

## **Organizational Resilience and Crisis Management in SMEs**

A qualitative study on how small and medium-sized enterprises can build resilience and prepare for future crises in the dynamic and unpredictable business landscape of today

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# Abstract

This thesis looks at how small and medium-sized enterprises might create resilience and prepare for future disasters. The research question is, "How can SMEs build resilience and prepare for future crises?" In recent years, the business environment has seen a few crises, ranging from economic downturns to worldwide pandemics, all of which have had an influence on SMEs. It has become increasingly important for these organizations to develop strategies and capabilities that enable them to navigate and withstand such challenges.

The goal of this study is to discover and examine effective techniques for improving SMEs' resilience in the event of future crises. A qualitative research approach will be used to accomplish this. Semi structured interviews with SMEs' owners and managers will be conducted. The conceptual framework will be based on current literature on organizational resilience and crisis management. This framework will provide a foundation for understanding the key components of resilience as well as some of the techniques that SMEs may use to successfully prepare for future crises.

The findings of this research should hopefully add to the academic literature and have practical implications for SMEs. This research will provide some help for SMEs aiming to improve their resilience capabilities by identifying some effective practices and methods. Overall, the purpose of this thesis is to give some useful insights on how SMEs might develop resilience and prepare for future crises. Understanding the elements that contribute to resilience and experimenting with successful techniques may help SMEs improve their capacity to endure and recover from crises, resulting in long-term success and sustainability.

**Keywords:** SMEs, Resilience, Crisis, Organizational Resilience, Crisis Management, Anticipation, Coping, Adaptation

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# List of Abbreviations

<b>Abbreviation</b>	<b>Definition</b>
SMEs	Small and Medium-sized Enterprises
OR	Organizational Resilience
SC	Social Capital
DC	Dynamic Capabilities
BCM	Business Continuity Management
DRR	Disaster Risk Reduction
RBV	Resource-Based View
RCR	Responsible Conduct of Research
RE	Research Ethics
RI	Research Integrity

# 1. Introduction

The business landscape we are currently facing is particularly dynamic and unpredictable, as we have witnessed during recent global events. For small and medium-sized enterprises, the most critical factor for long-term survival and success in today's business world depends on their ability to navigate and resist crises of a different nature (Schweitzer, 2023). Regardless of the nature of the crisis, be it an economic downturn, global pandemic, natural disaster, supply chain disruption or any other external crises, SMEs face challenges unique to them due to their size, limited resources, and capabilities (Etemad, 2020). Consequently, the question of how these entities can increase their resilience and prepare for future crises has intrigued many scholars, policymakers, and practitioners alike, attracting significant attention to the topic (Saad et al., 2021).

## 1.1 Background and Relevance

In many nations, SMEs are crucial for fostering economic development, innovation, and job opportunities. They frequently compete in fiercely competitive markets and are subject to a variety of internal and external pressures that might seriously jeopardize their sustainability (Ndiaye et al., 2018; Obi et al., 2018). Two studies show that especially SMEs have suffered from crises, with many of them unable to recover and potentially having to cease operations after a crisis occurrence (Fairlie et al., 2022; Steinerowska-Streb et al., 2022). Their inability to quickly adjust to changing conditions, dependence on key suppliers or customers, and restricted access to financial resources all contribute to their susceptibility (Hendricks & Singhal, 2003; Polyviou et al., 2019).

We were intrigued and became inquisitive about this topic, and it was exciting to look at how small businesses can improve their resilience and successfully manage crises, given the rising frequency and severity of crises as well as the essential role SMEs play in national economies. Policymakers and business leaders can proactively devise measures to help SMEs' survival and growth by understanding the underlying reasons that contribute to their resilience, and the measures they use to overcome difficult times. Additionally, the knowledge we gathered from researching SMEs' resilience may be used to develop better practices, standards, and support systems that can help these businesses create a solid foundation that can endure future crises.



## 1.2 Research Question

Investigating organizational resilience and crisis management in small and medium-sized enterprises is the focus of our thesis. This thesis seeks to offer insightful analysis and useful suggestions that might support SMEs in their efforts to survive and grow in difficult times by examining the elements that lead to organizational resilience in SMEs and finding successful crisis management strategies. Thus, this study specifically aims to address the following research question we formulated:

*RQ: How can SMEs build resilience and prepare for future crises?*

Overall, this thesis seeks to contribute to the expanding body of knowledge in the field by highlighting the critical components of organizational resilience and crisis management that are unique to SMEs and getting a better understanding of the long-term survival of these crucial economic actors.

## 1.4 Structure

This thesis' remaining sections are structured as follows,

**Chapter 2:** Goes into further detail into the theoretical background of the study, beginning with the key concepts. The most comprehensive section of this chapter is the literature review, which examines the most pertinent research on the topic and also identifies some significant gaps in the literature. The presentation and explanation of our conceptual framework, which was chosen to serve as the basis for this study, concludes this chapter.

**Chapter 3:** The research approach and design are thoroughly described in this chapter, which is followed by sections on the sample plan and the techniques for gathering and analyzing the data. Finally, it explains the reliability, validity, and ethical issues that went into this research.

**Chapter 4:** This chapter provides the empirical findings gathered from the interview subjects in the interviews we conducted. This entails examining some of the responses and data more closely and comparing it with the components and elements of the conceptual framework.

**Chapter 5:** The most important part of the thesis. This chapter includes the presentation and discussion of the findings in chapter 4 and the research question of this study, while also linking the findings to the relevant literature from chapter 2.

**Chapter 6:** This chapter concludes the thesis by summarizing and emphasizing the most important findings and their implications, followed by addressing and providing a review of the study's limitations and suggestions for future research.

## 2.0 Literature Review

In this section, we present relevant literature and theories. In order to set the stage for subsequent reading, the key concepts for this subject are first defined and described. The most pertinent research on the research issue is presented in the second part's literature review, which also identifies knowledge gaps that this study aims to fill. The chapter concludes a presentation and discussion of the conceptual framework we developed to serve as the basis for this study.

### 2.1 Key Concepts

Three essential elements form the research topic for this study: *Small and medium-sized enterprises (SMEs)*, *resilience*, and *crisis*. The next sections provide a good foundation for further reading by defining and clarifying each term individually and outlining its key characteristics.

#### 2.1.1 Small and Medium-Sized Enterprises

Small and medium-sized enterprises (SMEs) are according to Gilmore et al. (2013, p. 88), “*SMEs are often defined by what they lack, namely resources (capital or human, a many-layered management structure, and access to international or complex markets).*” According to Batra et al. (2015), there is some variation in the number of employees required to be considered an SME. SMEs are predominantly considered in two different ways, less than 250 in the European context and less than 500 in the Indian context. We chose the EU context for SMEs that have fewer than 250 employees. This is because the EU has a less labor-intensive economy than India (Batra et al., 2015), and measuring with 250 or fewer employees will give a more accurate answer relevant for this research.

#### 2.1.2 Resilience

Resilience is a widely used term and has many different definitions depending on who is defining it. However, the most common way of defining resilience is as resistance toward a specific scenario or situation. From a management point of view, it is how an organization can prepare and build persistent advantages in uncertain times. What measures can be implemented to ensure that an organization will survive future uncertainties. Resilience from a management perspective is defined by Linnenluecke (2017): “*Resilience is generally seen as a desirable*

*characteristic for an organization (and for its members) to possess in order to deal with various types of adversity.”*

### **2.1.3 Crisis**

Pearson and Clair (1998) state that the word "crisis" refers to any unforeseen occurrence in which there is a potential for adverse effects as a result of the occurrence, which could limit firms from reaching their optimal strategy and goals (Smart & Vertinsky, 1984). Furthermore, unexpected events can arise both internally and externally for an organization, and they are often looked at from five different perspectives: the kind of event, time, place, frequency, and duration. In addition, the significance of its impacts on the organization, as well as the extent of those effects, may come as a surprise (Duchek, 2020). Kramer and Tyler (1996, p. 262) point out that crises have the potential to lead to both positive and negative organizational outcomes. According to Rosenblatt and Sheaffer (2002), the term "crisis" is often used to refer to an unfavorable occurrence. In the context of companies, the nature of a crisis is frequently hazardous for the life cycle of a firm; nevertheless, it may also include opportunities to get stronger.

## **2.2 Organizational Resilience**

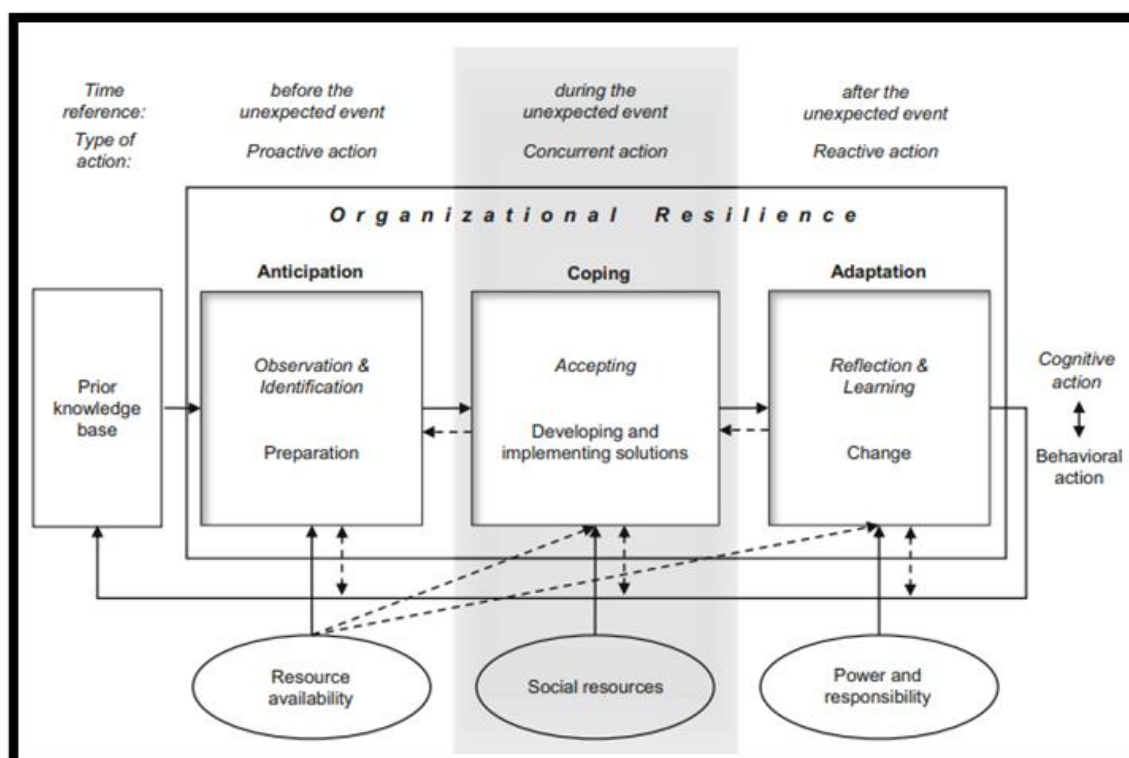
Organizations must build their resilience in order to be able to deal with unforeseen events, recover from catastrophes, and even promote future success in turbulent and uncertain times. Although there has been a steady increase in scholarly interest in organizational resilience in recent years, there is no agreement on what resilience actually entails and how it is made up (Duchek, 2020). Particularly needed is more information on the prerequisites for the development of organizational resilience (OR) skills.

Organizations will have to deal with unforeseen adverse events every now and then, like natural disasters, pandemics, or wars that cause volatile and uncertain periods. The unexpected can refer to a variety of dimensions or aspects, such as the type of event, its frequency, and its length of time, whether it occurs inside or outside of the organization. Organizations need to be able to deal with all of these expressions of the unexpected to thrive in unstable situations and support future success. Businesses must increase their resilience so they can respond to unforeseen circumstances and seize opportunities that if missed could endanger their survival (Lengnick-Hall et al., 2011). Dealing with unforeseen risks and catastrophes requires

resilience, which is a crucial success component. Resilience also contains an adaptability component (Madni & Jackson, 2009), which enables businesses to emerge from a crisis stronger than before, if handled correctly.

There are disagreements on the definition of resilience and the components it consists of (Duchek, 2020). This means that resilience is merely seen as an outcome when businesses handle crisis well or recover from setbacks (Horne & Orr, 1998). However, there is still confusion about what resilient organizations actually do and how it can be done in practice (Boin & van Eeten, 2013). The majority of study areas have created their own resilience definitions, conceptualizations, and metrics. Although there are several established definitions of resilience in the corporate setting, there is no shared understanding of the concept (Duchek, 2020). Organizational resilience, resilience ability, resilience potential, and resilient organization are some of the terms that researchers frequently use to describe the notion. We found the definition of (Vogus & Sutcliffe 2007, p. 3418) to be fitting of organizational resilience in which they define the term as *“The maintenance of positive adjustment under challenging conditions such that the organization emerges from those conditions strengthened and more resourceful.”* While this definition is focused more on adaptation of an organization during a crisis, other scholars are putting emphasis on resistance and recovery, or anticipation. The former (resistance and recovery) can be seen in the definition of organizational resilience by (Horne & Orr 1998, p. 31): *“Resilience is a fundamental quality to respond productively to significant change that disrupts the expected pattern of event without engaging in an extended period of regressive behavior.”* Finally, Somers’ (2009) interpretation of resilience is based on anticipation of risks and challenging times; *“Organizational 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.”* There is currently a shift in perspective from the traditional definition of resilience as a defensive response (resistance and/or recovery) found in many studies. As indicated, more recent research in particular broadens their horizons, focusing on a more proactive approach. They even use the idea of anticipation when describing resilience as a somewhat aggressive response (adaptation). Although some scholars go even further to describe different types of resilience, Duchek (2020) has incorporated these three perspectives into one definition of organizational crisis: *“an organization’s ability to anticipate potential threats, to cope effectively with adverse events, and to adapt to changing conditions.”* Overall, there are many different conceptualizations of organizational resilience.

According to Sutcliffe and Vogus (2003) several studies concentrate in particular on characteristics, assets, or behaviors that seem to set resilient companies apart from less resilient ones. As a result, it is unclear how resilient organizations may be structured or how resilience can be accomplished in practice. In order to address this problem, we will examine a framework for organizational resilience created by Ducheck (2020) in greater detail. The three sequential stages of resilience (anticipation, coping, and adaptation) suggested by Ducheck's (2020) framework provide a general overview of the underlying qualities that collectively make up organizational resilience. On the basis of this structure, the linkages and interactions between the various resilience stages as well as the key causes and motivators are examined. The framework's first phase outlines the resilient process and what it means to effectively adapt to unfavorable occurrences not just after, but also before and throughout them. Based on this process-based viewpoint, organizational skills that support the three resilience process stages and collectively make up organizational resilience can be found. As a result, it is possible to think of resilience as a meta-capability made up of a group of organizational skills and procedures that enable the successful completion of the three stages of resilience. An improved understanding of the nature and growth of a firm's resilience capacity is made possible by this focus on resilience capabilities. It is possible to gain a better understanding of resilient organizations' real behaviors by concentrating on their resilience capacities, routines, or practices. This can also help explain why certain organizations are more equipped to handle unexpected events than others (Ducheck, 2020).



**Figure 1.** A framework developed by Ducheck (2020) on capability-based conceptualization of organizational resilience.

Duchek (2020) had to broaden the search activities to other related fields like crisis management and innovation management in order to describe the capabilities behind each individual resilience stage as well as disciplines that address other resilience levels, because only a few studies have examined resilience capabilities in organizational resilience research. Following that, descriptions of anticipation, coping, and adaptation capabilities follow.

