can be seen as a dynamic capability which can be developed over time, and which may enhance organizational resilience, helping companies to survive and recover from external threats and turbulence, and adapt to a new situation. Yet ambidexterity capability is not easy to achieve, and it remains relatively rare, it is a key antecedent of SME resilience and thus worth targeting. (Iborra et al. 2020, 4, 12.)

### 2.3.5 Ambidexterity capability supporting innovation and resilience in SMEs

Ambidexterity is relatively difficult to achieve (March 1991, 72). This is the case particularly in SMEs due to the resource scarcity (Wenke et al. 2021, 661). Furthermore, the joint achievement of exploitation and exploration may create tensions within the firm (March 1991, 71) since these two activities are completely contradicting: whereas exploitation is associated with routinization, bureaucracy and tightly coupled systems, exploration refers to improvisation, autonomy and loosely coupled systems (He & Wong 2004, 481). On the other hand, some scholars (see, for example, Luger et al. 2018, 466) argue that engaging in both exploitation and exploration in a balanced manner leads to complementary returns.

In comparison to large firms, SMEs have major disadvantages regarding management expertise and access to capital, talent, and resources, which challenges the achievement of ambidexterity. Therefore, building separate units for exploration and exploitation, referring to structural ambidexterity, may not necessarily be an option for SMEs, as this would require heavy investments. (Wenke et al. 2021, 655.) Instead, some scholars (see, for example, Lubatkin et al. 2006, 646) argue that SMEs can achieve ambidexterity by

integrating these two activities to simultaneously undertake exploration and exploitation. This kind of approach is referring to contextual ambidexterity, which can also be seen as a capability to develop over time, and which may help to build resilience (Iborra et al. 2020, 4).

Some scholars (see, for example, Wenke et al. 2021, 660) have pointed out that ambidexterity, yet being beneficial, may not be as strongly associated with SMEs' performance than it is with large firms' performance. In fact, Wenke et al. (2021, 660) argue that SMEs may take a greater advantage of either exploring or exploiting. Although Wenke et al. (2021) find ambidexterity less beneficial for SME performance, they do not necessarily suggest that SMEs should focus only on exploration or exploitation exclusively. However, they find it inferior to focus on both activities simultaneously. Similarly, Jansen et al. (2012, 1299) argue that ambidexterity is less beneficial for companies having limited resources. Thus, in these cases, focusing either one of these activities at the same time is recommended (Wenke et al. 2021, 660). As a result, instead of focusing on simultaneous exploring and exploiting, a sequential switching between these two activities could be a viable alternative for SMEs (Parida, Lahti & Wincent 2016, 1160), referring to sequential ambidexterity.

Indeed, there does not seem to be a single, solid insight of the most appropriate approach for SMEs regarding ambidexterity capability. Teece (2014, 328) has defined "capability" as "a set of current or potential activities that utilize the firm's productive resources to make and/or deliver products and services". Following Teece's (2014) definition of capabilities, in this study, ambidexterity capability refers to a firm's current or potential activities that utilize the firm's productive resources for both exploration and exploitation. Whereas one stream of the literature highlights the capability of organizations to concurrently pursue both demands (Tushman & O'Reilly 1996, 11), another stream focuses primarily on one demand at a time (Duncan 1976).

## **2.4 Theoretical synthesis**

Based on the literature review, a novel conceptual framework is developed to serve as a basis for conducting this research. The literature review covers the discussion of organizational resilience, business model innovation and ambidexterity capability, and as a result, the conceptual framework is built around these three concepts.

Because the phenomenon of organizational resilience is very wide and fragmented, consisting of several research streams, the scope of this study was narrowed down and the proper approach to investigate organizational resilience was selected. Referring to Linnenluecke's (2017) systematic literature review, five lines of inquiry in organizational resilience research have been identified, one of them being the adaptability of business models. The business model approach to organizational resilience originates to the studies conducted by Gittel et al. (2006), Hamel & Välikangas (2003) and Sutcliffe & Vogus (2003), who in the beginning of 2000s investigated the ways companies adjust, adapt, and reinvent their business models in ever-changing surroundings in a proactive manner, before forced to do so. This approach emphasized the organizational processes and enabling conditions allowing companies to be resilient. In this research, the business model adaptability approach was seen as a highly intriguing aspect to investigate organizational resilience, as today, companies are forced to innovate continuously to survive over turbulent times and maintain their business relevant.

As the approach selected for this study was investigating how organizational resilience can be enhanced through innovating business models, it was important to follow an organizational resilience definition that includes the notion of anticipation. The inclusion of anticipation in addition to coping and adaptation is crucial particularly in this case because, business models should not be innovated reactively, when crises or external challenges already occur, but rather proactively, predicting and preventing potential dangers before any damage is done. Thus, Duchek's (2020, 220) definition of organizational resilience was followed in this research, arguing that organizational resilience is "an organization's ability to anticipate potential threats, to cope effectively with adverse events, and to adapt to changing conditions". According to Duchek (2020, 220), despite the prevalent perspective on organizational resilience has been defensive, resistance and recovery focused, recent studies are clearly taking an offensive view with a focus on adaptation, even including the notion of anticipation.

As argued, many scholars find two fundamental characteristics – robustness and adaptability – as integral part of resilience (see, for example, Horne & Orr 1998, 30; Lengnick-Hall & Beck 2005, 738). Additionally, these two characteristics are seen as prerequisites of organizational resilience (Buliga et al. 2016, 653). In this context, robustness refers to an organization's capability to withstand stress, reduce vulnerabilities and recover from crises (Bruneau et al. 2003, 737). Adaptability, again, refers to a

capability to respond promptly during crises (Mallak 1998, 149; Horne & Orr 1998, 29-30), develop learning mechanisms and innovation (Carpenter 2001, 765) towards searching and capturing for new opportunities emerging from the changing environment (Lengnick-Hall & Beck 2005, 740; Buliga et al. 2016, 648).

To specify, in this study, three stages; anticipation, coping and adaptation, and two dimensions; robustness and adaptability, constitute the core of organizational resilience. Regarding those two dimensions, business model innovation refers to the latter one, adaptability. This means that to ensure their viability, companies must innovate their business models faster and more often than ever before. In fact, according to many scholars (see, for example, Chesbrough 2010; Johnson 2010, 9) business model innovation can be seen as an adaptable organizational behaviour, and as Buliga et al. (2016, 654) argue, business model innovation can be considered as a manifestation and part of resilience.

Despite of the variety of slightly differing definitions of business model, all of them share the consensus that a business model explains how organizations create, deliver and capture value (Osterwalder & Pigneur 2010, 14; Zott et al. 2011, 1019; Teece 2018, 40). Referring to the definition of Casadesus-Masanell & Zhu (2013, 464), “business model innovation refers to the search for new logics of the firm and new ways to create and capture value for its stakeholders; it focuses primarily on finding new ways to generate revenues and define value propositions for customers, suppliers, and partners”. However, innovating business models is not an easy task, and companies tend to have better processes and competence to innovate new products, than business models (Chesbrough 2010, 356).

However, existing research has shown that in times of crises such as COVID-19 pandemic in the beginning of 2020 or Global Financial Crisis in 2007-2009, some firms seem to perform relatively well, whereas other firms face serious troubles. Compared to large firms, SMEs may have better abilities to respond to changes due to their greater flexibility and adaptability (Davidsson & Gordon 2016, 916). On the other hand, particularly SMEs are often in the worst risk to ensure their business continuum due to the liability of smallness and newness (Davidsson & Gordon 2016, 916; OECD 2021, 3). The competitive advantages of a firm constitute of a variety of tangible and intangible resources (Burns et al. 2011, 270-271). Due to the liability of smallness and newness,



SMEs tend to have less resources compared to large firms. For instance, lack of formal knowledge management procedures, lack of specialized human resources and lack of clear knowledge-oriented leadership may cause serious issues in SMEs endeavours towards organizational resilience. (Bivona & Cruz 2021, 3640.) Thus, due to limited resources, particularly SMEs may benefit greatly of collaborative partnerships (Usai et al. 2018).

Similarly, establishing and strengthening external relationships with external stakeholders, such as local partners (Eriksson et al. 2022, 209), and leveraging their knowledge (Dezi et al. 2021, 366-367) helps SMEs in their endeavours towards organizational resilience. Also, the ability to utilize readily available resources is beneficial for SMEs, allowing them to make prompt, marginal changes in their business model. Furthermore, when seeking for more innovative changes in business model, the ability to transform existing resources and mobilize distant resources from external partners is considered as a significant asset. (Bivona & Cruz 2021, 3650-3653.)

In addition, Eriksson et al. (2022, 220) study examines how SMEs innovate business models when seeking organizational resilience through international growth. The findings show that the adoption of digital technologies and smart utilization of data to make product or production advancements can benefit many companies aiming to increase organizational resilience. In parallel to factors mentioned in the previous paragraph, also Eriksson et al. (2022) highlight the importance of strategic collaboration, strong customer relationships and agile use of resources and expertise. Finally, Eriksson et al. (2022) included improved revenue model in their framework as a source of organizational resilience.

As said, when seeking for organizational resilience, business model innovation refers to the dimension of adaptability. Adaptability can be supported by capturing new opportunities from the changing environment and innovating business model accordingly. This has a strong positive impact on organizational resilience. (Lengnick-Hall & Beck 2005, 740.) However, focusing only on adaptability is not enough when seeking for organizational resilience. Also, the dimension of robustness needs to be included, and this can be achieved by managing the existing business model. If the original, existing business model is robust enough, it helps the organization to cope with changing surroundings, enhancing resilience. (Haaker et al. 2017, 14.) A proper management of the

existing business models, as well as searching for new possibilities to innovate business models is essential to enhance organizational resilience, and this leads the discussion into the ambidexterity capability.

There are various underlying reasons that affect the achievement of resilience. Resources, organizational structures, practices, or systems are examples of issues that all impact on the level of resilience within an organization (Iborra et al. 2020, 2). In the literature review, several factors have been identified as sources of organizational resilience: strategic collaborative partnerships, external and internal knowledge management, agile use of resources and expertise (ability to utilize readily available resources, transformation of existing resources and mobilizing distant resources), strong customer relationships, digitalization, and smart utilization of data, as well as improved revenue model. As argued, organizational resilience can be supported by balancing between exploitation and exploration activities. Exploitation means that an organization focuses on its current activities, especially on the efficiency and refinement, whereas exploration refers to experimentation, variation and discovering new opportunities (March 1991). Balancing between these two activities is called organizational ambidexterity (O'Reilly & Tushman 2008, 185). Some scholars have argued that ambidexterity is a dynamic capability that requires the development of sensing, seizing, and transforming activities (Luger et al. 2018; Teece 2020).

Three primary ways to achieve ambidexterity can be identified: structural, sequential, and contextual ambidexterity. Structural ambidexterity means that an organization is having two separate units for exploitation and exploration (Tushman & O'Reilly 1996, 11; O'Reilly & Tushman 2008, 192; Chen 2017, 388; Fourné et al. 2019, 565). Sequential ambidexterity means, that focusing on exploration and exploitation happens in cyclic periods (Gupta, Smith & Shalley 2006, 693-694), in different times Chou et al. 2018, 753). Contextual ambidexterity, again, means that both activities, exploitation and exploration occur within a single unit, supported by suitable organizational context (Gibson & Birkinshaw 2004, 209-210). Because SMEs have limited resources available, structural ambidexterity is often not possible, and building contextual ambidexterity may be easier to execute (Lubatkin et al. 2006, 646; Fourné et al. 2019, 572; Wenke et al. 2021, 655). However, fostering exploitation and exploration under the same roof is not an easy task, as these two activities are competing of the same scarce resources (March 1991, 72; Wenke et al. 2021, 661).

The initial theoretical framework of this study is illustrated in figure 5. Based on the literature review, it can be proposed that organizational resilience, business model innovation and organizational ambidexterity together form a coherent entity tightly connected into each other.

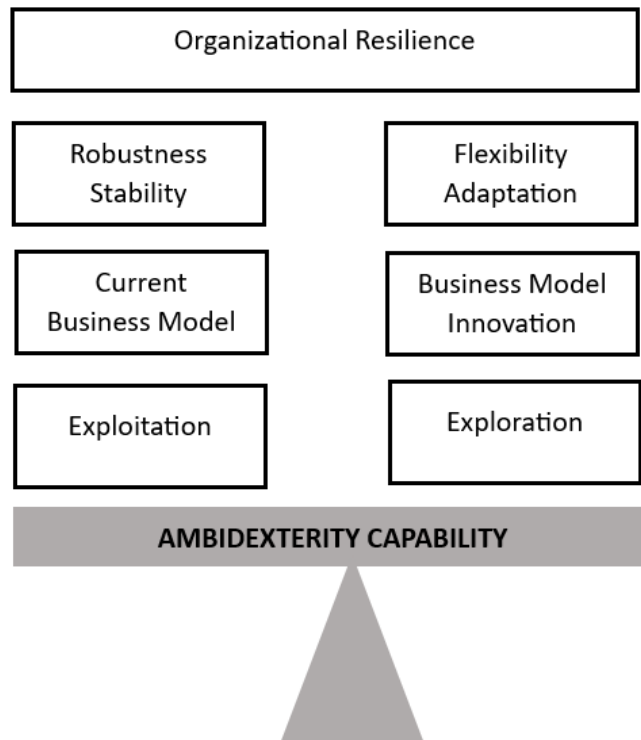


Figure 5 Theoretical framework

To be able to achieve or/and enhance organizational resilience, ambidextrous organization capability serves as a bottom of the pyramid. Ambidexterity capability ensures that the company has the ability to both exploit the existing business model, as well as explore new opportunities by innovating business model. Thus, engaging only in business model innovation and fostering flexibility and adaptation would not be a workable solution to enhance organizational resilience, as also ensuring robustness and stability through managing the current business is highly important. Ambidexterity capability is illustrated in a form of a seesaw, which means that balancing between exploitation and exploration leads to appropriate entity, impacting positively on organizational resilience. If the firm focuses too much either on exploitation or exploration, the seesaw will be unbalanced, meaning that either the robustness and stability or flexibility and adaptation will suffer from the lack of support. As a result, this leads to negative impacts on organizational resilience.

### **3 RESEARCH DESIGN**

When empirical research is conducted, the strategic choice of research design is made. In this chapter, the selected methods for conducting this research will be introduced. The aim of an empirical research is to answer to specified research questions. Thus, formulating research questions carefully is important, because the selection of a proper research approach is based on the type and nature of the research questions. The research approach, again, guides the selection of data collection methods. (Kananen 2015, 64.) In other words, the ambition is to select the most effective research approach that helps to find answers to the research questions in the best possible way, within a given constraints put on the researcher. These constraints can be for instance limitations related to time, budget, or researcher's competence. (Ghauri 2020, 61.)

The first sub-chapter discusses of the selected research approach that serves as a basis for conducting this research. The second sub-chapter introduces the methods used for collecting the empirical data. In the third sub-chapter, the process of data analysis is explained. Finally, in the fourth sub-chapter, trustworthiness of this research is evaluated.

#### **3.1 Research approach**

##### **3.1.1 Ontological and epistemological setting**

Considering the philosophical aspects of the research is highly recommended. A basic understanding of the philosophical concepts, positions and traditions helps a researcher to understand what can be done with different research methods. This further supports the researcher to design a solid study providing relevant answers to desired questions. (Eriksson & Kovalainen 2008, 11-12.) This leads the discussion to the following concepts in the philosophy of science: ontology, and epistemology.

Ontology deals with the question "What is there in the world?". It concerns people, society, and the world in general, their existence of and mutual relationship. One aspect of ontology in philosophy is the question of whether reality is viewed objectively or subjectively. Majority of qualitative research approaches are based on the ontological assumption, in which reality is understood as subjective. In other words, the reality is viewed through personal interpretation based on previous experiences and perceptions. Thus, it can change over time and context. In quantitative research prevails a contrary

interpretation. There, social world is seen as a distinctive and separate, objective reality. In addition to oncology, the meaning of epistemology in research is beneficial to understand. Epistemology deals with questions “What is knowledge and what are the sources and limits of knowledge?”. It defines how knowledge can be produced and argued for, setting up the criteria by which knowledge is possible. In addition, epistemology determines what constitutes scientific practice and process, and defines the limitations and structures of the available knowledge. (Eriksson & Kovalainen 2008, 14.)

In this research, the internal and external organizational context build the fundamental properties of the social world. Within this social world the research topic is investigated with an aim to build an in-depth understanding of the phenomenon. Organizational resilience is always an individual interpretation of the factors impacting on it. It is not a static phenomenon that remains unchanged, but it rather changes over time, depending on the individual’s experiences and how the person is viewing the world. Organizational resilience is a multidimensional, complex research topic, which the social reality, produced by social actors and social interaction, is shaping. Thus, this research adopts a subjective view. Taking into consideration the nature of the research topic, it more likely opens to the researcher through an ambition to carefully explore and interpret the phenomenon rather than analysing it in a measurable format through numbers. This supports the selection of qualitative research approach for this study.

### 3.1.2 Qualitative research approach

The very basic question is whether to follow a qualitative or quantitative approach in empirical research. Originally, in 1960s, research methodology in economic sciences was strongly intertwined with quantitative approach and statistical methods. Back then, some scholars argued that only issues that could be measured, are real. Since 1980s, qualitative research started to consolidate its position in economic sciences after being disappeared for a while. (Koskinen et al. 2005, 14.) However, qualitative research was typically used in social science and business research kind of as a complementary method. As an example, a quantitative phase typically followed qualitative research, with an intention to provide more rigorous results. Similarly, qualitative methods have been used in a sense to provide better understanding of the issues that have remained unclear after quantitative research. (Eriksson & Kovalainen 2008, 4-6.)

