

Supplementary Strategies for Organizational Resilience in the Times of Crisis: A Literature Review

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Abstract

This literature review explores complementary strategies for enhancing organizational resilience during crises. The study examines how innovation, dynamic capabilities, internal competencies, external support, and crisis-derived opportunities interact with resilience to help businesses survive and thrive in uncertain times. Through analysis of 26 Scopus-indexed articles from January 2020 to July 2024, the paper proposes an integrated model positioning organizational resilience as the core element, supported by innovation and dynamic capabilities as key enablers. Internal capabilities like networking and adaptability, along with external factors such as government support and digitalization, further reinforce resilience. Additionally, the study highlights how crises, despite their challenges, can drive positive transformation and growth when approached strategically. The proposed model suggests that maximizing these complementary elements collectively strengthens an organization's capacity to weather crises and emerge stronger. While providing valuable insights, the paper acknowledges limitations in its literaturebased approach and calls for empirical testing across diverse contexts. This research contributes to a more holistic understanding of organizational resilience, offering a framework for businesses to develop comprehensive strategies for navigating crises and capitalizing on emergent opportunities.

Keywords: Organizational Resilience; Innovation; External Support and Forces; Internal Capability; Digital Capability

Introduction

In an era of increasing uncertainty, the ability of organizations to endure and adapt during times of crisis becomes increasingly important. Organizational resilience refers to the capability of entities to navigate, respond to, and recover from unexpected disruptions. Moreover, firm resilience, conceptualised as the capacity to weather adversities and rebound, is postulated to act as a moderator in the relationship between learning from crises and firm survival. This moderation effect is underscored by the three key constituents of resilience: robustness, agility, and integrity (Kantur & Iseri–Say., 2012).

Mathura et al (20) argue that resilience is a system's ability to endure even in times of crisis and adversity and to recover after an external systemic shock. Learning from crises enables companies to identify and tackle underlying weaknesses in their structures and strategies, ultimately strengthening their resilience (Mathura et al., 2022). Businesses are not just resilient by chance. Business resilience plans are key to withstanding disruption and avoiding potential disaster. According to Kyrdoda et al (2023), firm resilience can be conceptualized as the capacity to whether adversities and rebound, is postulated to act as the moderator in the relationship between learning from crisis and firm survival. In the context of the current global landscape, some significant shifts marked by events such as the financial crisis, COVID-19 pandemic, and politic issues. These events have created an environment of constant change and uncertainty. Degbay & Einola (2020) stated that the prevailing narrative often advises individuals and organizations to "bounce back." However, this concept of bouncing back warrants further examination, particularly when considering its relationship with resilience (Degbey & Einola, 2020).

Business resilience, in particular, involves more than just a simple return to a prior state. It requires not only bouncing back, but also bouncing forward. Organizations must anticipate not only immediate challenges but also potential disruptions that are unforeseeable and potentially very disruptive. This means developing the capacity to withstand and adapt to shocks that may not even be fully understood at present. Moreover, The European Commission stresses the need to bolster the resilience of the European industry in order to thrive in uncertain time. However, there are few research about the ways the business should be functioning after the disruptive event.

Hence, this research aims to examine additional elements and strategies that contribute to resilience during times of crisis using a literature review method. The primary focus of this study is to examine existing literature on innovation strategies and organizational resilience practices in businesses. By analysing various studies and findings, this research will evaluate how these two aspects are applied in different contexts and how they influence each other.

This paper will start by eliciting our research method, including the inclusion and exclusion criteria. Next, the discussion will focus on our finding among the literature and the proposed model in explaining organizational resilience and innovation in times of crisis. Finally, conclusion, limitation, and future research will be followed.