The capacity to foresee important changes in the company or its environment and to proactively adapt is referred to as *anticipation* (Somers, 2009). That being said, resilient organizations are not necessarily able to avert every failure or disaster. Crises frequently arrive without warning. According to Duchek (2020), some businesses are better than others at spotting the unforeseen and acting on it right away while others "wait and see". According to Ortiz-de-Mandojana and Bansal (2016), resilience requires the ability to observe and identify. They contend that in order for organizations to act quickly and prevent an escalation, they must identify early signs of a crisis. To describe these skills, they do so by using various ideas. For instance, Burnard and Bhamra (2011) make use of the idea of threat detection, which is associated with both the evaluation of operating conditions and environmental feedback controls. Additionally, some scholars pay attention to potential future developments and their significance in addition to the *observation and identification* of real changes and impending crises. For instance, scenario planning techniques can assist businesses in considering potential futures, even if they are improbable or unthinkable, and possible solutions (Hillmann et al., 2018). In general, observation and identification skills assist businesses in recognizing and responding to changes before their complete effects are apparent. (Duchek, 2020). For resilient organizations, *preparation* skills are crucial (Somers, 2009). According to Lengnick-Hall and Beck (2009, p. 3), organizations that are well prepared are able to manage unforeseen adversity and are prepared to take advantage of unforeseen chances. This implies that planning skills contribute to the creation of resources needed in emergency situations, not only to survive but also to capitalize on opportunities that arise with them. Gibb and Buchanan (2006) offer crucial insights on how businesses can get ready for major occasions. For instance, they propose that training and modeling procedures can guarantee the accomplishment of the advantages and goals of such plans. However, developed plans and formal processes alone do not adequately equip organizations to deal with the wide range of unforeseen events. According to Duchek (2020), preparation does not entail planning for the unexpected because it is not feasible to do so. Instead, the author explains that organizations prepare even though they are unsure of whether, when, or where an unexpected event will take place in the future. Overall, anticipatory

skills contribute to the development of resilience potential, which is "*resilience that is not presently evident or realized*" (Somers 2009, p. 13). The foundation for a successful reaction to urgent situations is laid by anticipation skills, which lead to the realization of resilience (Duchek, 2020).

The next section of Duchek's framework talks about coping capabilities, which are just as crucial as anticipating and preparing for significant occurrences. Resilience, in the words of Wildavsky (1988, p. 77), also refers to the ability to deal with unanticipated threats once they have materialized and recovered from them. There are other synonyms for dealing with unforeseen events in the literature, such as responding effectively to big change (Horne and Orr, 1998) or creating and putting into practice good adaptive behavior appropriate for the current circumstance (Mallak, 1998). The capacity to accept a problem and the capacity to create and put into practice solutions are two subcategories of the general capacity to deal with the unexpected, which is closely tied to crisis management (Jaques, 2007). These capabilities suggest quick or short-term responsiveness to unforeseen situations (Madni & Jackson, 2009). According to Duchek (2020), the idea that *accepting* the problem is the first step in dealing with unexpected events has been put forth in the literature on individual resilience. This phenomenon is referred to as "the cognitive challenge" at the organizational level (Hamel and Vaelikangas 2003, p. 54). Critical events, despite the fact that they are predicted, are said to frequently come as a surprise because organizations seek solace in denial (Duchek, 2020). Organizations take too long to recognize and respond to those events, which often can have negative effects. Organizations must learn how to tolerate issues for this reason. Only then will they be able to respond rapidly in urgent situations (Duchek, 2020). The next step in the coping bracket (see figure 1) is *developing and implementing solutions*. Organizations must implement their crisis plans when a crisis arises and create the appropriate responses (Pearson & Clair, 1998). Creating solutions in the face of a crisis always involves both acting and sensemaking (Weick et al., 2005). Sensemaking, according to Duchek (2020), is when people or organizations attempt to hold each other and themselves accountable for their actions. People can only respond to a crisis if they are aware of it. Duchek (2020) highlights the necessity of ongoing feedback between knowledge and action, which implies that sense must continually be formed and reconstructed, for effective sensemaking. Yet, developing solutions requires coordination as well as the production of ideas. Both formal and informal coordination methods are crucial in times of extreme difficulty when decisions must be taken quickly, and mistakes could have grave repercussions (Faraj & Xiao, 2006). Conversely, businesses require formal



structures and defined roles for swift decision-making and prompt action (Duchek, 2020). Faraj and Xiao (2006) contend that in order to manage distributed information and ensure the timely application of the required skills, expertise coordination strategies (such as reliance on protocols and knowledge sharing) are essential. Furthermore, they contend that dialogic coordinating techniques, such as joint sensemaking, cross-boundary involvement, and protocol breaching, are essential in ensuring successful operations in the face of unforeseen circumstances. In general, the capacity to create solutions enables coordinated group responses to unfavorable occurrences. Yet doing so also necessitates actually putting the developed ideas into practice (Duchek, 2020). Nonetheless, research demonstrates that recently created solutions, no matter how thoroughly they are constructed, do not necessarily result in changes in the organizational patterns of activity (Pentland and Feldman, 2008). The developed solutions must be broadly embraced and used in order to ensure actual changes. Thus, the backing of the entire firm is required (Duchek, 2020).

The third phase of this framework are adaptation capabilities. The capacity to adjust to adverse circumstances and take advantage of changes is another aspect of resilience. Two categories of capacities are involved in adaptation: the capacity for *reflection and learning* and *organizational change* capabilities (Duchek, 2020). The former, discusses how behavior and cognition are both necessary for making use of failure for one's own goals. On the one hand, organizations need to be able to analyze the crisis situation and add the new knowledge to their body of knowledge. Yet, they must also be able to use this information to make a change (Edmondson, 2002). Daudelin (1997) shed light on the precise function of reflection in the learning process. In the reflection process, for instance, he proposes four stages: articulation of the problem, analysis of the problem, creation of a theory to explain the problem, and action. She also lists many reflection techniques that could aid in learning from experience (such as casual conversations with friends or co-workers or problem-solving sessions). According to two studies, businesses can get knowledge from incidents that their competitors or comparable businesses have indirectly encountered (Kim & Miner, 2007; Madsen, 2009). Kim and Miner (2007) demonstrate, with a focus on the banking sector, that even instances of near failure can result in vicarious learning. But up until now, there has not been much scientific study on how unexpected situations affect vicarious learning (Duchek, 2020). It's not always true that effective vicarious learning from failed experiences can be achieved. Organizations frequently concentrate on current failures, rather than doing in-depth analysis and identifying harmful latent conditions (Haunschild & Sullivan, 2002). Because of this, businesses frequently

produce new information (lessons learned) yet fall short of implementing these new behaviors. Organizational transformation is the second adaptive capability. It is critical to put previously obtained knowledge into practice if you want to bring about organizational change. An organization must be able to use a newly created solution and apply it to each of its component elements. Changes in management abilities are required to make that happen. Organizations must also be conscious of the possibility that implementing new knowledge could result in fresh issues or call for more adjustments (Duchek, 2020). Because of this, resilience depends on how change is handled. Change brought about in reaction to unforeseen occurrences may encounter various forms of opposition, just like any other organizational change. Hence, adaptation entails overcoming resistance to change in addition to implementing substantial changes (Dayton, 2004).

The three stages of resilience can be thought of as building blocks, with anticipation influencing coping and coping influencing adaptation. According to Duchek (2020), businesses must build the meta-capabilities of organizational resilience, which are the capabilities of all three resilience stages combined. These skills enable the early detection of risks and the implementation of preventative measures. Organizations must also build a high resilience potential as well as the capacity to actualize and continually improve this potential if they are to reach high levels of resilience. Why some businesses are more adept at handling crises than others can be explained by the combination between potential and realized resilience (Duchek, 2020).

The three resilience stages can be said to always include cognitive and behavioral components, and the successful completion of each stage depends on the interaction of cognitive and behavioral capabilities and actions. For one to comprehend environmental developments and arrive at the best judgments, one needs cognitive abilities (such as mindfulness, sensemaking, and critical reflection), (Duchek, 2020). The use of resources and the execution of necessary tasks are ensured by behavioral capabilities (such as improvisation, experimentation, and knowledge implementation), (Duchek, 2020). When considering the conceptualization, Duchek (2020) states that each resilience stage necessitates cognitive actions to produce and select action alternatives as well as behavioral actions to put the best action alternatives into practice and effectively handle the crisis scenario. This indicates that only when cognition and behavior are working together can resilient organizations form.

Contextual variables affect the organizational skills that underlie the three resilience stages. As resilience skills are exceedingly complex and intricately entwined with social contexts, defining the necessary circumstances and factors for their completion and development is by no means an easy task. Yet, some primary antecedents (knowledge base) and drivers (resource availability, social resources, and power/responsibility) are particularly significant (Duchek, 2020).

Resilience is a basic organizational skill that is geared toward organizational progress, according to Duchek's (2020) framework and analysis. It makes it possible for businesses to withstand pressure, be innovative, and quickly adjust to changes. Consequently, resilience should be intentionally fostered as it may be a significant source of long-term competitive advantage. Additionally, it could be demonstrated that resilient organizations can only be achieved by combining the capabilities of all three stages (Duchek, 2020).

### **2.2.1 Organizational Resilience in SMEs**

According to research that links entrepreneurial solutions to strategy renewal with organizational resilience, SMEs resilience is a crucial antecedent to larger local, regional, and national economic resilience (Chan, 2011; Suire & Vicente, 2014). Organizational resilience and its antecedents are similarly understudied in the SME setting (Bhamra et al., 2011; Polyviou et al., 2019; Verreynne et al., 2018), with additional empirical evidence required (Linnenluecke, 2017). For example, Verreynne et al. (2018) claim in a recent editorial that there is little study concentrating on the response of SMEs to external adversity and how the subsequent repercussions connect to organizational recovery, responses, and resilience. These writers also emphasize the amount of conceptual growth and theory building that can be found not only in their special issue, but also in the greater body of literature on organizational resilience (Verreynne et al., 2018). In a review of the resilience literature, Bhamra et al. (2011) argues that there is a need to investigate how SMEs might build resilient traits through network collaboration. Polyviou et al. (2019) investigate mid-size manufacturing enterprises and argue that more research is needed to discover whether SMEs have different resilience-enhancing resources or capacities than mid-size firms. This gap may be crucial to close because SMEs may be more vulnerable to adverse events due to resource restrictions not often experienced by bigger enterprises, such as liquidity, access to financial resources, and a more hostile policy environment (Hendricks & Singhal, 2003; Polyviou et al., 2020). Conversely, even though there is a lack of comprehensive literature on the definitions, metrics, and factors influencing

the notion, interest in business resilience research has significantly expanded in the academic community. Particularly after the global financial crisis of 2008–2009, scholarly interest in publications on SME resilience has increased (Saad et al., 2021).

Small and medium-sized firms (SMEs) face particular challenges in terms of resilience because their structure makes it difficult for them to overcome external disturbances (Sánchez-García et al., 2023). Because of their small size, SMEs may struggle to anticipate and prepare for disruptive events (Sullivan-Taylor & Branicki, 2011; Weick & Sutcliffe, 2015), making them more vulnerable to disruptions and making mitigation, response, and recovery strategies more difficult (Pettit et al., 2010; Sullivan-Taylor & Branicki, 2011). Nonetheless, due to their small size, lean organizational structure, and specialist business focus, SMEs may be more responsive to unexpected environmental changes than bigger enterprises (Burnard & Bhamra, 2011; Sullivan-Taylor & Branicki, 2011). Evidence also suggests that SMEs can mitigate the impact of disruptions by developing various types of social capital (SC), as the resources embedded in connections allow them to respond to adverse events (Martinelli et al., 2018; Prasad et al., 2015).

Although Herbane (2018) agree that organizational resilience refers to the capacity to respond to and recover from a sudden shock or interruption, it is unclear whether and how SMEs differ in terms of the formalization of both strategic planning and crisis management planning, the latter of which has the potential to increase organizational resilience (Herbane, 2018).

#### *Organizational resilience through social capital and dynamic capabilities*

According to Herbane (2018), he states that several researchers have looked into the relationship between social capital (SC), dynamic capabilities (DC) and organizational resilience in SMEs. SC is dynamic, dependent on network growth, and influenced by environmental unpredictability, which may include market shifts, competition, and unforeseen occurrences such as severe operational interruptions (Herbane, 2018). Personal networks and the embedded social connections between actors are crucial to SC (Bourdieu, 1986; Nahapiet & Ghoshal, 1998). The essence of social capital, according to Taylor et al. (2004), is that network interactions, encompassing family, friends, casual contacts, and even contact with strangers, constitute a rich resource in terms of knowledge, information, and support. This statement highlights the significance of relational links.

In order to respond, adapt, and recover from the disruption, SMEs have also tried to creatively handle problems like Covid-19 using internal and external resources (Ai & Peng, 2021) and dynamic capabilities (DC) (Dyduch et al., 2021). DC might be more crucial than standard operating procedures for which routines can be devised in the event of pandemic-like disruptions (Manfield & Newey, 2018). By facilitating the reconfiguration of a firm's existing resources and capabilities to identify and grasp market opportunities, DC enables responses to new, complicated challenges (Teece, 2007; Teece et al., 1998). Additionally, it has been discovered that the coping mechanisms used by SMEs in times of crisis come before the emergence of dynamic capabilities that change their commercial endeavors and target markets (Macpherson et al., 2015).

Social capital is an important resource that SMEs can use to access the resources hidden in internal and external relationships to adapt to disturbances, but it is unclear how SC facilitates organizational resilience (Ozanne et al., 2022). Dynamic capabilities are suggested by Ozanne et al. (2022) as the primary sensing, seizing, and reconfiguration of resources that convert SC into organizational resilience using middle-range theory. Additionally, their findings from a sample of SMEs from Australia and New Zealand show that internal SC has a favorable impact on external SC (customer-focused). Organizational resilience is only directly impacted by internal SC. The link between internal and external SC and organizational resilience is partially and totally mediated, respectively, by DC (Ozanne et al., 2022).

#### *Other resilience measures in SMEs*

According to Runyan (2006) and Johnson et al. (2013) illustrates how SMEs can build resilience by including measures such as formal strategic planning, which has been demonstrated to improve performance in SMEs, and that formal resilience-enhancing activities like business continuity management (BCM) improve SME capacity to respond to and recover from acute crises (Herbane, 2015). Herbane (2013) claims that BCM is a methodical process that businesses employ to set up certain structures, roles, processes, and resources in order to get ready for and react to significant operational interruptions.

The resilience of organizations and their potential to thrive after a crisis have also been found to be impacted by factors such as firm location, external crisis events, entrepreneurs' personal networks, and their attitudes toward the formal prevention of a crisis (Cope & Watt, 2000; Fang et al., 2010; Herbane, 2015; Coates et al., 2016). Additionally, according to García et al. (2020), operational and managerial coupling practices are essential to creating organizational resilience

in SMEs. According to Sánchez-García et al. (2023), employing various types of control can help SMEs become more resilient as an organization. Finally, prior research from Morris and Jones (2020) reveals that SMEs employ an entrepreneurial strategy that comprises engaging in risk-acceptance and opportunity-seeking behaviors to generate value for a variety of stakeholders in response to disruptions.

## **2.3 Crisis Management**

Organizational crises are a direct result of uncertainty in the corporate environment. Businesses must manage these contingencies regardless of the sort of crisis if they want to endure over the long term (Adikaram & Surangi, 2020). Crisis management is described as "*the discipline of preparing the resources and organizational structures necessary to respond effectively in the face of a crisis and recover effectively in the aftermath*" (Vargo & Seville, 2011).

### *Crisis management typologies*

Salamzadeh (2022) argues that organizational scientists and management experts have categorized crises using a variety of continuum and categories, including but not limited to three different ways. First, crises are defined as highly unpredictable events that can happen in any setting, including those that are social, environmental, organizational, and individual; significant and minor; internal or external; economic or non-economic; natural or caused by humans (Salamzadeh, 2022). Sfakianaki et al. (2015) argues that daily workplace volatility could potentially be classified as a type of crisis, however most management studies scholars view crises as being extraordinarily unpredictable events. Three management researchers, instead, refer to these problems as conflicts, disputes, debates, or major disagreements (McConnell, 2003; Wang et al., 2009; König et al., 2020). In a different strategy, crises could manifest at the level of the individual, the organization, and the societal or environmental context (Sabbag, 2018; Branicki, 2020).