The question of whether to choose qualitative or quantitative approach does not have to be exclusive of each other (Eriksson & Kovalainen 2008, 4). However, qualitative research in the discipline of business, management and organizational research has aroused much interest recently (Cassell et al. 2018, 2). More specifically, qualitative research has been recognised as an adequate method to provide knowledge, without any connection to quantitative research (Eriksson & Kovalainen 2008, 4). The potential of qualitative research has been recognised as an opportunity to investigate complex business-related phenomena in a specific context that the researcher is focusing on. With the means of qualitative research, it is possible to produce new knowledge of how things work in real-life business, why they work in a specific way and to understand phenomena in a deeper sense to be able to impact on them. Qualitative research is typically concerned with interpretation, understanding, and building a holistic understanding of the issues studied in a specific context. Quantitative research, respectively, focuses on explanation, testing hypothesis and statistical analysis. (Eriksson & Kovalainen 2008, 2-4.) Especially when investigating a novel phenomenon which previously has been studied only to a limited extent, qualitative approach is particularly relevant (Myers 2013, 9).

Aligned with the philosophical aspects of the research, previous arguments supported the selection of qualitative research approach for this study. Qualitative approach serves well in this context, as the research phenomenon of this study is relatively complex and has not been studied that extensively, previously. The aim of this study is to investigate how organizational resilience can be enhanced in SMEs through business model innovation and ambidexterity capability. The idea is not to generalize, but rather to build an in-depth understanding of this conceptually abstract phenomenon. This in-depth understanding could not be gained through quantitative research providing numeric results. Instead, exploring a real-life case(s) in its natural context would offer a fat soil to understand the complex entity of organizational resilience, business model innovation and ambidexterity capability.

### 3.1.3 Multiple case study as a research strategy

Knowing that the research is qualitative in nature, seldom is informative enough. There are variety of ways to conduct qualitative research, and these alternatives differ significantly of each other. Thus, it is important to share to the reader what kind of qualitative research is in question. (Eriksson & Kovalainen 2008, 29.) This research will

adopt a case study research approach, more specifically an extensive case study strategy. Some scholars (see, for example, Creswell & Poth 2017) find case study as a type of qualitative research. However, pushing beyond this definition is justified because qualitative research cannot be based on quantitative evidence, whereas in case studies the evidence can even be limited to quantitative evidence. (Yin 2018, 18<sup>10</sup>.) Case study as a research approach has gained popularity due to its ability to present complex business-related issues in a clear, personal, and down-to-earth way. This makes it appealing for the reader to absorb in. (Eriksson & Kovalainen 2008, 117.) Case study can be defined as the “development of detailed, intensive knowledge about a single ‘case’, or a small number of related ‘cases’”(Saunders et al. 2000, 94<sup>11</sup>). Case study allows building a rich understanding of the context and processes under investigation (Saunders et al. 2000, 94<sup>12</sup>). Furthermore, if the endeavour is to provide answers to “why”, “what” and “how” questions, case study is a highly potential strategy to consider (Yin 2018, 11).

Case study approach was selected for this research mainly for two reasons. Firstly, due to the complexity and multidimensionality of the research topic it was clear, that a method that helps to gain in-depth, holistic understanding of the phenomenon, by answering particularly to “how” questions, would be selected. Secondly, the research topic is relatively novel, and although some previous research of the topic exists, in the specific context of SMEs the topic remains unstudied. Case study offers a great way to explore the existing theory available of the research phenomenon, even challenge the existing theory and provide a source of new hypotheses (Saunders et al. 2000, 94). Furthermore, case study is preferred when seeking answers for “how” or “why” questions of a contemporary set of events. Here, contemporary refers to “fluid rendition of the recent past and the present, not just the present”. Additionally, researcher has only little or no control over these contemporary set of events under investigation. (Yin 2018, 12-13.) This supports the selection of case study research approach for this study because the researched phenomenon under investigation cannot be controlled by the researcher and, the studied phenomenon is investigated from the aspect of recent past and the present.

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<sup>10</sup> Creswell, J. W. – Poth, C. N. (2017) *Qualitative Inquiry & research design: Choosing among five approaches*. 4th ed. Thousand Oaks, SAGE: California.

<sup>11</sup> Robson, C. (1993) *Real World Research*. Blackwell: Oxford.

<sup>12</sup> Morris, T. – Wood, S. (1991) Testing the survey method: continuity and change in British industrial relations. *Work Employment and Society*, Vol. 5 (2), 259-282.

Yin (2018, 61) argues, that multiple case studies should be preferred over single-case studies when possible. Examining at least two cases instead of one case will increase the likelihood of doing a good case study. Focusing only on one case increases the vulnerability of the research and, focusing on two or more cases leads to substantial analytic benefits. Using two or more cases allows direct replication and, the analytical conclusions are more powerful when arising from more than one case. These justifications were enough to support the selection of multiple case study design for this study.

Furthermore, according to Eriksson & Kovalainen (2008, 119), two dissimilar types of case study research can be identified: intensive case study and extensive case study. In intensive case study research, the aim is to form a holistic, contextualized understanding of the specific case from the inside. This is done by investigating the unique case as detailed and in-depth as possible. In extensive case study, on the other hand, the idea is to compare or replicate a number of cases. Here, the intention is to elaborate, test or generate generalizable theoretical constructs, to identify common patterns and properties across cases. In extensive case study research, rather than investigating the individuals intrinsically as such, individuals are seen as instruments of the study, allowing the investigation of specific issues. Alternatively, Stake (1995, 3-4) views case studies from three different aspects. According to the first aspect, namely intrinsic case study, the case study is valuable as an objective of the study. The second aspect, namely instrumental case study, views a selected case as an instrument to understand certain phenomenon, not the unique case as such. Third aspect, namely collective case study, is similar to the second aspect but it extends the view to concern multiple cases rather than single one. Here, the aim is to build a better understanding of a specific phenomenon with a focus on comparability of selected cases until certain extent. (Eriksson & Koistinen 2014, 15-16<sup>13</sup>)

Extensive multiple case study research design is followed in this study. This approach can be applied for instance in cases, where there is no existing theory available regarding the research topic in a specific context or, there are gaps in the existing theory that need to be elaborated further (Eriksson & Kovalainen 2008, 123). The starting point for this study was alike: the interconnection between two of the three constructs has been studied previously. Some scholars (see, for example, Hamel & Välikangas 2003; Dewald &

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<sup>13</sup> Stake, R. E. (1995) *The art of case study research: Perspectives on practice*. SAGE. Thousand Oaks: California.



Bowen 2010; Carayannis et al. 2014; Buliga et al. 2016) have studied the interconnection of organizational resilience and business model innovation, whereas other scholars (see, for example, Iborra et al. 2020; Gayed & El Ebrashi 2023; Trieu et al. 2023) have focused on organizational resilience and ambidexterity capability. However, the research regarding the interconnection of all three constructs remains unstudied, particularly in the context of small and medium-sized enterprises. It is important to investigate the interconnection of all these three constructs in the context of SMEs, because the limited existing theory of the phenomenon may not be directly applied and accurate in SMEs. When seeking for organizational resilience, SMEs often face very different challenges due to their liability of smallness and newness compared to large firms. Thus, the existing theory may be critically evaluated in the context of SMEs, taken into account the constraints – as well as the odds – of SMEs, in this respect.

The aim of an extensive case study could be to construct a cumulative narrative, where selected cases would progressively increase the understanding of the research phenomenon in a specific context. Alternatively, creating new theoretical constructs that would help in describing, crystallizing, and explaining the dynamics behind the issue could help to build more general understanding of the research phenomenon. The main interest in extensive case study is not to examine the case itself but the phenomenon which can be investigated, elaborated and explained through the selected cases. This preferably leads to widened existing theory, conceptual model, or new theoretical constructs. (Eriksson & Kovalainen 2008, 123-124.) Because the topic has previously been studied only to a limited extent and is calling for more research to gain a better understanding of the phenomenon in general, extensive case study approach was selected for this study. By comparing two or more cases, common characteristics or models, new theoretical ideas and concepts could be achieved (Eriksson & Kovalainen 2008, 123-124).

## **3.2 Data collection**

### **3.2.1 Selection of cases**

Selection of the cases is among the most important phases in case study research because the critical understanding of the phenomenon depends on the well-selected cases (Eriksson & Koistinen 2014, 26). The starting point, before selecting the case(s) is defining “the case” in this study. In classic case studies, “the case” is typically an

individual person. Alternatively, “the case” can be an event or entity. Generally, the definition of “the case” is derived from the initially defined research questions. (Yin 2018, 28-29.) In this research, “the case” is the selected small or medium sized enterprise. As this research is conducted as a multiple case study, or more specifically, a two-case study, both selected enterprise serves as an individual case.

In multiple case study research, each case must be carefully selected (Eriksson & Koistinen 2014, 26; Yin 2018, 62). Selection of the cases is one of the most important phases in conducting case study research. As Stake (1995) has argued, what can be learned from each specific case should guide the selection of cases. A case should be one that increases understanding of the phenomenon and helps to develop or modify existing theory or concept system. Furthermore, when doing a multiple case study, attention should be paid on the balance and diversity between the cases. The cases are selected strategically based on their representativity, specificity, uniqueness, or theoretical importance – not according to random selection. (Eriksson & Koistinen 2014, 26.)

In this research, few factors were crucial in the selection of cases. First, because this study investigates how organizational resilience can be enhanced through business model innovation and ambidexterity capability in SMEs, the selected companies had to fit under the definition of SME. Following the Commission Recommendation 2003/361 of European Union, companies are classified as SMEs according to the number of staff under 250 and a turnover of up to €50 million and a balance sheet total of up to €43 million (Eur-Lex 2022).

Second prerequisite was that the selected companies have innovated their business model in some level. This was important to be able to analyse the impact of business model innovation to organizational resilience. The existence of ambidexterity capability of the case companies was not verified in advance. The assumption was that in addition to exploitation, every company needs to explore until certain extent to be able to innovate the business model. Thus, it could be expected that the key elements of ambidexterity – exploration and exploitation – would be involved to certain extent if the company has been able to innovate its business model. The interest lies in balancing act of these two very different activities.

To be able to investigate the phenomenon as comprehensively and reliably as possible, the ambition was to select only cases that fit under the definition of SME. Moreover, the

aim was to cover the full extent of the SME size category by selecting case companies of both ends. Thus, the aim was to select one medium-sized company with 50 to 250 employees, and one small company, with 10 to 50 employees. The Centre for Collaborative Research at Turku University was contacted to gain access to the potential case companies. Among five potential candidate companies, two were identified as the most intriguing ones, after familiarizing the companies' websites. Furthermore, Finland Futures Research Centre at Turku University was contacted, and five more case company suggestions were received. However, only two of them fitted under the SME definition. The other one of these two companies was seen as potential case company for this research but unfortunately, no reply was received despite of reminders.

Companies were contacted via email. Among the potential case company candidates, one medium-sized company and one small company, were selected. They both had executed business model innovation at some level. Both selected companies had participated in a pilot programme in 2020-2021 organized by an external party, which aimed to help SMEs building new business from data. However, the selected companies have innovated their business models not only through the pilot programme but also independently. The companies introduced the suitable person(s) within their company to be interviewed regarding the research topic. The research topic and the aim of the research were introduced, and preliminary interview themes were included in the email. The selected case-companies are presented in table 1.

Table 1 Case company overview

<b>Case company</b>	<b>Service field</b>	<b>Established</b>	<b>Firm-size</b>	<b>Turnover</b>
Alpha	Management and consulting	1975	Approx. 140 employees / medium-sized enterprise	15,4 million euros in 2021
Beta	Engineering services	2004	Approx. 40 employees / small enterprise	5,8 million euros in 2021

Two case companies were selected carefully based on the researcher's own interest and personal evaluation of their applicability in this research. The case companies were given an opportunity to select, whether they want to participate in this research anonymously or with the company name. Initially, both companies felt comfortable with either option. Because the research was conducted as an extensive cases study research, aiming to build

in-depth understanding of the research phenomenon rather than the cases themselves, no additional value would be gained through company identities. Thus, the final decision was to publish the empirical findings anonymously. This decision was supported by the willingness of the researcher to prevent any unpleasant consequences for the case companies, if in any case, later, they would find the shared information too sensitive.

The first selected case company is named as Alpha. Alpha is a Finnish, internationally operating company, which was established in 1975. The company offers management, change management and strategical personnel solutions. Initially, the business service focused on personal assessment. Later on, Alpha has expanded their business services and currently, their services are divided across four subsidiaries, each of them focusing on specific services, such as executive development, recruitment and personal assessment, digital learning, change management, and career development. The company has several business units around Finland and internationally, they are operating in Baltic countries and Sweden. In 2021, the company employed approximately 140 people and the turnover of the company was 15,4 million. Their business model innovations are related to continuous human resource management services, which they previously have been offering as a project-type of business. Furthermore, they are building new kind of business from data.

The second selected case company is named as Beta, which was established in 2004. Beta offers technological measurement, testing and encoding solutions for its customers worldwide. The field in which Beta is operating is very small and thus, from very early on, the decision to internationalize was clear for them. Today, Beta is the leading global technology provider in their field, having customers in over 40 countries. The company operations have been maintained fully in Finland. Currently, Beta has nearly 40 employees. In 2021, the turnover of the company was 5,8 million. Like Alpha, Beta is innovating their business model to move from project-type business towards on-going services. Furthermore, they are building new business from the data they are currently accumulating.

### 3.2.2 Semi-structured interviews and documentation

The purpose of the research, research questions and research approach are guiding the decision of what kind of empirical data would serve best in specific research. The variety of data collection methods is wide, and quite often researchers use various types of

methods to collect data. In case study research, the data can be collected either qualitatively or quantitatively. (Koskinen et al. 2005, 157.) In qualitative research, and in fact in case study research as well, interviews tend to dominate data collection. There are several types of qualitative interviews: structured and standardized, guided, and semi-structured, or unstructured, informal, and open narrative interviews. (Eriksson & Kovalainen 2008, 78-81.) For this research, semi-structured interview was selected as a data collection method, which according to Gillham (2000, 65) is the most important form of interview in case study research – and when done right, also the richest single source of data. Semi-structured interview means, that a preprepared outline of topics, issues or themes are chosen to be covered during the interview, but an interviewer may still vary the wording or order of the questions in each interview. One of the advantages of semi-structured interview method is that the materials are quite systematic and comprehensive, albeit the interview in practice is quite conversational and informal. (Eriksson & Kovalainen 2008, 82-83.)

Furthermore, with preprepared open-ended interview questions typical for semi-structured interviews, it is possible to gain interesting aspects of certain topics while making sure that the most essential themes will be covered in the interview. Preprepared questions will ensure that the necessary topics are discussed, while forming the questions in a way that the answers are open. This leaves more space for the interviewees to lead the debate in a direction, they find relevant. In semi-structured interview using prompts and probes is allowed. This means asking the type of questions that allow the interviewee to share more of a particular topic and, using so called “guiding questions” to lead the discussion to themes that apparently otherwise would not be covered. These means allow even more in-depth data collection through semi-structured interviews and, using prompts and probes ensures the comparability of the interviews in the stage of content analysis. (Gillham 2000, 66-67.)

Semi-structured interview method for this research is well applicable, as it enables the inclusion of specific themes induced from the theory to be discussed. The interview guide was structured on the basis of the operationalization table, which is illustrated in table 2.

Table 2 Operationalization table

Research question	Research sub-questions	Themes	Interview themes
How organizational resilience can be enhanced in SMEs through business model innovation and ambidexterity capability?	What are the main challenges SMEs face when seeking for organizational resilience?	Organizational Resilience: SMEs resource scarcity Proactive approach Anticipation Specialized human resources Knowledge management	2, 3, 4, 5, 6, 7, 8, 9, 20
	What resources are needed for successful business model innovation contributing to organizational resilience?	Business model innovation: Internal resources + capabilities External resources collaborative partnerships Knowledge sharing Digitalization Interconnection between BMI and resilience	10, 11, 12, 13, 14, 15
	How can ambidexterity capability help to achieve organizational resilience?	Ambidexterity capability: Exploitation Exploration Sequential, structural, contextual ambidexterity Sensing, seizing and transforming activities	16, 17, 18, 19

The operationalization table is structured based on the literature review and research questions. The table illustrates, how certain themes provide answers to specific research questions. Three key themes; organizational resilience, business model innovation and ambidexterity capability were identified from the literature and guided the data collection and formation of the interview guide. Discussing of all three main themes was crucial to be able to bind all three concepts together in the context of SMEs. Thus, semi-structured interviews help to ensure that certain themes, derived from the literature review, will be

covered at some point of the interview with certainty. Also, the ability to include open-ended questions together with more structured questions helps to receive answers to specific issues while still leaving enough space for the personal insights of interviewees. In other words, semi-structured interview method leaves enough space for interviewees to offer new insights and meanings for the study (Galletta & Cross 2013, 2). Although it is beneficial to have predefined questions to guide the interview, there should be left enough space for spontaneity and distinctiveness, to avoid confining the interviews only to certain topics. Narrowing down the interview structure too precisely may lead missing out some relevant issues which the interviewees otherwise would articulate if given the opportunity. (Eriksson & Kovalainen 2008, 83.) In this research, the interview questions were open-ended, and the interview guide was followed in a flexible manner. Furthermore, enough space for individual insights was left.

Four semi-structured interviews were conducted in the empirical part of this research. The contact person information was received from the Collaborative Research Centre of Turku University. The contact persons of the selected companies were approached via email and asked if one or more persons of their company could be interviewed. The initial contact person of Alpha gave additional contact details of two more persons to be interviewed within their company in addition to himself. These persons further agreed to give individual interviews. In terms of Beta, the suitable person to be interviewed was contacted directly. More detailed information of the interviews can be found in table 3.

