

RESEARCH ARTICLE

Digging deeper into organisational resilience through strategic agility and strategic orientation: a study from the perspective of Sri Lankan SME leaders

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Abstract: Fueling success in the small and medium enterprise (SME) sector requires a robust blend of organisational resilience and strategic agility to navigate the right strategies toward the ever-changing landscape of limited resources and constant dynamism. Therefore, leaders of SMEs need to play a prominent role in navigating the right balance of strategies towards organisational resilience. The purpose of this study is to explore the impact of strategic agility on organisational resilience in times of economic uncertainty and by firm characteristics. Accordingly, raw data was collected in 2023 from 440 SME leaders using a structured questionnaire and data was analysed using descriptive and inferential statistics using SPSS and AMOS. The findings of the study indicate that strategic agility significantly enhances organisational resilience by decoupling strategic orientation in the SME sector. Findings further revealed that strategic sensitivity has a prominent role in fostering resiliency, particularly in medium-sized companies. Therefore, SME leaders need to identify enablers of organisational resilience in line with firm characteristics and uncertainty of the market and detailed attention to evolving strategic constraints is necessarily required through codifying strategic agility with strategic orientation into resilience capabilities which requires capturing and embodiment of organisational reaction to change.

Keywords: Organisational resilience, strategic agility, strategic orientation, SME leaders.

INTRODUCTION

As organisational contexts become more complex and turbulent, the notion of “organisational resilience” (OR) has emerged as an increasingly prominent aspect

of social science that has established broad principles underlying the organisation and management of research. Each business sector needs to have its own strategy or inclusive business model to understand the holistic view and survive in the market in the long run. However, in the current highly volatile and complex world, organisations are struggling to maintain organisational resilience (OR) and most business leaders find it challenging to continuously accomplish the expected dynamics of corporate strategy. Consequently, any form of organisation, regardless of size, sector or age, is immune to these unprecedented new consequences. Given the increased pace and intensity of disruption in technology, economies and market competition, evolving the right strategies for how companies survive and achieve stable organisational resilience (OR) in highly dynamic and turbulent contexts is very important today (Hillmann & Guenther, 2021; Su *et al.*, 2022; Yuan *et al.*, 2022). In this light, the business environment in which small and medium enterprises presently operate is undergoing rapid unprecedented uncertainties and upheavals, which certainly effect the renewal of existing strategies. SMEs are recognized as a critical strategic sector and a change agent that contributes to economic growth, regional development, creation of employment, and alleviation of poverty. In this study, we considered Sri Lankan SME sector which accounts for more than 70% of the total business establishments, employs around 45% of the population, and accounts for 52% of the gross domestic product of the economy of Sri Lanka (GDP) (Gunawardana, 2020).

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However, there has been a significant SME failure rate of 18.1% and a negative business growth rate of 26.4% recorded after the pandemic and economic crisis (Shafi *et al.*, 2020; Sriyani, 2022; Ranasinghe, 2021; Nuwan *et al.*, 2023). Consequently, organisational resilience (OR), which is viewed as a distinctive strategy for corporate survival and prosperity, particularly in times of economic uncertainty, is becoming increasingly important (Gölgeci *et al.*, 2020; Lengnick-Hall & Beck, 2009; Pettit *et al.*, 2019; Sheffi, 2005). OR helps businesses to foresee and comprehend current situations, to allocate people and resources in a flexible manner (Erol *et al.*, 2010), and to change and adapt in a timely and effective manner (Hamel & Valikangas, 2003; Sullivan-Taylor & Branicki, 2011), and to self-renew over time (Reinmoeller & Van Baardwijk, 2005).

Moreover, SMEs are the most vulnerable category in a prolonged uncertain economic situation, and SMEs have to suffer an obstructive shock as a result of their limited capacity for downsizing, business diversification, poor financial structure, limited market, poor strategic formulation, limited access to technology, and reliance on external financing (Karadag, 2016; Sibanda *et al.*, 2018; Parojcic, 2021). SMEs are often regarded to lack resilience and suffer disproportionately from a variety of exogenous shocks (Parojcic, 2021; Battisti *et al.*, 2019; Ingirige, & Wedawatta, 2018). Therefore, it is noted that SMEs' resilience that [the ability to "rebound or bounce back from adversity, conflict, and failure" (Luthans, 2002: p. 702)] is greatly hampered by a lack of crisis planning strategies (Paton *et al.*, 2010). Agostini & Nosella (2022) also highlighted that SMEs' capacity to respond to disruptions is hampered by a lack of effective strategic planning and unaligned processes and strategizing organisational resilience is highly essential. Furthermore, Branicki *et al.* (2017) contend that the strategic formulation process of SME leaders helps them to become resilient by strengthening organisational characteristics such as agility, flexibility, adaptability, and creativity. However, OR has mainly grown independently of larger resilience research and is separated from multi-level resilience theories (e.g., Lengnick-Hall *et al.*, 2011; van der Vegt *et al.*, 2015; Broadhurst & Gray, 2022). Considering this concern, a deeper body of understanding about OR is required particularly in times of economic uncertainty and in the context of SME. Therefore, this study attempts to gain a strategic multi-level understanding of how organisational behavioural perspectives impact on SME resilience.

In light of the above concern, SME leaders have to play a leading role in navigating the right balance of strategies and creating a repertory of business process renewal and transformation. However, by employing their

talents and capacities, as well as the experience obtained by most SMEs due to recent challenges, they attempt to face the hurdles presented by the current economic crisis to ensure OR. In this concern, a significant question is how SME leaders may drastically speed the evolution of their company strategy-making process or models. Many businesses fail not because they do anything wrong or less fortunate, but because they do the same thing for too long and become victims of the rigidity of their business model. SME leaders' decision-making processes and actions might help to rejuvenate the business process, therefore promoting organisational resilience is a crucial juncture. The capacity of an organisation to successfully absorb disruptive surprises that threaten its survival, create situation-specific answers to them, and then participate in transformative activities is known as organisational resilience. (Chapman-Cook, & Karau, 2023; Coutu, 2002; LengnickHall & Beck, 2009; McCann, 2004). According to Sutcliffe & Vogus (2003), resilient organisations can maintain positive adaptations in the face of adversity. Thus, scholars suggest that establishing organisational resilience involves identifying both opportunities and threats, and prospering on these opportunities often requires strategic agility (SA). (Teece, 2019; LengnickHall & Beck, 2009; Coutu, 2002). SA allows an SME to originate and implement flexible, agile, and dynamic competitive movements that favourably respond to OR and changes imposed by others, as well as to instigate shifts in strategy to create new marketplace realities (McCann, 2004; Teece, 2019). SA and OR have shared ancestors and are built on complementary competencies and resources. Furthermore, both expected change and surprise can present opportunities. However, SA and OR have their separate constructions that are intended to adapt to varied environmental situations. SA is required to handle constant and relentless change, whereas OR is required to adapt to severe disruptive and unexpected change (Teece, 2019; Deevy, 1995; Hamel & Valikangas, 2003; Jamrog *et al.*, 2006). Since most SMEs frequently face both forms of change, OR and SA are complementary talents that help organisations to manage the turbulent settings in which they operate. However, OR is a modern organisational concept movement that draws on ideas from both coping and contingency theories. Even though several studies have been conducted on the concept and assessment of OR, there is still a lack of an integrated model. Some researchers believe that OR is contextual, which indicates that it is relevant to a certain scenario and aligned with firm characteristics such as firm size, age and entry-level. It is critical to recognize that resilience results from a complex interplay of several components at many levels of analysis (Van Der Vegt *et al.*, 2015). Therefore, SME leaders need to play a critical role in addressing this shortfall in the SME