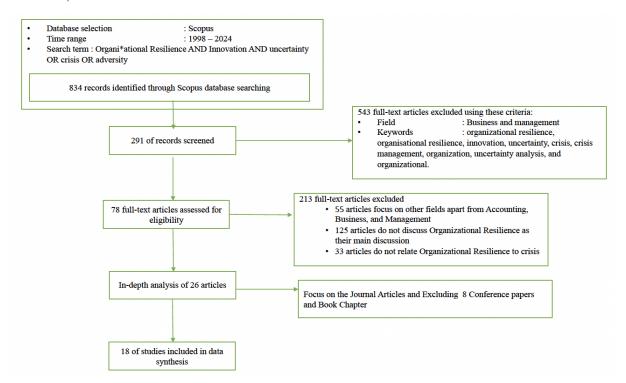


Figure 1. PRISMA Diagram

Methodology

The methodology section of this study is structured to ensure a comprehensive understanding of complementary elements to organizational resilience to encounter crisis. Figure 1 illustrates the preferred reporting items for systematic reviews and meta-analyses (PRISMA) flow diagram, which details the process of the study selection and inclusion for this research.

Key Concepts

Organizational Resilience in the Times of Crisis

Organizational resilience is a well-discussed topic in management. Rooted from psychology, ecology, and engineering literature, this topic starts to gain more attention in the field of management after Staw et al (1981) and Meyer (1982). The early discussions on organizational resilience focusing on organizational responses to external threats (Meyer, 1982; Staw et al., 1981). Staw et al (1981) stated that external threats automatically place organizations at risk. However, Meyer (1982) argued that external threats can both bring businesses to successful and unsuccessful condition.

These past decades, scholars discuss the triggers of organizational resilience, from institutional crisis (Bahri Korbi et al., 2021), entrepreneurial failure (Harries et al., 2018), crisis (Ortiz-de-Mandojana & Bansal, 2016), evolving market (Gunasekaran et al., 2011), change and uncertainty (Dahles & Susilowati, 2015). Along with that, the discussion of the aims of organizational resilience is dominated. The aims cover to survive the adversity (Melián-Alzola et al., 2020), to respond crisis and cope with uncertainty (Bachtiar & Ramli, 2023), to boost competitiveness (Tasic et al., 2020), and to adapt and learn (Ozanne et al., 2022). Table 1 below shows the organizational resilience throughout literature:

Table 1. Definition of Organizational Resilience Across Literature

Authors	Definitions
(Aleksić et al.,	The ability of an organization to withstand systematic discontinuities as well as the capability to
2013; Amann & Jaussaud, 2012)	adapt to new risky environments.
(Amann &	The ability a firm to take situation-specific, robust, and transformative actions when it confronts
Jaussaud, 2012)	unexpected and complex events that have the potential to jeopardize its long-term survival and performance.
(Branzei &	The psychological mechanisms of positive adaptation and generate income in the face of the
Abdelnour, 2010)	terrorism outbreak, escalation, and reduction situations.
(Burnard &	The ability to resist systematic discontinuities and the capability to adapt to new risk environments.
Bhamra, 2011)	
(Gunasekaran et	Adaptability, sustainability, vulnerability, responsiveness, and competitiveness in the evolving
al., 2011)	turbulent global markets.
(Lampel et al., 2014)	Greater stability in performance despite economic crisis.

However, we argue that the organizational resilience role will be more complex, and it needs important supplementary elements to play its role successfully in times of crisis.

Results and Discussion

Organizational Resilience Complementary in the Times of Crisis

Organizational Resilience is commonly recognized due to its substantial role to lead business to survive, thrive and prosper (Messabia et al., 2022). Prior research indicates the aims of organizational resilience to respond and cope with uncertainty (Bachtiar & Ramli, 2023; Conz et al., 2023; Kyrdoda et al., 2023), to adapt and learn (Galkina et al., 2023; Guo et al., 2023; Ozanne et al., 2022), to quick action, seize opportunities, and bounce back (Prayag et al., 2023;

Tasic et al., 2020), and to transform, recover, and bouncing forward (Chih et al., 2022; Martín-Rojas et al., 2023; Zabłocka-Kluczka & Sałamacha, 2023).