According to another typology (Ooi et al., 2017; Tagarev & Ratchev, 2020), crises can be immediate or progressive. While progressive crises might be noticed and addressed before they turn into significant issues, unexpected crises come suddenly when managers and organizations are not prepared to handle them. A different method categorizes crises as large or small (Wright, 2017; Doern et al., 2019). Minor crises could be handled more effectively and hence be viewed as less difficult, whereas major ones are complex and more problematic. According to Salamzadeh (2022), companies may be less likely to have significant crises and are less

likely to fail if they have the necessary policies and procedures in place. Managers may also need leadership abilities to manage major crises. In an intriguing approach, three researchers also take a look at the causes of the crises in addition to these typologies. According to them, internal crises arise and are typically handled within organizational boundaries, but external crises are imposed on organizations from outside those bounds (Vignal Lambret & Barki, 2018; Bhaduri, 2019). To manage the first type, managers need more technical and interpersonal skills, whereas to handle the second type, a set of tasks like market analysis and environmental scanning are needed. Economic crises are also divided into different categories (Li & Hersh, 2002; Su et al., 2019). Since they influence both the economic aspects of people's lives and the operations of organizations, economic crises like recessions, stagnations, stagflations, and similar events are better known than non-economic ones like storms and earthquakes. The natural and man-made crises are last but certainly not least (Nasr & Zhen, 2019; Zhai et al., 2020). Most natural crises are covered by force majeure clauses in term sheets and agreements, but managers and organizational leaders are responsible for handling crises that are caused by people.

#### *Crisis management approaches*

According to Tagarev and Ratchev (2020) crisis management strategies have already been put out by authors from various professions. In a recent study, Vašíčková (2019) divided these strategies into two primary streams: proactive (pre-crisis) and reactive (during and after a crisis). The first approach stresses a set of guidelines to assist the impacted organizations in emerging from the crisis and regaining stability whereas the second method places more emphasis on developing pertinent procedures and principles before facing the crisis (Brzozowski & Cucculelli, 2016). The first strategy typically begins with determining the type of crisis, after which the crisis management process is started (Paraskevas & Quek, 2019). The second strategy, on the other hand, focuses on foreseeing crises before they occur and begins by identifying a number of probable crises and developing appropriate strategies to cope with them (Mojtahedi & Oo, 2017). In a different study, Sahin et al. (2015) recommended a larger range of crisis management strategies, including proactive, reactive, interactive, and fleeing options. Managers attempt to list a series of crises and their effects in the first method, which is similar to a proactive strategy, in order to identify the escape situation before an incident (O'Connell et al., 2016). The second strategy is likewise comparable to a proactive approach to crisis management in that it calls on managers to anticipate potential issues and specify a range of alternatives to address them (Münzberg et al., 2016). The third strategy is more all-

inclusive because it incorporates both escape and solution strategies. They contend that this strategy comprises risk analysis, decision-making, crisis team creation, information provision, and warning analysis (Kitchin & Purcell, 2017). The final two categories bear a closer resemblance to the reactive strategy (Cakar, 2018). When a sudden crisis affects the organization, both reactive and interactive strategies are applied. These strategies enhance an organization's cycle of learning by educating managers on how to handle upcoming crises. It should be highlighted, nonetheless, that both of these strategies have a higher likelihood of being risky and expensive (Thomas et al., 2016; Varma, 2020).

### *Crisis management processes*

To demonstrate how a typical crisis is or should be addressed, two approaches have been offered. According to Sahin et al. (2015), these processes often involve prediction, prevention and preparation, property determination and control, recuperation, and learning stages. Using five phases: signal detection, preparation/prevention, containment/damage limitation, recovery, and learning, Pearson & Mitroff (1993) presented a simpler paradigm for managing crises. Because their conceptualization of the process is simple and obvious, it is possible that it does not fully capture how crises are handled. Likewise, technological developments like social media platforms (Stewart & Wilson, 2016), more complicated crises like the Covid-19 pandemic (Kuckertz et al., 2020; Bailey & Breslin, 2020), as well as contextual factors (Hällgren et al., 2018; Kawamorita et al., 2020), have fundamentally altered the traditional processes of crisis management. In light of this, a recently proposed framework may better address the requirement for crisis management. For instance, Doern et al. (2019) proposed a six-phase event sequence based on Buchanan and Denyer's (2013) perspective to assess and handle a crisis. According to such a viewpoint, the first stage is referred to as pre-crisis or incubation, and a crisis comes after that. The appropriate decisions are then made, and crisis response management is carried out. The following stage is the investigation, during which management looks into the causes of the situation. The following phase, in which the organization and its members increase their comprehension of the earlier phases, will involve organizational learning. After managing the crisis, the implementation phase will finally begin. Although some of the crisis management literature has previously attempted to conceptualize crisis management processes, more recent research indicates that crises have grown more complex, making the idea of proposing a singular crisis management process unreasonable (Tagarev & Ratchev, 2020; Zhai et al., 2020).



### 2.3.1 Crisis Management in SMEs

Crisis management planning in the context of small- and medium-sized organizations (SMEs) is less thoroughly researched, despite a long-standing crisis management literature that concentrates on large enterprises (Herbane, 2013). Over the years, according to Herbane (2013) academics have focused mostly on management strategies for dealing with the incidence of crises and operational disruptions in large organizations. The early literature on small business management does, however, show fragments of attention toward a concept of crisis management in smaller corporate entities (Herbane, 2013). Literature by Spillan and Hough (2003, p. 400) has acknowledged the scarcity of studies on formal crisis management planning in small businesses. They noted that “*historically, crisis management scholars have focused on larger organizations with little relating this discipline to smaller businesses*” in the preamble to their quantitative analysis of 162 US corporations. According to the study, SME managers are more concerned about crises as a result of their own problems than as a result of the existence of a formal crisis management team, and respondents with experience in crisis management are more concerned about crises. In small businesses, the study also reveals that managers pay little attention to crisis planning.

Small and medium-sized enterprises account for more than 90% of all firms, making a substantial contribution to national output and employee empowerment (Khalique et al., 2011; Sardana & Dasanayaka, 2013; Kato & Charoenrat, 2018). As a result of their substantial contribution, SMEs are regarded as the backbone of every economy (Romme, 1997). These statistics highlight how crucial SME crisis management research is in the organizational setting.

According to Adikaram & Surangi (2020) in academic research crisis management studies have gotten a lot of attention. Additionally, as mentioned earlier, SMEs received inadequate attention compared to larger firms. Thus, the concerns of what has been done in SME crisis management research and what tendencies have marked this scarcity in research arenas, which Adikaram & Surangi (2020) addresses. They answered these queries by analyzing the empirical studies that have already been done in the literature on SME crisis management. 181 research publications on SME crisis management since 2000 have been considered in their review. The key themes in the literature on SME crisis management that emerged from the compilation of research findings from prior studies and data synthesis were crisis preparedness measures, crisis impact on SMEs, and SMEs' strategic approach.

Existing research areas	Areas with less research
<ul style="list-style-type: none"> <li>• Crises were identified as a threat.</li> <li>• Identify the associated risk/ crisis impact on SMEs.</li> <li>• Highlighted the reactive behaviour of SMEs.</li> <li>• Indicated the cognitive learning approaches.</li> <li>• More quantitative studies.</li> <li>• More studies were conducted based on developing economies.</li> <li>• All industries were considered.</li> <li>• Mainly the data were collected through self-reported information.</li> </ul>	<ul style="list-style-type: none"> <li>• Crisis as an opportunity.</li> <li>• Strategic approach for SME crisis management.</li> <li>• Strategic management approaches that could expand the resource base.</li> <li>• Participatory learning approaches.</li> <li>• Comparatively less qualitative studies.</li> <li>• Lesser studies were based on developed nations.</li> <li>• Industry-specific studies were limited.</li> <li>• Data reporting through a third party.</li> </ul>

**Table 1.** Gaps in the SME Crisis Management Literature (Adikaram & Surangi, 2020)

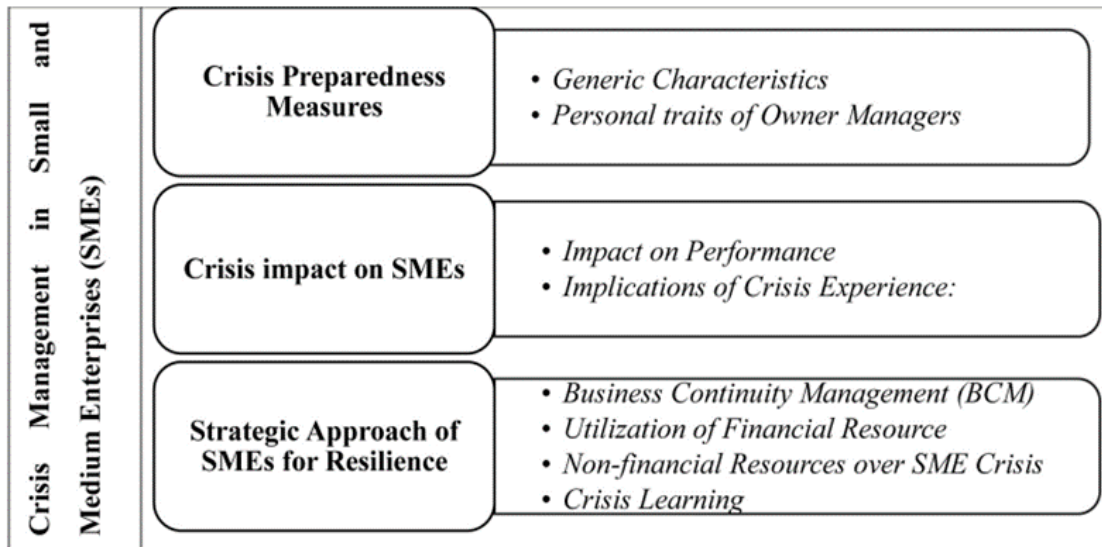
The gaps in the literature were shown by further exploration of the research findings through the themes that had been identified, and these findings indicated the need for future research with a greater organizational perspective, crisis experience that leads to crisis learning, crisis learning as a strategic approach, and networking as a social coping strategy (Adikaram & Surangi, 2020).

According to three scholars, SMEs are more susceptible to crises than bigger firms are (Herbane, 2013, 2010; Kato & Charoenrat, 2018). When faced with crises like natural disasters, socio-political turmoil, and severe economic shocks, these entities are more fragile and sensitive than major enterprises (Etemad, 2020). According to Salamzadeh and Dana (2020) they investigated a sizable amount of research that has concentrated on detrimental impacts including failures, failed contracts, resource restrictions, and similar setbacks. Several SMEs have been forced to scale back operations, terminate employees, incur losses, and even close after a crisis, but those same crises have also served as catalysts for the identification and utilization of new opportunities. For example, in response to the current Covid-19 pandemic, some South Korean SMEs modified their business plans and presented new products and services to newly identified customers (Salamzadeh & Dana, 2020). The acts of such SMEs,

who discovered numerous entrepreneurial opportunities, have given rise to terms like "disaster entrepreneurship" (Linnenluecke & McKnight, 2017; Aldrich, 2018). However, business researchers do not always adhere to these methods (Hillmann, 2020). As a result, a new study stream can be created by looking at publications on how SMEs have handled crisis. It will discuss potential ways for reducing the dangers of crisis mismanagement (McGuinness & Hogan, 2016; Demirgüç-Kunt et al., 2020).

Judging by the history of global crises, SMEs have had and continue to have significant problems handling local, national, and international crises (Doern et al., 2019). Thus, it is crucial to research how crisis management is carried out by SMEs (Eggers, 2020). According to Kurschus et al. (2017), a lot of research has concentrated on the financial and economic ramifications of such crises and how those effects have affected various areas of SMEs. Additionally, researchers are looking into topics like crisis planning (Almudallal et al., 2016), safety and security concerns (Herbane, 2019), and recovery (Iborra et al., 2020). However, little is known about how these entities prepare, formulate plans, act, react, recover, and occasionally expand prior to, during, and following crises (Eggers, 2020). Most people, however, prefer to deal with crises as they arise because they believe that crisis management is both expensive and time-consuming. As a result, they devote more time and resources to managing than they would by planning (Herbane, 2019). Additionally, it is possible that they lack the knowledge and resources to handle the problems, especially in terms of their managers. A small number of SMEs have crisis management teams and plans, as Mikušová and Čopíková (2017) have already demonstrated. As a result, when a crisis arises, they are not surprised and puzzled (Williams, 2016). Two studies have already examined the link between SMEs and crisis management. The resilience and capacity of SMEs to deal with natural disasters, such as extreme events, have been the subject of primary research in this area (Sullivan-Taylor & Branicki, 2011; Wedawatta et al., 2014). These studies reveal that SMEs are less prepared than larger businesses. Additionally, due to their larger reliance on sophisticated technology infrastructures, SMEs are more likely to endure significant outages during crises (Nair et al., 2019). One newly published study on how SMEs have handled crisis is the work of Herbane (2019). He divided SMEs into four types based on how they approach crisis management, including attentive interventionists, light planners, rooted strategists, and dependent neighbors. Additionally, recent research has paved the path for SMEs to become more resilient and prepared to handle potential crisis situations in the wake of the Coronavirus pandemic and its severe consequences on SMEs, according to Herbane (2019).

As mentioned earlier, a recent study of the pertinent literature from earlier theoretical and empirical studies on SME crisis management was conducted by Adikaram & Surangi (2020). Three key topics emerged from the process of selecting 26 high-impact articles: *Crisis Preparedness Measures*, *Crisis Impact on SMEs*, and *Strategic Approach of SMEs for Resilience*.



**Figure 2.** Main research areas for crisis management in SMEs (Adikaram & Surangi, 2020)

Overall, the data synthesis in those research papers produced eight sub-themes in addition to the three main themes that were found, as shown in the table. We will examine each one more closely and go into greater detail about the topics.

### *Crisis Preparedness Measures*

The attributes of SME owner-managers and general characteristics can both be used to define the characteristics of SME crisis preparedness. Therefore, generic characteristics refer to the unique traits of the organization. Under the category of personal qualities of owner-managers of SMEs, the charisma unique to people can be discussed (Adikaram & Surangi, 2020).

### *Generic characteristics*

Prior empirical research was important and revealed the limited resources of SMEs. Among them, tight budgets are a major issue (Pathak & Ene, 2017; Auzzir et al., 2018; AlBattat & MatSom, 2014), and the limited attention paid to cash flow (Herbane, 2010) limits access to advice and support (Doern, 2014), which heightens vulnerability to crises.

In addition to firm size, Orchiston (2013) recognized a SME's age as a critical element in using resilience solutions. Some empirical investigations emphasized that situational circumstances, such as the size of the business, past experience, and property ownership, affect how prepared SMEs are (Josephson et al., 2017). The authors claims that despite being aware of prospective catastrophes, new SME tourism operators were less cognizant of the effects of a crisis than established businesses. Simón et al. (2016), on the other hand, emphasized that young enterprises have a better chance of surviving the crisis than established ones.

Furthermore, when comparing SMEs with a crisis management team to SMEs without one, Spillan and Hough (2003) found no notable difference in disaster readiness.

#### *Personal traits of owner-managers*

The focus of this subject matter is on the traits of SME owner-managers with regard to crisis management priorities. Among these, the owner's attributes, such as their gender and level of education, have been found to have a substantial effect on crisis management (Josephson et al., 2017). The social norms and gender-specific roles were shown to be important reflectors of their behavior within firms in a study on the gendered impact on crisis planning. Female entrepreneurs' stronger learning capacity and increased support for SMEs were noted as the strengths (Pathak & Ene, 2017; Josephson et al., 2017). Similar flaws were found to include a lack of creativity, increased emotional trauma, and incorrect risk perception (Pathak & Ene, 2017).

In contrast, Tibay et al. (2018) emphasized the impact of owners or top managers' perceptions of SMEs when examining crisis preparedness. Leadership and management, core employee competencies, market sensitivity, situational awareness, and preparedness strategies were among the important resilience characteristics for SMEs that should be taken into account (Tibay et al., 2018).

The psychological influence on SME owner-managers evaluated the owner-managers' susceptibility and toughness. Through physical, emotional, financial, and informational assistance from the local community and other business partners, they were able to identify the potential options, including the social coping approach (Doern, 2014).

Owner-managers' perceptions of the importance of a crisis were examined in relation to crisis preparedness, and it was discovered that this perception is largely impacted by the owner-

managers' experience (Spillan & Hough, 2003). According to Herbane (2013), SMEs do not fully comprehend the crisis's long-term repercussions. Although the ability to plan for particular crisis types did not significantly differ between planning and non-planning SMEs according to the study, the post-crisis impact was shown to be different. The managers' perspective on the crisis, though, did not immediately influence their planning goals. According to Irvine and Anderson (2008), companies that planned for crises appeared to handle them better. They also stressed the critical impact that communication has on how customers perceive a company during a crisis.

### *Crisis impact on SMEs*

As was already established, past empirical investigations found that SMEs were more vulnerable to crises than larger organizations (Hendricks & Singhal, 2003; Polyviou et al., 2019; Etemad, 2020). The performance of SMEs may be directly impacted by the impact of a crisis on their physical resources. Parallel to this, owner-managers' personality qualities may change as a result of their crisis experience (Adikaram & Surangi, 2020).