sector. In this context, irrespective of the industry or size of the firm, all organisations need to strategize strategic orientation (SO) also along with SA to foster OR in long run. Strategic agility (SA), Strategic Orientation (SO), and Organisational Resilience (OR) all have similar ancestors and are constructed in part on complimentary competencies and assets. SO focuses on how businesses should engage with external contexts such as consumers, competitor rivals, and technology (Day, 1994; Goyal, Ahuja & Kankanhalli, 2020; Gatignon & Xuereb, 1997). Consequently, SO presents an external view of how well strategy options align with the surroundings. However, present literature has a very limited understanding on the overall integration of strategic agility, strategic orientation, and organisational resilience. Therefor this study is to examine the relationship between these three dimensions in SME setting during this uncertain situation in Sri Lanka.

Problem statement

The failure rate of business startups is significantly high within the first five years of the establishment and issues related to strategy formulation and navigation is one of the prominent factors (Jayasooriya, 2020; Prasanna *et al.*, 2022; Bandara, 2020). In addition, the current literature provides a very limited understanding of the overall integration of strategic agility and strategic orientation that are required to become a resilient organisation. Therefore, in developing organisational resilience, strategic orientation (SO) proposes refined typologies based on various combinations, otherwise only theories exists (Kiiru, 2015; Obulor & Onuoha, 2023; Zahoor *et al.*, 2022). The theoretical and model (framework) development process of research along the path of identifying antecedents of organisational resilience and devising a comprehensive strategic agility framework has been neglected. However, Cotta and Salvador (2020) have already proposed the need for identifying a comprehensive framework for organisational resilience.

According to the preceding argument, although there has been a clear association between strategic agility, strategic orientation and organisational resilience in an overall statistical model, researchers and SME leaders are unsure where these practices should be classified about organisational resilience of Sri Lankan SMEs. According to Linnenluecke (2017) theories and frameworks for organizational resilience need to be revised to reflect current needs. Hence, very limited understanding of SME resilience in the context of operational and practical during economic uncertainty.

The plethora of definitions used to describe the characteristics typifying organisational resilience, particularly in SME settings, reflects this ambiguity and unclarity, particularly in times of economic

uncertainty, there has been little progress in developing a comprehensive framework related to organisational resilience representing all key aspects such as strategic agility and strategic orientation by firm characteristics of SME in Sri Lanka during an economic uncertain situation up to date.

Research objective

To examine the determinants of organisational resilience and to formulate a framework for understanding how leaders of SMEs can strategize strategic agility, and strategic orientation to foster organisational resilience.

Specific research objectives

01. To determine the factors affecting organisational resilience in the SME sector through literature.
02. To examine the association of factors between SME leaders' strategic agility and strategic orientation with organisational resilience in the SME sector in Sri Lanka.
04. To determine the mediating role of strategic orientation between its antecedents and organisational resilience in the SME sector in Sri Lanka.
05. To investigate the moderating effect of economic uncertainty and firm size on strategic agility, and strategic orientation towards organisational resilience in the SME sector in Sri Lanka.

LITERATURE REVIEW

Organisational resilience is frequently defined as “bouncing forward” rather than “bouncing back” (Linkov *et al.*, 2018a, b; Ganin *et al.*, 2017). However, OR has two dimensions: reactive and proactive. Reactive resilience is made up of behavioural characteristics related to endurance under unfavourable situations (reactive factors) mainly focusing on bounce-forward strategies. The ability to rebound (bounce back) and make adjustments in the face of adversity (proactive components) is referred to as proactive resilience (Cognitive Resilience). Stress tolerance skills, as well as spiritual behaviors, are used to predict emotion-focused coping mechanisms is called reactive resilience. Similarly, proactive resilience, defined as the ability to adjust to change and perceived control predicts problem-focused tactics (de la Fuente *et al.*, 2021a). Reactive resilience is made up of behavioural elements (Behavioral Resilience) related to endurance under unfavourable situations (reactive factors). OR reflects its capacity to implement situation-specific, resilient, and transformative solutions. Strategic agility (SA) is a broad concept that encompasses an organization's capacity to build and rapidly deploy flexible, nimble, and

dynamic capabilities. In terms of developing OR, these organisational traits have shared foundations and are developed from complementary resources, capabilities, and competencies. Together, SA and OR enable businesses to prepare for a very unpredictable economic environment, re-energize after a painful jolt, and become even more adept as a consequence of the experience. OR helps companies navigate the many types of SA and successfully respond to changing situations. The capacity to be resilient serves as the basis for recovery from a severe jolt and can allow an organisation to make a good shift as a result of overcoming a particularly traumatic occurrence. Similarly, SA allows a corporation to originate and implement flexible, agile, and dynamic competitive movements in order to favourably respond to OR and changes imposed by others, as well as to instigate shifts in strategy to create new marketplace realities (McCann, 2004; Teece, 2019).

