Journal of Sultan Alauddin Sulaiman Shah
JSASS
Journal of Humanities & Social Sciences
https://jsass.kuis.edu.my
ISSN: 2462 1692 e-ISSN: 2289 8042
Vol. 12, No. 2, (Nov, 2025)

Strategic Agility for Organizational Adaptation in Volatile Environments: A Study of Managers in Climate Vulnerable SMEs

Ketangkasan Strategik untuk Penyesuaian Organisasi dalam Persekitaran Tidak Stabil: Kajian terhadap Pengurus dalam PKS yang Terdedah kepada Iklim

Abdulrasheed Aminullah[1*], Asniza Yusuf[2], Muhamad Fairos Bin Mohamad Shah[3], Nibras Kadhim Abed[4], Salamatu Attahiru Maiyaki[5]

[1]*Department of Human Resources Management, School of Business Management, Universiti Utara Malaysia, Sintok, Kedah*, alfarasheed@yahoo.com

[2]*Iqra Business School, University Geomatika Malaysia,* drasniza@geomatika.edu.my

[3]*Iqra Business School, University Geomatika Malaysia,* muhamadfairos@geomatika.edu.my

[4]*Department of Marketing and Business School, University of Kerbala,* nibras.k@uokerbala.edu.iq

[5]*Department of Cooperative Economics and Management, Kaduna Polytechnic, Nigeria.* sattahiru005 @gmaiĺ.com

[*]*Corresponding Author*: Abdulrasheed Aminullah, [1]*Department of Human Resources Management, School of Business Management, Universiti Utara Malaysia, Sintok, Kedah E-mail:* alfarasheed@yahoo.com

ABSTRACT

SMEs in particularly vulnerable regions of the world, and subjected to Environmental Institutional Strain (EIS), are facing the actual danger of extinction. Climate change is notable, and SMEs, which are concerned with EIS (socio-economic), are at a real risk of being wiped out. To withstand these conditions and remain adequately performing, such SMEs will need to build robust, effective adaptation mechanisms. To this end, this conceptual paper examines the importance of strategic agility within the shifting landscape of dynamic capabilities and how it facilitates organizational survival and adaptation in such dynamic, turbulent settings as outlined. Through a systematic literature review and thematic analysis, this conceptual paper synthesizes extant research on Dynamic Capability Theory (DCT) and Circular Economy (CE) Theory, the paper proposes an integrated model in which strategic agility is captured as the mediating mechanism situated within the connection of the core three key antecedents: environmental scanning, resilience training, organizational ambidexterity and organizational adaptability as the outcome. The model also articulates the moderating influence of environmental turbulence on the above relationships, suggesting the increased importance of agility in responding. By building on the literature, the authors suggest hypotheses based on the plausible theoretical routes which managers in climate

Journal of Sultan Alauddin Sulaiman Shah
JSASS
Journal of Humanities & Social Sciences
https://jsass.kuis.edu.my
ISSN: 2462 1692 e-ISSN: 2289 8042
Vol. 12, No. 2, (Nov, 2025)

vulnerable SMEs resilient, strategic focus and organizational ambidexterity to thrive and climate ill and climate vulnerable SMEs resilient, strategic focus and organizational ambidexterity to thrive and climate ill proposed to offer to the managers of such SMEs and to describe to the managers of such proposed to provide to the managers of such climate vulnerable SMEs and climate ill climate. The proposed model helps close the gap in the integration of DCT and CE within the literature and, within the climate ill, climate vulnerable, proposes to provide managers of such climate-vulnerable SMEs and climate-ill SMEs. For practitioners, the study provides a actionable framework for SME managers to enhance organizational resilience and pivot towards sustainable business models in the face of climate disruptions, offering a clear pathway from insight to adaptation.

Keywords: Strategic Agility, Organizational Adaptation, Dynamic Capabilities, Climate Vulnerability, SMEs, Environmental Volatility, Circular Economy, Resilience.