Natural disasters' consequences were extensively addressed in SME crisis management, and it was discovered that they have a substantial impact on the survival of SMEs. Asgary et al. (2012) estimate that 90% of SMEs continue to operate at a loss after experiencing a disaster. The bulk of them were still operating at pre-crisis levels of efficiency even six months later. The authors went on to say that a SME's ability to recover from a crisis is influenced by its average monthly sales, past crisis experiences, dependence on infrastructure, personal resources, losses of life and property, and interaction with stakeholders.

Four key areas of vulnerability have been identified as a result of the short- and long-term effects of natural catastrophes on SMEs: markets, labor, logistics, and capital (Samantha, 2018). The loss of sales, employee absenteeism, and property damage, according to Auzzir et al. (2018), are the SMEs crisis' most serious effects. The authors also highlighted the financial costs associated with these consequences as well as the impact of inadequate support from the experts and pertinent data.

The pandemic crisis has had an impact on SMEs in several industries. Due to the foot and mouth endemic, the tourism sector was severely affected and suffered losses in commerce as a result of the decline in visitor numbers. The constraints on future investments, changes to the product offering, and loss of supply were all examples of the indirect impacts. The results

showed that endemic had a substantial impact on the tourism sector in terms of company volume, profitability, and staffing cutbacks (Irvine & Anderson, 2008).

### *Implications of crisis experience*

The main factor affecting how vulnerable SMEs are to the crisis in each of its three stages is previous crisis experience. According to Josephson et al. (2017), SMEs' level of crisis readiness appears to be significantly influenced by their prior experience with adversity or disaster. According to Spillan and Hough (2003), SMEs must be concerned about crises in order to be successful. The susceptibility of SMEs was adversely affected by their lack of prior crisis experience (Auzzir et al., 2018; Doern, 2014). The results of a study to understand how owner-manager experiences affect the response phase revealed that experience, mindset, and resources are crucial factors in determining how resilient or vulnerable small firms are to a crisis. The results also showed how crucial it is for small enterprises to safeguard important assets in order to respond to crises more effectively (Doern, 2014). Kato and Charoenrat (2018), on the other hand, stressed that there is no substantial benefit from prior crises experience on SMEs' crisis readiness as greater experience with crises does not translate into a higher degree of crisis preparedness. The planning and non-planning priorities of SMEs did not directly reflect the crisis experience of owner managers (Herbane, 2013).

### *Strategic Approach of SMEs for Resilience*

The long-term viability of SMEs depends on their strategic approach and owner-managers' capacity for strategic thinking and action (Vargo & Seville, 2011). SMEs in developing nations showed a lower level of strategic orientation than SMEs in developed countries, according to a study that examined the association between management concern for organizational crises and competitive strategy (Parnell, 2015). The strategy approach of SMEs differs from that of larger firms due to their restricted technical and resourcefulness capabilities, but their rapidity strength is higher (Sullivan-Taylor & Branicki, 2011).

### *Business continuity management (BCM)*

According to Herbane (2010), studies on crisis management, particularly those focusing on crisis preparedness, have integrated BCM and crisis management. Most of these studies emphasized the importance of including business continuity management in strategic planning. Similar to that, it is a term that is frequently used in relation to organizational planning and resource allocation for crisis management and prevention (Herbane, 2010). Therefore, it

encompasses a wide spectrum of planning, including anticipating failures, planning, and practicing safeguarding the business and delivering stakeholders' interests (Herbane, 2019). It is not just disaster recovery planning. Strategic planning includes crisis management, which looks at ways for companies to become more resilient and seize opportunities (Vargo & Seville, 2011; Herbane, 2019).

Beyond the notion that crisis management is an intuitively driven process, crisis management is crucial to an organization's strategic management (Herbane, 2013). For Disaster Risk Reduction (DRR), Kato and Charoenrat (2018) integrated BCM with strategic crisis planning. The study also found a favorable correlation between perceived disaster readiness, business continuity knowledge, and training requirements of SMEs and a range of firm size, operating duration, and disaster experience.

#### *Resource utilization*

SME resource management includes both internal resource management and resource base expansion through external sources. SMEs must manage their internal resources, including both financial and non-financial resources (Adikaram & Surangi, 2020). According to Premaratne (2001), strategic implementation may enable SMEs to access a wider range of resources, improving performance.

#### *Financial Resources*

Adikaram and Surangi (2020) found that financial resource management against crisis resilience has garnered a lot of attention in the literature on crisis management since it is one of the few primary resources that has an impact on SMEs' survival. As a result, the financial crisis can affect how SMEs operate as a whole (Adikaram & Surangi, 2020). In a similar vein, the SME's total crisis management plan depends heavily on financial crisis management and its strategic approach. Environmental analysis, operational coordination, productivity and efficiency improvement, finance and marketing activities, downsizing, and partnership development are critical in the strategic approach to SME survival in a financial crisis, according to Kottika et al. (2020). For SMEs, alternative external financing sources ranged from bank loans to trade credit. Unconstrained SMEs substantially rely on bank loans, whereas credit-constrained institutions mostly rely on trade credits (Carbó-Valverde et al., 2016). This suggests that trade credit is essential in emergency situations. Business support and help services and access to information technology are seen to be elements that may favorably



contribute to SMEs adoption, even though the lack of financial resources is a factor that negatively affects risk adoption (Crick et al., 2018).

### *Non-financial Resources*

According to Adikaram & Surangi (2020), prior empirical studies on internal strategy creation and growing resource bases through networking with stakeholders mostly focused on non-financial resource management against the crisis management of SMEs. According on SME characteristics, even variations on the strategic resilience approach were identified (Adikaram & Surangi, 2020).

In order to determine whether there is any difference due to the presence or absence of strategic and resilience management strategies according to location, external crisis events, personal networks, and attitudes, Herbane (2019) investigated SMEs' strategic management strategy of resilient management orientation. Additionally, a considerable difference in terms of firm size, age, and activity has been found between the two clusters. Doern et al. (2019) stressed that a number of variables may affect whether and how entrepreneurs react to a crisis. These include experience, the stage at which a business is developing, the kind or stage of crisis that the business is experiencing, and resources - both in terms of how they are used and their suitability for the stage of the crisis. Comparatively, the use of nonfinancial variables for strategic repositioning of SMEs during the crisis response phase discovered the relevant elements, despite the assertion that the age of SMEs has a modest and detrimental effect on strategic crisis response. These elements include a distinctive selling proposition in addition to innovation, change, and network integration (Mayr et al., 2017).

Branicki et al. (2018) have challenged the entrepreneurial resilience of SMEs where they advocated for potential government or SME network intervention. SME networks, learning, location, and entrepreneurial planning work together to provide organizational resilience and strategic renewal. In order to understand an organization's capacity to integrate external resources through a network with external organizations, Battisti and Deakins (2015) applied dynamic capability. In order to increase the firm's resource base and improve its ability to react to a highly dynamic environment, external resources may be integrated.

### *Crisis learning*

For SMEs to survive over the long term, it is important to be resilient during the crisis. For SMEs to manage resource constraints and remain resilient to the crisis, knowledge generation

through crisis learning is crucial. Although the reactive nature of SMEs was noted in the literature on crisis management (Herbane, 2010), crisis learning is crucial to lessen their vulnerability. Beyond learning about business opportunities, organizational learning may help entrepreneurs identify risks. Due to the intrinsic characteristics of SMEs, individuals like owner-managers and/or other top managers implement a big function within the learning process as they are the key decision-makers in the firm. In young businesses, both individual and group learning are essential, but as organizations get older, ingrained past learning becomes more important (Crossan et al., 1999).

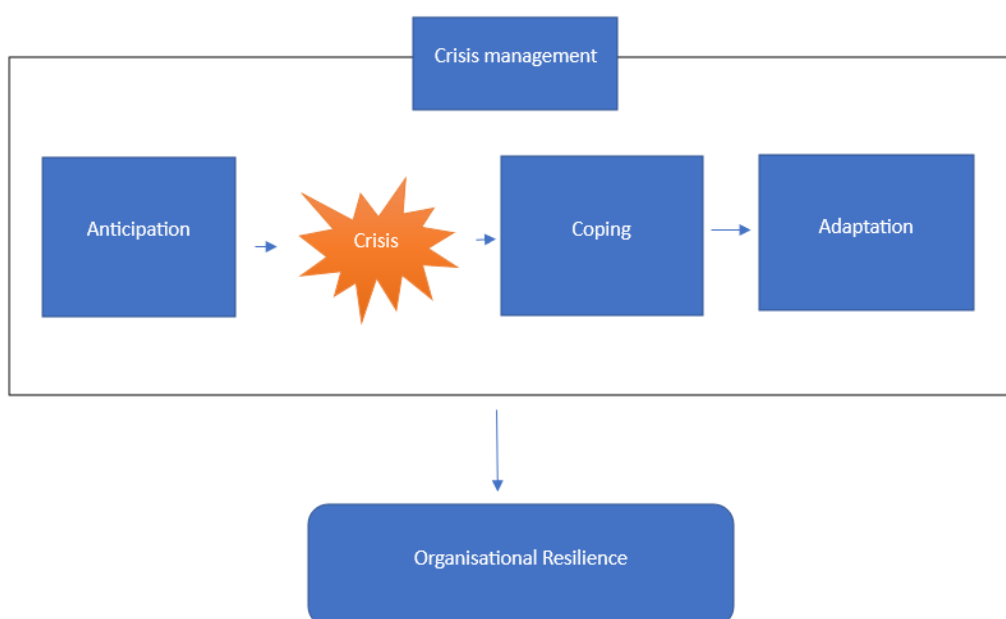
Herbane (2019) also claimed that learning across enterprises may improve resilience. SMEs may develop their capacity for crisis learning through the acquisition of assets, skills, and knowledge. These could possibly mitigate the resource restriction (Allan et al., 2015). The significance of the role of SME leaders in promoting learning as a component of their shared organizational vision was highlighted by Saunders et al. (2014). It was shown that freshly founded SMEs are more interested in both formal and informal learning sources and are more learning oriented.

Herbane (2014) investigated the perceived value of information for crisis preparation as well as how organizational learning might guide crisis learning. The author defined crisis preparation as an information-intensive, isomorphic learning and knowledge transfer process. The study focuses on understanding how SMEs may perceive information for crisis learning since risk perception of managers is influenced by the level of trust placed in the source of information and such information as a forerunner for organizational learning. A more recent study by Herbane (2019) emphasized that while awareness of the crisis in other organizations may lead to isomorphic learning, personal crisis experience may improve knowledge of the situation through crisis learning. According to Mayr et al. (2017), the Resource-Based View (RBV) can also be used to analyze how organizations can innovate, adapt, and refresh their resources to provide them a competitive advantage.

## 2.4 Conceptual Framework

Pearson and Clair's (1998) study suggests that unanticipated occurrences and crises have the potential to adversely impact organizations, hindering their capacity to attain their desired goals and strategies (Smart & Vertinsky, 1984). The study also points out that organizations are required to augment their ability to effectively handle unforeseen events and emergencies by cultivating their resilience abilities. According to Lengnick-Hall et al. (2011), individuals are able to improve their ability to manage crises and capitalize on opportunities by developing their resilience. This study explores how SMEs handle crises and how they build resilience. Thus, it needs a conceptual framework that can categorize the different types of information gathered in this thesis.

In the theory of organizational resilience, the framework often consists of three different stages: anticipation, coping and adaptation (Duchek, 2020). Our conceptual framework is inspired by Duchek's framework, as mentioned in the literature review. Duchek's framework involves complex interrelationships between the different stages. However, we wanted to include the perspective of crisis management, which is highly relevant for answering the research question. The development of organizational resilience capabilities is a gradual process that arises from the experience of managing challenging circumstances and unanticipated occurrences, as suggested by Linnenluecke et al. (2012).



**Figure 3.** Conceptual framework (Authors, 2023).

Burnard and Bhamra (2011) assert that the initial stage in establishing organizational resilience involves the capacity to identify and respond to crucial circumstances and adapt accordingly to yield favorable outcomes. Duchek (2020) argues that some companies are better at managing difficult situations than others, preventing disasters or even leading to favorable outcomes. One of the main aspects of anticipation is the ability for organizations to gather external information and thereby react accordingly. Routines like market research, end-user survey and gatekeepers could be useful ways of gathering information for the development of their anticipation abilities. Furthermore, Duchek (2020) argues that preparation is also an important aspect of an organization's ability to react to unforeseen events. The development of resources that are essential during times of crisis, such as appropriate recovery plans, effective relationships, and mutual understanding, is facilitated by preparation capabilities (Duchek, 2020).

Coping may be defined as an organization's capacity to effectively manage unforeseen occurrences in order to avoid failure (Duchek, 2020). According to Duchek (2020), there are two major subcategories for coping: the ability to accept a problem and the ability to effectively handle the problem. Stubbornness in organizational aspects could be seen as a bad trait and could lead to inertia. In addition, the capability of successfully managing an issue may be interpreted as the capability of an organization to improvise and find solutions to problems as they arise (Duchek, 2020).

According to Duchek (2020), adaptation is a key element for organizations to build their resilience and withstand future crises. Through reflection and learning, organizations better learn to manage crises and are able to react to unforeseen events. There might be no resilience building if organizations do not use their prior crisis knowledge. Change management capabilities are fundamental for organizations to exploit prior knowledge. To overcome changes in organizations, they have to be willing to make important changes on both individual and organizational levels to increase their resistance (Duchek, 2020).

Crisis management is best described as how companies prepare and enhance their organizational structure and resources to better their position to be able to respond to a crisis and have the ability to recover (Vargo & Seville, 2011). Crisis management shares some key points with organizational resilience. Duchek's model of anticipation and adaptation can be applied to the proactive and reactive strategies employed by companies in crisis management. The reactive strategy involves taking measures before a crisis occurs, while the proactive strategy involves responding to a crisis after it has occurred (Vašíčková, 2019). The first

approach stresses a set of guidelines to assist the impacted organizations in emerging from the crisis and regaining stability whereas. The second method places more emphasis on developing pertinent procedures and principles before facing a crisis (Brzozowski & Cucculelli, 2016).

## 3.0 Methodology

According to Jacobsen (2015, p. 23), “*methods are the techniques used to acquire knowledge about reality.*” In this chapter we will outline our research methodology in this chapter and provide justification for it. The research philosophy, research approach, research methodology, research questions, study design, data collection technique, sampling, and data analysis method are all included in this chapter.

### 3.1 Research Philosophy

The production of knowledge and the nature of that knowledge in connection with research are referred to as research philosophy (Saunders et al., 2012, p. 680). According to Easterby-Smith et al. (2012, p. 17-18) there are three reasons why the study of philosophy may be important in terms of research methodology: First of all, it can help the researcher refine and specify the research methods that will be used in a study, making the whole research process clearer. This includes what kind of evidence is collected, where it comes from, how it is used, and how it helps answer the research questions. Secondly, if a researcher understands the philosophy of research, they will be able to compare different methods and techniques, avoid making mistakes and doing extra work, and figure out early on where certain approaches fall short. Finally, it may aid the researcher's ability to be creative and original in either selection.

One needs to be aware that a researcher makes assumptions throughout a research project like this, especially assumptions drawn from ontology and epistemology. There is an interrelationship between the three different topics: ontology, epistemology, and methodology (Easterby-Smith et al., 2012, p. 18). Ontological assumptions are philosophical ideas about the nature of reality, while epistemological assumptions are a large group of ideas about how to find out about the nature of the world. Methodology, on the other hand, is a collection of approaches used to investigate a certain problem (Easterby-Smith et al., 2012, p. 18).

A researcher needs to be aware of how these assumptions might change how people see the results and how well-thought-out assumptions can help people understand the method and conclusions better (Saunders et al., 2012, p. 129). Chia (2002) underlines the importance of what constitutes genuine and acceptable information being heavily influenced by the scientist's philosophical perspective. Management research is a knowledge-creating activity

that can be compared to any manufacturing process in which the type of technology used (philosophical orientation), the method of production used (research method), the raw material used (experience and established knowledge), and the operator's capabilities (researcher's competence) all contribute to the quality and reliability of the product itself (Chia, 2002).