Strategic agility

The concept of strategic agility arose in reaction to the increased volatility and unpredictability in the corporate environment. Strategic agility highlights the importance of companies' flexibility, adaptability, and responsiveness. It promotes an open-minded attitude toward change and experimentation (Doz & Kosonen, 2007, cf. Doz, 2020: p. 1). Businesses that cultivate strategic agility are better positioned to adapt to faster changes in competitive settings. Previous studies have examined SA from the standpoint of corporate change. The notion of strategic agility (SA) is divided into two parts: responsiveness and knowledge management. (Khoshnood & Nematizadeh 2017). However, this study focuses more on responsive perspectives which is equally crucial perspective: altering a firm's resource portfolio through strategic orientation. SA is mainly considered as an organization's ability to identify changes in the business environment through opportunities and challenges, and to respond quickly through the recombination of resources, processes, and strategies. A detailed review of the SA literature demonstrates that agile business organisations can be effective in a competitive situation by displaying responsiveness, competence, flexibility, and speed, resulting in a market competitive advantage. (Teece, 2019; Ganguly *et al.*, 2009; Oyedijo, 2012). According to Doz & Kosonen (2008), SA is a method for organizations to reform, innovate, adapt, and, eventually, support OR. Doz & Kosonen (2008) further defines SA as the ability of a company to continuously alter and adapt its main business strategy in order to generate value for the organisation. Accordingly, strategic agility is an organisational characteristic that refers to a company's ability to foresee future requirements, develop suitable strategies, and deploy resources while being adaptable to

unanticipated developments and correctly shifting course or direction. As a result, strategic agility is defined as the following three cornerstones.

Determinants of strategic agility

SA incorporates a company's ability to handle and react to continual change and reflects its agility and speed. It is thus linked to the frequency and speed of environmental changes. SA prepares businesses to tolerate constant change by providing a variety of resource and capability options; developing capabilities in resource alignment, realignment, and mobilization; taking decisive action; and lowering change obstacles. (Teece, 2019; Brown & Eisenhardt, 1997; D'Aveni, 1994). Because both OR and SA emphasize a firm's need for purposeful and beneficial operations in the face of changing situations, there is a significant relationship between these two concepts. SA is the result of continuous and unified activities and talents in top management, rather than a framework or duality. It may be understood as the result of a convergence of forces that derive their strength from the acts and abilities of individual managers engaged in collective activity. Prior research has classified SA's co-components into three "meta-capability" vectors. (Doz & Kosonen, 2008b). These are:

- i). **Strategic sensitivity:** The sharpness of perception, as well as the level of awareness and attention to evolving strategic constraints.
- ii). **Resource fluidity:** The capacity to swiftly redeploy resources from present activity to new growth prospects.
- iii). **Collective commitment:** The ability of the organization's senior management and leaders to make and implement energetic collaborative strategic choices swiftly and without delay.

Doz & Kosonen (2008) discovered that strategic sensitivity requires a more open strategy process, a high level of shared strategic awareness, and high-quality discussions among organisational leaders. Collective commitment to joint decisions, possibly the most difficult "meta-capability" to develop, was discovered to be dependent on mutual dependence among executives around a shared strategic agenda, collaboration among them, team unity, and leaders who were more process architect and facilitator than action hero. In order to develop innovative ways to create value (Weber & Tarba, 2014; Bogers *et al.*, 2019) and retain flexibility without sacrificing efficiency (Junni *et al.*, 2015), an enterprise's strategic directions must be continuously adjusted and readjusted. This is why SA has been identified as a critical success factor for firms in developing OR (Doz

& Kosonen, 2008; Doz & Kosonen, 2010; Teece, 2019). The fluidity of institutional support and the remarkably rapid and unpredictable changes in the market make being “both stable (resilient, reliable, and efficient) and dynamic (fast, nimble, and adaptive)” (Aghina *et al.*, 2015: p. 58) even more crucial for strategically agile organisations in emerging markets. (e.g., Elg *et al.*, 2017; Ferraris, 2022).

Furthermore, OR captures an essential conceptual diagnostic and interpretive component, allowing a business to precisely select the most appropriate type of SA to utilize in a particular circumstance. The collective awareness of organisational leaders underpins the firm-specific routines that emerge (Teece, 2019; Chapman-Cook & Karau, 2023; Fiol & Lyles, 1985). As a result, proactive resilience improves a firm’s ability to both envisage alternative forms of routines that may be required and to construct specific types of routines to adapt to specific scenarios. Furthermore, proactive resilience fosters higher-level learning (Pertheban *et al.*, 2023; Tripsas & Gavetti, 2000), which stimulates the creation of diverse routines and drives a business to rethink its existing beliefs. Having several distinct routines and viewpoints to pick from allows a business to respond to a wide range of problem-solving requirements (Lei *et al.*, 1996; Pertheban *et al.*, 2023). OR has numerous distinct contributions to reaching SA.

Existing literature establishes a clear association between the co-constructions of SA and OR. Proactive resilience, in the first place, enhances an organisation’s capacity to identify changes in the external environment by assisting individuals in identifying novel patterns and assessing potential outcomes. To create strategic sensitivity, proactive resilience also helps organisational members determine whether environmental changes are long-term or temporary, evolutionary or discontinuous. (Lengnick-Hall & Beck, 2005). In this approach, proactive resilience leads to an awareness of the environment, which assists a business in deciding whether to follow a competence-enhancing path or a competence-destroying project. It also assists a company in determining if the most successful SA will be repeatable or emergent. An accurate assessment of the environment is required before deciding on an acceptable type of SA. Second, proactive resilience helps to realize different types of SA. Cognitive resilience is important for honing persistent, repeating dynamic talents as well as developing fluid, emergent agility routines which means resource fluidity. On the one hand, a focus on realistic evaluation, which underlies proactive resilience, improves a company’s capacity to establish difficult but feasible goals and arrange internal processes for maximum feasibility, efficiency, and scalability. Effective goal formulation and effective process design

lay the groundwork for building repeating patterns of behaviour and learning and improving routines over time. On the other hand, understanding and expertise gained via proactive resilience serve as a basis for developing and implementing basic principles that drive more collective commitments of SA. Proactive resilience also reduces the incentive to engage in frivolous creativity or risky endeavours. As a result, proactive resilience serves as an effective restraint on investment when faced with uncertainty. Ultimately, proactive resilience plays a role in determining whether to choose complexity absorption or reduction. Proactive resilience, as previously said, increases the possibility that an organization will be able to distinguish between transient, ongoing, and permanent changes in its external environment. (Lengnick-Hall & Beck, 2005). Therefore, proactive resilience assists a company in determining if analysis will reveal a single optimal option or if it is necessary for the company to continue to be aware of competing effects and several plausible interpretations. The use of complexity reduction is appropriate if a single optimal solution can be found. Nonetheless, a complexity absorption approach works better in situations where conditions are dynamic. Because the same skills that enable people and organisations to achieve wisdom and strategic sensitivity and balance competing forces also enable people and units to hold many viewpoints concurrently, cognitive resilience is particularly advantageous when combined with complexity absorption strategies.