Table 3 Conducted interviews

<b>Organization</b>	<b>Position in organization</b>	<b>Interview date</b>	<b>Interview duration and language</b>
Alpha	Chief Growth Officer	3.3.2023	45 min Finnish
Alpha	Managing Director	10.3.2023	51 min Finnish
Alpha	Senior Consultant	23.3.2023	45 min Finnish
Beta	Co-Founder, Director of Business Development	8.3.2023	49 min Finnish

The interviews were conducted in March 2023 as video calls via Zoom. Each person was interviewed individually. There were no technical issues or any disturbance during the interviews. When approaching the interviewees in terms of their participation in the research, the research problem, and preliminary themes to be discussed were shared with them via email. A concise introduction to the research topic was orally discussed with the participants before each interview to further clarify what is investigated in this research. The final structure of the interview guided the interviews. The interview guide was followed adaptively, in a flexible manner, to lead the discussion towards central issues when needed. The interview guide can be found in appendix 1. The length of the interviews varied between 45-51 minutes. In every interview, all major themes were discussed. In some interviews more guiding questions were asked, whereas in other interviews the discussion flow was more intense, leaving slightly less need for guiding questions. The interviews were recorded and afterwards transcribed word for word. These tape-recordings produced approximately 40 pages of transcribed text.

In addition to interviews, documentation was used as a secondary source of data. As Yin (2018, 115) argues, the main use of documentation in case study research is to corroborate evidence that has been gathered from other sources. In this research, the documents were collected from company websites, mainly to verify information related to company details, services, and titles of the interviewees. Furthermore, case company Alpha was willing to share their business model canvas, which helped the researcher to gain in-depth understanding of their business model innovation. The business model canvas of Alpha, however, is not shared in this research due to its sensitivity and in respect to company privacy and confidentiality. Furthermore, as both case companies had participated few years ago in a pilot programme which supported them to build new business from data, the website of this programme was discovered to increase understanding of the nature and aim of the programme. This was beneficial to understand what kind of external support the case companies have received for business model innovation. However, the programme played a minor role in this study because the companies have been innovating their business models also independently, without the support through the programme. As argued by Yin (2018, 126-127), data triangulation, meaning the utilization of multiple sources of evidence, is related to a higher quality of a research and particularly in relation to case studies supports the basic motive for doing a case study – to build an in-depth understanding of the phenomenon in its real-life context.



The data management plan was shared with interviewees in a written form together with the informed consent. Each interviewee was asked to familiarize oneself with these documents and verify the information consent either written or orally before the interview. When the permission for information consent was given orally, it was recorded to guarantee the documentation of the given permission as well. All interviewees consented the recording of the interviews as well. Furthermore, before the interview, interviewees were tentatively asked whether they prefer the interview findings to be published anonymously or under their names. The alternative for both options was kept open, and it was agreed that the decision can be made after interviewees have checked the transcription through. According to Yin (2018, 88), participants of the study should be protected from any harm, their privacy and confidentiality should be protected in a way that they will not be put in any undesirable position. Thus, following this view, the final decision to remain the findings anonymous was made during the data analysis phase. Even though the findings were published anonymously, the analysis of the findings was sent to participants to be reviewed before publication, to avoid any deception in the study and to make sure that the shared information has been interpreted correctly.

### **3.3 Data analysis**

One of the cornerstones to succeed in research is to select suitable data analysis methods. These methods should be the most appropriate ones in relation to the aim of the research, supporting the process of finding answers to the research questions. (Eriksson & Koistinen 2014, 34.) The data analysis strategy can be deductive or inductive. Deductive strategy means that the data analysis follows previous theory. Pre-formulated theoretical propositions stem from the existing theory, and the research questions and research design have been defined based on the existing theory. Inductive strategy, on the other hand, refers to an approach where the empirical data serves as a starting point for further analysis, leading to development of research questions and a framework for the research. (Tuomi & Sarajarvi 2009, 95-99.)

In this research, the deductive approach was followed due to the following reasons. Firstly, the underlying theoretical proposition was that organizational resilience can be enhanced through business model innovation and ambidexterity capability. This pre-determined proposition was investigated from the aspect of “how” organizational resilience can be enhanced by the mentioned means. Secondly, the aim was to investigate

the phenomenon through the selected cases, not particularly the cases themselves. Because only limited amount of previous research of the phenomenon is available, particularly in the context of SMEs, it felt logical to start with what is already known of the phenomenon. Because the research topic is quite complex and ambiguous, and can be viewed from multiple different perspectives, familiarizing with the existing theory before moving on to the empirical part was seen necessary.

Understanding the phenomenon in a deeper level, by examining the theory, was beneficial as it helped the researcher to form the operationalization table and interview guide which without a former knowledge would have been too wide and abstract. Familiarizing with the existing theory built a basis for further empirical research to find similarities with the previous theory, to strengthen the existing theory and by examining the phenomenon in the context of SMEs, potentially building novel conceptualizations of the issue through in-depth understanding of the phenomenon. The operationalization table, presented in table 2 in chapter 3.2.2, also serves as a structure for theory-led data analysis.

The amount of collected empirical data is often massive. Thus, researcher should have the ability to recognize what information is relevant in terms of this research and, have skills to utilize it as thoroughly as necessary. (Tuomi & Sarajärvi 2002, 92.) The deductive approach however helped in this matter as well. The use of semi-structured, open-ended interview questions prevented the conversation to get side-tracked which again helped the management and analysis of the data. Following deductive, theory-led strategy for data analysis, the analysis started with coding the data according to themes that emerged from the existing theory. This kind of pre-planned, systematic coding is commonly used when the existing theory builds a ground for the research and the aim is to improve the previous theory or to test it (Eriksson & Kovalainen 2008, 129). Align with this argument, systematic coding or categorizing is often used when doing an extensive case study (Eriksson & Koistinen 2014, 34), which is the case in this research. Despite of the deductive, theory-led strategy for data analysis, also space for induction was purposefully left in this research. Leaving enough space for induction is important, to allow the emergence of topics that the interviewees highlight in addition to pre-determined topics, potentially leading to new insights and identifying additional theoretical relationships (Yin 2018, 169).

Besides coding, each individual case is analysed separately, which is called within-case analysis. When a single-case or multiple-case is conducted, the data analysis in both cases typically starts with analysing each case individually (Eriksson & Kovalainen 2008, 130). The purpose of individual case analysis is to form an overall description of the cases either in chronological or thematic order and by doing that, form a holistic configuration by linking these patterns or themes, to each other. (Eriksson & Kovalainen 2008, 130.) When conducting a multiple case study, like in this research, within-case analysis is followed by cross-case analysis. The purpose of a cross-case analysis is to compare the individual cases and look for differences and similarities across cases and in relation to theory. (Eriksson & Kovalainen 2008, 130.)

### **3.4 Evaluation of the study**

When doing research, the trustworthiness of the research findings should always be critically assessed, to be able to prove that the data has been analysed precisely, consistently, and comprehensively. The trustworthiness should be actively evaluated during the whole research process, from the very beginning until the end. (Eriksson & Kovalainen 2008, 290.) In social sciences and business research, the three concepts of reliability, validity and generalizability form the classic criteria for the evaluation of the research (Eriksson & Kovalainen 2008, 291). However, in the context of qualitative research, the application of reliability and validity have been criticized. This is because the concepts are derived from quantitative research and as such, respond only to the needs of quantitative research. (Tuomi & Sarajärvi 2009, 136.) If the philosophical origins of the research are based on relativist ontology – referring to multiple realities – and subjectivist epistemology – where the researcher and the participant together create understandings – alternative evaluation criteria may better apply to the philosophical settings in question (Eriksson & Kovalainen 2008, 294). Lincoln and Guba (1985) have presented an alternative ‘trustworthiness’ judgement criteria for evaluation of qualitative research based on four dimensions: credibility, transferability, dependability, and confirmability. Reflecting on the philosophical starting point of this research, relativist ontology and subjectivist epistemology, the judgement criteria by Lincoln and Guba (1985) are followed in this study.

Credibility refers to the truthfulness of the research findings (Kananen 2015, 353). This can be evaluated through a question “Do the data sources, most often humans, find the

inquirer's analysis, formulation, and interpretations to be credible, in other words, believable?" Due to the multiple realities that vary from individual to individual, it is essential to verify whether the realities of these individuals have been represented properly. (Guba & Lincoln 1982, 246.) To be able to evaluate the credibility successfully, sufficiently detailed documentation of research data, research methods and data analysis is required (Kananen 2015, 353). In this research, the credibility of the empirical findings was secured by requesting the interviewees to read through the transcript of the interview, findings of the empirical research and conclusions derived from the comparison of empirical findings and initial theoretical framework. Furthermore, the research data, research methods and data analysis process have been described in such detailed level, that a peer reviewing, in other words, verifying coding, grouping and interpretation by an external researcher (Kananen 2015, 353) would be possible and would lead to similar findings with this research. However, peer reviewing was not conducted for this research due to resource constraints.

Furthermore, in terms of credibility, Eriksson & Kovalainen (2008, 295) mention three questions through which the credibility of the research can be evaluated: 1) Does the researcher have familiarity with the research topic and is the data sufficient to merit the claims? 2) Has the researcher made strong logical links between observations and categories named by the researcher? 3) Can any other researcher, based on the reported materials, obtain relatively similar results compared to researcher's interpretations or argue with researcher's claims? All three constructs, organizational resilience, business model innovation and ambidexterity capability, were studied extensively. The theoretical framework was built on the basis of various well-known sources, both older and newer, mainly scientific articles and few academic books. Empirical data collection was started only after the theoretical framework was developed. This was seen necessary to be able to construct an operationalization table that also guided the creation of interview structure and data collection. Extensive knowledge of the research phenomenon helped to gather relevant data through the interviews which could have been challenging with data-driven approach due to the ambiguity and complexity of the research topic. The empirical data was transcribed, coded, grouped and analysed with conscientiousness to avoid missing any relevant comments.

Transferability refers to the generalizability of the research findings to another context. In qualitative research, transferability is always the responsibility of the endorser, as the

aim of the qualitative research is not to generalize but to understand a specific phenomenon. A researcher can however facilitate the evaluation of the transferability of the research findings by describing the starting point and assumptions of the researched phenomenon. (Kananen 2015, 353; Lincoln & Guba 1985, 316.) In this research, the empirical findings were compared to the literature review, aiming to find similarities or differences to previous studies. Even though the research was conducted as a case study, the intention was not to build an in-depth understanding of the case companies themselves, but through the case companies' real-life experiences and insights to understand the phenomenon itself in a deeper level. Generalizability of the findings was not the aim of this research, but an extensive case study research can verify the existing theory, revise it or extend the theory by providing novel insights and explanations.

Dependability means, that if the research would be repeated in a similar context by another researcher, relatively equivalent results compared to the primary research would be achieved (Guba & Lincoln 1982, 247). Thus, according to Eriksson & Kovalainen (2008, 294), the research process should be documented in a way that it is logical and traceable to the reader to understand. Research data, research methods, selected judgements and final outcomes should be documented well in detailed. The research process of this study has been described in detailed level, and the interview guide has been included in the appendix.

Finally, confirmability refers to making sure that the research findings are actually induced from the empirical data, not being a result of imagination. The empirical results must be presented objectively by a researcher. Thus, a researcher should make sure to report the linkage between the findings and the data in a clear way (Eriksson & Kovalainen 2008, 294; Kananen 2015,354.) To support confirmability, the interviewees were asked to read the collected data through, and to verify the validity of the content. Furthermore, to avoid researcher's personal imagination and to make sure that the empirical findings are actually induced from the collected data, the interviewee recordings were listened, and transcriptions of the interviews were read several times, to familiarize with the findings and to ensure that the findings have been understood in a correct way.

## **4 FINDINGS**

This research aims at finding answers of how organizational resilience in SMEs can be enhanced through business model innovation and ambidexterity capability. The empirical data was collected by conducting semi-structured interviews with the representatives of two selected case companies. Through these cases, the aim was to understand the research phenomenon in a more holistic, in-depth level. The empirical findings are reported in chapters 4.1 – 4.2 by sketching both cases thoroughly. The findings of the cases are presented in a logical order based on the themes that were covered in the interviews. These main themes are organizational resilience, business model innovation and ambidexterity capability, under which certain topics were discussed.

However, some topics were overlapping across the main themes and thus, analytical approach was utilized in order to structure the findings of the interviews into a logical entity. In addition to the main themes and topics that were identified in the literature review and based on which the initial theoretical framework was developed, two additional themes emerged in the interviews: organizational culture and management/leadership. These topics are discussed in chapter 4.1.4 and 4.2.4 in relation to both case companies. Following the individual within-case analyses, a cross-case analysis is presented in the last sub-chapter. Cross-case analysis aims at comparing both cases, searching for similarities and/or differences across the cases. These findings are further compared to the initial theoretical framework and analysed in order to provide answers to the research questions of this study.

### **4.1 Case 1: company Alpha**

Three persons were interviewed from the case company Alpha. The first interviewee works as a Chief Growth Officer. Furthermore, he is a Senior Partner and a Member of the Board in Alpha and is responsible for consumer business operations in one of the company's subsidiaries. Furthermore, he is a Co-Founder of an e-learning and change implementation subsidiary, through which he joined Alpha in 2013 as part of mergers and acquisitions.

The second interviewee works as a Managing Director in another Alpha's subsidiaries. She leads a multidisciplinary team of professionals in competence development business. In an organization relatively small in size, she finds her work versatile, consisting of

diverse range of duties. She joined Alpha in 2016 and has been working in the current position since 2019.

The third interviewee works as a senior consultant in one of Alpha's subsidiaries (not in the same subsidiary with the other two interviewees). She joined the company few years ago and is responsible for the continuous services and their development in Alpha. Continuous services are one of the new business model openings in the organization.

#### 4.1.1 Organizational resilience

The Chief Growth Officer from Alpha describes organizational resilience as a continuous ability to change. A continuous ability to change refers to many aspects of resilience. First, it means resilience that is driven by an external force, where company learns to change because the environment changes. Second, it refers to cultural resilience, which means that the company is capable to maintain a good, viable organizational culture while living along a continuous change instead of being stuck in a rut – which can easily start to prevent the success. Third, continuous ability to change includes the aspect of short-term resilience, which is related to the question of what kind of energy and atmosphere prevails within an organization in a way that the organization is able to survive of the temporal challenges, such as COVID-19 pandemic. These kinds of challenges can be shorter as well, for instance when losing a large client or when a key person leaves the company. How the organization is prepared for such changes and, how the organization can overcome such challenges is critical, as he highlights:

*In SMEs, those challenges are big deals. For instance, if some key person leaves the company and entrains customers along...how are we prepared for such a case and how can we cope with that kind of situation. I would say that there are different types of resilience.* – Chief Growth Officer from Alpha.

Similarly, the Managing Director from Alpha describes that resilience is very wide and ambiguous phenomenon. She highlights how the recent COVID-19 pandemic has increased the discussion of resilience among a wider community, and in a way has also impacted her personal understanding of what resilience is. In a world, where uncertainty is a “new normal”, the importance of resilience cannot be highlighted enough. She understands organizational resilience particularly as an ability to renew, and more

specifically, continuous ability to renew. In addition, she finds that resilience and tolerance are also impacted by the organizational culture and interaction:

*A collective team working towards a common good is for sure more resilient than a team which is comprised of individuals acting in their own self-interest.* – Managing Director from Alpha.

The Managing Director highlights that in terms of resilience, the ability to renew alone is not taking the organization far enough if the sense of community and willingness to collaborate is lacking amidst difficulties and continuous change. Similarly, a positive attitude towards change and right kind of feeling within the organization is not enough if for example business models are never renewed or business is not progressing. In these kinds of situations, the positive feeling within an organization will typically suffer as well.

Besides the successful times, Alpha has faced also challenging periods during the years. An example that the Chief Growth Officer shared was related to one of their subsidiaries, that offers solutions in digital learning, management development and change management. In this business, tools were changing so rapidly that the value of the content creation dropped off. As an example, an e-learning module that was quite challenging to produce 15 years ago brought a good return back then, and now its additional value for the customer is only a small part of its initial value. In other words, the same business that used to be quite profitable earlier is not that profitable anymore. In these kinds of situations resilience is needed, and that can be achieved partly through business model changes, partly by creating new products and services, for example. Overall, the Chief Growth Officer from Alpha finds incremental, silent long-term changes in the market environment as the most challenging issues threatening company's viability:

*Perhaps the most worrying issues are related to imperceptible, long-term changes that the company does not understand to seize.* – Chief Growth Officer from Alpha.

The Managing Director from Alpha continues in a similar vein. She argues that having a too inward-looking attitude is very toxic towards resilience. She states that being alert, having continuous curiosity in how the world is changing is important. Following the current trends in the field alone is not enough, because “tomorrow it is already a trend of yesterdays”, but in a wider spectrum, listening to silent signals is a key for success.



The Senior Consultant from Alpha points out that in today's world and in today's business environment, the change is continuous. Amidst continuous change, she finds that coping alone is not enough. Moreover, organizations should learn to thrive and renew. She highlights the importance of organizational movement amidst the change, rather than remaining in a static condition:

*Organizational resilience in a nutshell is particularly the ability to keep moving with a good spirit in a changing world.* – Senior Consultant from Alpha.

In terms of resilience, the Chief Growth Officer highlights the inclusion of anticipation, and just recently, before the pandemic, they had a larger strategy round, where they investigated the anticipating future trends in their field. Many trends are impacting on this business sector and for example, automated digital recruitment channels and “do-it-yourself tests” offering fast solutions for recruitment and personal estimation are potentially replacing in-depth, high-quality services at some point in the future. Even though this is not the case yet, and customers prefer the latter kinds of services that Alpha is currently specialized on, they need to be aware of the potential market changes. This is essential, to be able to react proactively and, to consider what kind of business model innovations for example can help to tackle potential market changes.