### **3.2 Research Approach**

In research, there are primary three ways of conducting research projects, deductive, inductive and abductive research (Saunders et al., 2012, p. 145-147). Deductive reasoning, according to Sekaran and Bougie (2016, p. 26), is a theory that is a structured set of assumptions that creates testable predictions about a topic of interest. Inductive reasoning is adventurous and open-ended in design. The two methods can be combined into abductive research. Whereas the process is a continuous process between theory and empiricism (Jacobsen, 2015, p. 35). This research applies both the principles from inductive and deductive research and therefore an abductive approach is being used. As it is a continuous exploration of both the crisis management and organizational theory linked with SMEs. As most of the literature made on both crisis management and organizational resilience is not directly made around SMEs, we want to connect the current literature towards SMEs.

### **3.3 Research Method**

The fundamental distinction between the two research methodologies, according to Saunders et al. (2012), is numerical data in quantitative research and non-numerical data, such as words and images, in qualitative research. Quantitative data (statistical data) is a large quantity of measurable information, while qualitative data is better suited for answering the “why” and “how” question (Park et al., 2020). Words are used to represent qualitative data, and examples of data include interview notes, focus group transcripts, and replies to open-ended questions (Sekaran & Bougie, 2016, p. 332).

This research applies a qualitative method that focuses on key strategic factors of resilience and how businesses cope with crises. Additionally, Basias and Pollalis (2018) propose that qualitative methods should be used in domains that demand in-depth comprehension. Furthermore, Merriam (2009, p. 42) states the following about qualitative research: “*In summary, all qualitative research is interested in how meaning is constructed, how people*

*make sense of their lives and their worlds. The primary goal of a basic qualitative study is to uncover and interpret these meanings.*“ This is especially useful in subjects such as economy, business, technology, communication, sociology, and politics (Basias & Pollalis, 2018, p. 98), which fall under the purview of this study. The chosen research methodology aimed to investigate the cognitive processes and behavioral patterns of the participants during periods of uncertainty, while utilizing a conceptual framework for analyzing the data (Saunders et al., 2012, p. 163).

### **3.4 Research Design**

In research methodology, the most commonly used research designs are causal, exploratory, and descriptive (Saunders et al., 2012, p. 170). The goal of causal research is to test a hypothesis about whether or not one variable will change. Descriptive research describes something: it depicts a population, event, or circumstance objectively. Descriptive research collects data using surveys, questionnaires, observations, and case studies. This kind of study helps find patterns and trends, figure out how common something is, and guide future research. An explanatory study tries to find out what caused a certain event and what happened as a result (Sekaran & Bougie, 2016, pp. 43–44). According to Sekaran and Bougie (2016, p. 43) one needs to be aware that exploratory studies often are not generalizable to the population.

According to Sekeran and Bougie (2016, p. 96), there is no single design that is superior in all circumstances. One needs to create a design that is suitable for the job at hand. Our research topic is quite new, and there has been an increase in interest in the topic due to recent events like COVID-19, the Ukraine War, and the Financial Crisis. Because the topic has changed recently and is becoming more relevant, collecting data is necessary to understand it better. We chose an exploratory study that wanted to investigate the literature on crisis management, and organizational resilience and we wanted to see how this theory applies to SMEs.

### **3.5 Data Collection**

Data collection is a vital aspect of research design. The data collection will give a comprehensive overview on how information was gathered. We will explain in more detail how we did our interviews later in the thesis. People are often the most important source of information in business research, and by doing interviews, we can get very comprehensive information that is useful for this kind of exploratory study.



Hox and Boeije (2005) describe the two different kinds of sources a research project could have: primary and secondary sources. Primary sources are data originally collected just for a specific research goal. Data for this study will be gathered via semi-structured interviews. The precise procedure for semi-structured interviews will be described in more detail later. Secondary sources are sources that have been collected for a different purpose than this study. Furthermore, we need to be aware that we need to evaluate the secondary data to ensure that the secondary data meet our requirements for this research (Hox & Boeije, 2005). This study will use the primary data set collected from the interviews and this will be used with other relevant literature.

### **3.6 Case Selection**

Choosing the appropriate sample is important in all scientific research. When choosing a sample, we are trying to be diverse in our choices. In this research, only a portion of the Norwegian SMEs will be studied. Due to time and resource limitations, this research will have limitations regarding the sample size. Due to the exploratory nature of our research question, interviews are an ideal approach to data collection for this study. Because our research questions are exploratory, interviews are suitable to gather information for this study.

Since the interviews are semi structured, we use an interview guideline (which can be found in Appendix A1) to make sure we cover all the important parts of the research. According to Saunders et al. (2012, p. 374) semi-structured interviews consist of a list of themes and some key interview questions. Furthermore, Wildemuth (2016) points out that semi structured interviews could be a key way of collecting data. One needs to beware that semi structured interviews can often be too structured, limiting the output from the person being interviewed (Wildemuth, 2016). This is done to ensure that we get a deep dive into the subjects that are relevant for this research, rather than when doing an unstructured interview, where one might be at risk of not covering all important aspects. We want the interviewee to speak freely and be able to move into areas where the interviewee feels they are most relevant. We will have follow-up questions, in case there are short answers, or we want the interviewee to elaborate. Before the interview, we sent out a list of themes and important concepts that we wanted to discuss during the interview, this was to ensure that the participants understood what resilience meant in an organizational context. The guidelines also included, how we will handle their

personal data, and that their data will be handled according to SIKT's strict guidelines for data handling.

### **3.6.1 Interview Participants Privacy and Rights**

Since we handle personal data, privacy and rights are important to take seriously. We want our interviewee to feel safe, and we want to ensure that the appropriate measures for data handling are taken. The measures and procedures are following the guidelines from SIKT (Kunnskapssektorens Tjenesteleverandør), which is the Norwegian Agency for Shared Services in Education and Research (SIKT, n.d.). Ahead of conducting the research, we had to send an inquiry to SIKT, where we had to give an explanation of our project and how the data was collected and handled. The interview guide was also included, as was the consent agreement. The application was granted permission.

The agreement form was used to inform the interviewees. The template from SIKT included the purpose of the research and the rights of the interview subjects. The agreement also listed how to get in touch with both our supervisor and the University of Agder's privacy officer. This was done to ensure that if the interviewee had any questions regarding the project or their privacy, they could also raise them for other than the researchers. To ensure the safety of our research, we anonymize delicate data, such as a personal name and other information that could reveal the identity of the interviewee. All the sensitive data that was collected was stored on a memory stick, and all the data will be securely erased on May 31, 2023.

### **3.6.2 Sampling**

The process of choosing the participants who are best suited for the gathering of data is known as sampling. The researcher will save time, money, and other human resources, as well as produce more trustworthy findings, if they begin the data collection process by identifying the population segment or sample units that are most likely to be representative of the whole (Sekaran & Bougie, 2016, p. 235). On the other hand, the sample size should be a sufficient size, such that the understanding of their properties makes them both reliable and generalizable (Sekaran & Bougie, 2016, p. 239). Sampling is an essential part of doing both qualitative and quantitative research. Since quantitative research relies on confidence, as well as the fact that it deals with a significant number of respondents, sampling is an essential concept to be aware of. In qualitative studies like this one, subjects are often chosen because of their expertise,

however, one needs to be aware that the sample should be a reflection of the population to ensure a high-quality study (Sekaran & Bougie, 2016, p. 265).

### **3.6.3 Sample Size**

The size is important due to the generalizability and reliability of the study. In this study, we want to investigate different SMEs in different industries. According to Saunders et al. (2012 p. 283) the point of saturation is reached when, on the basis of the data that have been gathered or analyzed up to this point, it is usually understood to imply that additional data gathering and/or analysis is unnecessary. Furthermore, one may not reach the point of saturation due to limits during the research, like time and cost. As a result, one may arrive at a compromise between the level of confidence desired and the expenses associated with the desired sample size (Sekaran & Bougie, 2016, p. 266).

Our topic on resilience is quite complex, and there are many variables involved in different organizations and in different industries. For this reason, in order to attain saturation, you need to do research on a large number of different organizations, both in various fields of business and in different regions of the world. Interviewing four different executives from four distinct companies, all of which were of different sizes and generated different amounts of revenue, was the primary focus of our research. We were restricted in what we could do because of the length of the study project and the lack of willing participants who were prepared to take part. If we had paid a fee for the interviews, we could have been able to recruit a greater number of participants.

### **3.6.4 Network-Based Sample Selection**

We assumed that, given the duration of this research endeavour, network-based sample selection would be an efficient use of time and resources. To find qualified managers for our thesis, we used both our personal and professional networks. All of the managers who were selected to participate met both the sample selection criteria and the falls under the SME category. According to Saunders et al. (2012, p. 219), you are more likely to acquire access if you can use your current connections.

While selecting this form of sample collection, we must consider both the secrecy and privacy of the subjects. We chose to anonymize all individuals and ensure that their identities were concealed. Furthermore, our intention of doing so, would hopefully lead to the participants

being more open-minded when answering our questions. One of the subjects had a strong relationship with one of the authors, so we had to proceed with care while doing the interview; the other writer, who was unrelated to this subject, conducted the interview. This was done to guarantee the interview was of a high standard and to eliminate the possibility of bias.

### 3.6.5 The Sample

The gathered sample consisted of four distinct organizations, all of which are private firms. All of the subjects representing the organizations are their respective leaders and shareholders and play a significant role in the strategic planning and management of the organizations. This allows the subjects to respond accurately on behalf of their respective organizations. Each organization in the sample operated in a distinct industry; this was done to have an appropriate sample to get insights from different industries and be able to provide a more generalized and precise solution to the research question. The examples of the different organizations that were interviewed are:

Org. A – Furniture and Interior Reseller

Org. B – Commercial Real Estate Company

Org. C – Industrial Clothing Manufacturer

Org. D – Car/Boat Detailing Manufacturer and Reseller

Participant	Position	Duration
Organization A	CEO and shareholder	15:49
Organization B	CEO and shareholder	33:04
Organization C	CEO	29:55
Organization D	CEO and shareholder	42:01

**Table 2.** Interview subjects (Authors, 2023).

### 3.7 Method of Analysis

In contrast to a quantitative study, a qualitative study analyzes text and answers rather than hard numbers. Our data comes from the people we talk to, and our transcripts are made up of answers and responses from managers in different industries. The goal of qualitative data analysis is to systematize and make valid interference from what might be an overwhelming quantity of data (Sekaran & Bougie, 2016, p. 332). According to LeCompte (2000) there are five different steps to analyze qualitative data to prevent biased data:

1. Tidying up
2. Finding items
3. Creating stable sets of items
4. Creating patterns
5. Assembling structures

Explained in detail, this step-by step process ensures that the data is handled in the correct way and limits the chance of biased data. Step one is to structure all data to ensure that all data is available and that there are no missing data chunks. Step two is to identify relevant data for answering the research question. Step three is to categorize the data and start comparing and contrasting items, making clumps of the data, and seeing similar results between the data. Step four is to identify patterns in the data. By identifying patterns, it could help clarify ways to answer the research question. Step five is to assemble the structures of the data. When assembling the structure, it could help the researchers explain the whole phenomenon (LeCompte, 2000).

While the interviews in our research were semi-structured and the topics were wide and exploratory, the interviews ranged in length from 15 to 40 minutes. As a consequence, the transcripts became quite extensive, necessitating the employment of an appropriate analytic approach to restrict the data to what is important while also providing us with a presentable result that can be presented and used to draw conclusions. Our analysis is based upon the step-by step process of Le Compte as well as a thematic categorisation. This is a simple and manual approach of categorizing the data. This approach was suitable for our limited research.

### 3.8 Quality of Research

One major difficulty with research design is the quality of the study and its discoveries, which is why research design is crucial. In quantitative analysis, one often mentions validity and reliability as central ways of measuring the quality of the findings, and in qualitative research, trustworthiness is a more accepted form of measuring. Farrelly (2013) underscores the difference: when addressing the quality of quantitative research, the phrases 'validity and dependability' are often utilized, whereas 'trustworthiness' pertains to qualitative research. Also, in qualitative studies, the parameters should be changed to emphasize the questions rather than the measures (Mason, 2018). As per Saunders et al. (2012, p. 194), it becomes challenging to exhibit quality while adopting validity and reliability in qualitative research. This is because of the inherent nature of qualitative research. On the other hand, Lincoln and Guba (1985) propose that trustworthiness may be broken down into four distinct categories: *credibility, dependability, confirmability, and transferability*.

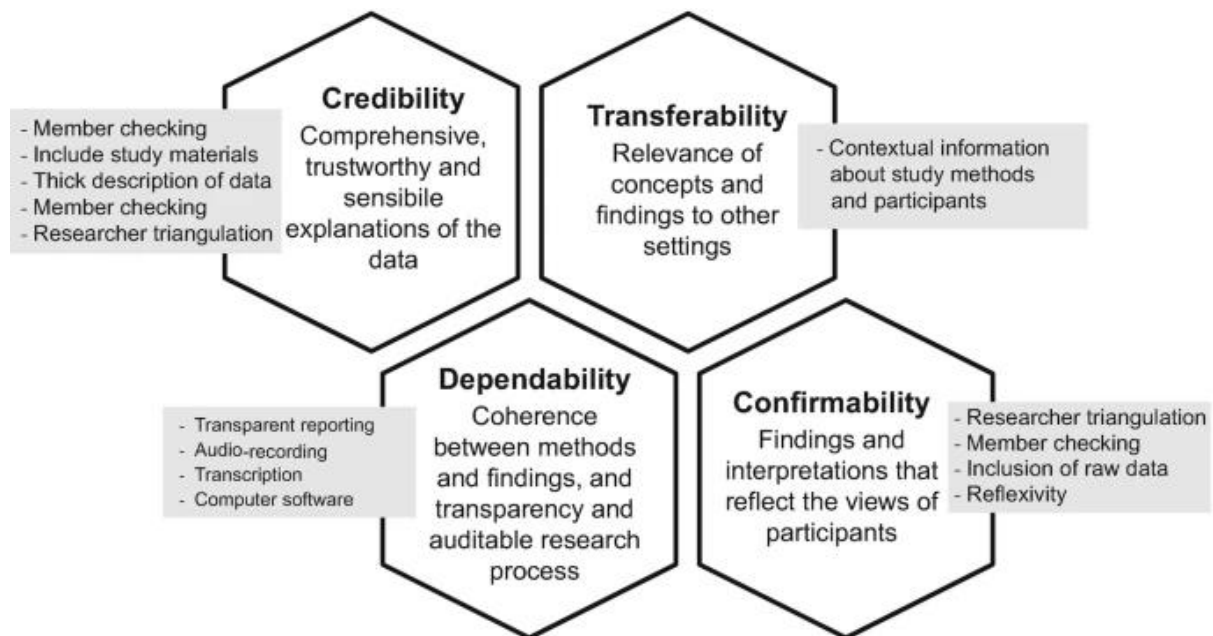
Credibility refers to the truthfulness of the data or the participant's statements as well as the researcher's capacity to accurately interpret and express them (Lincoln & Guba, 1985). Credibility is the counterpart criteria for internal validity, and it refers to the process of verifying that the information obtained from the study participants accurately matches the socially constructed world that the participants themselves intended (Lincoln & Guba, 1985). According to Cope (2014), for a researcher to establish credibility while presenting the results of a qualitative study, they need to show involvement, techniques of observation, and audit trails.

In qualitative research, dependability is emphasized over reliability. According to Cope (2014) dependability is the constancy of the data under similar conditions. This means that other researchers have to agree on the decision-making throughout the writing of this research article. According to Jacobsen (2015, p. 16) underscores the importance of dependability: “*with dependability and credibility we mean that the research has to be trustworthy.*”

Thirdly, conformability is the criterion where the researchers have to prove that they are able to utilize the replies of the participants rather than the researchers' own biases and opinions. This criterion is important since it ensures that the study is valid (Cope, 2014). Additionally, Cope (2014) contends that confirmability may be demonstrated by showing how conclusions

are reached and interpretations are developed, as well as demonstrating that the results were generated directly from the data.

Transferability is the last requirement that must be met. The technique by which the results may be identified by the readers so that they can be applied to different groups or circumstances is known as transferability (Cope, 2014). If the findings of qualitative research are meaningful to those who were not engaged in the investigation, and if readers are able to connect the findings of the study to their own personal experiences, then the study has satisfied this criteria. The researchers are obligated to provide the reader with an adequate amount of background information about the research participants and the environment in which the study was conducted so that the reader may evaluate the "fit" or "transferability" of the results (Cope, 2014).