The existing literature on the SA of multi-national enterprises (MNEs) has widely focused on a qualitative basis (rare exceptions include the studies of Hock *et al.*, 2016 and Kale *et al.*, 2019), focusing primarily on organisational antecedents (Lewis *et al.*, 2014), basic meta-capabilities (e.g., Fourné *et al.*, 2014), determinants of firm performance (e.g., Clauss *et al.*, 2019), and factors affecting mergers and acquisitions. However, only few empirical research studies have looked at how specific actions, or “micro-foundations,” support and/or contribute to the routines that enable even for MNEs strategic agility to manage OR in dynamic market settings (Liu *et al.*, 2021). However, the existing body of knowledge on SA is derived from studies on large and MNE organisations (Fourné *et al.*, 2014), with little attention paid to SMEs particularly in times of uncertain economic contexts coping with firm characteristics into account.

According to Zafari (2017), poor SA and insufficient response to microeconomic and macroeconomic factors affect not only the performance of the business sector but also the overall economy. While academics believe that OR is the ability to recover and respond to an acute shock or disruption, little attention has been paid to

whether and how SMEs differ in formalizing their crisis management and strategic planning, two processes that can be leveraged to boost OR. In this context, irrespective of the industry or size of the firm, organisations have to integrate strategic orientation (SO) also along with SA to foster OR in the long run otherwise SA and OR are only theories (Borazon *et al.*, 2023; Wided 2023; Teece, 2018; Hussain & Malik, 2022).

Association of strategic agility, strategic orientation with organisational resilience

Strategic agility (SA), Strategic Orientation (SO), and Organisational Resilience (OR) all have similar ancestors and are constructed in part on complimentary competencies and assets. SO focuses on how businesses should engage with external contexts such as consumers, competitor rivals, and technology (Day, 1994; Goyal *et al.*, 2020; Gatignon & Xuereb, 1997). Consequently, SO presents an external view of how well strategy options align with the surroundings. Therefore, combining these two approaches provides fresh perspectives on how strategic decision-making influences internal procedures like resource adjustment and reconfiguration. There is a clear study gap, nevertheless, as the current literature ignores the significance of strategic direction in building organisational resilience. SO represent how aggressively organizations aim to compete in the market, as well as their desire to investigate and create expertise, goods, or markets. Various strategic orientations necessitate varying expenditures in organisational resources. As a result, strategic orientations are an important component of the organisational setting in which open innovation activities are carried out. SO, Gatignon & Xuereb (1997) define it as having three subconstructs: client, competitive, and technology orientations. Customer-focused organisations are proactive in identifying and meeting their customers' explicit and latent needs (Han *et al.*, 1998). Companies that follow customer-oriented concepts are successful in developing and maintaining relationships with customers, as well as collecting timely feedback from them. Customer orientation enables firms to recognize changing customer needs and directs them to invest the necessary resources in developing appropriate new products or services, refining production processes, and offering a flexible product line to cater to changing preferences (Slater & Narver, 1998). As a result, customer-focused businesses can efficiently adjust to market changes. When market demand is very unpredictable, firms seek more insightful information from competitors. Firms can gain an understanding of competitive behaviors and industry trends by learning from their competitors' knowledge and intelligence (Day & Wensley, 1988). Competitor-oriented firms that have up-to-date information about the competitive environment

can correctly diagnose rivals' offers and then manage resource flows to develop superior items to satisfy target consumers' expectations. Furthermore, competitor-oriented firms redeploy resource bases at the appropriate scale and rate to respond to emerging innovations (Hamel & Prahalad, 1994). As a result, rivals are better equipped to redeploy their available resources to develop relevant product offers and deal with organisational resilience. Furthermore, technology orientation builds huge reservoirs of technological knowledge through prior experience and methods such as significant R&D investments, quick acquisition of new technologies, and collection of up-to-date technology information. Such expertise not only enables firms to capitalize on existing competitive advantages in refining technology and differentiated products to respond to market changes (Gatignon & Xuereb, 1997), but also enables them to recognize emerging or potential technological trends and reconfigure resources to capitalize on those opportunities (Teece 2018; Zhou *et al.*, 2005). Accordingly, most of previous studies highlight that SO is mediating the relationship between capabilities and OR (Borazon *et al.*, 2023; Wided, 2023; Teece, 2018; Hussain & Malik, 2022) but how well SA and OR is mediated is required to explore deeply particularly on the context of SME.

In light of the above concern, a thorough examination of the role of SME leaders in fostering OR is critical to developing strategic model and a complete understanding. Therefore, a comprehensive empirical study is required to examine how SME leaders can succeed in fostering the resilience strategies of their companies in the face of a highly uncertain economic condition in line with their firm characteristics. Unfortunately, the majority of the literature on leadership capabilities and OR is in the form of theoretical and conceptual. There has been a little empirical study on resilient organisations (Pertheban *et al.*, 2023; Van Der Vegt *et al.*; 2015; Boin *et al.*, 2013). According to Williams & Due (2017), there is a paucity of empirical evidence on the function of SME leadership in the process of establishing organisational resilience. As a result, the purpose of this study is to fill two gaps: the role of SO between SA and OR, and the effect of SA in encouraging OR by embedding SO in the context of SME in Sri Lanka. The paucity of empirical research opens the door for future studies to further substantiate the concept of leadership in organisational resilience building. In this study, OR is viewed as an antecedent to SA, SO is mediating the relationship and Firm characteristics and economic uncertainty constructs moderate the relationship between SA and OR. In terms of addressing the above research gaps, this article analyses the impact of SA on OR considering the moderating effect of firm characteristics and economic uncertainty.