Regarding the inclusion of anticipation, the Managing Director mentions the limited resources of SMEs, and how large companies have an edge over SMEs in this regard. She highlights that in an SME such as Alpha, they try to actively anticipate and sense the external environment, but it is hard to ever find quite enough time for that, because people typically have so many things on their plate. The Senior Consultant expresses similar thoughts by saying that the current strategy of the company is very forward-looking, but the daily business activities of the current business require majority of the time and thus, less time is available for development activities. The aim is to act proactively, and this has been done successfully, but sometimes the actions taken are quite reactive due to the time and resource limitations.

According to the Managing Director, being able to anticipate for instance a change in market environment does not mean that the change would be much easier. Some preparation can of course be done, but the changes can still be quite dramatic. In some areas, Alpha has been very successful in anticipating for example where the market is going, and thus has been able to launch some new services before competitors, in a micro-

level. In relation to anticipation, the Managing Director from Alpha highlights the importance of personnel in sensing the environment and sharing the information and knowledge further within the organization:

*We have a huge amount of information nowadays and we receive it from multiple sources. We should listen the sounder voices as well as silent signals. It is challenging. But in this regard, having a team that is keen to these signals is a great value for us. I am not talking now only about our subsidiary team but overall, of the entire company organization. Our people are quite aware and keen, voluntarily scanning the environment and so on. Our personnel are quite actively sharing observations, reports and customer communication which as well is very important.* – Managing Director from Alpha.

Yet all the interviewees from Alpha describe organizational resilience as a continuous ability to change, renew or keep moving, another perspective emerged in the interview with the Chief Growth Officer. He reminds that being realistic with the plans is also part of resilience, arguing the following:

*In a firm of this size, resource allocation is challenging...we cannot develop million plans at the same time and invest a lot of money for each of these plans. It is important to be realistic. Being overoptimistic means poor resilience.* – Chief Growth Officer from Alpha.

According to Chief Growth Officer, it needs to be carefully considered, how much can be invested in innovation and developing new. He argues that it would be nice to proceed faster, but the resources are limited, and various plans – requiring also large financial investments – cannot be developed simultaneously. Being realistic is important in terms of resilience. Being overoptimistic leads to situations, where oversized risks are taken and this again, may threaten the viability of the company.

#### 4.1.2 Business model innovation

Since 2020, Alpha has put a lot of effort on innovating their business model, aiming to serve their customers in a new, innovative way. The driver for business model innovation is, according to the Managing Director, the ability to effectively scan the environment. In the case of Alpha, three years ago when they started the strategy renewal, they saw that the world is changing even more rapidly. They were able to identify certain signals from the customer interface which affirmed their feeling of the need for change.

*I would say that the very important signals (regarding the need for change) come from the customers.* – Managing Director from Alpha.

The Managing Director from Alpha highlights, that those signals and the ability to scan the environment are useless, if the capability of strategic thinking is missing. Usually this capability exists in management, and support can also be sought and bought outside the company to complement the existing internal expertise. Similarly, business expertise and substance competence are critical elements supporting successful business model innovation. Furthermore, taking new innovations and practices into practice is often challenging, and here communication, interaction, and social competence play an important role. This is related to persistent, long-term, daily leadership, because particularly major changes are not simple nor fast to execute.

Following the strategic decisions of the consolidated corporation, Alpha is currently making significant investments to their back-end systems related to for instance project management and ERP and recently, Alpha has reformed their CRM and marketing models. These investments have taken place to prepare for new type of business, where the idea is to move from a project-driven business towards customer-oriented business. In other words, they are aiming to offer continuous services where the customer relationship is more important than the single project. They have been offering some of their services in a model of continuous services already previously, but now, they are expanding the continuous services to offer many of their services combined in a wider package. Furthermore, in terms of their platform reformation, Alpha is expanding their customer segment to smaller organizations and customizing the services to fit properly for the needs of this target group.

In the new business model, by combining technological abilities and expertise, the aim was to build new competences and intellectual capital for customers instead of offering occasional, single services such as recruitment, personal estimations, or trainings. In other words, the continuity of competence management rose as a background in this new business model. This kind of business model which allows annual billing has a great potential for Alpha. Even if the invoiced sales per company are minor, it leads to continuous customer relationships, forming a significant growth element.

The Chief Growth Officer from Alpha highlights that they do not believe that the new business model will replace the existing business model directly. He sees it rather as a

gradual transformation, hopefully in the future leading to an outcome where clearly over half of the customers are engaged in continuous services in different forms. The Chief Growth Officer points out, that the benefits of the new business model are twofold – both for Alpha and their customers. However, to run forward the new business model, also organizational renewal in Alpha is required:

*The ambition is to offer greater added value for the customers in such a way that they would feel it is more sustainable to operate with us with a partner model rather than just with a project model. For us, this means completely new capabilities and roles within the organization. So, if we think that a consultant has so far been a very independent project consultant, in the future, customer management needs to be learned, key account management roles to be discussed...consultant work would probably be divided into customer management type of work and project consultant type of work, leading to different kinds of roles. And of course, system generation role is constantly growing. New investments are needed in technology, software...of course we have had this all the time, but its role is constantly growing. This requires new competence. – Chief Growth Officer from Alpha.*

According to the Chief Growth Officer, another important factor in terms of resilience and business model innovation is the unity of management. It is normal, that also in the managerial level, individuals may have very differing opinions. Where some executives are satisfied with the current business operations and do not see change as relevant, particularly if the current business is doing fine at the moment, other executives recognize a stronger need for change. However, any kind of business model reformations require strong collaboration at the management level and thus, having a common goal across the management is critical. This is important, because pushing the reformation into practice requires a lot of work and to implement the reformation into practice without a common willingness will make it challenging. He argues that the challenges are often in implementation and practice rather than in ideation and planning:

*It is quite easy to launch new systems and generate new models but, to make them work in practice and to make them into business requires a human work, and operative capabilities as well. Creating a nice plan and nice business model without thinking that it requires completely different information systems... So, in a way, being over-optimistic with the thought of having such capabilities at hand. Because sometimes the thing is that*

*management does not even know what the operations require.* – Chief Growth Officer from Alpha.

Alpha finds external partnerships critical particularly for SMEs, in terms of business model innovation. The Chief Growth Officer points out that it is relatively easy to get stuck with own businesses and become “blind” to existing operating modes and models. Without any external thoughts the perspective is quite narrow. Regarding the strategic renewal of their consolidated corporation, they conducted a participatory strategy work. It was not only the management involved in this renewal, but the entire personnel participated. In addition, Alpha participated in a pilot programme organized by an external party. This programme was closely related to their strategic renewal, and it offered guidance how to build new business from data. Quite often, external partnerships provide financial support as well, but in his opinion, rather than from financial support, the major benefit comes from the support of thinking. This was the case also with this pilot programme, where financial support for external consulting services was received. However, the true benefit came through the common brainstorming.

#### 4.1.3 Ambidexterity capability

According to both Chief Growth Officer and Managing Director from Alpha, a challenge in terms of innovation and development in SMEs is that the resources are limited. Resource allocation between exploitation and exploration is a challenging question because the resource scarcity. Reserving enough resources for developing new is important, but SMEs cannot allocate various millions only for development work. Due to the limited resources, simultaneous exploration and exploitation is often inevitable. As the Chief Growth Officer points out:

*A firm of our kind actually does not have other option than “press the gas and the brake” at the same time.* – Chief Growth Officer from Alpha.

On many occasions, having more time for exploration would be very welcoming according to all three interviewees from Alpha. The Senior Consultant shares her thoughts of the simultaneous exploitation and exploration, where the main challenge is that due to the time constraints, developing new business is slower:

*Responsibility for development work comes alongside the traditional, daily work, nearly always. Because we are a smaller company, we have the normal goals for invoicing. And*

*besides that, we kind of develop new. So, in all our development work, one of the challenges is that it is done besides the basic work... so, it makes it (development) slower. (...) Certain objectives have been set for the new, hopefully growing business, and those objectives are guiding how I divide my time between exploitation and exploration.*

– Senior Consultant from Alpha.

However, the decision of how to arrange exploration and exploitation within an organization is not unambiguous. In Alpha, they have tried different practices how to balance between these two different activities of running the current business and developing new openings. In some cases, they have been simultaneously exploring new business opportunities while exploiting the existing business. In other cases, they have been freeing up resources from the current business and have formed new teams to focus solely on developing new business. According to both the Chief Growth Officer and the Managing Director from Alpha, the decision of how to organize exploration and exploitation depends on the situation and context:

*We have been continuously doing both ways (balancing between exploration and exploitation by the same individuals or allocating human resources solely for the new business) and we are slightly being at pains to decide what would be the smartest option. And of course, we have slightly different businesses, and this also impacts on the decision.*

– Chief Growth Officer.

Even though it may often feel that having more resources for exploration would be necessary, the decision to form a separate “exploration team” does not always work as expected. According to the Chief Growth Officer, for example the recruitment work in Alpha is very traditional. Changing the way how recruitment work is executed is an arduous task, in terms of changing the culture and many other factors. In an early stage, they noticed that recruitment work cannot be changed without establishing a separate team focusing on new, continuous services. The challenge, however, was that quite soon the team was focusing on this job alone and the new service model did not expand into the whole organization outside this single team. The Managing Director pointed out similar observations by saying that, in a way, rest of the business unit thought that the new business concerns solely the single team, instead of being a matter of the entire business unit.

The Managing Director ponders that pressures to conduct the current business such intensively may have distanced others from the new business. Due to this phenomenon, from the beginning of 2023, they decided to change their procedures. The single team that had been focusing on the novel services under a development unit, was now moved into one of the subsidiaries focusing on recruitment services. The aim here was, that within the subsidiary, the team would start to transform the overall recruitment process gradually. Thus, they decided to do the pilot separately and after that, move it into the whole subsidiary team to reach a wider impact. This decision was taken partly due to profitability reasons, because the single team bounded quite a lot of resources. Implementing the new business model in the whole unit faster would also make it profitable quicker.

Then again, according to the Chief Growth Officer from Alpha, in digital learning business, which is naturally more development oriented, the development of new platform started in parallel with the old platform. The idea in this case was more of business evolution rather than revolution and the customers of the old software were gradually turned into customers of the new platform. Because the change concerns a large entity, the transformation in this case is easier to do gradually. Thus, the approach in the transformation of digital learning business was different compared to the transformation of recruitment business, because in the recruitment business unit the change would not have happened gradually. Thus, the reformation had to be catalysed with a team which first was separate and later on was integrated into the whole business unit.

The pitfall in these investments is how much can be invested in these new openings. It is kind of the question of business tolerance. How much can be invested in terms of time, money, and human resources. The Chief Growth Officer finds this something closely related to resilience as well, because the culture in Alpha is built strongly around independently working consultants who are used to have the privilege to decide how they conduct the work. The culture in this kind of set-up is significantly different compared to a set-up where the customer is at the centre and there is a team building that continuous customer relationship. Thus, there are many elements to consider, one of the elements being the phase of change. The resilience capacity needs to be carefully evaluated to avoid destruction of the growing business.

Finally, the Managing Director mentions that in SMEs, decisions are tight. It needs to be accepted, that it is not always possible to do what would be best according to theory. Sometimes the selected way is not the most idealistic, and sometimes compromises are vital. However, she argues that this should not be seen automatically as a restriction but alternatively as an opportunity:

*Sometimes this (not doing exactly what would be best according to the theory but instead compromising) also leads to organizational agility. The liability of smallness should not only be viewed as a constraint. Rather, it can bring certain courage to try different kinds of ways to conduct things, learning by trial and error. Thus, the real treasures can be found relatively quickly.* – Managing Director from Alpha.

The Senior Consultant also mentions that, when employees are encouraged to be innovative and developmental oriented, the ideas and thoughts represented should be listened. It naturally decreases the willingness to develop things, if the new presented ideas, stemming from the personnel, never proceed anywhere. In other words, the organization must have the ability to drive forward new potential ideas, to motivate the personnel to foster their innovative mindsets in the future as well. Similar thoughts are presented by the Managing Director, who argues that having the most talented individuals developing great, new ideas does not bring any benefits if these ideas are never seized and they are repeatedly abandoned. Thus, communication and social interaction skills are essential, when taking the presented ideas further and when anchoring the new businesses and practices into teams.

#### 4.1.4 Organizational culture, management and leadership

Furthermore, two additional themes were highlighted particularly strongly in the discussions between the three interviewees from Alpha. These additional themes, emerging in the empirical part of the research, are organizational culture and management/leadership. One of the challenges that has been identified in Alpha is the difficulty of future vision. This means, that people within an organization have the tendency to think that right things are done, and the current vision is great. The culture of preservation of the status quo is quite strong.

*People like to do what they know they can do. Doing new things is often a personal step out of the comfort zone. There may be questioning. Can we manage, are we good enough,*



*can we make this happen, why do we have to change if we are doing just fine at the moment.* – Chief Growth Officer from Alpha.

The driver behind the change is closely related to the understanding of the slow, long-term changes, noticing the signals of the changing market. However, not everyone in the organization is able to identify these clues. However, according to the Chief Growth Officer from Alpha, it is very essential that the management has a common faith in the future and a common vision of the future. In terms of resilience, the organizational image and self-image, as well as faith in the future are the cornerstones. If the management has very differing views of the future and firm's abilities, it is very challenging to achieve any great transformations. Not everyone needs to be super involved in transformation, because some business units are very traditional compared to others, but still, it would be very important to share a common vision of the future throughout the organization.

The Managing Director highlights the importance of participatory leadership, which does not mean that a manager is just easily accessible, but that time is really taken for interaction, structures are built, and participatory leadership is made systematic. In times of turbulence, when moving from crisis to crisis, having the sense of community and having the feeling that 'we are in this together' is important. In addition, the leader should have the capability to show direction to rest of the personnel. Showing direction does not mean that the leader commands how things are done, but in a culture of common trust, participatory conversation, ability to make changes, and clarity in terms of communication are clearly needed.

Furthermore, the Managing Director finds that SMEs should focus more on participatory change, which they in Alpha have been able to improve during the last few years. The own personnel and the most important stakeholders should not be forgotten when starting the process of change, because exactly these sources have various signals, observations, and highly valuable understanding to be utilized:

*In terms of sensing the market environment and sensing the world, it would be nonsense not to ask insights from our smart personnel, important stakeholders, or customers.*

– Managing Director from Alpha

Alpha has been investing in this aspect, conducting for example participatory strategy work, and building a culture where the whole organization would be interested of these

kinds of topics, within the limits of time constraints. The Managing Director highlights that activating and engaging personnel to participate in strategy work and increasing the understanding of the reasons behind the change leads to more favourable responses regarding the change. Discussing of the issues and future directions together, having a possibility to be part of the conversations and be heard and respected is essential. Similarly, sharing information and building understanding of the challenges the company is having and why the change is needed plays a critical role in driving successful change forward. As the Managing Director argues, the starting point should be in building a solid foundation for implementing a change, rather than breaking the change resistance down:

*The approach should not be how to dissolve some kind of mythical change resistance, but to initially start from the idea of making the change a 'common issue'...it is always easy to make nice plans, but the execution of these plans is always challenging. The execution would be so much easier, and the success as well, if there is a shared feeling among the personnel that we are doing this together and I kind of own this thing as well. – Managing Director from Alpha.*

The Senior Consultant similarly points out that implementing new innovations and new ways of conducting things requires a team that finds it meaningful. In a team and individual level, there must be the willingness to conduct things in a new way, to express thoughts and ideas. And in expert organizations, individuals in well-being teams usually do so. This can be supported by having a common direction which is well communicated within the organization. Like the Managing Director, also the Senior Consultant highlights the importance of common trust and open conversation within an organization as factors supporting resilience significantly.

## **4.2 Case 2: company Beta**

One person was interviewed from the case company Beta. The person interviewed is a Co-Founder of the company, and currently he works as a Director of Business Development.

### **4.2.1 Organizational resilience**

The Co-Founder and Director of Business Development from Beta finds organizational resilience as something closely related to sustainability of the business. Sustainability,

traditionally used in a sense of environmental values and green thinking, can also be used in relation to resilience. Sustainability of the business is based on competitiveness, sustainable delivery capacity and proper leadership and management. Here, proper leadership means that people are entrusted. As argued by the company representative of Beta, a top-heavy organizational structure does not signal a sustainable or resilient business:

*In my opinion, sound management does not mean that there is that one single source that alone holds all the reigns, strictly controlling everything. If your business lies on the basis of one person...then it is not eminently sustainable.* – Co-Founder and Director of Business Development from Beta.

Furthermore, the Co-Founder and Director of Business Development adds that resilience is also an organization's capability to adjust to changes in the environment, referring to COVID-19 pandemic as a great example of such an environmental shock. Beta, like many other companies, were impacted due to the pandemic and lockdown, but instead of taking a 'testudo-tactic', they took a number of measures to ensure the business continuity. Despite of the slightly declined revenues during the pandemic, supported by so called "healthy financial buffers", Beta sailed through the pandemic without any layoffs, emerging even stronger than before – like they had decided. This serves as a great example of a resilience according to the company representative of Beta:

*This is actually a nice example of resilience in a way that you have to have that visionariness or, better put, foresight, courage, and organizational ability to push the way through the difficult times. During the easy years, the company's finances are growing and everything goes like planned – in those days, you actually do not do anything with resilience – even lousy companies grow during the easy years.* – Co-Founder and Director of Business Development from Beta.