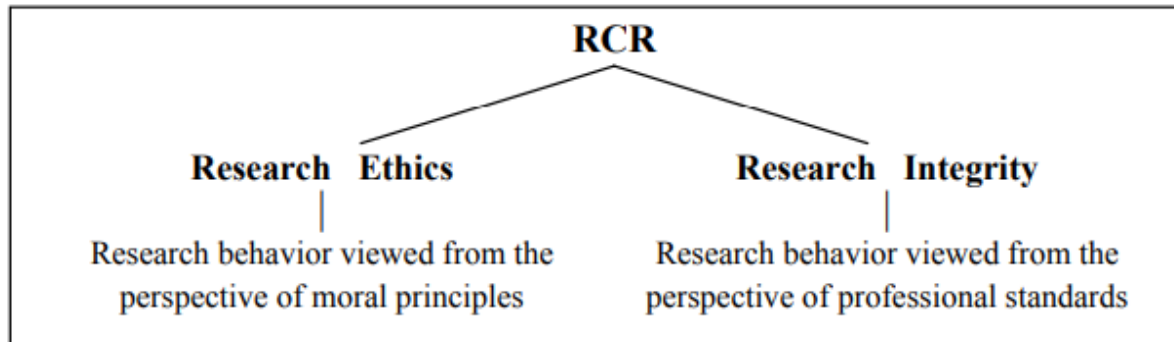


**Figure 4.** Techniques to enhance the credibility, dependability, confirmability, and transferability of a study (Hanson et al., 2019).

### 3.9 Research Ethics

According to Steneck (2006), some researchers do not conduct research responsibly. Furthermore, according to Steneck (2006), responsible research is defined as the responsible conduct of research (RCR): “conducting research in ways that fulfill the professional responsibilities of researchers, as defined by their professional organizations, the institutions for which they work, and, when relevant, the general public.” Steneck’s (2006) definition of research ethics (RE): “the critical study of the moral problems associated with or that arise in

*the course of pursuing research*” (Steneck, 2006). Research integrity (RI) is just as important. RI means *“processing research in a way that meets and sticks to professional standards as set out by professional organizations.”* By focusing on both the ethics and integrity of the research, the interviewee, and the researchers, we limit the chance of misconduct.



**Figure 5.** Research ethics and research integrity (Steneck, 2006).

#### *Authors Contributions*

Two students have researched and co-written this thesis. The distinct portion was divided evenly between the two authors. Both writers have thoroughly drafted and edited each chapter. Because of their geographical separation, multiple virtual encounters were held between the two writers. This was done to ensure excellent development, mutual comprehension, and, most significantly, a smooth, cohesive, and coherent writing style throughout the whole article.



## 4.0 Empirical Findings

This chapter will have a presentation of the empirical data gathering. With subsections based on the topics from the conceptual framework, each instance is presented independently.

### 4.1 Company A – Furniture and Interior Shop

Company A is a family-owned furniture shop that offers everything for the home, for example decors and furniture. The company was established in 1932 and has been under franchise in recent years. The company only operates in a local market north of Oslo. They have twenty-one full time employees, and their revenue is about 100 million Norwegian kroner. The respondent is the CEO of the shop and one of the co-owners. The company operates solely in Norway; however, they have both international and local suppliers.

#### Anticipation

The CEO of the company provided their response, which was as follows: *"If we can build the financial platform that we can stand on, which we have done, we can handle any crisis. It is impossible for me to imagine a scenario in which we are not able to adapt to any change that may occur. We have no choice but to confront the impending catastrophe straight on."* When we reached a later point in the interview, we asked the respondent if he could explain the term "financial platform." In response, he elaborated: *"We are building a capital base that does not make us dependent on other outsiders, such as financial institutions and banks. Because we have sizable equity, we can weather two to three severe economic downturns without the need to seek funding from other sources. According to what I have discovered, we need to lay a strong foundation before we can construct a home on it because if the foundation is not strong enough, the house will not stand."*

#### Coping

While the collision in the Suez channel led to a worldwide shortage of goods, the CEO stated: *"During the collision in the Suez channel, we had some implications for getting our products on time. We had to cancel a lot of products because they were not arriving on time. We saw that many other companies in the aftermath were sitting with huge inventories that they had to sell for a discount."*

## **Adaptation**

During Covid-19, the home and furniture industry was booming, people were staying more home without the possibility to travel, resulting in a huge positive impact for this business: *“We were able to manage an increase of 15 million NOK in revenue, however, we got 5 million on top of that. We had to use some emergency solutions. We had to order some containers and purchase an external storage facility to handle the increase in revenue. We had the people and the transportation in place to handle this increase”*. The respondent also responded, *“Buying a new vehicle or boat should be the very last item on your shopping list if you have plans to start a business one day. There have been many people who have done this too quickly, which has resulted in the business's capital being depleted too early on. If you do this, you will not have cash on hand when you need it the most.”*

## **4.2 Company B - Commercial Real Estate**

Company B is a commercial real estate company that develops, sells, and rents out property. They specialize in developing land for different big Norwegian grocery conglomerates as well as other retailers. The company was established in 2010 and has eight employees. The respondent is the CEO of the company and its largest shareholder. The company operates solely in Norway.

## **Anticipation**

The respondent's answer is as follows: *“We manage our company based on liquidity, so we try to keep a large bank reserve in case of rising inflation and interest. If you look at our accounting, you can see that we do not empty the company's equity. We do not purchase boats with flybridges and Porsches because we want to focus on building assets in the company and building rock for rock to ensure a solid foundation for the company. We think in the long term, ten years plus.”* Also, the respondent said the following about how they chose their customers prior to the Covid-19 crisis: *“I am obsessed with our customers being rock solid. I usually aim to have a return requirement of 9% a year to even start building.”* He replied later: *“If I am building for you, I need a 10-year deal, my bank requires me to do a 10-year deal.”*

## **Coping**

The real estate industry is one that requires a significant amount of financial investment. As a result of recent occurrences, they have incurred some additional costs as a result of the increase in the interest rate. To purchase land, invest in its development, and then resell the lots at a later

date, the company needs a sizable amount of capital. A plot of the land can be regulated by the municipality over the course of many years. Therefore, a significant number of financial resources is required. The following is what the CEO had to say about it: *"It will probably be partially incorporated into that again and maintain a high level of liquidity, among other things. Being liquid, having solid equity, and having a war chest to ensure that...And then, as I have planned, you are required to. You really need to give some thought to the possibility that, you know what, we have no revenue at all. Two years from now. Or three years, which is a little bit like that; thus, you need to have a war chest of at least one million, as well as a liquidity reserve that enables you to have three years of operation."*

### **Adaptation**

It is widely accepted that the rise in the interest rate has had an unfavorable effect on the Norwegian housing market, making it more difficult for individuals to acquire property. The following is what one of the respondents stated in response to the revelation that there has been a surge in the number of times that they are searching for real estate transactions: *"bad times mean that business chances develop, right? As we speak, there are upcoming deals involving real estate as well as individual parcels of land. Because whenever we are in a storm, there is always someone who does not manage or does not get their bank with them, and because of this, they are forced to sell. Because I anticipate that there will be a large number of bargains coming up for sale in the next two years, I have recently employed another person to assist me in my search for deals. We end up doing the exact opposite of what we ought to have done, which is to say that we increase the number of resources that we make use of. The reason for this is that we have been cautious for a significant amount of time, have built the company stone by stone, and have resisted making significant dividend payments. There are a lot of people who do that, but you will not see the same level of growth."*

Additionally, the participant expressed that business relationships held significance and that the pre-existing robust collaborations persisted throughout the COVID-19 pandemic. Instead of uncooperative partners, the respondent answered: *"For example, if we work with a contractor that is quite new and established and might have some trouble getting significant liquidity, then we might help him with some liquidity, so he can better manage his projects. This means that we pay earlier, or maybe some in advance. Then this collaboration gets very strong, and then he will remember when we helped him out. You will remember those who lifted you, and those who pushed you"*.

### **4.3 Company C – Industrial Clothes Reseller**

Company C is an industrial clothing reseller. It was established in 1996. They import personal protective equipment. Their focus is on reducing industrial accidents by providing high quality gear to ensure the safety of different personnel in different sectors. They have 12 employees in Norway. However, this company also has offices in Sweden and Finland. But they all operate under different companies. The company operates in Norway; however, they have international suppliers.

#### **Anticipation**

Their company sells equipment from different major brands within the industrial clothing sector. The respondent said the following: *“Our company does not only sell the iPhone; we have multiple different smart telephones, so when I cannot deliver you an iPhone, I can deliver you a Samsung. We have kind of a backup if it is needed”* (In this case, the telephone reference symbolizes protective gear).

#### **Coping**

The company noticed an increase in revenue when Covid-19 arrived. They had to increase their purchase rate of different Covid-related products, like *“Covid-19 was a rise in revenue for us, we noticed a lot of demand for protective gear related to Covid-19.”*

#### **Adaptation**

The CEO later in the interview elaborated on the aftermath of Covid-19 had on his firm. He said the following *“The relationship and the trust between our company and the other relevant party I believe that this is extremely important in many ways, both in the relation with customers but also in the relation to conducting healthy business.”*

### **4.4 Company D – Car/Boat Detailing Company**

Company D offers a wide variety of goods that are geared toward the automotive and marine industries. In addition to car washing systems and oil products for internal combustion engines, they also sell goods for detailing boats and automobiles. They started off with 5 million Norwegian kroner (NOK) in income in 2010, and by 2021, they had achieved 25 million NOK in sales. Since their founding in 2010, they have undergone substantial expansion. They aim to reach one to two million NOK in organic growth.

## **Anticipation**

Before the Covid-19 incident, the CEO emphasized their strategy of focusing on different sectors. From marine cleaning products to oil and car cleaning. *“The thing with car detailing is that we have always done it, and as a result, we expanded our business to include automatic car washes and other machines linked to car washing. When we first started out, our only business was washing cars; now, however, we are also a market participant who is well-known in the transportation industry. Therefore, in an effort to establish a more stable foundation for our company, we have been exploring opportunities in a variety of markets.”*

## **Coping**

During the COVID-19 incident, the CEO of business D provided a response: *“By the time Covid-19 arrived in Norway in the year 2020, we already had a large supply of raw materials for the race fuel, which was composed entirely of ethanol. When we saw that there was a rapidly growing need for disinfectant, we decided to begin manufacturing it on the very same day. Cans of disinfectant ranging in size from 250 ml to 5 L. The production of disinfection had this immediate and positive effect, which resulted in an increase in income of 5 million NOK all by itself. This was only feasible because we are always on the lookout for new opportunities, and since we are a small firm that is able to quickly adjust to new circumstances.”*

## **Adaptation**

Further on in the interview, the CEO elaborated on the fact that they also recently expanded into a new field of business: *“In April last year, we went all in on a Dutch oil brand; they had not quite figured out how they should operate here in Norway, so we took over and hired one of their employees. So, we have full responsibility for both the sales and marketing of this brand. So, we now offer car detailing, machines, equipment, and oils and lubricants as well.”*

After Covid-19, the prices of raw materials for their products skyrocketed, and the respondent had a long-term strategy to reduce their costs related to sales: *“Today, we have eight different sellers out in the field; they cost us a lot of money. We are currently building a website that, after a while, hopefully, can take their job. So, our customers will get used to ordering at least milk and bread through our shop online, which enables us to keep the sales, while we may have to scale down in the future. We are currently looking into this as the prices of raw materials are getting more and more expensive. - tough times...”*

## 5.0 Discussion

The forthcoming chapter aims to critically analyze and evaluate the empirical evidence in the context of the conceptual framework. The objective is to offer a thorough analysis and elaborate on the commonalities and distinctions among concepts and the process of scientific data gathering. The segments contained in this chapter have been developed based on prominent patterns that have been discerned from the process of data gathering, which is connected to the conceptual framework.

### 5.2 Organizational Resilience - Discussion

#### *Anticipation*

During the early stages of the pandemic, all of the businesses were affected by a lack of information on what the pandemic would bring. According to Wildavsky (1991), anticipation is defined as the prediction and prevention of prospective threats before they arrive. In this research, our participants showed little to no ability to identify risks that could harm their businesses. Case A was quite entailed on handling crisis straight on, rather than to try to identify and prevent further risks and implement actions. That these SMEs show little to no anticipation abilities is recognised from the framework by Duchek (2020), which categorizes that some are better at recognizing and acting right away, while others “wait and see.” Only Case B showed some anticipation abilities by controlling their company after liquidity. They had different precautions with choosing their tenants and structuring their tenancies agreement to ensure a valid cash flow even in economic downturns. However, it might be difficult to make sure that this was a general strategy for them and in their respective line of business, or if it was of significant importance for handling the Covid-19 crisis.

Both cases C and D showed a lack of anticipation abilities. In both cases they showed little to no acceptance that there was a crisis and that appropriate measures had to be taken. According to Duchek (2020) the idea of accepting the problem is the first step in dealing with unexpected events. None of the companies in the sample had any form of a contingency plan in case of crisis. This may be the case that SMEs are characterized with a lack of resources, namely capital or people (Gilmore et al., 2013).

### *Coping*

According to Smart and Vertinsky (1984), a crisis or unforeseen incident may prohibit a company from functioning, which in turn threatens the company's ability to achieve its strategy and goals. All of the companies had to cope with the governmental restrictions and the different consequences that Covid-19 caused. Company A, C and D experienced an increase in revenue when Covid-19 hit. All companies responded to the crisis with a predominantly optimistic and composed attitude, acknowledging, and embracing the resulting outcomes. All the managers have conveyed that they have acquired the ability to handle similar situations. Moreover, it is noteworthy that three of the four managers have attested to their increased strength subsequent to the crisis. This observation aligns with the findings of Rosenblatt and Sheaffer (2002), who posited that crises could pose a significant threat to a company but can also present opportunities for growth and resilience.

SMEs are generally known to be able to cope with scenarios better than larger companies. Due to their smaller size and having increased flexibility and agility to do so. However, they are also shown to be more vulnerable to adverse events (Hendricks & Singhal, 2003; Polyviou et al., 2019). Company A showed measures had to be taken during the pandemic and the blockage in the Suez channel. They had to cope with the situation and had to discontinue a lot of their goods. This was done to prevent them from being stuck with too many goods. Furthermore, due to the increase in revenue, it was vital for the company to have sufficient capital to handle the revenue increase.

Company D showed a greater ability for adaptability. They were able to turn their heads from their core business segments to producing disinfectant. This matches with the framework from Duchek (2020): the capacity to create solutions enables coordinated group response to unfavorable occurrences, and also putting the solutions into practice. This can lead to an increase in revenue.

### *Adaptation*

After Covid-19, most of our respondents did not seem to have given much of a thought on how it went, and what had changed. Most of our interviewees agreed that there were a lot of virtual meetings, rather than physical ones. However, as predicted by Duchek (2020) most of our participants did not consider organizational change in the aftermath of Covid-19. This could be because the crisis was not necessarily a negative development for these industries. They

went on with business as usual without major adjustments. Company A had to adapt to the rapid increase in revenue during Covid-19, and they took some shortcuts to be able to handle such an increase of 25%.

### *Resilience*

The three subcategories of our conceptual framework consist of anticipation, coping and adaptation. According to Duchek (2020) all three must be successfully integrated to ensure organizational resilience. However, this framework is not specially designed for SMEs. Due to the resource constraints of SMEs, achieving all three might not be as relevant for SMEs. Our respondents showed most interest in the coping phase. This might be due to the increased focus when the crisis emerges. Their response might be adaptable, as shown with our respondents. Some of the companies that we investigated had focused on controlling the situation when it happened, rather than trying to make plans for tackling the situation. Only Company B showed some anticipation abilities before the crisis. This could also be seen as the real estate industry being a more long-term focused industry which requires substantial capital and solid partnerships with banks and contractors, as well as their customers, which often involves deals over 10 years periods for this company. The other cases were selling different goods in different industries which might require both less capital and less planning ahead. Furthermore, all the three different goods related companies: company A, C and D demonstrated that they had an increased focus on their coping abilities. This might be due to the resource constraints, or it might be difficult to anticipate when a crisis will emerge. As for all these three companies, they had a successful run during the Covid pandemic, with all of them experiencing growth during these uncertain times. As explained earlier, company D showed a greater ability to adapt, with producing something that was not linked to their core business.