METHODOLOGY

To accomplish the main purpose of our research, we establish the framework for our study and provide the general research plan. Furthermore, all members of the research teams have previous experience working as consultants, and two members of the team have significant prior research knowledge in the SME sector. The research designing process consisted of three primary steps: selection of the right unit of analysis, data gathering, and data analysis. In terms of the selection process, Sri Lanka lacks a well-maintained and developed SME list. However, the Chamber of Commerce and the Ministry of Industries maintain separate lists of SMEs. This study consolidated these two lists and amalgamated them into a single database and after the depletion of multiple entries the final database consisted of 8438 SMEs for the study's population. Accordingly, this database was considered as the newly created contact list of SMEs. After alphabetization of the list, a questionnaire was circulated among 1260 SME leaders (630 SME units) randomly and received 440 SME leaders' responses from 220 SME units. The sampling method is critical for the quality of the research since it identifies and evaluates how respondents were selected to participate in the specified study (Easterby-Smith *et al.*, 2021). In keeping with the significance of the sampling method, to extract the right subset of the complete entity and the source from which conclusions about the study issue can be drawn. Practically what we observe in the field, SME leaders have to participate at least 5-6 surveys per month and they have to repeatedly answer the same which leads to a common method variance (CMV) issue. One strategy proposed to avoid this CMV issue is to collect

data from multiple sources within the same organisation (Wall & Wood, 2005), specifically by selecting 'key' informants (one or more) who respond to questions about which they are more knowledgeable or that are more closely related to their areas of expertise (Huselid & Becker, 2000). As a result, we suggest that adopting a multiple-key informant approach to collect data is a possible way to expand understanding of the antecedents of organisational resilience. This technique allows the researcher to solve the concerns stated above about the single-informant study strategy. In the beginning, based on the sample size calculation, the entire list was alphabetised and randomly selected 630 organisations using a simple random sampling technique considering the response rate of 43% we called each SME owner of 630 SME units and explained the purpose of the survey and asked to nominate another SME leader from the following positions: Managing Director, Director, CEO, Finance Manager, and Accountant. The following illustration (Figure 1) describes the entire selection procedure. However, before the final survey, pre-testing and item modification were carefully carried out with support of the expert review of academicians and industry leaders. Additionally, a pilot test was carried out with 38 SME leaders to troubleshoot unanticipated problems and make any required modifications prior to the real data collecting and the result of the reliability test for all items exceeded 0.7 which indicated that the overall internal consistency of the study was above expected level.

The primary data was collected employing an online survey approach using a structured questionnaire consisting of 42 items, and the questionnaire was sent to SME leaders via Google Forms. Furthermore, items

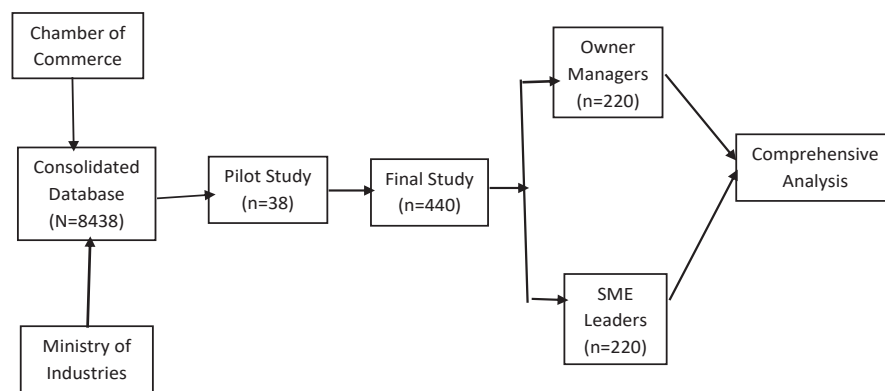


Figure 1: Summary of identification procedure.

Source: Authors

for each construct were adapted from prior studies. The data collection process took more than three month time and finally 440 responses were recorded in the system. In terms of achieving the overall goal of the study, the following conceptual framework (Figure 2) was built in accordance with theory and literature, encompassing three exogenous factors, one mediating variable, and two moderating variables. OR is a prominent factor for firms to cope with the size of the firm and market situation, and these moderating factors are favored by OR, which focuses on improving firms' ability to recognize and reconfigure the need for responding to changing environmental situations (Lengnick-Hall & Beck, 2016; Teece, 2018).

Moreover, raw data collected from the survey was analysed using descriptive and inferential statistics using AMOS and SPSS software packages.

Hypotheses development

In line with the overall research objective and the conceptual framework (Figure 2), the following eight hypotheses were developed.

H1: Strategic agility has a significant positive impact on organisational resilience

H2: Strategic agility has a significant positive impact on strategic orientation

H3: Strategic orientation has a significant positive impact on organisational resilience

H4: Strategic orientation mediates the relationship

between strategic agility and organisational resilience

H5: Economic uncertainty moderates the relationship between strategic agility and organisational resilience

H6: Economic uncertainty moderates the relationship between strategic orientation and organisational resilience

H7: Firm size moderates the relationship between strategic agility and organisational resilience

H8: Firm size moderates the relationship between strategic orientation and organisational resilience.

RESULTS AND DISCUSSION

Using SPSS and AMOS 25 software, primary data was analyzed using descriptive and inferential statistics particularly factor analysis and structural equation modelling (SEM). This research analyzes data in three stages: In step 1, exploratory factor analysis was done on the scale using maximum likelihood and Varimax rotation in SPSS. Step 2 involved confirming the factor structure generated by EFA and transferring to CFA using AMOS. Step 3 was used to evaluate the hypotheses by analyzing the structural model of OR with AMOS. As a result, the findings of the EFA study are shown in Table 1.

Since the KMO value is greater than 0.50, the sample adequacy conditions are satisfied. The sphericity Bartlett test has a statistically significant result ($P < .05$). As a result, the study's conclusions demonstrate that, as

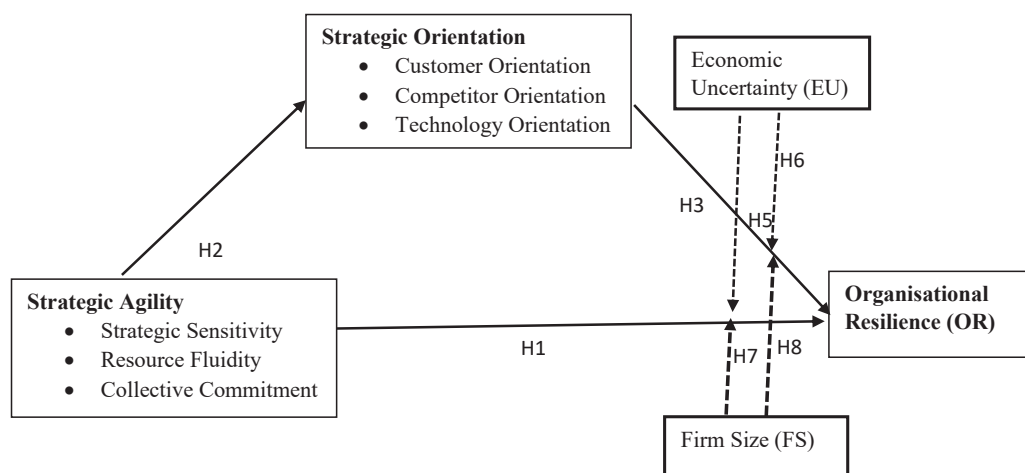


Figure 2: Conceptual framework.
Source: Authors

intended, the correlation matrix differs statistically from an identity matrix. As a consequence, components were categorized into seven groups. The RCM findings of the exploratory factor analysis indicate that, as anticipated, the solution is based on eight factors, and that every item loads over 0.5 on each of the factors independently. Of the overall variation, the eight-factor solution accounts for 75.4% of the variance. The factors have a high degree of validity, according to the EFA results. Confirmatory Factor Analysis (CFA) was used for additional validation, and the graphical representation of the CFA starting model and the final computed model, followed by results, is shown in Table 2. The CFA results reveal that the parameters evaluated for the study have a good level of validity. However, Reliability, Convergent Validity, and Discriminant Validity were examined for additional validation.