The importance of proactivity and the notion of anticipation have been acknowledged at Beta. Regularly irregularly, with varying composition of individuals, they conduct "what if?" exercises. The Co-Founder and Director of Business Development finds these "what if" exercises as highly relevant in terms of resilience. The idea of these exercises is to create scenarios. As one example, what would be done if one day, the customer data system (CRM) of the company would not exist anymore? As another example, what would be done if China, where Beta has a lot of customers and some contact suppliers,

would be embargoed? What actions would be taken? The interviewee from Beta points out how these exercises help to prepare the organization against potential risks and, identify and execute some early changes to be taken directly:

*First of all, these kinds of exercises activate people to think, what to do in case of turbulence. And secondly, these exercises help us to notice, what kind of simple procedures can be executed right now, to be better prepared to cope with these kinds of scenarios. These issues are often quite light, if only recognized and fixed accordingly.*

– Co-Founder and Director of Business Development from Beta.

In relation to corporate foresight, the Co-Founder and Director of Business Development continues the discussion of long-term planning arguing, that successful companies should have plans, thoughts, and conjectures ahead three to five years. He recognises that in many companies, when doing sales budgets and annual plans, in January the plan has been set up for the following twelve months. When summer arrives, there are plans left for the following six months, in Autumn only for two to four months, and so on. He finds this far too short time span to run a business. Despite some companies have made improvements, moving towards rolling twelve months budget, even this is not enough. The interviewee from Beta argues, that even the smallest, established companies should have rough plans for the next three to five years to be able to make long-term plans and analyse the business viability in relation to market and environmental changes:

*Of course, small companies cannot have detailed plans for three to five years. But even small companies, growth-oriented tech firms, must have some kind of gut feeling, how the market is changing and where the business is going in the long run. This is essential to be able to take desirable actions and preferably before the competitors realize what it is all about.* – Co-Founder and Director of Business Development from Beta.

The Co-Founder and Director of Business Development states that even in their early years, when Beta had only three employees, they tried to actively look three to five years ahead. This was the case, even though the cash funds were sufficient only for three to four months. But they found it essential to try to think which way they are going as a company. They tried to make decisions that would take them to the right direction.

#### 4.2.2 Business model innovation

Beta offers testing and measurement solutions for their customers. Following the standard procedure, customers purchase these services through investment model. Gradually, Beta is reforming their existing business model, purposefully aiming to offer these same solutions to customers but in a service format as subscriptions or lease-model. The basic idea behind the new business model is that instead of offering single investments, they offer long-term maintenance and support work for years, along the testers. This means a significant reformation of their revenue model. In this case, the value of the new deal is significantly lower after the first year, but due to the longevity of their solutions, this new model provides long-term returns. If the customer is satisfied, the system can be used in production for over ten years, customer paying the same subscription from year to year. This kind of business model reformation has positive impacts on company Beta's resilience, as the interviewee from Beta argues:

*This is a great example of such business model innovation that strengthens organizational resilience significantly. As long as the production plants of the customers are running, we have fixed revenue.* – Co-Founder and Director of Business Development from Beta.

As another example, Beta executed a business model innovation in collaboration with an external party, by participating in a pilot programme. The purpose of the programme was to develop new business from the data that emerges when customers use Beta's testers. According to the Co-Founder and Director of Business Development, the amount of this data is massive, and in this programme, the idea was to explore what can be done with the data. They mapped out for instance, how the data can be aggregated and how it can be processed. The aim was to turn the data into meaningful and actionable information to be utilized for instance for smooth running of customer's production line. According to the interviewee from Beta, the collaboration with an external party provided new capabilities to be utilized in their further independent endeavours towards new business model:

*This programme was quite useful for us. It did not lead us to any "epic" inspiration providing major growth, yet. But it gave us new capacity, new capabilities of personal competence. These new capabilities have supported us to modify and reform our existing business models towards a direction that we believe provides something great in few years.* – Co-Founder and Director of Business Development from Beta.

Regarding partnerships related to innovation, the Co-Founder and Director of Business Development from Beta finds that in many cases, only minor value is received through external partnerships. This is the case especially in terms of partnerships with just a little money, perhaps with no partnership contract and when the purpose and outcome of the partnership is not clear. Having partnerships just for having partnerships, does not provide any extra value. Talking in general of partnerships, for example, in their early years, Beta utilized some consulting services for internationalization, but the benefits were rather poor. Yet these kinds of partnerships focusing on background work have some marginal value, in the end, it is the entrepreneur, or for instance the sales manager doing all the work that leads to financial gains, all the fieldwork and heavy lifts. He highlights that greatest benefits are received through partnerships, where the tasks and duties of the partners are clearly defined and, when these partnerships are managed well:

*Of course, there are good partnerships, too. But based on my personal experience, these are related to product development, for instance. Then, you have clearly targeted, clearly defined vision what the partner should do. The partner has been chosen to execute exactly that specified task in question. Then, there is a contract, schedules that guide the process and provide great facilities for the project. These kinds of partnerships are working well, and this is what we do every day. And frankly, this returns to the subject of good management. Partnerships work well, when they are managed well and when not, they will not work neither provide any value. – Co-Founder and Director of Business Development from Beta.*

Regarding the contributors for business model innovation, first of all, Beta highlights the importance of strong customer relationships and customer orientation. This is essential in order to build trust with the customer. When having a mutual trust, the communication is fluent, and the customer is willing to share information about any new issues they are facing. The person to whom the customer shares the information of the issue can be a product manager, a tech support, a salesperson, for instance. The importance is that the business contact senses and seizes the issue communicated by the customer and brings it to the wider awareness within an organization to be handled properly.

Secondly, the ability to reflect these small signals of potential businesses arising from the customer interface towards the long-term planning can lead to new innovative opportunities. Furthermore, the ability to monitor the external business environment

sensitively can be a great advantage, and when these early signals from the customer interface can be reflected towards the company's vision of the business and market in three to five years, it supports the decision to advance the seed of a novel business idea. Thirdly, if innovation policy has been stated in company's strategy, there should be rules for invention. This means that individuals should be rewarded for invention closures, patent applications or granted patents. These kinds of structures spur talented people on to generate invention closures. In conclusion, staying close to the customer, having a long-term vision for three to five years and creating some kind of structures for innovation and invention processes are the factors that Beta finds essential in enhancing innovation activity within a company.

#### 4.2.3 Ambidexterity capability

Regarding the ambidexterity capability and how a small firm, such as Beta, can balance between exploring and exploiting, there is no univocal answer. Due to the smallness of a firm, the Co-Founder and Director of Business Development from Beta argues that they cannot have a person who is solely focusing on innovation in their organization.

Instead, in a way, he finds crowdsourcing as a key for innovation, supported by those three previously mentioned corner stones for business model innovation: close customer relationships, long-term vision and some kind of structures for innovation processes. The Co-Founder and Director of Business Development argues that the previously mentioned three corner stones are the required preconditions that are required to be able to innovate business models. In fact, he finds that these three factors create the conditions which then lead to results, referring to something inventive.

In Beta, of their nearly 40 employees, approximately 7-8 persons have generated notifications of the invention. This indicates that innovation within an organization often stems from a larger group of individuals. As said, companies should have some kind of structures or processes for innovation, starting from the contact person to be approached with the idea of an invention, as argued by the interviewee from Beta:

*When someone within the company has some kind of idea of an invention, there should be few persons within the company that could be approached in this matter, to present the idea and its potential. And then these few contact persons can help to elevate the idea*

*further, towards the application for a patent, for example.* – Co-Founder and Director of Business Development from Beta.

The interviewee from Beta states that in some large, listed companies, there can be innovation managers, but in smaller companies this is normally not the case. However, even having an innovation manager within an organization does not mean that he/she is responsible for creating innovations alone. It rather means that the innovation manager is there to support the innovation process and to support the organization to innovate. Even though smaller companies cannot have a one single person focusing solely on innovation, they should have a person or persons to be approached with the innovative idea.

#### 4.2.4 Organizational culture, management and leadership

Two additional themes, that emerged in conversations with Beta, were the importance of management and organizational culture. These topics were not included in the initial theoretical framework but were highlighted in the empirical findings. The Co-Founder and Director of Business Development from Beta stated that in terms of resilience, poor management is extremely detrimental, particularly to small companies. During the easy years when everything goes like planned, running a business is relatively easy. However, in times of crises, the quality of the management is assessed, as argued by the interviewee from Beta:

*In times of setbacks, deterioration of the economic situation or when facing minor or major catastrophe, these are the periods when the quality of management and perseverance play a major role, separating the wheat from the chaff.* – Co-Founder and Director of Business Development from Beta.

When asked, what high quality management means to Beta, the Co-Founder and Director of Business Development argues that in a perfect world, staff is part of management. This means that individuals manage themselves. However, he underlines that this should not be automatically the case with each company but, in companies with high-skilled, ambitious personnel, such top-down management, to him, feels outdated. Instead, structures where personnel are involved in management should be generated, in his opinion. Of course, there is someone at the management who then decides and finalizes for example new directions, but in terms of implementation it is extremely important that the personnel have kind of a “buy in” attitude from very early on regarding the strategy.



As the interviewee from Beta states, engaging the personnel in the strategy work supports the implementation of the renewed strategy:

*For example, developing new strategy is relatively easy. Where 90 percent of companies are struggling, is the implementation of the strategy, which can be nearly impossible. This is the case especially when the strategy has been developed at the “ivory tower” by management and then it is fed to the staff. The high-skilled, ambitious personnel would perhaps expect the management to ask them first – them being the ones collaborating with customers, developing the products. The likelihood of implementing the new strategy is significantly strengthened if majority of the personnel is part of forming the new strategy.* – Co-Founder and Director of Business Development from Beta.

The Co-Founder and Director of Business Development from Beta believes that there are many companies which do not have a clear strategy arguing, that some companies do not necessarily even have to have a strategy if the business is very simple in nature. But then there are those determinant, growth-oriented or large companies and for them, having a strategy is a must. If the strategy is updated, personnel-oriented and the staff has a “buy in” attitude towards it, it is a great benefit for a company.

Following the discussion of how to put strategy into practice within an organization, the discussion leads to organizational culture. The company representative of Beta highlights the importance of organizational culture over company’s strategy:

*Strong, powerful organizational culture eats strategies for breakfast.* – Co-Founder and Director of Business Development from Beta.

According to the Co-Founder and Director of Business Development from Beta, strategic reformation and its implementation may take a year or two, whereas changing organizational culture can be a process of five to ten years. Thus, changing rotten organizational culture does not happen easily, nor fast. In the context of resilience, organizational culture has a significant importance, even impacting by a third in the formula for enhancing organizational resilience.

### **4.3 Cross-case analysis and discussion**

The structure of the cross-case analysis is composed of three key themes: organizational resilience, business model innovation and ambidexterity capability. These themes are

covered one after another through comparing the findings of both cases. Moreover, these key themes are viewed from the aspect of answering to the sub questions by bridging the theory and empirical findings. Theme one, organizational resilience, answers to the first sub-question: what are the main challenges SMEs face when seeking for organizational resilience? Theme two, business model innovation, answers to the second sub-question: what resources are needed for successful business model innovation contributing to organizational resilience? Theme three, ambidexterity capability, answers to the third sub-question: how can ambidexterity capability help to achieve organizational resilience? Furthermore, two additional themes, organizational culture and management/leadership were highlighted in the empirical findings. These findings were described in chapters 4.1.4 and 4.2.4, and in this chapter, are analysed in the last chapter 4.3.4 as overarching themes across organizational resilience, business model innovation, and ambidexterity capability.

#### 4.3.1 Main challenges towards organizational resilience in SMEs

In this sub-chapter, the aim is to answer to the first sub-question: “what are the main challenges SMEs face when seeking for organizational resilience?”

The interviewees in company Alpha highlight that resilience means continuous ability to change (Chief Growth Officer from Alpha), continuous ability to renew (Managing Director from Alpha) and ability to keep moving with a good spirit in a changing world (Senior Consultant from Alpha). In case company Beta, resilience is considered as the sustainability of a business and capability of an organization to adjust to changes in the environment. According to empirical findings, both case companies seem to be sharing a similar understanding, where resilience refers not only to coping in times of crises, but in addition, it includes the elements of adjusting and changing.

In the field of business and management, organizational resilience was originally focusing on organizational responses to external threats (Linnenluecke 2017, 4). The early definitions of resilience were strongly intertwined with characteristics such as robustness and stability (Horne 1997, 27). The focus was clearly on coping strategies and maintaining expected level of performance under environmental stress (Horne 1997, 27; Lengnick-Hall et al. 2011, 244). Later on, the concept of resilience has been studied from various different perspectives (Linnenluecke 2017, 14). Instead of looking at the organizational resilience only as an ability to bounce back to the normal stage, it was now

seen as an ability to emerge stronger after a challenging situation (Lengnick-Hall et al. 2011, 244).

In the beginning of 2000, the research started to focus on organizational processes and enabling conditions that reinforce resilience (Hamel & Välikangas 2003, 53; Sutcliffe & Vogus 2003, 94-95; Gittell et al. 2006, 300). More specifically, attention was paid on how companies adjust, adapt, and reinvent their business models in ever-changing world, preferably ahead of time, before forced to change (Linnenluecke 2017, 12-13). The empirical findings of this research are in line with the later definitions of organizational resilience, including the aspects of adjusting, adapting, and changing. Resilience does not mean that the organization is just struggling over difficult times, remaining unchanged. Instead, resilience means that an organization takes the necessary actions to adjust to new conditions, and at best, anticipates the environment to be able to proactively respond to changing conditions. Without the ability to adapt and adjust to changing environment, and to respond to changing customer needs, companies' level of resilience will be weaker, and their position in the highly competitive market environment may be threatened in the long run.

In both case companies, also the importance of anticipation has been identified. Similarly, the most recent definitions of organizational resilience include the notion of anticipation on top of coping and adaptation (Duchek 2020, 219). Anticipation means, that the potential dangers are predicted and prevented before any damage is done (Wildavsky 1991, 77). Both case companies argued that they are actively anticipating potential threats, opportunities, or significant changes from the external environment. Recently, before the pandemic, the case company Alpha had a larger strategy round, where they investigated the future trends in their field. They are very aware of the many trends impacting on their business sector, and they recognize the ongoing, gradual change in the field. Thus, they understand the importance of anticipation and considering potential business model innovations to respond to the changing market needs in the future. Similarly, the case company Beta, invests in anticipation by conducting "what if?" exercises regularly. In these exercises, they create different scenarios of imaginary threats, and practice how to overcome these challenges. In addition, these exercises help them to recognize simple procedures to be executed already now, to be better prepared towards potential threats.

Previous literature has presented various differing definitions of organizational resilience. This study follows a definition by Duchek (2020), where the notion of anticipation is included. In the research setting of this study, where organizational resilience is viewed from the perspective of business model innovation and ambidexterity capability, the inclusion of anticipation is critical. The reason behind the importance is that business models should not be modified only when the crisis or disruptive event occurs but instead, business models should be evaluated proactively, prospecting the future, and looking for responses to the potential threats or need for change.

Chief Growth Officer from Alpha finds imperceptible, long-term changes as significant threat to organizations, whereas Co-Founder and Director of Business Development from Beta argues that lack of long-term planning is a significant weakness to organizations. These findings further show that both case companies have recognized the urgency for anticipation and proactivity, as factors supporting organizational resilience and long-term survival. If companies are lacking the ability to sense and seize gradual, discreet long-term changes in the environment, it can lead to negative consequences regarding organizational resilience and potentially may threaten even company's survival. Similarly, companies must have the ability to reflect their current position and future direction towards the current market position and future market environment, to be able to take desirable actions to ensure their viability and long-term success. This supports the existing theory, which argues that when notable changes in the business environment occur, the business model should be critically examined, and potential changes done to ensure company's viability (Johnson 2019, 7; Eriksson et al. 2022, 4).

Furthermore, the empirical findings of this research highlight observation and identification as critical capabilities supporting anticipation. In her capability-based conceptualization (illustrated in figure 1 in chapter 2.1.2), Duchek (2020, 224) points out specific capabilities that are required in each stage during the process towards organizational resilience. Duchek argues that in the stage of anticipation, resource availability is particularly important. Organizations should have enough resources to focus on observation and identification of the potential threats or notable changes in the environment. Both case companies argued that the ability to sense the external environment and detect the silent and louder signals from the customer interface are

important factors, supporting organizational endeavours towards new openings and innovations. This further enhances their resilience. Furthermore, empirical findings imply, that SMEs have resource scarcity in this respect, and extra resources would be often welcomed, to invest more in anticipation and long-term planning. In Alpha, the company's strategy is very forward-looking, and the aim is to anticipate and sense the external environment proactively. However, it is hard to ever find quite enough time for anticipation because people typically have so many things on their plate. Similarly, the Co-Founder and Director of Business Development from Beta states that small companies cannot have detailed plans for three to five years, but it is critical to have at least rough long-term plans to support resilience.

The empirical findings show that both case companies pursue robustness and adaptability. These two fundamental characteristics – robustness and adaptability – are seen as an integral part of resilience (see, for example, Horne & Orr 1998; Mallak 1998; Lengnick-Hall & Beck 2005, 738; Buliga et al. 2016, 653). The case companies foster robustness by running the existing business model, taking care of the daily routines and existing customers, potentially executing improvements or incremental changes to the main business. These actions contribute to organizational robustness, which according to literature refers to an organization's capability to withstand stress and maintain its function under stressful event (Coutu 2002; Bruneau et al. 2003). Resilient organizations have the ability to absorb complexities and adversity (Horne 1997; Mallak 1998; Sutcliffe & Vogus 2003), by reducing vulnerabilities towards risk environments (Burnard & Bhamra 2011), coping with unexpected challenges and recovering from these situations (Sutcliffe & Vogus 2003).