ABSTRAK

Perusahaan Kecil dan Sederhana (PKS) yang beroperasi di kawasan yang rapuh dari segi alam sekitar semakin terancam oleh Tekanan Institusi Alam Sekitar (Environmental Institutional Strain, EIS) akibat peningkatan kesan perubahan iklim. Perusahaan Kecil dan Sederhana ini menghadapi risiko kemerosotan atau kepupusan sekiranya gagal membangunkan mekanisme yang berkesan untuk ketahanan dan penyesuaian. Kertas konseptual ini meneliti peranan penting ketangkasan strategik (strategic agility) sebagai satu keupayaan dinamik yang membolehkan kelangsungan dan penyesuaian organisasi dalam persekitaran yang tidak menentu dan penuh ketidakpastian. Berdasarkan Teori Keupayaan Dinamik (Dynamic Capabilities Theory, DCT) dan Teori Ekonomi Pekeliling (Circular Economy, CE Theory), kertas ini mencadangkan satu rangka kerja bersepadu di mana ketangkasan strategik bertindak sebagai pemboleh ubah perantara antara tiga faktor utama iaitu pemeriksaan persekitaran (environmental scanning), latihan ketahanan (resilience training), dan ambideks-teriti organisasi (organizational ambidexterity) terhadap keupayaan penyesuaian organisasi (organizational adaptability) sebagai hasil yang diingini. Selain itu, model ini juga memperkenalkan pergolakan persekitaran (environmental turbulence) sebagai pemboleh ubah penyederhana yang menekankan kesan penguatan ketidakpastian luaran terhadap keperluan ketangkasan strategik. Dengan mensintesis pandangan daripada literatur DCT dan CE, kertas ini mencadangkan satu set hipotesis yang boleh diuji bagi menjelaskan bagaimana pengurus dalam PKS yang terdedah kepada iklim dapat meningkatkan ketahanan, memperkukuh fokus strategik, dan memanfaatkan ambideks-teriti bagi terus berkembang dalam menghadapi gangguan alam sekitar. Rangka kerja yang dicadangkan ini menyumbang kepada integrasi teori antara perspektif DCT dan CE serta menawarkan panduan praktikal kepada pengurus PKS dalam menangani cabaran yang berpunca daripada perubahan iklim. Secara keseluruhannya, kajian ini menyediakan asas konseptual untuk membangunkan model perniagaan yang tangkas, mampan, dan adaptif dalam menghadapi ketidakstabilan persekitaran yang semakin meningkat.

Kata kunci: *Ketangkasan Strategik, Penyesuaian Organisasi, Keupayaan Dinamik, Kerentanan Iklim, PKS, Ketidakstabilan Persekitaran, Ekonomi Pekeliling, Ketahanan.*

Received: October 25, 202 **Accepted:** November 21, 2025 **Online Published:** November 30, 2025

Journal of Sultan Alauddin Sulaiman Shah
JSASS
Journal of Humanities & Social Sciences
https://jsass.kuis.edu.my
ISSN: 2462 1692 e-ISSN: 2289 8042
Vol. 12, No. 2, (Nov, 2025)

1. Introduction

Today, businesses operate in an environment that is constantly changing, driven by rapid technological innovation and geopolitical and climate instability. For many organizations, this instability is a fundamental condition of existence (Lavdari & Lavdari, 2024). For small and medium-sized enterprises (SMEs) in the climate-vulnerable parts of the world, however, volatility and instability may be a matter of life and death. Coastal areas prone to flooding, agricultural areas currently suffering from drought, and politically and economically unstable, resource-scarce areas are all problematic for SMEs. Such SMEs are subjected to the risks of the changing environment, while also having to contend with the usual inter-business competition, and the direct impacts of climate change on their business, physical, regulatory, and supply chain (Rawashdeh et al., 2024). The main issue this paper seeks to address is the adaptive deficit evident in climate-vulnerable small and medium enterprises (SMEs). Compared to large firms, SMEs lack the resources, sophisticated systems, and strategic foresight, making them more vulnerable to climate shocks (Zahoor et al., 2022). Disturbances in the supply chain caused by floods, agricultural losses due to droughts, and new carbon taxes can create cost structures that SMEs find impossible to recover from, leading to failure. The recent COVID-19 pandemic was a global proxy for these types of disruptions and revealed the lack of agility that SMEs had in shifting operations, supply chains, and business models (Jafari-Sadeghi et al., 2022; Alfarajat, 2023). The pandemic revealed that no rigid, traditional managerial approach is sufficient to cope with the uncertainty and volatility that characterize the world today (Feng & Rani, 2024). In rapidly evolving scenarios, the ability to adapt within the organization and across markets is critical and cannot be considered a strategic advantage (Paulino & Manalo, 2025). The ability to sense and shape opportunities and threats and seize and maintain the advantage by enhancing, combining, shielding, and reconfiguring assets is a distinct dynamic capability of a firm. For small and medium enterprises operating in high-risk terrain, acquiring such capabilities is not an academic endeavor but a practical necessity (Uddin et al., 2023). The literature identifies several potential enablers of adaptability, such as environmental scanning organizational resilience, and ambidexterity but still does not develop these into a cohesive framework for action for SMEs (Nuwan et al., 2024). Most notably, the function of strategic agility, the uninterrupted and unhindered continuum of management's flexibility, perception, and strategic sensitivity as a central mediating capability, is under-theorized, particularly for climate-vulnerable SMEs (Aswan, 2023). From this position, strategic agility is an organizational dynamic capability that empowers an enterprise to rapidly shift a firm's threat and opportunity resource configuration, strategy, and operational reorganization. Therefore, the proposed conceptual paper aims to address this gap by offering an elaborate framework for the understanding of how climate-vulnerable SMEs can achieve organizational adaptation. In this model, we assume that strategic agility is the primary mechanism for transforming underlying capabilities (environmental scanning, resilience training, and ambidexterity) into adaptive outcomes. To create our framework, we use two theories: Dynamic Capability Theory and Circular Economy Theory (Engga et al., 2024; Rawashdeh et al., 2024). The former describes the process of change within the organization, and the latter theorizes intentional change toward sustainable and regenerative objectives. By combining these lenses, we can argue that adaptation goes beyond mere survival through shocks and involves a shift towards a more sustainable, resilient business model. To address this gap, this paper has three key objectives:

Journal of Sultan Alauddin Sulaiman Shah
JSASS
Journal of Humanities & Social Sciences
https://jsass.kuis.edu.my
ISSN: 2462 1692 e-ISSN: 2289 8042
Vol. 12, No. 2, (Nov, 2025)

1. To conceptualize the role of strategic agility in supporting organizational adaptation among climate-vulnerable SMEs.
2. To propose an integrated DCT–CE conceptual framework.
3. To develop testable propositions linking key dynamic capabilities to adaptation outcomes.

The structure of the paper is as follows. The former section discusses our hypothesized theoretical frameworks, specifically the synergy between DCT and CE Theory. The second chapter reviews the literature to develop the conceptual model and formulate hypotheses on environmental scanning, resilience training, and ambidexterity as tools for achieving strategic agility and organizational adaptability, with environmental volatility as a moderating factor. We also present the actionable insights from the discussed stakeholders in the final part and conclude with a strong conclusion that outlines future avenues.

2. Theoretical Postulations

The research is partially anchored on Climate Change and Climate Change Adaptation/Transformative Change in Small and Medium Enterprises (SMEs) in the Circular Economy. These two lenses provide a solid and normative basis for understanding how SMEs can sustain climate-driven change and leverage it to create a new value paradigm in a sustainable manner.

2.1. Climate Change Adaptation and Transformative Change within SMEs

Dynamic Capability Theory was first introduced by Teece, Pisano, and Shuen in 1997 and explains how firms in a specific industry create and sustain competitive advantage. In the context of Dynamic Capability Theory (DCT), the focus shifts from value/market resources to value/market change mechanisms, which explain how firms can sustain competitive advantage in changing environments. The ‘Dynamic capability’ or ‘capacity to change’ a firm has is assessed and calibrated by its three micro-foundations:

1. Sensing, or the opportunity/ threat discourse in the external environment.
2. Seizing, or resource mobilization, to capture a pre-determined value.
3. Reconfiguring/ Transforming, or the continuous asset base and structure renewal paradigm to retain evolutionary fitness (Teece, 2007, 2018).

For this study, we define the core conceptual constructs as manifestations of the following dynamic capabilities:

I. Environmental Scanning is the most basic capability of sensing. It entails continuous observation of the milieu for technological, regulatory, social, or climatic signals that signal change (YahiaMarzouk & Jin, 2022). For a climate-vulnerable SME, this might consist of monitoring and evaluating climate patterns, climate change legislation, and changes in consumer attitudes toward green products.

II. Strategic Agility as the seizing capability. It implies the ability to make quick, strategic decisions about reallocation of resources and shifting strategies the firm will employ in response to sensed signals (Nurfitriani et al., 2024). An agile SME might, for example, pivot in a short period of time from a linear to a circular supply chain to address the issue of resource scarcity.

Journal of Sultan Alauddin Sulaiman Shah
JSASS
Journal of Humanities & Social Sciences
https://jsass.kuis.edu.my
ISSN: 2462 1692 e-ISSN: 2289 8042
Vol. 12, No. 2, (Nov, 2025)

III. Organizational Ambidexterity and Resilience Training in this case is part of the critical reconfiguring capability. Ambidexterity, the ability to simultaneously explore and exploit, will help the firm sustain a balance between present efficiency and future innovation (Ürü, Gözükara, & Ünsal, 2024). Resilience training, which focuses on developing employees' behavioral flexibility and adaptive mindset, is designed to prepare human capital to facilitate the necessary reconfigurations in processes and roles during a disruptive event (Nuwan, Shukri, & Khatibi, 2024).

This paper asserts that, due to their dynamic capabilities (sensing as scanning, seizing as agility, reconfiguring as ambidexterity, and resilience), companies will be better positioned to translate strategic understanding into sustainable fluidity within an organization, especially during moments of shocks and environmental volatility.