According to the results of Table 2, the examined fit indicators are well fitted, and the model's validity and reliability have good fit statistics such as $\chi^2/df = 4.43$, RMSEA of 0.088, SRMR of 0.0374, and CFI of .890. The approved and suggested values are given in brackets

based on Hu and Bentler's (1999), Browne and Cudeck's (1992), and Cline, Huckaby, and Zullo's (2023) proposes (RMSEA.08, SRMR.05, CFI>.90, CMIN/DF5). The standardized factor loading for all items was greater than 0.60, and the AVE was greater than 0.50. As a result, it is a reliable indicator of convergent validity (Hair *et al*, 2017). Another indicator of convergent validity is that the Maximum Shared Variance for all variables is smaller than the respective Average Variance Extracted. Cronbach alpha and composite reliability are both more than 0.70 for all constructs. As a result, the study's findings show that the considered structures are reliable. However, in this approach, assessing discriminant validity is also essential.

In terms of assessing discriminant validity, the Fornell & Larcker (1981) criteria were utilized based on the analysis of Table 3. The values in bold on the diagonal represent the square root of AVE, whereas the other values indicate inter-variable correlation. The essential criterion is that the diagonal bold values be greater than other values in their corresponding rows and columns, which is satisfied in the table. As a result, it may be

Table 1: KMO and Bartlett's Test

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.943
	Approx. Chi-Square	5201.480
Bartlett's Test of Sphericity	Df	105
	Sig.	.000

Source: Authors

Table 2: Reliability and Convergent Validity

Attribute	Cronbach Alpha	Composite Reliability	Average Variance Extracted	Maximum Shared Variance
Strategic Agility	.755	.742	.645	.168
Strategic Orientation	.770	.767	.752	.356
Organisational Resilience	.767	.760	.722	.168
Model Fitness: $\chi^2 = 2472.540$, $df = 558$, $\chi^2/df = 4.431$, RMSEA=.088, SRMR=.0374, GFI=.875, CFI=.890				

Source: Authors

Table 3: Discriminant validity

Attribute	Strategic Agility	Strategic Orientation	Organisational Resilience
Strategic Agility	.795		
Strategic Orientation	.358	.731	
Organisational Resilience	.340	.296	.832

Source: Authors

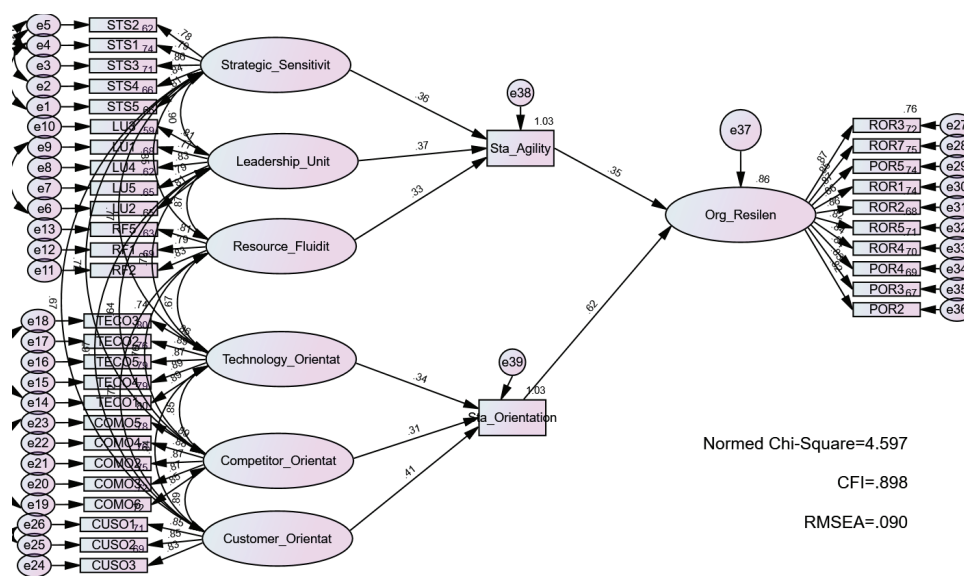


Figure 3: Proposed structural model.
Source: Authors

confirmed that the variables under consideration have strong discriminant validity as well. In addition to the Fornell and Larcker test, the HTMT ratio was examined, and all results were less than 0.85 (Kline, 2011). As a result, the model has satisfied all of the requirements for model dependability and validity.

Analysis of the structural model (SA, SO, OR)

The structural equation modeling method was employed, together with AMOS path analysis and factor score imputing from CFA, to investigate the association between SA, SO, and OR. Results are shown in Figure 3,