Adaptability, again, is fostered in the case companies for instance by searching for new business opportunities, staying close to the customer to be able to detect the potential future needs and, observing the environment actively. Both case companies have innovated their business models to be better able to serve their customers, to respond to environmental changes and to increase their long-term resilience. These actions support organizational adaptability, which means, that an organization is capable to act promptly and effectively during crises (Horne & Orr 1998; Mallak 1998; Sutcliffe & Vogus 2003). Furthermore, adaptability means that an organization develops mechanisms for learning and innovation (Carpenter 2001, 765) and aims at capturing new opportunities from the changing environment (Lengnick-Hall & Beck 2005, 740).

It can be argued that, taking care of the “original”, established business model increases the organization’s robustness, as it guarantees regular cash flow. Furthermore, preserving the existing operations, systems, and processes it strengthens organizational stability, robustness, and predictability of the business – supporting the company to survive better when facing external turbulence (Haaker et al. 2017, 14). Then again, innovating business models increases organization’s adaptability (Buliga et al. 2016, 654), through seizing new opportunities that could increase the success and continuity of the organization in the long run.

In order to survive, companies are seeking for balance between robustness and adaptability (Buliga et al. 2016, 653-654). However, empirical findings show that resource allocation between activities fostering robustness and adaptability is not a simple question in SMEs, because SMEs usually do not have slack resources. This argument shows similarity with the existing theory, which argues that balancing between activities that support robustness and adaptability is particularly challenging for SMEs due to the resource scarcity (Wenke et al. 2021, 661). According to the empirical findings, conducting daily business operations naturally reserves majority of the time, and less resources are at hand for innovating new. This naturally makes innovation slower and, it may impact negatively on organizational resilience.

According to theory, due to limited resources, small and medium-sized enterprises often lack so-called buffers against potential threats or risks, often resulting to a weaker performance during crises, compared to larger firms (Lai et al. 2016, 117). Even though both case companies brought out the limited resources of SMEs, being an SME or having limited resources does not automatically lead to weaker performance during the crisis. For instance, Beta survived agilely over covid-pandemic without any layoffs, and Alpha was able to successfully drive forward the participatory strategy work during the pandemic with the help of digital platforms. Similarly, Arbussa et al. (2017) argue that in fact, SMEs are typically more flexible and adaptable compared to larger firms, and thus, SMEs may actually be more resilient.

It can be argued that despite of resource scarcity, the decisive point is how these scarce resources in SMEs are utilized, and how to bring out the best of these scarce resources. Here, according to empirical findings, high quality management expertise with strategic excellence plays a major role. In both case companies, the interviewees stated, that if the

quality of the management is poor, it plays a significant threat towards organizational resilience. Furthermore, case company Alpha mentioned that if the management has contradicting visions of the future direction, it emerges as another barrier towards organizational resilience.

In the empirical findings, the role of specialized, motivated human resources was strongly highlighted as a factor supporting organizational resilience. Similarly, the previous theory identifies lack of specialized human resources as a barrier towards innovations and increased competitiveness (Bivona & Cruz 2021, 640), thus also impacting negatively on organizational resilience. The importance of social resources emerged very early in the interviews with both companies' representatives. In Ducheck's (2020, 224) capability-based conceptualization of organizational resilience, social resources were identified as a critical factor in coping stage, during the unexpected event or crisis. According to the empirical findings, social resources and motivated, skilled personnel is a critical asset during the entire resilience continuum, all the way from anticipation to coping and adaptation. The empirical findings show that new opportunities emerge quite often from the customer interface and thus, having motivated, skilled personnel with the capability to sense the signals from the customer interface is a considerable resource for the company. This shows that social resources and specialized, motivated human resources are critical already in the anticipation stage. Similarly, both case companies argued, that implementing new strategies or business models, and adjusting to new situations or changes is much easier, when the personnel have a "buy in" attitude towards change. This further shows that the role of human resources has a great importance also in coping and adaptation stages.

As a conclusion, lack of anticipation, in other words, the ability to detect long-term imperceptible changes in the environment, changes in the market needs or silent signals from the customer interface, can be identified as factors that weaken the attainment of organizational resilience. Similarly, unbalance between activities that support robustness and adaptability may weaken organizational resilience. Lack of investments in the activities that support adaptability is often the challenge in SMEs, as there is a lower threshold to invest in operations that bring financial gains in the near future rather than in innovations that may potentially become a success or even a vital new business only later on. The importance of innovation is sometimes more challenging to recognize, especially if the current business is successful, and because the potential financial gains and benefits

that the innovation is bringing, become visible only in the long term. Similarly, lack of long-term vision or in other words, short-sightedness negatively impacts on organizational resilience. The resource scarcity in SMEs according to theory and empirical findings often makes it challenging to invest enough in anticipation and seeking for adaptation. Thus, SMEs' resource scarcity can be seen as a challenge towards organizational resilience. Even though resource scarcity can make it challenging to enhance organizational resilience, and having for instance slack resources would potentially make it easier, more important is how these scarce resources are utilized. Similarly, SMEs may often be agile and open for quick experiments, which on the other hand supports the enhancement of organizational resilience. The empirical findings strongly highlighted that poor management and leadership as well as lack of specialized human resources are identified as significant barriers towards organizational resilience.

#### 4.3.2 Critical factors supporting business model innovation in endeavours towards organizational resilience

In this sub-chapter, the aim is to provide answers to the second sub-question "what resources are needed for successful business model innovation contributing to organizational resilience?"

During the past years, both case companies have been innovating their business models, for example aiming at offering continuous services for their customers or building new business from data. Business model innovation means searching for new logics of the firm and new ways to create and capture value for the stakeholders of an organization (Casadesus-Masanell & Zhu, 2013, 464). As an example, the case company Alpha has been able to identify, that the field in which they are operating in, is rapidly changing. As argued by the Chief Growth Officer from Alpha, they believe that in ten years, the business field will be very different compared to what it is today. To be able to keep up with the continuous change, they have taken a proactive approach towards adaptation through gradual business model innovation. The example of Alpha shows that the need to prepare for environmental changes has been identified, which supports the existing theory. According to literature, to ensure the viability of an organization in a long run, companies need to innovate faster and more often than ever before (Tidd & Bessant 2013, 9). Companies are operating in an environment, where disruptions, discontinuities and intense competition are rules rather than exceptions. If companies lack the ability to



respond adequately to the changing environment, they become victims of their own rigid business models. (Doz & Kosonen 2010, 370.) Organizations should critically examine their business models, when notable changes in the business environment occur (Johnson 2019, 7; Eriksson et al. 2022, 4).

Both case companies have identified business model innovation as a valuable source, enhancing organizational resilience. As Buliga et al. (2016, 650) and Chesbrough (2010, 362) argue, business model innovation is critical for companies, to ensure their viability and even survival. The purpose of the business model innovation in the case companies has not been to replace the existing business model, but instead, to build new kind of service on top of the existing business model. As the existing literature argues, business model innovation strengthens the adaptability of an organization (Chesbrough 2010; Johnson 2010, 9). In other words, through business model innovation, companies can build alternatives for the current business, to be well prepared towards different scenarios, where the existing business may be threatened. The main focus on business model innovation is to find new ways to generate revenue and define value propositions for customers, suppliers, and partners (Casadesus-Masanell & Zhu 2013, 464). However, some of these business model innovations may replace the original business model in the long run. The empirical findings show that innovating business models is not a short-term, temporary project, but it actually takes years to drive the business model change forward. This supports the insight, that organizations should prepare for change in a proactive manner, by anticipating future changes. This is important because the adjustments and changes in business models are not simple tasks to execute. (Chesbrough 2010, 362.)

Both case companies mentioned that the new business model aims at providing fixed revenue through regular invoicing. The idea is to move from project type of business towards continuous services. Both case companies have identified that this kind of business model innovation significantly increases the organizational resilience, for instance, by strengthening financial stability and predictability. This is in line with the findings presented by Smallbone et al. (2012, 773) who argue that generating new revenue streams is one of the ways how SMEs can enhance their resilience. Similarly, Eriksson et al. (2022, 220) argue that improvements in the revenue model, for example by moving from fluctuated revenue flow towards constant income increases the stability of SMEs' operations and their predictability, supporting resilience. As it has been argued, executing

business model innovation is not a simple task. Thus, looking at the underlying factors that support successful business model innovation were seen important. By developing those supportive factors, organizations could enhance their resilience as a result.

In both case companies, the value of both internal and external knowledge has been acknowledged. As an example, both case companies find the ideas and thoughts of their employees as highly valuable assets. For instance, in company Alpha, they have been doing participatory strategy work with the intention to activate the entire personnel, to utilize the extensive knowledge that their employees carry. Similarly, in company Beta, they find it highly beneficial to engage the personnel in strategy work, because the employees for example develop the products, and they also actively communicate with the customers. As a result, the employees also possess an extensive amount of highly valuable information, ideas and thoughts. Also, the existing literature argues, that one of the critical factors supporting business model innovation is knowledge, which as an intangible resource belongs to the competitive advantages of a firm (Burns et al. 2011). However, if the knowledge is not managed properly, its value is diminished. Organizations should adopt formal knowledge management procedures and invest in specialized human resources, and clear, knowledge-oriented leadership. (Bivona & Cruz 2021, 640.) Effective knowledge management is critical for organizations, to be able to respond to the changes in the environment (Zhao et al. 2013, 908).

The knowledge management should not concern only internal knowledge, such as employees' ideas, information, and experiences. In addition, it should cover external knowledge as well. External knowledge refers to knowledge that is received outside the organization's boundaries. This refers to, for example, customers' problems, needs, ideas, and information. (Usai et al. 2018, 1647.) Advanced knowledge management systems are highly valuable, as they support the creation of tacit knowledge, knowledge sharing and knowledge utilization within an organization (Dezi et al. 2021, 366-367). In order to manage the external knowledge that is received from the customers, organizations should take care of proper customer relationship management (CRM) and invest in proper technological infrastructure of customer relationship management. High-quality CRM allows organizations to capture relevant customer data and build customer knowledge based on this data. (Migdadi 2021, 120.) Furthermore, this data can be utilized for the purpose of innovating new business from the data, like both case companies have done.

Both case companies foster close relationships with their customers and other key stakeholders. In case company Alpha, as argued, the importance of external knowledge and relationships have been strongly identified. These external relationships widen the spectrum of insights, and thus, support innovation within the organization. Empirical findings are in line with the theory, arguing that internal and external knowledge sharing supports business model innovation (Usai et al. 2018, 1647; Migdadi 2021, 120). In the empirical findings, strong, close customer relationships seem to be identified as the most critical external relationship. Also, the most valuable external knowledge from the perspective of business model innovation is received from the customers. Customers serve as a source of information, and this information can be utilized for the purpose of innovating new business based on customer needs. The empirical findings are in line with the theory, showing that customers are a critical source of information, giving signals of their challenges, needs and ideas, which the company should be able to sense and seize. In business model innovation, customer intimacy plays a vital role in SMEs aspirations towards resilience. (Eriksson et al. 2022, 220-221.)

The empirical findings showed slightly dissenting opinions regarding the importance of collaborative partnerships in business model innovation. In the case company Beta, they recognize the value that certain partnerships provide, but most often valuable partnerships are related to product development or to other issues where the objectives and tasks are clearly defined. In these kinds of partnerships, partners have specific, well-determined tasks to accomplish. Case company Alpha, again, finds external partnerships highly beneficial in terms of business model innovation. They feel that the perspective towards business model innovation can be broadened with external ideas and thoughts.

Bivona & Cruz (2021, 2650-3653) argue, that mobilizing distant sources from organization's business partners could support SMEs' business model innovation. Furthermore, the ability to absorb external knowledge from these partners can support SMEs in business model innovation. The empirical findings seem to support the latter argument. According to case company Alpha, the benefit of the partnerships was achieved through common brainstorming and knowledge sharing. On the other hand, the interviewee from case company Beta mentions that the benefit from the external relationship mainly lies in relationships related to product development. This could be interpreted in a way, that in Beta they find those kinds of partnerships most relevant, which support the actual execution of the business model rather than its innovation,

whereas in Alpha the partnerships for business model innovation itself are seen as highly beneficial.

The empirical findings of this research point out that, utilization of data, which is gathered through existing customer relationships, offers new kind of business opportunities. Similarly, according to literature, digitalization in business model innovation is considered as one of the factors supporting organizational resilience, and its importance was highlighted particularly strongly when seeking international resilience (Eriksson et al. 2022, 209, 220). The underlying reason for the importance of digitalization in business model innovation is, that new service models, providing novel possibilities for SMEs, are often based on data. The case companies have been able to seize these data-enabled opportunities, hopefully in the long run leading to major benefits and financial gains. The business model innovations that were related to data utilization were initially implemented in collaboration with an external party. Even though the case companies find that data-oriented business model innovation may have a great future potential in terms of their resilience, the importance of digitalization and data was not highlighted particularly much in the interviews. However, it seems that both case companies have made significant investments in terms of digitalization and in today's business environment, digitalization can be interpreted as a crucial element, of which many innovations are dependent on.

As a conclusion, based on the literature and empirical findings of the research, the needed resources for business model innovation are particularly internal and external knowledge, close customer relationships, specialized human resources, collaborative partnerships, and digitalization.

#### 4.3.3 Balancing between exploitation and exploration to support robustness and adaptability in the organization

In this sub-chapter, answers to the third sub-question: "how can ambidexterity capability help to achieve organizational resilience?" are provided.

Both case companies have identified the need for organizational robustness and adaptability. They have been contributing to both dimensions by exploiting their current, existing business, while simultaneously exploring new business models. According to theory, both dimensions are critical in terms of organizational resilience. Iborra et al.

(2020, 2) argue that in order to remain safe and stable when facing difficulties and unexpected events, organizations should develop capabilities that are beneficial in terms of robustness, as well as capabilities that are beneficial in terms of flexibility, allowing coping and adaptation. O'Reilly and Tushman (2008, 190) argue, that companies must develop capabilities to simultaneously engage in exploitation and exploration.

According to the empirical findings, finding the right balance between exploitation and sufficient exploration is not easy. What makes it challenging is the limited resources of SMEs and their allocation. In terms of organizational resilience, some scholars (see, for example, Weick 1993) highlight the importance of stability and reliability, which can be achieved through routines, consistency, and control. Other scholars (see, for example, Hamel & Välikangas 2003, 54) find adaptability and flexibility more important and thus emphasize innovation, variety, and experimentation (Iborra et al. 2020, 2). It cannot be determined, how the resources between exploitation and exploration should be divided, or how these activities should be conducted in practice. It depends on the situation and context.

However, more often, companies are focusing solely on exploitation due to its liability of short-term success and the higher risks that are related to exploration (O'Reilly & Tushman 2013, 325). Furthermore, as argued by case company Alpha, sometimes the need for exploration may be more challenging to recognize, particularly if the current business is prospering at the moment. Exploitation provides benefits, such as revenues, that can be noticed in the short term, whereas the benefits of exploration can often be noticed only in the long term. Thus, there lies a risk of falling to the trap of focusing solely on exploitation. Focusing only on exploitation leads to a neglected proactivity of an organization, further leading to a lower organizational resilience. Without any investments in exploration, companies are likely to fail in the face of change. Thus, to support long-term survival, organizations should accommodate both exploration and exploitation. (O'Reilly & Tushman 2013, 325.)

Contemporary balancing between exploitation and exploration is also called organizational ambidexterity (O'Reilly & Tushman 2008, 185). Exploitation means that the company is running its current daily business, focusing on efficiency and refinement. Exploration refers to experimentation, and discovering of new opportunities, searching for novel solutions towards environmental changes (Duncan 1976; March 1991, 71).

In both case companies, business model innovation is conducted on the side of running the existing, established business. In other words, they are exploiting the current business while at the same time exploring new opportunities and developing the potential future business model. According to Harren et al. (2022, 258), particularly in cases where organization has two weakly linked business models, structural ambidexterity in a form of spatial separation is seen as a viable solution. This is the case for instance in business model innovations, where organization maintains the old business model alongside the new, innovative business model, which can be significantly different from the original one (Buliga et al. 2016, 655). According to empirical findings, in SMEs such as the case companies, the only option is to “press the gas and the brake” at the same time, as argued by the Chief Growth Officer from case company Alpha. However, the empirical findings show that the question of how the investments both in exploitation and exploration are organized in practice is not a simple, unambiguous decision. It rather depends on the situation and context.

Based on the empirical findings, both case companies find it feasible to exploit and explore simultaneously within the same unit by the same people, besides the fact that these two activities are contradicting in nature. This refers to contextual ambidexterity, which means that individuals are having a behavioural capacity to simultaneously explore and exploit within the entire business unit (Gibson & Birkingshaw 2004, 209). In contextual ambidexterity, it is the decision of an individual rather than business unit to balance between exploration and exploitation (O’Reilly & Tushman 2013, 329). In contextual ambidexterity, organizational culture, vision, values and especially members of the organization are in critical role, supporting the successful balancing between exploration and exploitation (Markides 2013, 318-319).

Both case companies argue that SMEs do not have enough resources to build separate business unit only for exploration and thus, it can be argued that structural ambidexterity typically cannot be considered as a potential alternative for SMEs. Structural ambidexterity means, that an organization has distinct strategic units for exploration and exploitation. Both business units have their own alignments and capabilities (Tushman & O’Reilly 1996, 11; O’Reilly & Tushman 2008, 192; Chen 2017, 388; Fourné et al. 2019, 565). Structural ambidexterity refers to either temporal separation or spatial separation (Fourné et al. 2019, 565, 568). In this respect, empirical findings are in line with the theory. As Parida et al. (2016, 1150) argue, due to the limited resources, SMEs usually

cannot develop structural ambidexterity through separate distinct units for exploration and exploitation and thus, structural ambidexterity is often favoured only by large, multi-unit organizations.