However, in the times of crises, Organizational Resilience can standalone. To react, adapt, and transform, businesses need complementary strategies to accompany business resilience. This paper aims to elaborate the complementary elements of organizational resilience. By studying the literature, we analyse some complementary aspects to organizational resilience as discussed below:

1. Innovation

The selected papers for this research collectively assert that innovation is an indispensable component of organizational resilience (Y. Li et al., 2024; Vasi et al., 2024; Yadav & Tripathi, 2024). Vasi et al. (2024) emphasize that small and medium-sized enterprises (SMEs) should adopt open innovation to build resilience during crises. Their study presents a dynamic open innovation funnel, which incorporates the micro-foundations of dynamic capability: sensing, seizing, and reconfiguring, to navigate through different stages of an exogenous crisis. This framework enables organizations to anticipate, adapt, and transform in response to external shocks.

Li et al. (2024) further refine the concept of open innovation by differentiating between Inbound Open Innovation (IOI) and Outbound Open Innovation (OOI). They argue that both types of innovation are crucial for enhancing growth performance during crises, with organizational resilience acting as a moderating factor. The authors advocate for the strategic implementation of IOI and OOI, suggesting that this dual approach can significantly bolster organizational resilience, enabling firms to swiftly adapt and thrive amidst adversity.

The relationship between organizational resilience and innovation has been extensively explored in academic literature, yet it remains subject to diverse interpretations. One perspective views innovation as a precursor to resilience, proposing that innovative capabilities are foundational to developing resilience (Carayannis et al., 2014). Another perspective posits that resilience itself fosters innovation, suggesting that resilient organizations are better positioned to generate innovative solutions (Ortiz-de-Mandojana & Bansal, 2016). Additionally, some scholars argue that innovation serves as an enabler of resilience, facilitating adaptive responses and continuous improvement in the face of challenges (Biggs et al., 2012; Hamel & Välikangas, 2003).

This study contends that during crises, innovation and organizational resilience are not merely complementary but integrative forces that collectively advance business objectives, namely survival and prosperity. Innovation provides the tools and frameworks necessary for organizations to adapt to rapidly changing environments, while resilience ensures that these innovations can be sustained and leveraged effectively over time. This symbiotic relationship underscores the need for a holistic approach that encompasses both innovation and resilience in organizational strategy.

2. Dynamic Capability

The dynamic capabilities concept, akin to innovation, is strongly rooted in Joseph Schumpeter's notion of creative destruction. Schumpeter's perspective lain the groundwork for understanding how continuous innovation and disruption could lead economic growth and competitive dynamics. He introduced this idea to explain how business could achieve a competitive advantage by leveraging their internal resources to enhance operational efficienty and effectiveness (Schumpeter, 1934).

Building on this foundation, Teece et al (2007) introduced the concept of dynamic capabilities, which posit that a firm's competitive edge is fundamentally dependent on its

ability to continually renew and adapt its resources and capabilities, especially in rapidly evolving industrial landscapes (Teece et al., 1997). This concept is widely employ in gaining competitive advantage in the times of crises. Previous studies underline the role of dynamic capability on boosting recovery and nurture a portfolio of competencies to activate during crises (Bughin, 2023). Furthermore, this perspective has become particularly relevant in the context of globalization and technological advancements, where industries face constant change and uncertainty.

The dynamic capabilities frameworks extend the Resource-Based View (RBV), which emphasized the critical role of organizational resources in maintaining a competitive advantage (Barney, 1991). Dynamic capability goes a step further by arguing that it is not sufficient for firms to possess valuable, rare, inimitable, and non-substitutable resources. Instead, firms must also develop the capacity to adapt, reconfigure, and renew these resources to respond to environmental changes effectively (Bechtel et al., 2023; Teece, 2007). Through its micro foundations, dynamic capability is strongly related to innovation and organizational resilience. Scholars indicate entrepreneurial leadership, AI, risk-taking ability, and absorptive capabilities as the major substantial dynamic capability to support innovation and resilience (Yadav & Tripathi, 2024)

As mentioned above, this theoretical approach has gained significant attention, particularly in contexts of crisis when standard operations are disrupted, and organizations are in urgent need of effective strategies to adjust and respond. The dynamic capabilities view emphasizes three core processes: sensing, seizing, and transforming. Sensing involves scanning and interpreting the external environment to identify opportunities and threats. Seizing focuses on mobilizing resources to capture identified opportunities, while transforming involves reconfiguring the firm's resource base to address emerging challenges and capitalize on new opportunities (Rhaiem & Doloreux, 2024; Schoemaker et al., 2018; Teece, 2007).