## **5.2 Crisis Management - Discussion**

Our interview subjects had a lot in common when it came to crisis management. Despite their seeming success during Covid-19, none of them demonstrated any major strategic or learning ways to deal with a crisis. As a result, all interviewees stated that their greatest shortcoming is that when terrible circumstances arise, only one or a few individuals, presumably themselves as principals or a small group of principals, bear responsibility. This is primarily due to a lack of preparedness at all stages of the crisis. Employees also did not participate in conversations about how to manage disruptions and may have lacked subject knowledge. According to the interviews we conducted, how crisis management is handled varies depending on the industry.



Only one of the four interview subjects engaged in an open and constant dialogue with the employees for suggestions and input on projects that might fail due to a crisis or other adverse event. They did this on a quarterly basis. The same firm (B) was the only one that looked for opportunities during a crisis in terms of expanding purchasing and investment power, taking actions to prepare for the future by looking forward five to ten years by financial forecasting, and deciding who would take over management. The remaining interview subjects confronted a crisis head on. Their argument was that it is difficult to forecast the next crisis and its impact. This is a bit of a paradox, because preparing for this unpredictability could reduce the detrimental impact of this unforeseen disaster. However, one thing all of our interview subjects from various industries had in common was having enough cash to last two or three years if a crisis struck. All four companies shared a close relationship and positive collaboration with their stakeholders, notably their suppliers. Furthermore, their primary focus was on internal rather than external crises.

Overall, in terms of crisis management, all four organizations shared some characteristics, albeit one stood out more.

**Table 3: Response to crisis considered by SMEs.**

		Company - A	Company - B	Company - C	Company - D
Factors	Items				
Resilience through planning	- Employee involvement	⊗	⊙	⊗	⊗
	- Considering recovery costs	⊙	⊙	⊙	⊙
	- Considering operational changes	⊙	⊗	⊙	⊙
Fiscal impact	- Considering suppliers reactions	⊙	⊙	⊙	⊙
Outside events	- Considering external crisis	⊗	⊙	⊗	⊗
	- Substantial measures	⊙	⊙	⊗	⊙

**Table 4: Crisis Management processes considered by SMEs.**

Stages	Title	Company - A	Company - B	Company - C	Company - D
Pre-crisis	Proactive	⊗	⊙	⊗	⊗
Crisis	Concurrent	⊙	⊙	⊙	⊙
Post-crisis	Reactive	⊙	⊙	⊙	⊙

The interviews provided us with valuable insights into how some small and medium-sized enterprises react and respond to crises and subsequently handle the ordeal in a way they believe is the best course of action. According to the literature, the responses provided some parallels to how and why SMEs overall react in a certain way to crisis at various stages.

#### *Pre-crisis*

Three of the four SMEs we interviewed stated that they face a crisis when it arrives and do not have any particular strategy to plan before a crisis occurs. As mentioned earlier in the literature, the reason many companies of these sizes cope with disruption in this manner could be due to the expensive costs that are incurred while planning. Another reason mentioned was due to the fact that it was very time-consuming. Consequently, they devote more time and resources to manage a crisis rather than plan for it ahead of time. Furthermore, when we looked earlier on SMEs with a crisis management team compared to SMEs without one, Spillan and Hough (2003) stated that there was no notable difference in disaster readiness. Taking all these factors into account, we can understand why the SMEs we interviewed did not have any preparation for a potential upcoming crisis that is very difficult to plan for. Instead, the three companies all focused on having enough equity to survive for a couple of years when a disaster hit. This way, their companies had enough time to stand on their own legs and had a considerable time to deal with a crisis concurrently. Conversely, when many SMEs had to close their company during Covid-19 and lost profit, many did not recover. We already referenced Herbane (2013), who noted that although the ability to plan for particular crisis types did not significantly differ between planning and non-planning SMEs, the post-crisis impact was shown to be different according to a study he conducted. While several of the companies we interviewed reported a higher profit during Covid-19, one can deduce that the pandemic was a very unique type of crisis. Most people had to stay inside for extended periods of time which resulted in higher

numbers of consumers going online and higher spending as well. Companies who sold products and services online in addition to their physical stores did not always suffer as much, some even seeing an increase in revenue. But as some flourished, many suffered, and most companies (SMEs and larger enterprises) suffered tremendously during the Covid-19 and preceding financial or other forms of external crisis. In Irvine and Anderson's (2008) study, companies that planned for crisis appeared to handle them better. Some preparation plans for a crisis do not necessarily need to be very costly. Training staff members to be better in handling crisis and acquire soft skills and hard skills can be effective. Examples include how to handle clients that pay late and how to manage cash flow issues, doing so can assist in avoiding future liquidity challenges. This example is similar to what company B did before Covid-19.

### *Crisis*

This stage is where the majority of SMEs decide to act and was also as mentioned reflected in the answers by our interviewees for the reasons previously given. We mentioned earlier that according to the literature there was no clear way on how SMEs act or what measures they take to avoid a decrease in performance during a disruption. There are some recurring themes, however, like cutting costs and employee layoffs. Without crisis preparedness, SMEs must act and decide rapidly on the next move they believe is best in which they could mitigate negative crisis impact. Finding new sources of income, considering potential partners, and eliminating certain wasteful expenses are some examples of this. If we revisit the earlier example of some of the South Korean SMEs which modified their business plans and presented new products and services to newly identified customers, it provided them more stability and a new lifeline to cling onto. Company D did something similar, albeit it was before the crisis hit. By expanding their business into new products and services, they had a bigger inventory with a vast set of different products which came in handy by the time Covid-19 arrived. Due to the expansion, they had a large supply of ethanol in which they produced disinfectant right away because of the high demand. Company D did look out for new opportunities and quickly adjusted to the circumstances, thereby increasing their income. One might argue that it was coincidence or just a business strategy, but it provided the company with flexibility, which is imperative during a crisis. Company B did look out for new opportunities for procurement during the crisis as we mentioned, and with a long-term strategy of thinking ahead ten plus years, they were able to retain positive performance during a crisis. They found a way to preserve their markets or discover new ones by enhancing their environmental scanning. Company C mentioned having a backup of resources they had which was in high demand

during the pandemic. As Doern (2014) stated in his results, which we looked at earlier, it was crucial for small enterprises to safeguard important assets in order to respond to crisis more effectively. Finally, company A made a clever move by cancelling products due to late arrivals during the blockage of the Suez Canal. This move prevented them from having huge inventories that would make them sell their products for a discount and avoid wasteful expenses, unlike other competitors in their respective industry. A common theme that occurs in all four companies is the immediate actions, opportunity seeking, and quick adjustment to the situation that enabled them to handle the crisis, in spite of evidently not having any major pre-crisis preparedness.

### *Post-crisis*

This stage is very important for SMEs as the experience could benefit them with learning opportunities after survival. Additionally, they need to know how to recover and get back on track as per usual. None of the SMEs in our interviews had any previous experience handling major crises with long lasting effects, until Covid-19 arrived. The lack of preparation for crisis by these SMEs could also be attributed to the lack of previous negative crisis impact. Otherwise, they could evaluate the effects and take lessons from them, thereby enabling them to update their current crisis management strategies or create one. However, we mentioned earlier that Kato and Charoenrat (2018) stressed that there is no substantial benefit from prior crises experience on SMEs' crisis readiness as greater experience with crises does not translate into a higher degree of crisis preparedness. Conversely, Herbane (2010) stated that crisis learning is crucial to lessen SMEs vulnerability. In addition, we looked earlier at more recent research indicating that crises have grown more complex, making the idea of proposing a singular crisis management process unreasonable (Tagarev & Ratchev, 2020; Zhai et al., 2020). The reason for these conflicting results from past studies could be the high level of unpredictability a crisis has and its effects on different industries. Despite our interviewees being in different industries, they all had one thing in common that they highly valued during the post-crisis stage, regardless of the impacts left by the Covid-19 pandemic. They all emphasized the importance of relationship and trust between them and their stakeholders including customers and suppliers and conducting healthy business with the relevant parties. In the light of the crisis' effects, it is imperative for their stakeholders to continue to do business with the companies due to SMEs possibly incurring reputational concerns as a result of their survival. Hence, healthy relationships between all parties were of high value for our interviewees. Finally, this leads back to what we mentioned in the introductory part of this

stage, that recovery is crucial. In order to adapt to changing market conditions, SMEs must think about new tactics including resilience and renewal plans.

Overall, the SMEs we interviewed highlighted different ways to face crisis and what their actions entailed during the different stages. We were able to identify both parallels and distinctions between the different industries. Due to the complex nature of disruptive events and crisis there is no definitive answer to how SMEs should anticipate, cope, and adapt to build resilience during adverse events. One can build a solid foundation in crisis management strategies with some commonalities and actions that are ubiquitous among SMEs. Building a general crisis management plan for SMEs that can work for companies in all industries to some extent is possible, albeit improbable. It was evident in the actions and measures taken by the four SMEs that one strategy might work better for some more than others. Despite the small sample size with four interviewees, we discovered both similarities and disparities in the approaches taken by all of them (See Table 3 & 4). Whichever way SMEs decide to tailor their crisis management plan in order to face a crisis, we can conclude that the important part is to have one and be prepared and know how to act in all stages of crisis to survive better during the ordeal.

### **5.3 SMEs Building Resilience and Preparing for Future Crises**

When a crisis hits the global stage, like Covid-19 did in early 2020, it has a devastating effect on the economy, with SMEs bearing the brunt of the crisis. Many SMEs were put in trouble, and some went out of business permanently, as a result of the knock-on consequences of lockdown measures, social isolation, abrupt changes in the regulatory environment, and prolonged travel restrictions. SMEs are essential to national economies, as was stated in the introduction to this research, therefore it is crucial for SMEs to better anticipate, react to, and adapt to crises if they are to survive over the long term (Schweitzer, 2023). Building resilience and preparing for future crises is not an easy undertaking but looking back on our review of the literature and the interviews we conducted, we have learned some important things about the topic.

First and foremost, we now know that resilience is a reality. Despite all the problems that the recent events have caused, they have served as a wake-up call and brought attention to the necessity of fostering resilience at all levels, including those of the workplace, enterprise, sector, and business ecosystem. A resilience strategy is becoming more and more of a "must-

have" for SME owners. Recent events, especially the Covid-19 pandemic, the global supply chain problem, extreme weather, and the war in Ukraine, will likely keep forcing resilience to the top of SME owners' priority lists for the foreseeable future. Secondly, SMEs have limited resources and capabilities (Etemad, 2020), and the majority of methods for boosting business resilience are designed for larger organizations with well-established quality management systems. For SME owners who do not have access to resilience training and resources, this might pose a challenge. Thirdly, we observed that many of our interviewees lacked a plan for becoming more resistant to future crises, similar to many SMEs described in the literature. Building resilience requires a number of prerequisites, but having a company resilience strategy in place is only one of them. The strategy development process is as crucial as the outcome. SME leaders must ensure that their workforce is involved in the strategy formulation and that it is understood and frequently updated throughout the company. If employees do not support it, even the strongest business resilience strategy will not work. Finally, it is critical to recognize that the business ecosystem is the primary driver of risk and resilience. Individual SMEs can only do so much in terms of crisis anticipation, coping, and adaptation. Since many of the issues that SMEs must deal with are so complex, taking individual risk management steps would either be too costly, inadequate, or ineffective. This is where the business ecosystem comes into play. Only SMEs that are well aware of their place within it, and of their relationships with other market actors, whether they be customers, suppliers, regulatory authorities, or investors, are able to treat risks thoroughly. Who only survives and who flourishes during the next crisis will depend on how well SME leaders build resilient networks and initiatives with their peers, and occasionally competitors.

## 6.0 Conclusion

This chapter presents the research findings with the aim of addressing the research question and revising the theoretical framework in light of the obtained results. The authors intend to provide an exposition of the implications and limitations of the study, as well as recommendations for possible paths for future research.

### 6.1 Research Objective and Question

This research aimed to investigate how small and medium-sized enterprises develop organizational resilience and crisis preparedness. The conceptual constructs expounded in the Literature Review section were employed as a conceptual framework for developing the interview questions and to improve the gathering of the empirical evidence. Upon gathering the empirical data, we were able to identify measures employed by SMEs to enhance their organizational structure and enhance their resilience throughout the Covid-19 pandemic.

*Answer to the research question*

*How can SMEs build resilience and prepare for future crises?*

It is worth noting that the outcome of our study gives an understanding of the significance of organizational resilience in SMEs. SMEs are recognized to have less resources and are smaller firms with fewer employees (Gilmore et al., 2013). Our conceptual framework, which was based on the literature review, shows that Ducheck (2020) argues that all the components must be applied to guarantee resilience, however this might not be achievable for all SMEs. We could see in our four distinct organizations we researched that none of them had direct metrics within all of the three main phases: anticipation, coping, and adaptation. However, all of the subjects demonstrated some degree of priority within the various subgroups. Company B, for example, had better anticipatory skills than coping skills. This could also be due to different priorities within the various industries, as real estate is often recognized as a long-term business, as opposed to the example with company D, which demonstrated less ability to anticipate and a greater willingness to cope with the current crisis.

Our conceptual framework demonstrated how the many components of crisis management, anticipating, coping, and adaptation all contribute to organizational resilience. However, due to their small size, SMEs may be unable to fully benefit from the organizational resilience

framework. This might be due to financial limitations on SMEs preferring to concentrate on certain of the conceptual framework's subsets rather than all of them. The results reveal that various organizations have varying skills for working toward organizational resilience. SMEs may not achieve complete organizational resilience owing to size constraints; nevertheless, like company D, one may place greater emphasis on coping skills, which may assist to strengthen their resilience abilities in the future. This might also be considered as advantageous, since some firms are better equipped to deal with crises than others. Being able to see and take advantage of uncertain times may be a strong ability for SMEs to possess, as larger businesses may find it more difficult to navigate during uncertain times due to their natural size, which may lead to less ability with their coping strategies, as change is often more challenging depending upon the scale of an organization.

## **6.2 Limitations and Suggestions for Further Research**

The study's outcomes and ramifications are constrained to small and medium-sized enterprises, which exhibit distinct attributes in contrast to larger multinational corporations. The study's empirical data was obtained exclusively from Norwegian companies, which may constrain the generalizability of its results to different countries. The limited sample size poses a large constraint on the extent to which the findings can be generalized, thereby further limiting the generalizability of the results. Hence, it is recommended that further investigation be conducted in this area utilizing a more extensive sample size and over an extended duration. All interviews were conducted during the period following the outbreak of Covid-19 and within the ongoing conflict between Russia and Ukraine. Hence, it would be fascinating to investigate whether enterprises that exhibited resilience amidst the pandemic are able to sustain such resilience in the face of a distinct and new crisis. Empirical evidence examining crisis management and organizational resilience pre-, during, and post-crisis would be a compelling area of research. It is likely that conducting multiple interviews in the different stages would yield more comprehensive responses.



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# Appendix

## A1: Interview Guideline

Master's Thesis Interview Guide on How Small and Medium-sized Enterprises Build Resilience and Prepare for Future Crises.

### 1) Introduction

- Can you describe the company's history, size, and industry?
- What are the company's overall goals and values, in your opinion?
- How has the company dealt with previous crises and challenges, and what have you learned from them? What were your previous crises, how did you handle them, and what did you learn from that experience?

### 2) Crisis Preparedness and Resilience

- How would you characterize the company's ability to adapt to changing conditions and manage crises?
- What steps has the company taken to prepare for potential crises?
- Is there an emergency response plan in place at the company? How would you rate this plan?
- What information and resources does the company use to monitor and predict potential crises?

### 3) Organization and Leadership

- How would you characterize the role of leadership in establishing and maintaining the company's resilience?
- How has the company involved employees and stakeholders in its resilience-building efforts?
- How has the organization and structure of the company been modified to improve resilience?
- How has the company communicated and received its crisis plan with employees and stakeholders? How has it been put into action?
- How does the company involve employees in continuous process improvement for crisis management?

### 4) Partnerships and collaboration

- How does the company handle crises in collaboration with other stakeholders such as suppliers, customers, or government agencies?
- How has the company established relationships and partnerships that will be useful in a crisis?
- How do you rate the company's ability to collaborate and communicate with other crisis actors?
- How has the company dealt with collaboration and partnership challenges in previous crises, and what have you learned from these experiences?