However, in case company Alpha, in some cases they have released some employees from the current business and have built a separate team for developing the new business. This can refer to structural ambidexterity through temporal separation (Fourné et al. 2019, 565, 568). This has been necessary in some cases, where conducting the change towards new business model has not progressed through contextual ambidexterity. Based on the empirical findings, the risk in creating a separate team focusing on exploration of the new business is that the team focusing on the new business may become alienated from the rest of the business unit and thus, implementing the new business model into the entire unit becomes challenging. It can be argued that structural ambidexterity through temporal separation may be a suitable option in SMEs in some cases but, after piloting, the team focusing on exploration and business model innovation should be integrated back to the entire business unit relatively quickly, to avoid siloing.

If the team has the capability to exploit and explore simultaneously, it might be the best option for SMEs based on the empirical findings. The Co-Founder and Director of Business Development from case company Beta argues, that they cannot have a single person or few persons focusing solely on innovation but instead, activating and motivating the members of an organization to anticipate, observe the environment, search for new ideas and potential innovations is highly valuable way to innovate in small company such as Beta. The Co-Founder and Director of Business Development from Beta refers to crowdsourcing as a viable way to innovate in SMEs. Similarly, in case company Alpha, personnel as a source for innovation has been identified and utilized for instance in a form of participatory strategy rounds. Contextual ambidexterity is beneficial in this respect, as it supports an internal atmosphere within an organization, where the ideology is that innovation and engaging into new business development, when intended so, concerns everyone in the unit.

Furthermore, contextual ambidexterity could be recommended for instance for evolutionary innovations where the novel kind of business aims at replacing the existing business in the long-run and thus, the new business truly concerns everyone in the organization. However, in case company Alpha, also the challenge of simultaneous

exploitation and exploration has been identified both in employee as well as in managerial level. When exploitation and exploration are conducted by the same employees or managers, innovation is slower, whereas having separate units for exploration and exploitation would allow focusing solely on either one of the activities. The challenge of simultaneous exploitation and exploration by the same people is related to the time constraints that the personnel are having. Furthermore, in contextual ambidexterity it may become challenging to find enough time for exploration, because running the existing business and taking care of the daily tasks and routines is naturally a must, reserving major portion of the resources. Alternatively, a suitable option may be the third perspective presented in the literature review: sequential ambidexterity. It means, that balancing between exploration and exploitation happens in cyclic periods (Gupta, Smith & Shalley 2006, 693-694), in different times (Chou et al. 2018, 753). Tushman & Romanelli (1985) have described sequential ambidexterity as a practice, where long periods of incremental change are followed by short bursts of radical change, forming a balanced, punctuated entity (Wenke et al. 2021, 660).

According to theory, contextual ambidexterity is often a better option for SMEs due to the limited resources, which is a barrier to structural ambidexterity (Iborra et al. 2020, 4, 12). However, limited resources and time constraints make also contextual ambidexterity challenging – yet possible – according to the empirical findings. Even though the resource scarcity of SMEs seems to be a concern in terms of business model innovation and ambidexterity, the liability of smallness is not always a disadvantage. In fact, smaller organizations may be more agile and flexible compared to large firms, and quick experimentations are easier to execute. Thus, compared to larger firms, SMEs may have better conditions to find the best possible structures, systems, and processes for their individual needs, through trial-and-error.

As a conclusion, based on the theory and empirical findings, it is obvious that both exploitation and robustness, as well as exploration and adaptability, are critical elements in organizational resilience. Thus, investing sufficiently in both activities is critical. Ambidexterity, referring to a simultaneous exploration and exploitation within an organization, helps to achieve organizational resilience as it builds suitable organizational surroundings to foster both robustness and adaptability. However, ambidexterity is not easy to achieve (March 1991, 72). Especially when seeking for contextual ambidexterity, organizational culture, vision, values and especially the members of the organization play



an important role in the endeavours to achieve ambidexterity capability (Markides 2013, 318-319).

The role of culture was highlighted particularly strongly in the empirical findings even though it was not included into the initial theoretical framework due to the structural limitations of the study. Similarly, the role of management was emphasized in the empirical findings of the study and thus, the role of management, leadership and organizational culture will be discussed in the next sub-chapter.

#### 4.3.4 Organizational culture, management and leadership building a strong basis for ambidexterity, innovation and resilience

In this sub-chapter, the importance of organizational culture, management, and leadership are discussed. Organizational culture and management can be interpreted as overarching themes because they seemed to be discussed along the interviews here and there, relating to organizational resilience, business model innovation and ambidexterity capability.

Both case companies highlighted the importance of organizational culture, which begins from the management. It is critical that the managerial level has a shared consensus of the future directions of the organization. Having a shared vision and common faith in the future is important because it is the management level who shows direction to the rest of the organization. If the organizational vision is unclear in the managerial level, it cannot be clear in the employee level either.

Furthermore, in the empirical findings participatory leadership was highlighted. Particularly in expert organizations, the knowledge, ideas, and thoughts of personnel should be fostered because the members of an organization are the most valuable asset and competitive advantage of an organization. Thus, this competitive advantage should be utilized in best possible manner also in relation to innovation. Managers should not only show the direction to the rest of the organization, but to build common trust, invest in clear communication and conversational culture where employees are motivated to share their ideas.

As argued by the Chief Growth Officer and the Managing Director from company Alpha, and by the Co-Founder and Director of Business Development from Beta, it is relatively easy to launch new systems or generate new business models but to implement them into practice is the challenging part. It is the human work that is needed to implement the

innovations and new business models and thus, the members of an organization should be at the core when thinking of how to enhance organizational resilience through business model innovation. The change is much easier to execute when the personnel is motivated towards the change, when the personnel understand the reasons for change and in the best scenario, when the personnel is motivated to innovate towards a change together within an organization. Thus, a participatory strategy work, where the personnel is actively engaged in forming and developing the strategy, is recommended.

As argued by the case company Alpha, building a solid foundation for implementing a change is always easier than breaking the change resistance down. Furthermore, the case company Beta states that whereas strategic reformation is a process of year or two, changing an organizational culture is a process of five to ten years. In other words, changing an organizational culture is not an easy task. In this respect, it is critical to proactively build and foster a healthy, collaborative organizational culture that is open-minded and flexible, favouring both exploration and exploitation, as the culture will not be transformed easily. Similarly, allowing employees to participate in the planning process from early on, supports the implementation of new strategies and business models significantly.

## **5 CONCLUSIONS**

In the first sub-chapter, theoretical contributions are presented. The second sub-chapter focuses on managerial implications and finally, in the third sub-chapter, limitations of the study and future research suggestions are discussed.

### **5.1 Theoretical contribution**

The aim of this research was to investigate how organizational resilience in SMEs can be enhanced through business model innovation and ambidexterity capability. A strong need was identified for the research to investigate the interconnection of organizational resilience, business model innovation and organizational ambidexterity in the context of SMEs. The motivation towards the research topic was enhanced by the fact that these concepts seem to be sharing many similar characteristics but previous research of all three constructs remains non-existent. The potential theoretical contribution on the organizational resilience and innovation management research was considered remarkable, because being able to form a clear, coherent entity of the three constructs would increase the understanding of how organizational resilience could be enhanced and on the other hand, to increase understanding of the benefits that business model innovation and ambidexterity capability can provide. The decision to focus on SMEs was made because according to the literature, when facing crises, small and medium-sized enterprises have more often challenges in terms of their continuity and survival compared to large companies (Davidsson & Gordon 2016, 916). Furthermore, SMEs' growth and innovation seem to be at risk in the long run (Kuckertz et al. 2020, 1).

Based on the literature review, a theoretical framework was developed. Based on the theoretical framework, an interview guide was formed to guide the theory-led data collection of this study. The aim was not to create theoretical generalizations but rather to build in-depth understanding of the research phenomenon and to contribute to the existing literature of organizational resilience, business model innovation and ambidexterity capability, which as an entity remains unstudied. Furthermore, the focus was not on the case companies themselves, but the cases were utilized more as instruments to understand the phenomenon itself. Through an extensive multiple case study research, it was possible to evaluate the existing theory in comparison to practice, to see whether the empirical findings support the existing theory in the context of SMEs.

In addition, space was left also for interviewees’ personal insights, allowing novel interpretations to emerge outside the initial theoretical framework that was structured in this study.

Based on the theory and empirical findings, a revised theoretical framework, which is illustrated in figure 6, was developed. It supports the initial insight, that the three constructs; organizational resilience, business model innovation and ambidexterity capability share major decisive components which are overlapping and by combining them, could form a clear, coherent entity, explaining how organizational resilience can be enhanced.

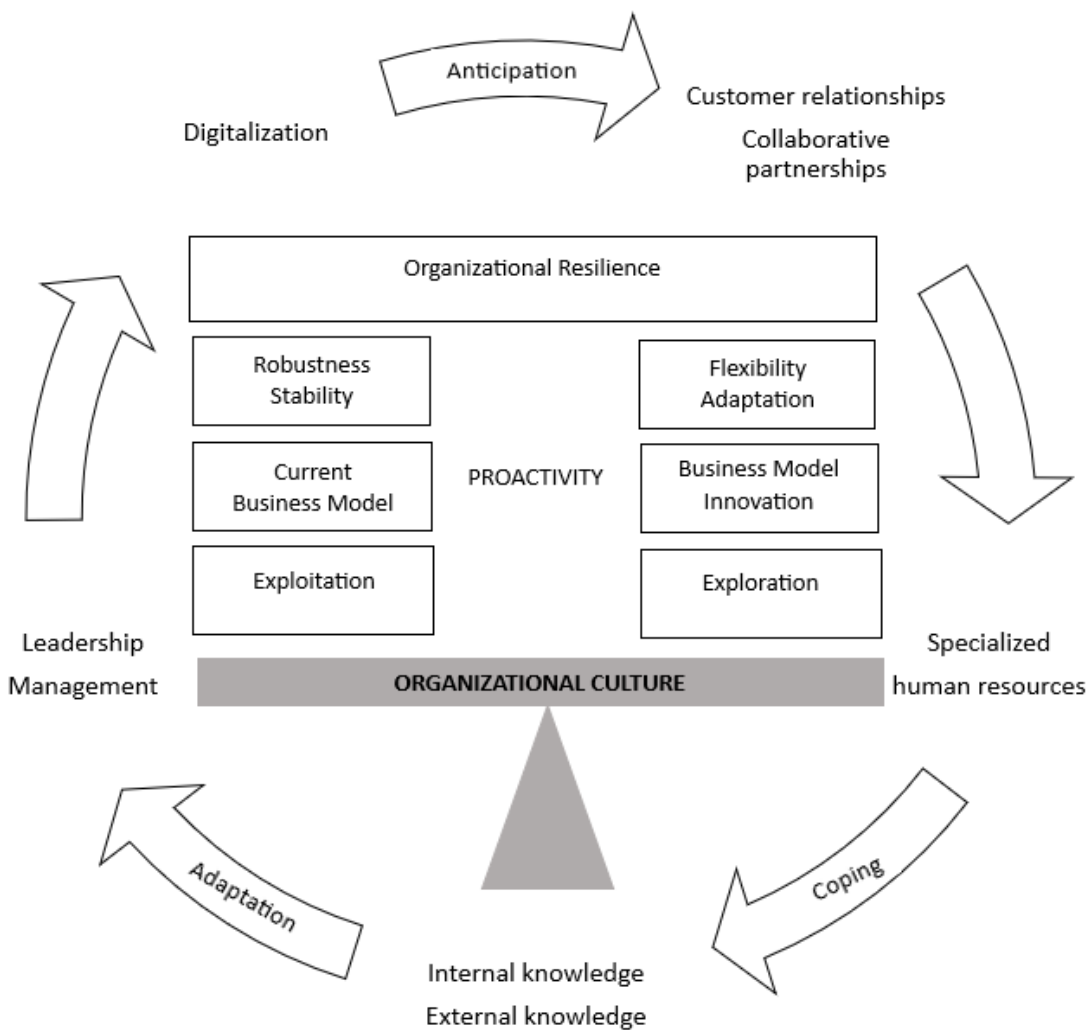


Figure 6 Revised theoretical framework

In the initial theoretical framework (figure 5 in sub-chapter 2.4), the core of the see-saw was ambidexterity capability. Based on the empirical findings, instead of having the

ambidexterity capability at the very basis, it can be argued that it is rather the organizational culture, that builds the basis for ambidexterity capability (in other words, balancing between exploitation and exploration), business model innovation and organizational resilience. Without including organizational culture, that supports innovation, reformation and renewal while running the existing business skilfully, one critical element would be ignored. The rest of the critical elements leading to organizational resilience are loaded on top of the organizational culture. Suitable organizational culture allows the execution of contrasting activities: exploitation and exploration. *Thus, according to this study, an organizational culture that is supportive towards innovation while carefully taking care of the existing business is a critical prerequisite that enables successful balancing between exploration and exploitation within an organization. This kind of culture is characterized by personnel's sense of community, willingness to collaborate, and positive attitude towards change.*

As previous literature argues, exploration and exploitation are completely contradicting activities (He & Wong 2004, 481), requiring contradicting skills, processes, and performance appraisals (March 1991, 71). This study further adds that without a proper organizational culture, it will be even more demanding to successfully balance between the contradicting activities of exploration and exploitation, as these activities require completely different skills and attitudes, and may create tensions within the organization. The recognition of the importance of both aspects needs to be firmly rooted in the organizational culture, as it unites the personnel, supports their acceptance towards changes and facilitates the resource allocation between the two activities from the perspective of human resources. Organizational culture is bolded in the figure, to illustrate its importance. It serves as basis of the whole system, and without a proper organizational culture, the organization cannot hold up the activities it should be conducting and this again, leads to weaker organizational resilience.

According to the previous literature, some scholars (see, for example, Duncan 1976; Tushman & O'Reilly 1996, 11; Lubatkin et al. 2006, 646; O'Reilly & Tushman 2008, 185-190) argue that organizations must develop ability to simultaneously engage in exploitation and exploration, whereas other scholars (see, for example, Parida, Lahti & Wincent 2016, 1160; Luger et al. 2018, 466) support the approach of dynamic balancing between these two activities. All in all, balancing between these contradicting activities of exploitation and exploration is called organizational ambidexterity (Duncan 1976;

O'Reilly & Tushman 2008, 185; O'Reilly & Tushman 2013, 330; Luger et al. 2018, 466; Wenke et al. 2021, 654).

In the revised theoretical framework, exploration and exploitation are presented as separate activities instead of describing them as ambidexterity capability, because the idea is to highlight their difference as contradicting activities, impacting on different dimensions of organizational resilience: robustness and adaptability. Exploration, on the right side, increases organizational flexibility and adaptation. Exploitation, on the left side, supports organizational robustness and stability. As the existing literature argues, exploitation is associated with routinization, bureaucracy and tightly coupled systems, whereas exploration refers to improvisation, autonomy and loosely coupled systems (He & Wong 2004, 481). Following this view, business model innovation illustrates the right side of the figure, impacting on organizational adaptability. This is in line with the existing theory, arguing that business model innovation, in itself, illustrates adaptable organizational behaviour (Chesbrough 2010; Johnson 2010, 9), whereas current business model operations illustrate the left side of the figure, enhancing organizational robustness. Without organizational culture that is supportive towards both activities, engaging in both activities in a balanced manner would not be possible.

Previous literature has pointed out, that two fundamental characteristics – robustness and adaptability – are seen as an integral part of resilience (see, for example, Horne & Orr 1998; Mallak 1998; Lengnick-Hall & Beck 2005, 738; Buliga et al. 2016, 653). Companies seeking for organizational resilience must develop capabilities that support both flexibility and robustness (Iborra et al. 2020, 2). This study supports the existing theory by arguing that together, the left side of the figure – consisting of exploitation, current business model and robustness/stability – and the right side of the figure – consisting of exploration, business model innovation and flexibility/adaptation form an entity, which in balance leads to organizational resilience. *Furthermore, this study aims that business model innovation enhances organizational resilience by contributing to the adaptability aspect of organizational resilience. However, adaptability alone is not enough to enhance organizational resilience. Moreover, the aspect of robustness needs to be taken care of, and this is supported by careful execution of the current, existing business.*

In the revised theoretical framework, the see-saw in the bottom illustrates, that both left and right side do not have to be evenly in balance. Organizational resilience will be enhanced as long as both sides are adequately balanced, and this does not mean that the time or resources are allocated equally in half. How much is invested in each side depends on the situation and context and an unambiguous answer cannot be provided for that question. This argument is in line with the existing literature, which states that engaging in both exploitation and exploration in a balanced manner leads to complementary returns (Luger et al. 2018, 466). What is situation and context dependent as well, is the type of ambidexterity. Whereas some scholars (Lubatkin et al. 2006, 646) recommend contextual ambidexterity for SMEs, other scholars (Wenke et al. 2021, 660) find simultaneous exploitation and exploration leading to weaker results in SMEs. Some scholars (Jansen et al. 2012, 1299) find ambidexterity less beneficial for small companies overall.