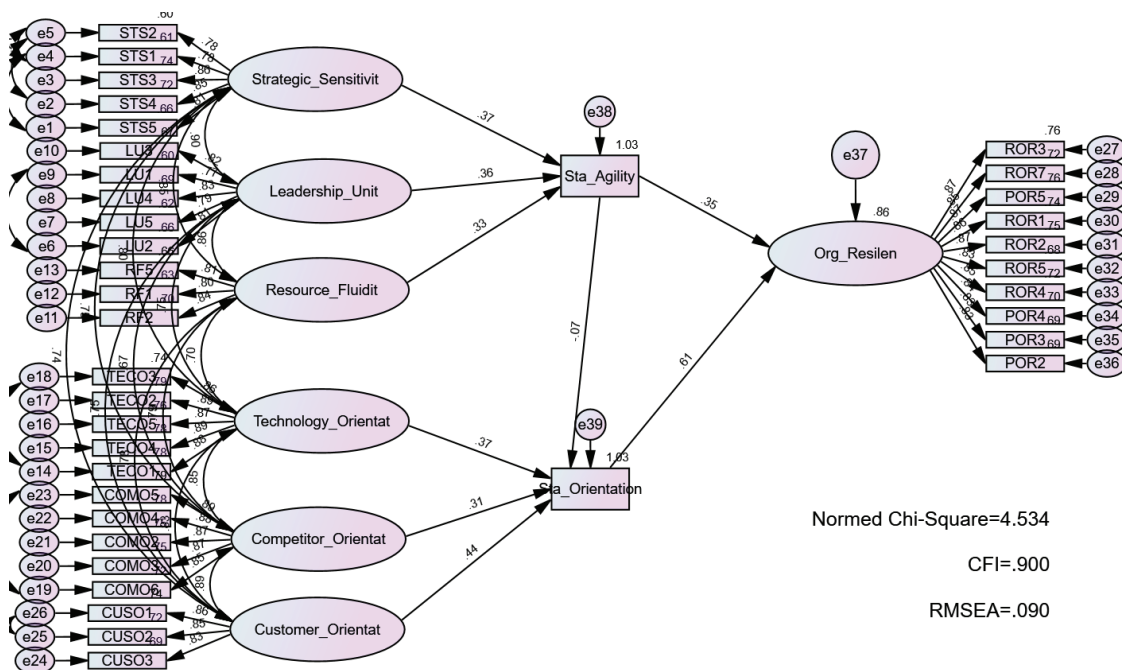
The model proposed was not well fitted at the initial level, as evidenced by the SRMR of 0.05 and RMSEA of 0.09. In general, the accepted value of RMSEA should be less than 0.08 and SRMR should be less than 0.05 to ensure model fitness which was not reached by the intended values. Additionally, the CMIN/DF value should be less than 5 (Collier, 2020). In order to test the diagonal relationship between SA, SO and OR, the suggested model was retested. Since the new model, OR, is 86% described by the components of SA and SO, the results show that the new model is successful and suitable for further modifications or refinements.

Table 4: Hypothesis testing

H. No.	Paths	Estimate	S.E.	C.R.	P	Remarks
H1	Strategic Agility > Organisational Resilience	.366	.038	9.556	0.001	H1 Supported
H2	Strategic Agility > Strategic Orientation	.076	.013	6.058	0.003	H2 Weakly Supported
H3	Strategic Orientation > Organisational Resilience	.576	.037	15.631	0.021	H3 Supported

Model Fitness: $\chi^2=2842.579$, $df=627$, $\chi^2/df= 4.53$, $RMSEA=.09$, $SRMR=.045$, $GFI=.895$, $CFI=.900$

Source: Authors



Standardized RMR = .0452

Figure 4: Modified measurement model.

Source: Authors

The newly tested model's results (Figure 4) demonstrated a good fit for the model, with SRMR of 0.045, GFI of 0.895, and CFI of .90. Furthermore, the model's generalizability shows RMSEA of 0.09 and a CMIN/DF value of 4.53, indicating a high level of model fitness. In accordance with the output of the tested model conforms that well combination of strategic agility and strategic orientation enhance the ability of fostering organisational resilience by 86% in SME sector. Practically when the market pressure comes both these

strategies have to be deployed in terms of surviving in the market. Accordingly, the relationship of the variables can be tested as following Table 4.

Table 4 illustrates that the alternative hypothesis is accepted for H1, H2 and H3 all three hypotheses. Accordingly, the findings of the study confirm that SA has an impact on OR, SA has an impact on SO and SO has an impact on OR as an integrated model. On the other hand, all these three constructs have a clear association.

Table 5: Mediation analysis

H.No	Relationship	Direct Effect	Indirect Effect	Confidence Interval		P value	Conclusion
				Lower Bond	Upper Bond		
H4	SA >SO>ORG_RES	.313 (p=0.07)	0.0456	-.043	-.017	.025	Partial mediation effect-Supported

Source: Authors

Table 6: Moderation testing

H. No.	Moderating effect- Size of the firm	Estimate	S.E.	C.R.	P	Remarks
H5	Interaction Strategic_Agility*FirmSize> OrganisationalResilience	.003	.026	.117	.907	Not Supported
H6	Interaction Strategic_Orientation*FirmSize> OrganisationalResilience	.001	.022	7.057	.001	Supported
	Moderating Effect of Economic Uncertainty					
H7	Interaction Strategic_Agility *EcoUncertainty> OrganisationalResilience	.030	.026	2.150	.050	Supported
H8	Interaction Strategic_Orientation * EcoUncertainty > OrganisationalResilience	.848	.038	22.202	.002	Supported

Source: Authors

The role of strategic orientation between strategic agility and firm resilience

The mediation analysis was carried out by using three meta capacities of strategic agility as independent factors, organisational resilience as a dependent variable, and strategic orientation as a mediator. The mediation analysis was based on an examination of indirect effects using the Baron & Kenny (1986) classical technique. According to the study, direct and indirect effects were examined using bootstrap techniques (5000 samples) and bias-corrected bootstrap confidence intervals (95%). As a consequence, the findings are shown in Table 5.

By the above finding (Table 5), shows that strategic orientation (SO) is partially mediating the relationship between strategic agility (SA) and organisational resilience (OR) as indirect effects are statistically significant ($\beta=.12$, $P<.05$) which means that the resiliency of the SME sector companies is achievable by strategizing agility capabilities of the organisation at the right time through strategic orientation. Embedding strategic orientation as a mediator, improves the capacity of SA in fostering OR in SME sector. Based on these findings, the alternative hypothesis can be accepted for H5.

Analysis of the moderation effect of firm size and economic uncertainty

The moderation analysis was performed by treating Strategic sensitivity, Leadership unity and Resource fluidity as independent variables, OR as dependent variables, and firm size (Small and Medium) and economic uncertainty as moderator variables. The results are calculated by creating interaction terms from standardized scores of variables using SPSS.

In this study, two moderating effects (Firm size and Economic uncertainty) were tested with strategic agility and organisational resilience. In light of the above findings (Table 6), indicate that firm size strengthens the positive relationship between strategic orientation and organisational resilience which means when the firms grow in size, it is required to orient towards technology, competitor activity and customer feedback more proactively. Moreover, findings discover that Economic Uncertainty strengthens the positive relationship between strategic agility and OR as well as strategic orientation and OR. Accordingly, results further highlight that alternative hypothesis is accepted for H6, H7 and H8 but null hypothesis is accepted for H5.