2.2. Circular Economy (CE) Theory as the Compass for Adaptation

Since DCT narrates the tale of adaptation, Circular Economy Theory provides a critical, rational, and normative guiding path of adaptation. According to the CE theory, the economic system should be restorative and regenerative, which seeks to eliminate waste and encourage the concept of resource circulality by design, maintenance, repair, reuse, remanufacturing, refurbishing, recycling, and composting (Fehrer, Kemper, & Baker, 2023; Renfrew et al., 2022). It combats the unsustainable linear economy of take-make-dispose, which is one of the greatest causes of climatic instability to which SMEs are especially susceptible. For SMEs under pressure from climate change, CE is not merely a sustainability approach; it is a critical business approach for mitigating risks and creating value. It can be achieved through CE actions, such as recycled-material use, lasting design, and product-as-a-service innovation.

I. Decrease Resource Dependence: By stabilizing exposure to highly volatile raw material prices and disruptive supplies.
II. Generating New Profit Opportunities: Through waste valorization, refurbishment, and sharing.

Enhancing Regulatory Compliance: Proactively advance adaptation to evolving environmental regulations and the implementation of carbon pricing. In our context, CE theory complements DCT by specifying the purposes and goals that SMEs should pursue in developing their dynamic capabilities. The sensing ability lies in detecting circular opportunities (e.g., new markets to upcycle). The seizing capability is used to implement circular business models. The reconfiguration capability is to redesign operations for zero waste and closed resource loops. This study, therefore, theorizes that Organizational adaptability guided by the principles of the circular economy will enable climate-vulnerable SMEs to embed regenerative and restorative practices to achieve operational resilience and lasting sustainability. The integration of DCT and CE theory provides a comprehensive perspective: DCT supplies the "engine" for change, while CE offers the "compass" to guide that change toward a resilient and sustainable future. This integration of theories is the main basis for the conceptual model and hypotheses outlined in the next section.

Journal of Sultan Alauddin Sulaiman Shah
JSASS
Journal of Humanities & Social Sciences
https://jsass.kuis.edu.my
ISSN: 2462 1692 e-ISSN: 2289 8042
Vol. 12, No. 2, (Nov, 2025)

3. Literature Review and Hypothesis Development

This section synthesizes the existing literature to establish logical connections among the constructs in our conceptual model, culminating in a set of testable hypotheses. Our proposed model (see Figure 1) positions Strategic Agility as a central mediating variable between three key antecedent dynamic capabilities (Environmental Scanning, Resilience Training, Organizational Ambidexterity) and the dependent variable, Organizational Adaptability. Environmental Volatility is posited as a critical moderating variable.

3.1. Antecedents to Strategic Agility

3.1.1. Environmental Scanning and Strategic Agility

Although Environmental Scanning (ES) is described as "how management obtains pertinent information concerning external events to direct the company" (Harris & Brooker, 2025), in the most essential sense, it is also the most rudimentary form of dynamic capabilities. Monitoring and responsiveness to emerging circumstances, e.g., new climate change laws, eco-innovations, or changes in consumer behavior regarding sustainability, are essential in volatile situations (Rawashdeh et al., 2024). The ES sub-function of rapid decision alignment is the strategic agility factor, where it is important to execute strategies quickly, and the ES increases responsiveness at the narrative level. This leads to an agile strategy, which is just a gamble since the actions are taken without a thorough understanding of the external environment. Based on empirical evidence, Halim, Zainal, and Ahmad (2022) outline the abilities and proactive stance of organizations involved in long-term strategic management processes, such as the capacity to manage threatening environmental changes, identify novel opportunities, and adopt proactive rather than reactive strategy frameworks. For example, when an SME incorporates climate policies into its climate risk assessment, it is likely to detect an impending water crisis/reduction, which will assist in strategic pre-investment in water recycling technologies. This can be regarded as one of the elements of agility that Reed (2022) defines as strategic sensitivity. This study, therefore, proposes:

Proposition 1: Environmental Scanning will positively impact Strategic Agility.

3.1.2. Resilience Training and Strategic Agility

As defined by Shojaee & Vasa (2024) and Prieto & Talukder (2023), resilience at the individual and organizational levels is the capacity to resist, absorb, respond to, and reinvent in the face of disruptive change. Although resilience is often defined as an outcome, we view it as a dynamic capability that helps to build and facilitate adjustments. Resilience training aimed at developing employees' psychology (e.g., optimism, efficacy, resilience) and adaptive skills fosters a workforce that is more flexible, more willing to change, and better able to handle uncertainty (Zhang, Li, & Zhao, 2025). This individual-level flexibility is the foundation of organizational-level agility. A team that is instructed to "quickly adapt to new ways of doing things" and "easily change courses when needed" (as defined in our scale) is more able to execute an agile pivot when strategy calls for it. Nuwan, Shukri, and Khatibi (2024) maintain that the routine and resource combinations that resilience capacity enables enable strategic agility. Thus, the study proposes:
Proposition 2: Resilience Training has a significant positive influence on Strategic Agility.