According to the existing literature, there does not seem to be a single, solid insight of the most appropriate approach how SMEs should pursue ambidexterity. This study is in line with the previous literature. According to the empirical findings, there is no single, precise answer of the most appropriate ambidexterity type for SMEs, as it depends on the situation and context. However, this study argues that if the focus is too much in either side, the system will collapse, and organizational resilience will suffer from the lack of either exploitative or explorative investments. *Even though it cannot be defined how the resources should be allocated between exploration and exploitation, this study argues that SMEs should pay attention particularly to sufficient investment in exploration, because due to limited resources of SMEs, exploration is more often overshadowed by exploitation.*

For SMEs with limited resources, it is a lower threshold to invest in activities that support robustness rather than adaptability, because exploitation and robustness is linked to benefits that become visible in a short term, supporting economic viability. Investing in exploration and adaptability again pays off in the long term, and the economic viability gained through the innovation can be identified only after a longer period of time, and in some cases, it may take many years. (O'Reilly & Tushman 2013, 325.) Furthermore, according to empirical findings, in some cases the need for exploration may be more challenging to identify, particularly if the current business is prospering at the moment. *Thus, SMEs should regularly ponder their long-term vision instead of implicitly trusting*

*on short-sighted plans, because in terms of resilience, long-term planning is extremely critical to support the longevity of the business.*

In the revised theoretical framework, around the circle, the most critical factors enhancing organizational resilience from the aspect of business model innovation, are mentioned. According to the literature review and empirical findings of this research, *the most critical resources that support business model innovation and can enhance organizational resilience are specialized human resources, internal and external knowledge, collaborative partnerships, digitalization, and especially close customer relationships and, leadership and management.* The existing literature argues that lack of formal knowledge management procedures, lack of specialized human resources and lack of clear, knowledge-oriented leadership challenge SMEs endeavours towards organizational resilience (Bivona & Cruz 2021, 3640). In the empirical findings, motivated, specialized human resources were strongly highlighted in terms of business model innovation, as the employees possess highly valuable knowledge gained through customer interaction, practical work, and considerable professional skills. Organizations should have capabilities to utilize this internal knowledge in the best possible manner. Furthermore, to put the business model innovation into practice, usually human work is needed and thus, human resources play a key role also in this respect.

Due to the resource scarcity, SMEs may benefit from collaborative partnerships when seeking for organizational resilience through business model innovation (Usai et al. 2018; Eriksson et al. 2022, 220). Collaborative partnerships often provide valuable knowledge, and an ability to leverage this external knowledge also supports organizations to achieve organizational resilience (Dezi et al. 2021, 366-367). The importance of strong customer relationships (Eriksson et al. 2022, 209) was highlighted particularly in the empirical findings, because customers are a highly valuable source of information, providing silent or louder signals implying the need – or possibility – for business model innovation. Furthermore, digitalization and smart utilization of data are seen as important factors, supporting for example product and production advancements within organizations. Thus, they are identified as beneficial in terms of business model innovation and organizational resilience. (Eriksson et al. 2022, 220.) Finally, the role of highly skilled leadership and management was discussed extensively in the empirical part of this research, and according to both case companies, it was seen as a critical factor enabling and enhancing business model innovation and organizational resilience.



Furthermore, in the revised theoretical framework, the see-saw and blocks on top of it are surrounded by a circle. This circle illustrates, that organizational resilience should be enhanced in a proactive manner, supporting the conceptualization of organizational resilience introduced by Duchek (2020, 220). This means that actions to enhance resilience should be taken not only at the moment of stressful or unexpected event and after it, but particularly before the issues in the internal or external environment become visible. Thus, the process of organizational resilience and its enhancement includes the stages of anticipation, coping and adaptation. In Duchek's (2020, 220) definition, the notion of anticipation is highlighted, and based on the empirical findings, this research similarly highlights the role of anticipation and proactivity when seeking for organizational resilience. Anticipation is critical when the aim is to increase organizational resilience through business model innovation because business model innovation is not a quick, simple process but rather requires time and effort. On the other hand, sometimes "time is money". In business model innovation, pioneering may bring great benefits in some cases and thus, entering to the markets with disruptive or radical innovation can fully change the competition. In this study, it is argued that *organizations, whether large or small, should invest in anticipation, sense the external environment and try to identify potential threats, opportunities or changes that may have a considerable impact on their business field. This is critical to keep pace with the business environment changes or more desirable, to be able to react ahead of the competitors and, potentially gain first-mover advantages through quick reaction, for instance.*

As a final conclusion, it can be argued that business model innovation and ambidexterity capability can enhance organizational resilience in SMEs. A supportive organizational culture builds a foundation for ambidexterity capability within an organization. Supportive organizational culture and ambidexterity capability together enable business model innovation in SMEs. Business model innovation contributes to the adaptability of an organization, which is one of the two critical dimensions of organization resilience. Furthermore, referring to the second critical dimension, in resilient organizations, certain level of robustness is needed, which is achieved through careful execution of the current business. Business model innovation enhances organizational resilience particularly by strengthening the long-term viability of the company. Companies that are focusing only on execution of the current business, are in a trap of short-sightedness, lacking long-term vision. Even the companies that are prospering today should pay attention to long-term

vision and consider possibilities for business model innovation, because the environment, where companies today are operating in, is characterized by continuous change and unexpected turbulence. As a result, business viability of an organization may be suddenly threatened, and companies should be prepared for such scenario.

## 5.2 Managerial implications

This research provides several managerial implications. Managers should understand that a central issue in organizational management is the culture of an organization. Organizational culture is the underlying prerequisite that builds a solid foundation to implement a company's strategy. If the strategy highlights the importance of innovation and ability to renew, the organizational culture should support this kind of ideology. *What managers should understand is that innovation within organizations is not self-evident. Being innovative, as well as implementing and executing innovation, is challenging. Building organizational capacity to innovate initially starts from the culture, and thus, managerial attention should be paid primarily on this aspect.*

Changing an unfavourable organizational culture is an arduous task. Thus, organizations should focus on developing values, beliefs and practices that impact positively on the members of an organization. When seeking for organizational resilience, the culture should support both robustness and adaptability. Building organizational values, beliefs and practices that allow fluent exploitation of the existing business and running the normal, daily business operations is as important as clearing space for innovation and developing new products, services, and business models. Finding a right balance between these two activities, exploitation, and exploration, leads to a proper balance between organizational robustness and adaptability – strengthening organizational resilience. This balance can be found through organizational ambidexterity capability, which again is enabled by organizational culture that is in line with and supports company's strategy. *Managers should acknowledge that in addition to solid organizational culture, certain structures, processes, and capabilities are required, to allow the execution of differing activities, exploration, and exploitation.*

*Furthermore, managers should pay attention to participatory leadership.* It can be argued that business model innovation enhances organizational resilience. However, as the empirical findings of this research show, innovating business models is relatively easy. The challenge comes from the implementation and execution of the novel business model.

Here, human work is in a critical role, and the personnel need to be motivated to put the innovation into practice. This can be supported by *activating employees already in the ideation and planning phase and engaging them in the entire process of change. Managers should have the skills to communicate internally within an organization why the change is essential, and why this business model innovation is needed.* Without skills, time, or motivation to build a shared understanding of why the change is mandatory, it is much more difficult to engage employees in this process. Behind all major changes, such as business model innovation, there is always a reason. Usually, this reason is clear in the management level. However, it should be made clear in the employee level as well. If employees understand the necessity of innovation, for instance in terms of business continuity or viability of an organization in the long run, they are more motivated, more willing to advance the change and even invest more of their personal time and effort to be innovative, to be more alert to external signals of potential opportunities and thus, contribute to the organizational resilience and long-term performance.

*Furthermore, employees within organizations could contribute to organizational resilience by developing their intrapreneurial activity.* In other words, employees within organizations should act as entrepreneurs, proactively seeking for ways to do things in a better way, to improve processes or generate new ideas aiming to accelerate innovation. Employees should take responsibility and enhance their activity, instead of passively waiting for guidance and instructions from above. In the 21st century, pursuing highly hierarchical organizational structures is not the case anymore and thus, sharing responsibility among personnel should be the direction where organizations are going. As stated in the empirical findings, in the ideal situation, staff is part of the management. Employees often possess highly valuable knowledge due to their expertise and wide-ranging field work. This knowledge and professional skills should be harnessed for strategy work, innovation, and development as it would potentially lead to promising new openings. Thus, employees should have the courage to actively present their ideas, thoughts, and opinions of the issues for the common good of an organization.

### **5.3 Limitations of the study and future research**

Four persons were interviewed for this research. One of the interviewees was a Co-Founder of the company, working as a Director of Business Development. Two interviewees were Directors, and one of the interviewees was a Senior Consultant.

Because majority of the interviewees were executives, certain issues may have been highlighted in the empirical findings, due to positions of the interviewees. For instance, the role of management and leadership may have been highlighted particularly strongly, because all the interviewees have subordinates and thus, they critically evaluate their personal impact on how organizational resilience could be enhanced through business model innovation and ambidexterity capability. Interviewing subordinates would potentially have led to dissimilar results. Furthermore, company Alpha, offers management, change management and strategical personnel solutions for their customers. They deal with customer issues related to organizational resilience and strategies. Thus, it can be expected than company Alpha has advanced level knowledge of the issues related to organizational resilience, business model innovation and organizational capabilities supporting innovation and resilience. Selecting case companies that do not have such an advanced knowledge base regarding resilience and how it could be enhanced, might lead to different findings. The company Beta however operates in the field of technology and thus, does not have similar kind of “home ground advantage”. Nevertheless, the findings of company Alpha and company Beta showed many similarities.

The research followed a deductive logic, where an in-depth understanding of the research topic was gained before conducting the empirical part of the research. However, space for induction was also left, to allow new insights emerging through the interviews. A semi-structured interview was used as a data collection method. The interview guide was constructed based on the theoretical framework and thus, pre-determined themes guided the interview. Selecting an inductive logic would have potentially led to other kinds of results, where different aspects would have been highlighted. However, selecting deductive logic was necessary, because the research topic was relatively unknown for the researcher, and familiarizing with the theory was critical to build understanding of the ambiguous, even abstract concepts examined in this study.

The focus in this study was in small and medium-sized enterprises. Two criteria were set for the selection of the case companies. Firstly, the company had to fit under the European Union’s definition of SME. Secondly, the company had to have conducted business model innovation at some level. The latter prerequisite was set because that would allow the investigation of the interlinkage between business model innovation and organizational resilience through the organization’s subjective experiences. An

alternative option would have been to select case companies, who have failed in business model innovation and to investigate, how the failure has impacted in the resilience level of an organization or, what was the role of organizational resilience in this failure. However, due to the sensitivity of the research topic, it might be challenging to find case companies who have failed in their endeavours to innovate business models.

Another interesting future research topic would be to focus on micro-sized companies or sole entrepreneurs, who have even less resources compared to small and medium-sized firms. Thus, the actual impact of resource scarcity towards business model innovation and organizational resilience could be examined. Alternatively, focusing on young established businesses would be an interesting focus group, offering new kinds of aspects in investigating the interconnection of organizational resilience, business model innovation, and ambidexterity capability. For instance, the logics of causation, effectuation, and bricolage could provide interesting perspectives on how entrepreneurs innovate business models, and what is the impact of these logics towards organizational resilience. In fact, as argued in the literature review, some SMEs have responded to crises by successfully adopting a bricolage approach, meaning that an enterprise utilizes its current tangible and intangible resources towards new problems or opportunities, and reconfigures innovation processes to create new products and services (Senyard et al. 2014, 211).

In the traditional model of entrepreneurship, the intention is to explain the entrepreneurial actions taken in order to find a potential entrepreneurial opportunity and evaluate whether it is worth exploiting. If the identified opportunity is taken further for exploiting, originally, the next step taken is to find all the needed resources to make the business function. (Fisher 2012, 1019.) According to Sarasvathy (2001), this is called causation. Another entrepreneurial approach towards exploitation of an identified opportunity is effectuation (Sarasvathy 2001). In effectuation, the focus is on resources that the entrepreneur is having at hand (Fischer 2012, 1019-1020). Furthermore, instead of making extensive pre-market research, target customers are defined based on who is buying the product or service. Rather than focusing on long-term goals and plans, the focus in effectuation is on the available set of means that the entrepreneur is having the control over. Here, the focus is on affordable loss – not on expected return. (Fischer 2012, 1024.) In a similar vein, entrepreneurial bricolage refers to an action-oriented, “hands-on” approach towards innovation. Accordingly, an entrepreneur creates something novel

of the materials or resources having at hand – potentially utilizing these materials or resources in an extraordinary way. (Fischer 2012, 1026.) Causation, effectuation, and bricolage could all be studied separately to compare how business model innovation following these approaches works, and how each of these innovation logics impact on organizational resilience.

## 6 SUMMARY

Today, companies are operating in an environment where increasing competition, continuous change, and turbulence, caused by internal or external factors, are a “new normal”. Thus, to ensure the continuity of the business, there is an increasing need for innovation. Companies that have the capacity to sense their environment, seize the emerging opportunities and transform their operations preferably quicker than their competitors enjoy a competitive advantage of organizational resilience. Companies need to re-innovate, change, and modify their business models more intensively than ever before to ensure long-term viability. However, adapting to ever-changing market needs and seeking for new opportunities from the market environment, in other words, investing in innovation is not enough to ensure organizational resilience. Companies need to foster certain level of robustness, to remain stable when facing crises or other unexpected events. Thus, finding a proper balance between robustness and adaptability is the true essence of organizational resilience. Robustness and adaptability are enhanced through contradicting activities of exploitation and exploration, and balancing between these activities is also called organizational ambidexterity.

The main research question in this study was how organizational resilience can be enhanced in SMEs through business model innovation and ambidexterity capability? The main research question was approached through the following three sub-questions: What are the main challenges SMEs face when seeking for organizational resilience? What resources are needed for successful business model innovation contributing to organizational resilience? How can ambidexterity capability help to achieve organizational resilience? The initial theoretical framework was constructed on the basis of the literature review, and it guided the collection of empirical data. The empirical part of the research was conducted as an extensive multiple-case study, and the data was collected qualitatively with semi-structured interviews. Two SMEs were selected as case companies, and from these companies, in total four individuals were interviewed. Three of the interviewees were executives and one interviewee was a senior consultant, all of them closely involved in business model innovation within their organizations. The themes presented in the operationalization table guided the within-case data analyses. Furthermore, the additional themes emerging from the interviews were included. Within-case analyses were followed by a cross-case analysis.

This study argues that organizational resilience can be enhanced in SMEs through business model innovation and ambidexterity capability. Business model innovation indicates an adaptive organizational behaviour, whereas taking care of the current business operations refers to organizational robustness. According to the literature and empirical research, the most critical resources that support business model innovation and contribute to organizational resilience are specialized human resources, internal and external knowledge, collaborative partnerships, close customer relationships, and digitalization. Furthermore, leadership and management were strongly highlighted in the empirical findings of this research, although it was not included in the initial theoretical framework. As said, business model innovation contributes to the adaptability aspect of organizational resilience and alone, it is not enough to build organizational resilience. Also, sufficient level of robustness is needed, and it can be achieved through running the existing, current business.

In other words, both dimensions, adaptability, and robustness, are essential elements of organizational resilience, and certain premises are required to allow successful balancing between the activities contributing to both dimensions. This can be achieved through ambidexterity capability, which means balancing between exploration and exploitation. However, to be able to obtain ambidexterity capability, organizations should cherish a culture that is supportive towards innovation, experimentation, and new openings, while simultaneously taking care of the smooth running of the current business procedures. This kind of culture is characterized by sense of community, willingness to collaborate and where personnel have a positive attitude towards change. The role of organizational culture was not included in the initial theoretical framework, but it was strongly highlighted in the empirical findings.

Organizational resilience, business model innovation and ambidexterity capability together form an entity that share various similar elements, forming a coherent entity that should be examined as a bundle rather than as separate constructs. By discussing of all these three constructs together, it is possible to build an in-depth understanding of the underlying factors that enable organizational resilience through business model innovation and balancing between exploration and exploitation. Regarding small and medium-sized enterprises, this knowledge is particularly important, because compared to large firms, SMEs are having more challenges to cope in times of crises or unexpected events. Furthermore, the growth and innovation of SMEs seems to be at a greater risk in



the long run, compared to large firms. As a conclusion, more knowledge is required how SMEs can enhance their resilience to ensure their long-term viability, and this study contributes to this need. The findings of this study are beneficial for small and medium-sized enterprises' management, increasing their understanding of the challenges and enabling conditions that SMEs face or need in their endeavours towards organizational resilience.

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## **Appendices**

### **Appendix 1 Interview Guide**

#### **BACKGROUND**

- 1) Could you please shortly introduce yourself, your professional background, and your current role in the organization?

#### **THEME 1: ORGANIZATIONAL RESILIENCE**

- 2) How do you understand the meaning of organizational resilience (in your organization)?
- 3) Which factors in your organization support the resilience level of your company?
- 4) Which factors in your organization lower the resilience level of your company?
- 5) Does your organization approach resilience in a proactive or reactive manner? In other words, do you anticipate potential threats/environmental changes or, are actions taken only when crises already occur?
- 6) What makes it challenging for SMEs to achieve/enhance organizational resilience in your opinion?
- 7) Guiding question: What is the role of specialized human resources in terms of organizational resilience?
- 8) Guiding question: How knowledge management has been organized in your organization to support organizational agility?
- 9) Guiding question: What kind of leadership would be supportive towards organizational resilience?

**THEME 2: BUSINESS MODEL INNOVATION**

- 10) Has your organization visualized a business model in a form of a chart? Is it available for all members of your organization? How do you understand the idea of a business model?
- 11) What kind of business model innovation has been executed in your organization?
- 12) What kind of major impacts business model innovation has had in your organization?
- 13) Which resources/capabilities have been the most essential allowing business model innovation?
- 14) Do you find collaborative partnerships useful in business model innovation?
- 15) Do you find digitalization necessary in business model innovation?

**THEME 3: ORGANIZATIONAL AMBIDEXTERITY**

- 16) Does your organization invest in innovation and exploring new opportunities? How does it show in practice?
- 17) How is your organization balancing between innovation and exploring new things versus focusing on the on-going business? For instance, does exploration and exploitation happen concurrently, within a single unit by same employees, or sequentially? Or do you have two separate units for exploration and exploitation?
- 18) What is the role of sensing, seizing, and transforming activities in your organization? How are they executed in practice?
- 19) What do you think could be the best way for SMEs to balance between innovating new and taking care of the existing business?
- 20) Which three factors would you name as the most important in terms of enhancing organizational resilience, from the point of view of balancing between adaptability and robustness, and utilizing business model innovation as an adaptive behaviour?