DISCUSSION AND CONCLUSION

As indicated in this study, various studies discovered comparable findings about SA and OR in the SME sector in times of economic uncertainties in both the global and Sri Lankan contexts. The present study revealed that strategic agility affects firm resilience in SME sector companies. However, strategic orientation plays a significant role as a mediator between SA and OR. Otherwise, SA and OR become only theoretical foundations. This is one of the prominent findings to mention the importance of embedding strategic orientation as a key determinant that influences SMEs' resilience and SO determines the capacity to leverage new business strategies. Furthermore, it has been discovered that leaders of SMEs with a more prospector strategy generally outperform the greater capacity for fostering firm resilience. As highlighted by several past valuable studies (for example, Kottika *et al.*, Lim *et al.*, 2020; Akturk, 2014), These studies revealed that economic instability creates learning opportunities and rare business lessons for SMEs, allowing them to capitalize on their unique talents, skills, traits, and resources to survive in the market. According to the findings of this study, Kottika *et al.*, (2020) outlined how SMEs' SA enables them to develop resilience through innovative projects, a capability that aids SMEs in surviving the financial crisis and detailed attention to evolving strategic constraints is required. More positive opinions were found in past literature (for example, Kottika *et al.*, 2020; Simon-Moya *et al.*, 2016; Soininen *et al.*, 2012; Petzold *et al.*, 2019; Acikdilli *et al.*, 2013; Gunawardana, 2020; Samsudin & Ismail, 2019; Collis & Anand, 2018; Carayannis & Stewart, 2013) There are very few studies that compare how much an entrepreneur's SA or SO affects their business resilience when it comes to the support that DCs and SO of SMEs provide for their survival amid economic downturns and hard times.. These findings indicate separate directional relationships between SA, SO, and OR. Moreover, how well these constructs need to integrate in navigating towards OR is still vague. This study, however, concentrated on this research gap and found that, more so than other factors, both SA and SO had a considerable impact on the business resilience and strategic sensitivity of SMEs. Nonetheless, in Sri Lanka's SME sector, managing the correct balance between strategic agility and orientation is crucial. This result adds credence to earlier research by Mandal & Saravanan (2019), Zelbst *et al.* (2010), Gligor *et al.* (2016), and Zhang (2011), which found that an organisation with a market orientation is better able to recognize changes in customer requirements and competitor actions quickly, to gather intelligence and coordinate efforts, and to adapt appropriately. However,

the results of this study further expand the body of knowledge that a well-combined customer, technology and competitor orientation is required in line with the size of the firm. In particular, embedding these three key drivers for medium-sized firms positively impact on resiliency in the long run.

Theoretical contributions and practical implications

The current study's findings added to the literature on organisational resilience, strategic agility, and strategic orientation in three key areas. First, this study presented and investigated an integrated model of supporting company size and the current market environment in Sri Lanka's SME sector. In this study, it was implied that multiple layers of analysis (which have rarely been used in previous studies) must be used to examine SA in order to both theoretically propose and empirically detect evidence of interaction effects. A more sophisticated understanding of how micro foundations may interact with SO and firm features and economic uncertainty circumstances in the context of an SME setting is provided by the fact that different micro foundational impacts are attenuated when they interact with internal and external factors. Moreover, the study articulates several remarkable additions, small enterprises must be more oriented towards technology, competitor activities and customer feedback and need to evaluate strategically in terms of aligning with the turbulent situation. In light of this concern, SO is more essential in between OR and SA. Furthermore, findings elaborate that the strategic orientation process and strategic agility process need to integrate in line with the uncertainty level.

Another significant contribution of this study is a detailed description of the three SA meta capabilities that underpin the path-dependent process of producing OR, and how SME leaders can manage these features when market demand is becoming increasingly uncertain. These characteristics are addressed in terms that these company leaders can operationalize and that represent the multilayered actions and interactions that produce proactive and reactive resilience in the SME sector.

RECOMMENDATIONS

The findings of this study are recommended in terms of fostering OR SME sector, SO is necessarily needed since it is mainly guiding philosophies for leaders of SMEs to attain resiliency through deploying appropriate behaviours; such philosophies are bound to have a profound influence on the development of SA.

Moreover, business leaders of SMEs need to identify the essential enabler in terms of navigating strategic agility in line with the size of the organisation and determine the degree of effect of economic uncertainty towards the organisation and detailed attention should be given to evolving strategic constraints of SMEs. Further, SME leaders have to identify entrepreneurial and individual resilience characteristics that contribute both directly and indirectly to SME resiliency and antifragility.

Finally, the findings suggest that SME leaders must navigate the strategic sensitivity of SA in times of economic uncertainty, particularly for medium enterprises.

Author contributions

Findings confirm that strategic orientation and strategic agility significantly develop organisational resilience in SME sector however, integration of SO as a mediator between SA and OR yields a better result in times of economic uncertainty. In other words, the capacity to maintain adaptability in the face of novel opportunities and unprecedented challenges to consistently modify the SME's strategic orientation is highly essential to bounce back. Moreover, SME leaders have to understand the firm characteristics and the strategic orientation process has to be integrated accordingly. The findings further enhance the body of knowledge that a well-combined customer, technology and competitor orientation is required for medium-sized firms which positively impacts resiliency in the long run. All these three meta components of SA are necessarily needed in fostering OR in SME sector. Accordingly, a newly tested framework (Figure 4) was identified and proposed for the SME sector, particularly in times of economic uncertainty. The study further revealed that fostering organisational resilience is enhanced when detailed attention is paid to evolving strategic constraints which is necessarily required through these inclusive business models.

Limitations and future research avenues

Although the authors made every attempt to perform a thorough study that was theoretically supported, the data for this study were gathered from a leadership aspect functioning in the SME sector. While the author believes that context is important when considering firm concepts such as strategic orientation, dynamic capabilities, and strategic agility, it is entirely possible that the firm at the center of this study has some distinguishing characteristics that are not transferable to other firms or industries. However, this research has also identified several mechanisms and relationships

that can be explored in different contexts to further shed light on the relationship between strategic agility and a firm's dynamic capabilities. For example, paper one revealed the existence of a relationship between the responsive process and resilience process that resulted in a new idea, a subsequent behaviour modification and a reciprocal outbound knowledge flow as well. Examining the relationship between strategic orientation, and knowledge process in terms of fostering organisational resilience in different settings has the potential to shed light on the circumstances which may result in more or less favourable outcomes. Another feature uncovered during paper two is the cultivation of connections and resource flexibility as supporting mechanisms for strategic orientation's contribution to SME resilience. These processes may be influenced by business size, which has implications for using this paradigm to better understand the link between strategic orientation and decoupling with dynamic capacities.

FINANCIAL DISCLOSURE

None reported.

CONFLICT OF INTEREST

The authors declare no potential conflict of interests

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