In times of crisis, such as the COVID-19 pandemic, global financial crisis, man-made crisis, natural disaster and else, research has shown that firms with strong dynamic capabilities are better equipped to navigate crises, as they can quickly sense changes in the environment, seize opportunities presented by the crisis, and transform their operations to align with the new realities (Y. Li et al., 2024; Vasi et al., 2024). For example, during the pandemic, many firms leveraged digital transformation as a dynamic capability to maintain operations and engage with customers despite physical restrictions (Yadav & Tripathi, 2024).

Moreover, the dynamic capabilities framework underscores the importance of external engagement. This involves building and maintaining relationships with external stakeholders, including customers, suppliers, and partners, to gain insights and resources that can enhance the firm's adaptive capacity. External engagement also facilitates the exchange of knowledge and best practices, which can be critical for innovation and resilience during crises (Schoemaker et al., 2018; Teece, 2007).

3. Core or internal Capabilities

Even though innovation is included as one of the capabilities, this part discusses other core capabilities needed to support organizational resilience. each business has to own its capabilities to run business and in the time of crises, there are some outstanding capabilities that able to assist business to encounter adversity. The first capability we gained from the literature is networking capability. Networking is used to capitalize on emerging market opportunities to recover and grow in the times of crises (Sahi et al., 2023). The authors also underline the important role of organizational resilience as a moderating variable in integrating resources generated by networking to foster new product

innovation. This result is in line with prior research that describes how networking results resilience benefits for established firm and its project process (Dieterle & Duchek, 2023).

The next core capabilities complements organizational resilience in the times of crises are flexibility, adaptability, recovery and responsiveness. We group these capabilities into one concept called reactive capability. The importance of this reactive capability is confirmed by some literature which explains that the recognizing and leveraging the interplay between these factors can position firms to withstand crisis and enhance their long—term survival (Kyrdoda et al., 2023). Other study underlines the role of different reactive capability in each phase of crisis. For instance, recovery capability augments iterative digital product innovation and integrated digital process innovation during crisis, where, after the crisis, recovery capability fortifies expanded digital product innovation and experiential digital process innovation (Wang & Sun, 2024).

The last reactive capability underlined in the literature is adaptability. This capability underlines the quick respond in facing and dealing with crisis. Being adaptable may trigger transformative environments and contribute to resilience (Dragin-Jensen et al., 2022). Finally, we argue that the core or internal capabilities are the one of the complementary aspects in promoting organizational resilience in times of crises and they integrate to achieve business survival and growth in uncertain situation.

4. External support and forces

In encounter crises, businesses cannot standalone. Prior studies have proven the advantages of having external support to help business survive and thrive. Those support may include government support (Messabia et al., 2022; Mustapa & Mohamad, 2021; Najib et al., 2021), community support (B. Li et al., 2021), and collaboration and knowledge transfer (Schotter, 2021). Messabia et al (2022) state the significant role of federal government funding to help the Food and Beverage Business in Canada survive during the past Covid–19 pandemic. Najib et al (2021) add to it by claiming the assistance programs provided by the government is equally important rather than only providing fresh money. At the same time, B. Li et al (2022) explain how community support provides local market and security to the local businesses during localized lock down during pandemic. The authors also claim the community based marketing help businesses to stay operating and gain income during the limited sales in pandemic time. Finally, Schotter (2021) highlights that maintaining effective collaboration and knowledge transfer are critical for Multinational Enterprises during global crises.