Journal of Sultan Alauddin Sulaiman Shah
JSASS
Journal of Humanities & Social Sciences
https://jsass.kuis.edu.my
ISSN: 2462 1692 e-ISSN: 2289 8042
Vol. 12, No. 2, (Nov, 2025)

3.1.3. Organizational Ambidexterity and Strategic Agility

In the context of the organization, ambidexterity entails aligning and effectively managing the current needs and demands of the business (exploitation) and, at the same time, being adaptable and open to environmental changes (exploration) (Ürü, Gözükara, & Ünsal, 2024). The organization must identify and sustain a balance between the competing capabilities and demands to survive in the long term. Ambidexterity makes the organization strategically agile, giving it the structure and the leadership to take dynamic action. The acts of exploitation yield short-run efficiencies and cash flows, which are offset by the resources required to sustain them, and the finance generated through exploitation keeps organizations stable. The stability of the organizations is enabled by financing generated from exploitation activities. In addition, the innovation and new knowledge needed for rapid strategic turnover, e.g., entering new markets or developing new products in the circular economy, are generated through exploitation activities. This is, in large part, the responsibility of leadership to cultivate. An ambidextrous leader, according to Schlosser, Spilbergs, and Volkova (2023), simultaneously "motivates experimentation with diverse ideas" (exploration) and "supervises and manages the achievement of targets" (exploitation). This leadership style creates an organizational context in which the organization can be both efficient and agile, thereby managing the tensions of exploration and exploitation. Therefore, the study proposes the following:

Proposition 3: Organizational Ambidexterity significantly positively impacts Strategic Agility.

3.2. Strategic Agility and Organizational Adaptability

Strategic Agility is the most important element of our model. It is the ability to identify and address dynamic changes in the environment and to take strategic actions within control, such as resource and process reconfiguration, to sustain competitive advantage (Rawashdeh et al., 2024; Zhang & Chen, 2024). Strategic Agility is increasingly linked to outcomes in the literature, and Pelletier, L'Écuyer, and Raymond (2025) illustrate that firms with strategic agility can shift their business models during a digital transformation. In the context of SMEs, Yuen and Baskaran (2024) and Sidabutar and Siswanto (2024) describe the adaptive capacity of Turkish SMEs to address financial and digital disruptions as a characteristic of agility. During the COVID-19 pandemic, Putra and Masnita (2025) showed that agile SMEs were able to reconfigure their business processes more rapidly. In this regard, Strategic Agility gives a business the capacity to shift from simple survival (resilience) to transformation (adaptability), in a positive sense, altering its core model to the new environment. Hence:

Proposition 4: Strategic Agility significantly positively impacts Organisational Adaptability

3.3. The Role of Strategic Agility in Mediation

Within the framework of the direct relationships outlined in P1-P4, we maintain that strategic agility is not merely an additional factor influencing adaptability but, in fact, the foremost channel through which prior capabilities influence it. While environmental scanning supplies the information needed, resilience training provides human capability, and ambidexterity

Journal of Sultan Alauddin Sulaiman Shah
JSASS
Journal of Humanities & Social Sciences
https://jsass.kuis.edu.my
ISSN: 2462 1692 e-ISSN: 2289 8042
Vol. 12, No. 2, (Nov, 2025)

supplies the structural context, it is strategic agility that synthesizes these components into effective, flexible action. This intermediate role has been realized in past studies. Xu & Zhang (2024) and Trieu & Nguyen (2025) demonstrated that organizational agility serves as a mediating factor linking knowledge application to performance outcomes. On the same note, Panichakarn et al. (2024) established that agility mediates the correlation between IT alignment and company performance. In our framework, we assert that the complete effect of sensing (scanning) and reconfiguring (resilience and ambidexterity) on adaptability is achieved only if the firm has the seizing capability of strategic agility.
Thus:

Proposition 5: Strategic Agility mediates the relationship between Environmental Scanning and Organizational Adaptability.

Proposition 6: Strategic Agility mediates the relationship between Resilience Training and Organizational Adaptability.

Proposition 7: Strategic Agility mediates the relationship between Organizational Ambidexterity and Organizational Adaptability.

3.4. The Moderating Role of Environmental Volatility

Changes in a company's external environment, market, technology, and competition can be rapid, unpredictable, and unstable. They can also be progressive, gradual, and deterministic (Panichakarn et al., 2024). Given that a company environment is considered the most stable, it does not require rapid sensing or agile responses. In such circumstances, enduring routines and long-term plans suffice. In contrast, weak and climate-vulnerable SMEs face highly unstable situations. They most certainly require dynamic capabilities. We suggest that such environmental volatility positively moderates the antecedent-agility interactions. In other words, increasing volatility makes environmental scanning, resilience training, and ambidexterity more necessary for achieving greater strategic agility. In a calm sea, a lookout is less critical; in a storm, they are essential. We expect it to negatively moderate the agility-adaptability relationship; here, the agility helps, but extreme volatility can overwhelm the responses. This leads us to the following hypotheses:

Proposition 8: Environmental Volatility positively moderates the relationships between (a) Environmental Scanning, (b) Resilience Training, (c) Organizational Ambidexterity and Strategic Agility, such that these relationships are stronger when volatility is high.