## **5) Recommendations and Evaluation**

- How confident are you in the company's ability to build resilience and prepare for crises?
- What are the company's strengths and weaknesses in crisis management, in your opinion?
- What actions would you suggest for the company to improve its resilience and preparedness for future crises?
- How will the company measure the long-term success of its crisis preparedness plans and actions? (For example: profitability, revenue, or other key performance indicators?)

## **6) End**

- Do you have any additional comments or observations about the company's resilience and crisis management that you'd like to share?
- Is there anything else you want to say?

# A2: SIKT Approval

Meldeskjema for behandling av personopplysninger



## Vurdering av behandling av personopplysninger

**Referansenummer**

388768

**Vurderingstype**

Automatisk

**Dato**

07.03.2023

**Prosjekttittel**

Masteroppgave

**Behandlingsansvarlig institusjon**

Universitetet i Agder / Handelshøyskolen ved UiA / Institutt for strategi og ledelse

**Prosjektansvarlig**

Andreas Wald

**Student**

Lars Jørgen Kaalsaa Dahl

**Prosjektperiode**

27.02.2023 - 31.05.2023

**Kategorier personopplysninger**

Alminnelige

**Lovlig grunnlag**

Samtykke (Personvernforordningen art. 6 nr. 1 bokstav a)

Behandlingen av personopplysningene er lovlig så fremt den gjennomføres som oppgitt i meldeskjemaet. Det lovlige grunnlaget gjelder til 31.05.2023.

[Meldeskjema](#)

**Grunnlag for automatisk vurdering**

Meldeskjemaet har fått en automatisk vurdering. Det vil si at vurderingen er foretatt maskinelt, basert på informasjonen som er fylt inn i meldeskjemaet. Kun behandling av personopplysninger med lav personvernulempe og risiko får automatisk vurdering. Sentrale kriterier er:

- De registrerte er over 15 år
- Behandlingen omfatter ikke særlige kategorier personopplysninger;
  - Rasemessig eller etnisk opprinnelse
  - Politisk, religiøs eller filosofisk overbevisning
  - Fagforeningsmedlemskap
  - Genetiske data
  - Biometriske data for å entydig identifisere et individ
  - Helseopplysninger
  - Seksuelle forhold eller seksuell orientering
- Behandlingen omfatter ikke opplysninger om straffedommer og lovovertridelser
- Personopplysningene skal ikke behandles utenfor EU/EØS-området, og ingen som befinner seg utenfor EU/EØS skal ha tilgang til personopplysningene
- De registrerte mottar informasjon på forhånd om behandlingen av personopplysningene.

**Informasjon til de registrerte (utvalgene) om behandlingen må inneholde**

- Den behandlingsansvarliges identitet og kontaktopplysninger
- Kontaktopplysninger til personvernombudet (hvis relevant)
- Formålet med behandlingen av personopplysningene
- Det vitenskapelige formålet (formålet med studien)
- Det lovlige grunnlaget for behandlingen av personopplysningene
- Hvilke personopplysninger som vil bli behandlet, og hvordan de samles inn, eller hvor de hentes fra
- Hvem som vil få tilgang til personopplysningene (kategorier mottakere)
- Hvor lenge personopplysningene vil bli behandlet
- Retten til å trekke samtykket tilbake og øvrige rettigheter

Vi anbefaler å bruke vår [mal til informasjonsskriv](#).

## A3: Discussion Paper

Master's Programme in Business Administration

### Competency Goal: International

Written by *Sajad Nayab*

#### Introduction

As part of my master's thesis at the School of Business and Law at the University of Agder in Kristiansand, I am required to write this discussion paper. It aims to reflect on the concept of "international" in light of my master's thesis topic, research question, and findings. Consequently, I begin by giving a quick overview of my master's thesis before proceeding to a discussion of the international trends and forces that are relevant to the master's thesis, followed by a summary and conclusion.

The master thesis is a qualitative study investigating organizational resilience and crisis management in small and medium-sized enterprises (SMEs). In other words, it is a study about how SMEs can build resilience and prepare for future crises, in the dynamic and unpredictable business landscape of today. Recent events such as Covid-19 and the war in Ukraine, made us curious about how businesses deal with such disruptions, and we wanted a better understanding of the measures and actions taken by the leaders and companies to resolve the ordeal. There are many big companies today that have existed for hundreds of years surviving all types of different adverse events. Conversely, many smaller companies with less resources suffered during these crises. We wanted to focus on the latter, as SMEs are regarded as the backbone of every economy (Romme, 1997), and account for more than 90 % of all firms (Khalique et al., 2011; Sardana & Dasanayaka, 2013; Kato & Charoenrat, 2018). Given the essential role SMEs play in national economies, as well as the rising frequency and severity of crises, we wanted to research how small businesses can improve their resilience and successfully manage crises. Thus, this thesis specifically aims to address the following research question we formulated:

*RQ: How can SMEs build resilience and prepare for future crises?*

We did a qualitative study where we spoke with the managers of four distinct small and medium-sized enterprises in Norway to address our research topic. We were given enlightening data to work with by categorizing antecedents and contrasting the results with our conceptual framework inspired by a framework from Ducheck (2020).

Overall, this thesis seeks to contribute to the expanding body of knowledge in the field by highlighting the critical components of organizational resilience and crisis management that are unique to SMEs and getting a better understanding of the long-term survival of these crucial economic actors. We hope that our study will be beneficial for further research on the subject and be helpful to business owners as they think about how to make their organizations more resilient in face of a crisis. The report is intended to be a resource throughout subsequent global crises.

### **Discussion of the concept international**

According to Oxford Languages, the term “international” is described as something “*existing, occurring, or carried on between nations*” (Oxford Languages, 2022). In light of this, international or even global trends might be thought of as broad developments or changes in a scenario that has an impact on numerous nations. Our master's thesis' research topic, *organizational resilience and crisis management in SMEs*, combines three essential concepts: SMEs, resilience, and crisis. Some global trends and forces can be seen as being particularly relevant to this topic.

When thinking about internationalization, the very first thing that comes to mind is globalization. SMEs are impacted by the expanding global interconnection of markets and economies. They are for instance exposed to global competition, volatile markets, and supply chain disruptions. The last point, that global supply chain disruptions brought on by for example pandemics, natural disasters, or geopolitical unrest can have a domino effect and have a considerable influence on SMEs' resilience. Building resilience may require an understanding of how SMEs can manage and adjust to these international forces. In general, globalization can provide SMEs with tremendous growth prospects, but it also has drawbacks. SMEs may better position themselves to succeed in an increasingly interconnected global economy by understanding and addressing the effects of globalization on their companies.

Other forces which can be of influence include economic trends. International economic trends, which can have a big impact on SMEs, include trade conflicts, economic recessions, and global financial crises. Market demand, financial accessibility, and general business stability may all be impacted by these changes. Consumer spending typically decreases during economic downturns, which has a direct impact on SMEs as their target audience tightens budgets and becomes more frugal with their purchases. The sales and revenue streams that SMEs depend

on might be disrupted by this rapid change in market demand, prompting them to reassess their plans and come up with creative solutions to get through the challenging times. It is impossible to underestimate how international economic trends affect SMEs. The survival and development of SMEs may depend on their ability to navigate these economic shifts. Therefore, it is important to understand how SMEs come up with plans to lessen the consequences of economic volatility in order to promote a stronger and more sustainable environment for these companies.

In addition to being international phenomena that are pertinent to our topic, digitalization and technology development have significantly changed the world of business. With the emergence of decentralized digital money, automation, and artificial intelligence (AI), technology has advanced quickly. By enabling them to access new markets, interact with customers in creative ways, and improve their overall competitiveness, the digitization of products, processes, and services can give SMEs an edge over their competitors. E-commerce platforms as well as online advertising strategies are examples of digital technology that SMEs can adopt to increase their reach, enhance consumer experiences, and build a strong online presence. SMEs may increase their resilience, react to digital disruption, and maintain competitiveness in a business environment that is rapidly changing by embracing the technologies outlined previously, such as AI, automation, and digitalization. To accept these developments, one must have a strategic attitude, be open to change, be perspicacious, and be dedicated to promoting an innovative culture.

International networking and cooperation are the final international trend worth highlighting. Understanding how small enterprises can successfully share information, resources, and best practices in organizational resilience and crisis management can be gained by looking into the field of international cooperation and networking among SMEs. We can learn priceless lessons that other SMEs experiencing similar challenges can easily apply, by examining the intricate details of effective international collaborations or networks that support the resilience of SMEs.

### **Summary and Conclusion**

This discussion paper aimed to explore the concept of "international" in light of our master's thesis on organizational resilience and crisis management in small and medium-sized enterprises (SMEs). I began by presenting the thesis briefly before explaining how and which contemporary international trends and forces are relevant to the master thesis.



The term "international" refers to activities that take place between nations. SMEs resilience is impacted by a number of international trends and forces. Small and medium-sized businesses are exposed to global competition, volatile markets, and supply chain disruptions. It may be important to understand how SMEs might deal with these dynamics in order to develop resilience. Market demand, financial availability, and general stability of SMEs can all be severely impacted by global economic trends like recessions and trade conflicts. For SMEs to survive and expand, understanding how they come up with plans to counteract economic swings can be of much importance.

Other global trends relevant to the subject include digitization and advances in technology. SMEs can use digital technology to increase their competitiveness, reach a wider audience, and improve customer experiences. Adopting innovations like automation, artificial intelligence, and digitalization can increase SMEs' resilience and aid in their ability to compete in a business environment that is rapidly changing. Finally, networking and international collaboration among SMEs can provide opportunities to exchange information, resources, and best practices in organizational resilience and crisis management. Successful international alliances or networks can teach other firms experiencing comparable challenges important lessons.

In conclusion, this discussion paper examines the concept of "international" in the context of organizational resilience and crisis management in SMEs. It emphasizes how globalization, international economic trends, digitalization, and international cooperation affect SMEs. Understanding these global trends and pressures is important for SMEs in order to build resilience, cope with obstacles, and plan for future crises. The insights gathered through qualitative interviews with SME managers add to the body of knowledge on this topic and may assist SMEs to navigate global crises. After discussing the concept international in relation to our topic about SMEs, resilience, and crises, one can deduce that SMEs can do well in an interconnected international economy by embracing global dynamics and implementing strategic measures.

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## **A4: Discussion paper**

Master's Programme in Business Administration

### **Competency Goal: Responsible**

Written by *Lars Jørgen Kaalsaa Dahl*

This discussion paper is part of my master's thesis at the School of Business and Law at the University of Agder in Kristiansand. Its purpose is to consider the concept of "responsible" in accordance with my master's thesis. As a result, I begin by providing a brief overview of our master's thesis, and then I discuss responsible trends in relation to both my thesis and other relevant subjects that we were educated on in our master's program. This discussion paper will have a summary at the end.

Our master's thesis is called "Organizational Resilience and Crisis Management in SMEs." Small and medium enterprises are considered the backbone of many economies (Romme & Dillen, 1997). Furthermore, SMEs are characterized according to Gilmore et al. (2013), p. 88. "*SMEs are often defined by what they lack, namely resources (capital or human), a many-layered management structure, and access to international or complex markets.*" SMEs are important for worldwide economies, and most of the current literature on crisis management and organizational resilience is not focused on SMEs. Therefore, we try to investigate the theory behind crisis management and organizational resilience in SMEs specifically. In our qualitative research, we try to investigate the following research question:

#### **Research Question:**

*How can SMEs build resilience and prepare for future crises?*

Our thesis focuses on how SMEs can build resilience and prepare for crises. As most of the current literature on organizational resilience and crisis management does not take SMEs into their respective theories, we want to see what SMEs can do and how they might react to be best able to cope with a future crisis. As SMEs lack resources in comparison with larger enterprises, their responses might not be as well thought out. Since they have fewer resources that they can use, the SMEs we investigated showed small signs of anticipation abilities but rather more focus on their coping strategy. Our research is qualitative, as we wanted to get more in-depth information from our interviewees. We hope that our study will be somewhat useful for future

studies and that it may be able to guide future research. We also hope that our thesis provides some guidance for SMEs owners and managers on what to focus on in the next crisis that may occur.

Our master's thesis was written because we found it interesting to look at what differs between SMEs and large enterprises. Since most of the economies have a lot of SMEs, there is still room for more academic literature on SMEs. We investigated four different companies in four different industries and wanted to see how they coped with the crises. We felt like this research area is quite complex, and there is limited academic research with a focus on SMEs. Therefore, our research relates to the world in the sense that it investigates an area that could help SMEs survive during turbulent times as well as be prepared for the next crisis. As crises will arise in the future.

With the topic also come ethical debates. Our thesis focuses on increasing SMEs survivability. Is it ethical to help SMEs enhance their chances of survival? Often, companies that don't survive a crisis make room for other companies. Companies that might even be more thoroughly driven. One might see the economic ecosystem as a vicious system, which is often synonymous with eat or get eaten. However, if one can make a company more resilient, there might be a higher probability of survival. Often, resilient companies are recognized as companies that put a lot of effort into their organizational robustness.

Furthermore, we only had the possibility to interview four different organizational leaders, of whom three were shareholders. With our research, one needs to be aware that this sample might not be representative of business in general. Because of the limited time frame as well as the difficulty of recruiting interviews, this study has some limitations. This might lead to a reduced academic quality of the research as the findings might give false indications. Therefore, it might be an ethical challenge to publish such research.

During our master's program, we were taught a subject called sustainable capitalism. We were taught about highly relevant business topics, from environmental, social, and governance (ESG) to different macroeconomic models from a world perspective, i.e., degrowth, steady-state-economics (SSE), and green growth. Also, we were taught different environmentally friendly ways of conducting business. I remember well the example of Toms, where they took their social responsibility to gain value. For example, the campaign is called "Toms one for one" (Roncha & Radclyffe-Thomas, 2016). Their campaign centered on the idea that for every

pair sold, one is given away to someone in need. As well as making trendy shoes, they wanted to help others in need. Furthermore, we also wrote a task about the company Patagonia. Were we investigated Patagonia together with the research question "Is green growth possible?" Were we given an insight into the different economic models, for example, Hickel and Kallis (2020, p. 483) had an interesting conclusion against green growth: "*While some models show that absolute decoupling may be achieved in high-income nations under highly optimistic conditions, they indicate that it is not possible to sustain this trajectory in the long term.*"

This citation from Hickel and Kallis summarizes much of how we thought it was possible for the clothing industry to adjust after green growth. By today's standards, one might not be able to reach green growth since it's often a more expensive way of producing clothes. And not everyone can afford to buy sustainable, environmentally friendly clothing. However, in the future, the production technology for producing more environmentally friendly clothing might be more readily available for the rest of the world. Therefore, being aware of different economic and business models, one may apply a responsible method in the future.

Another subject that we were taught is financial accounting four. Here we learned to identify "red flags" in accounting. We learned a lot of information regarding accounting and how to prevent red flags and other drawbacks. We learned how we can try to be as responsible as possible when accounting. For example, Heskestad (n.d.) points out that one needs to be aware of accounting manipulation, which can alter a company's value. Being responsible, especially in accounting, one needs to be aware of such red flags and take the right precautions.

This discussion paper is part of a master's thesis at the University of Agder in Kristiansand, and it focuses on the concept of "responsible" in accordance with the thesis. The thesis is titled "Organizational Resilience and Crisis Management in SMEs" and seeks to investigate how small and medium-sized enterprises (SMEs) can build resilience and prepare for future crises.

SMEs are critical to economies, but due to their limited resources, the existing literature on crisis management and organizational resilience frequently overlooks them. The qualitative research for the thesis looks at how SMEs can respond to and cope with crises effectively. Despite their limited resources, SMEs showed some signs of anticipation but were primarily concerned with coping strategies.

The study aims to contribute to future research and provide guidance for SME owners and managers dealing with crises. The thesis also investigates the ethical implications of increasing

the survivability of SME. The study's small sample size and difficulties in recruiting participants are acknowledged as limitations that may have an impact on the research's academic quality.

I also discuss our education in sustainable capitalism, which included environmental, social, and governance (ESG), macroeconomic models (e.g., degrowth, steady-state economics, green growth), and environmentally friendly business practices. Companies like Toms and Patagonia serve as examples of responsible business. The discussion focuses on the feasibility of achieving green growth in the clothing industry as well as the importance of responsible financial accounting practices in order to prevent manipulation and ensure accuracy. Finally, this discussion paper provides an overview of the master's thesis, including its research question, findings, limitations, and relationship to responsible business practices.

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