Furthermore, our final papers agree on one external force that is crucial to supplement organizational resilience, specifically in facing prolonged crises. That external force is digitalization. When most of the businesses run digitally and digital machinery and tools are dominated the industry, the forces to utilize this technology are also increasing. This external force is proven to gain more market, expand the business and turn business' operation effective and efficient (Browder et al., 2024; Mahmood et al., 2024; Nakpodia et al., 2023). The role of digitalization is increasing in the time of crisis where digital imperatives can support and mediate the organizational resilience and growth's role to achieve business sustainability (Bachtiar et al., 2023).

5. The Strength of Crisis

This study agrees that in embracing crises, businesses need to see crises in two ways. Firstly, each crisis is indeed a negative event leads to uncertainty, adversity, and severe impact for the business (Bachtiar et al., 2023; Kromidha & Bachtiar, 2024; Vargo & Seville, 2011). However, at the same time, crisis carries a learning process (Chen & Biswas, 2021; Kyrdoda et al., 2023) that can take business into new ways of doing business. We call this second perspective of crisis as the strength of crisis.

Along with its negative impact, crisis changes how a business operates and, most of the time, may lead to the increasing performance of the business. Prior study claim crisis can transform the business model of a company (Brenner, 2018), expand their market by opening new market (Wang & Sun, 2024), providing continuous learning (Kyrdoda et al., 2023), and increase business growth (Bachtiar et al., 2023). These strengths drive to a complete impact, from the learning process, transformative business strategies, market expansion, to business growth.

Hence, this study argue that, to complete and complement organizational resilience role in the times of crises, businesses need to maximise the positive impact or the strength of crisis and by utilising it, businesses not only strengthen their organizational resilience but also may increase their business growth that lead into business success.

Organizational Resilience Model in the Times of Crisis

The above part has discussed the compliments aspect of organizational resilience in the times of crisis. In this last part of the paper, we integrate all the complimentary aspects to build an organizational resilience model in the times of crisis. This model is expected to be applied as a whole to maximise its advantage in bringing business to thrive and prosper in the times of crisis. The model is proposed in Figure 2 below:



Figure 2. Organizational Resilience in the Times of Crisis Model

The Figure 2 above describes organizational resilience as the core element to survive crisis. However, organizational resilience cannot standalone. It requires complimentary elements as its support system. In this model, we put innovation and dynamic capability as the inner circle as we argue that both elements integrate directly and strongly with organizational resilience and those relationships are increasing in crisis time. Following that, we place internal capabilities and external supports and forces as we believe these elements complement the earlier aspects to maximise the role. Finally, we put the strength of the crisis as the umbrella element to be used and exploit to survive the crisis and to thrive and prosper in the times of crisis.

Conclusion

In conclusion, this literature review research emphasizes the integral role of innovation, dynamic capability, internal capabilities, external supports and forces, and the strength of crisis in fostering organizational resilience in the times of crisis. First, this study argues that during crises, innovation and resilience are not only complementary but also integrative forces that

advance business objectives, ensuring survival and prosperity. Following that, dynamic capability, involving sensing, seizing, and reconfigure/transforming, is crucial for firms to continuously adapt and renew their resources in response to environmental changes. Moreover, the study identifies core internal capabilities, such as networking, flexibility, adaptability, recovery, and responsiveness as essential complements to organizational resilience. These reactive capabilities enable firms to leverage opportunities, recover from setbacks, and maintain operational continuity during crises. Additionally, external support from government, community, and collaboration with other entities plays a critical role in enhancing resilience and ensuring business continuity. Finally, this research acknowledges the strength of crises as opportunities to learn and transform. Crises, despite their negative impacts, can drive business model innovations, market expansion, and continuous improvement, ultimately contributing to business growth and success. Therefore, maximising the positive impacts of crises, alongside leveraging internal and external capabilities, can significantly enhance organizational resilience and lead to sustainable business model.

While this study provides valuable insights into the role of complimentary aspects on organizational resilience in the times of crisis, several limitations should still be acknowledged. The limitations include data collection method that is still in the literature review stage, empirical research is needed to confirm the finding of this research. Next, the specific context of a case study is required to measure and test for which context this model can be applied for. Finally, future research possibilities may include empirical study, contextual research, comparative studies across industries and regions, and mixed method approach.

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