Proposition 9: Environmental Volatility negatively moderates the relationship between Environmental Scanning, Resiliency training, Organizational Ambidexterity, and Strategic Agility.

ISSN: 2462 1692 e-ISSN: 2289 8042 Vol. 12, No. 2, (Nov, 2025)

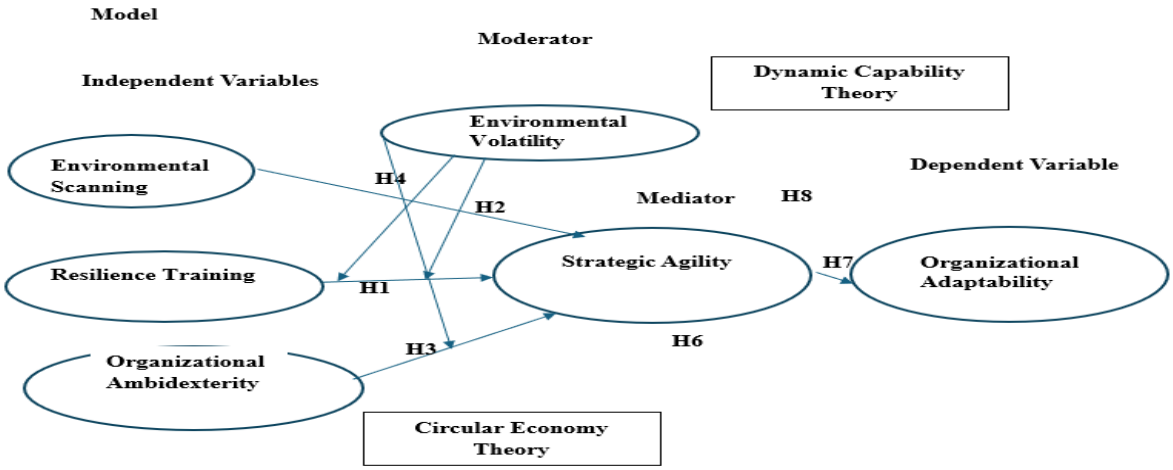

Figure 1: Conceptual Framework

4.Methodology and Conceptual Framework

This study employs a conceptual research design, grounded in a systematic synthesis of existing literature. The methodological approach involves a thematic analysis of scholarly works on Dynamic Capability Theory (DCT) and Circular Economy (CE) Theory, with a specific focus on SMEs and climate vulnerability. Through this analysis, core constructs and their interrelationships were identified and integrated into a novel conceptual framework (Figure 1). This framework is then used as a foundation to logically derive a set of testable hypotheses, establishing the proposed linkages between the constructs

5. Recommendations for Theory and Practice

The theoretical framework offered by this paper provides valuable insights and broad applicability for theorists, SME managers, and policymakers who must navigate an era of intersecting environmental and economic uncertainties. These implications are outlined below under the theoretical and practical realms.

5.1 Theoretical Implications

This paper introduces several relevant contributions to the academic discourse, primarily the synthesis of theories and the development of models.

First, it offers a new theoretical synthesis by bridging Dynamic Capability Theory (DCT) and Circular Economy (CE) Theory. As DCT describes the process of adaptation (how firms sense, seize, and reconfigure), CE theory offers a critical norm that guides this process toward restorative and regenerative business models. This integration addresses a major gap in the literature, providing a more comprehensive understanding of how SMEs can not only survive but also generate long-term value in a climate-disrupted environment.

Second, the paper locates strategic agility accurately as a major mediating process. It hypothesizes strategic agility as the critical seizing capability that converts the basic inputs in the form of the information obtained through environmental scanning, human flexibility developed via resilience training, and structural capacity developed via organizational

ISSN: 2462 1692 e-ISSN: 2289 8042 Vol. 12, No. 2, (Nov, 2025)

ambidexterity, into concrete adaptive products. This explains the practical role of agility in the dynamic capabilities model, helping us stop seeing it as a single concept and recognize it as the vital driver behind transforming potential into action.

Lastly, the research offers a confirmable conceptual model and hypothesis for the researcher to use in future studies. It logically derives a series of propositions (e.g., H1-H9) and provides a definite moderating role of environmental volatility that allows the paper to shift between pure conceptualization and an empirically researchable model. It provides scholars with a basis for quantitatively proving their existence by applying tools such as Structural Equation Modelling (SEM) and for understanding contextual complexity through qualitative research.

5.2 Practical Implications

The framework is transformed into practical, actionable strategies for the main stakeholders, namely the SME managers and policymakers.

For SME Managers and Leaders

Let Environmental Scanning Be an Institution: Drop Ad-Hoc monitoring. Invest in systematic monitoring of climate risks, policy changes, and the prospects of the circular economy through state publications and industry associations. The culture should be cultivated in which all employees become the change sensors.

Invest in Human Capital through Resilience Training: Build a psychologically resilient, cognitively flexible workforce. Introduce the problem-solving under pressure, stress management, and scenario planning training workshops. Based on constructive failures, build a safe-to-fail environment that promotes experimentation and treats them as learning opportunities.

Champion Ambidextrous Leadership and Structures: Refuge the paradox of both having to continue operating efficiently (exploitation) and seeking innovation (exploration) in the future. To prevent internal conflict, create different teams, measures, and incentives for each form of activity, and invest in them effectively.

Build Strategic Agility as a Competency: Decentralize decision-making to empower frontline employees. Establish interdepartmental teams to address emerging problems quickly. Conduct frequent climate and market stress-test strategies to develop a fast, learning, and adaptable culture.

Make the Circular Economy (CE) Part of Business Strategy: Undertake waste audits to identify opportunities for reuse and valorization. Install product life-cycle analysis and change to recycled or biodegradable products. This not only mitigates environmental risks and helps save money but also creates new sustainable market niches.

ISSN: 2462 1692 e-ISSN: 2289 8042 Vol. 12, No. 2, (Nov, 2025)

In the case of Policymakers and Supporting Institutions:

Offer Ready Climate Risk Intelligence: Design and communicate localized flooding forecast maps and drought forecast maps, etc. This will help SMEs be more effective in environmental scanning and decision-making regarding risk reduction and insurance.

Fund Capacity-Building and Agile Adoption: Support resilience and strategic agility through grants, tax exemptions, or subsidies to fund workforce training programs for SMEs and to implement agile management systems. This reduces the threshold to investment in their adaptive capability by SMEs.

Create Innovation Ecosystems to be Ambidexter: Promote the establishment of innovation hubs and clusters among SMEs, universities, research institutions, and larger corporations. Such alliances help it share knowledge and collaborate on R&D essential to exploration, as well as reinforce exploitative capabilities. Encourage the Circular Transition: Accelerate the adoption of CE practices through financial and technical assistance. This entails the CE technology implementation grant programs, subsidies for the use of recycled materials, and the creation of industrial symbiosis parks where the waste of one SME is used as raw material by another.

From the perspective of informing future studies, the research paper proposes selective prioritization to provide empirical insight into the framework. To test the hypothesis, the proposed hypotheses should be tested first through empirical quantitative studies, i.e., structural equation modeling (SEM). Such studies can be collected by managers of small and medium-sized enterprises (SMEs) across sectors and regions susceptible to climate change. Future studies need to consider contextuality in relationships, where organizational traits should be a priority, including firm size, age, industry, and geographical vulnerabilities (e.g., coastal and arid areas), since they can determine certain peculiar traits. It would be interesting to examine the phenomenon in a longitudinal study, as the dynamic capabilities developed during environmental shocks and disruptions may speak volumes. Lastly, the circular economy concept must be integrated by exploring micro-based dynamic capabilities to anchor the application of the various CE strategies (narrowing, slowing, and closing) and gain control of the cycle. The paper suggests a combined emphasis on environmental awareness, people-oriented approaches, agile leadership, and sustainability-based innovation. In my opinion, the strength and competitiveness of SMEs have a positive influence on Malaysia's social and economic development as it transitions to a sustainable, circular, and climate-resilient economy.

6. Conclusion

This conceptual paper focuses on the organizational adaptation challenges faced by SMEs operating in climate-prone, volatile environments. Incorporating the Dynamic Capability Theory and the Circular Economy Theory has produced a new statement of the possibilities of creating adaptive capacity. The study proposes that strategic agility is the key mediating capability that allows tactical adaptation to reflect organizational adaptability. The remaining pillars of the discipline of environmental scanning, resilience training, and organizational ambidexterity are triggers of the organizational pivot. Finally, the model underscores the

ISSN: 2462 1692 e-ISSN: 2289 8042 Vol. 12, No. 2, (Nov, 2025)

importance of environmental turbulence, which, at the same time, increases the need for the specified capabilities while limiting their feasibility. The proposed model is practical and theoretically grounded for SME managers trying to make sense of the twin challenges of market volatility and climate change. The model allows shifting the patchwork of survival in the expected and unforeseen environments into a predictable pattern of change, grounded in the foundations of a regenerative circular economy. For scholars, the present situation offers testable predictions and constraints for future qualitative research. The economic, ecological, and social significance of the construction of strategic agility and dynamic capabilities of SMEs in a volatile global market environment depends on current conditions. The main theoretical contribution of the paper has been the new combination of Dynamic Capability Theory and Circular Economy Theory to elucidate organizational adaptation in climate-vulnerable SMEs. It makes strategic agility not only a capability but also the dominant mediating factor that enables sensing and reconfiguring to yield adaptive outcomes, thus taking the discussion of micro-foundations of dynamic capabilities to a critical point.

Since this is a conceptual paper, the main weakness is that the proposed relationships are hypothetical and have to be confirmed empirically. The proposed model should be quantitatively tested by future researchers by techniques such as Structural Equation Modeling (SEM). Moreover, the framework can be enhanced through qualitative discovery to reveal context-specific peculiarities in how these capabilities are established and implemented by SME managers.

References

Alfarajat, J. (2023). Strategic agility and supply chain agility: Potential antecedents of SMEs performance. Uncertain Supply Chain Management, 11(5), 1–12.

Aswan, A. (2023). Moderation role of strategic agility in the relationship between entrepreneurial orientation and competitive advantage in SMEs. Jurnal Manajemen Bisnis, 14(1).

Clauss, T., Kraus, S., Kallinger, F. L., Bican, P. M., Brem, A., & Kailer, N. (2024). Strategic agility in entrepreneurship: A comprehensive meta-analysis and research agenda. Journal of Business Research, 177, 114609.

Engga, E. J., Sobandi, A., & Santoso, B. (2024). SMEs performance based on strategic leadership: The role mediating of dynamic capabilities. The Eastasouth Management and Business.

Fehrer, J. A., Kemper, J. A., & Baker, J. J. (2023). Shaping circular service ecosystems. Journal of Service Research, 27(1), 49–68.

Ferreira, J., Mueller, J., & Papa, A. (2022). Strategic knowledge management in the digital age: A multi-faceted perspective. Journal of Knowledge Management, 26(5), 1125-1152.

Feng, H., & Rani, S. (2024). Strategic agility in a digital age: Exploring the role of dynamic capabilities in organisational adaptation. Uniglobal Journal of Social Sciences and Humanities, 3(2).

Halim, H., Zainal, S. R. M., & Ahmad, N. (2022). Strategic foresight and agility: Upholding sustainable competitiveness among SMEs during COVID-19 pandemic. International Journal of Economics and Management, 16(1).

Harris, J., & Brooker, R. (2025). Environmental scanning: A look to the future. New Directions for Evaluation.

ISSN: 2462 1692 e-ISSN: 2289 8042 Vol. 12, No. 2, (Nov, 2025)

IPCC. (2022). Climate Change 2022: Impacts, Adaptation and Vulnerability. Contribution of Working Group II to the Sixth Assessment Report of the Intergovernmental Panel on Climate Change. Cambridge University Press.

Jafari-Sadeghi, V., Mahdiraji, H. A., Busso, D., & Yahiaoui, D. (2022). Towards agility in international high-tech SMEs: Exploring key drivers and main outcomes of dynamic capabilities. Technological Forecasting and Social Change, 178, 121272.

Khan, S. A., Kusi-Sarpong, S., Gupta, H., & Iddris, F. (2024). Implementing sustainability in SMEs: The role of strategic flexibility and green supply chain management. Business Strategy and the Environment, 33(1), 298-317.

Kumar, S., Dutta, D., & Malik, S. (2023). Environmental scanning and organizational resilience: The mediating role of strategic agility. Global Journal of Flexible Systems Management, 24(2), 243-260.

Kumar, V., & Sharma, R. R. K. (2024). Organizational ambidexterity and innovation performance: The moderating role of leadership support. Journal of Business Research, 174, 114517.

Lavdari, F., & Lavdari, X. (2024). Organizational agility and performance: A time-series analysis of crisis response. Qeios.

Nurfitriani, S., Rifan, D. F., & Sanjaya, V. F. (2024). The influence of strategic agility on competitive advantage with organizational ambidexterity as mediation at MSME's in Bandar Lampung. Assets: Jurnal Ekonomi, Manajemen dan Akuntansi.

Nuwan, N., Shukri, M., & Khatibi, A. (2024). Digging deeper into organisational resilience through strategic agility and strategic orientation: A study from the perspective of Sri Lankan SME leaders. Sri Lanka Journal of Social Sciences, 47(1).

Panichakarn, B., Pochan, J., Shafiq, M., Saleem, I., Wang, Y., & Nazeer, S. (2024). The interplay of digital transformation, agility, environmental volatility, and innovation to spur enterprise performance: Evidence from Chinese electric vehicle firms. Journal of Open Innovation: Technology, Market, and Complexity, 10(1), 100408.

Paulino, R., & Manalo, J. (2025). The bridge to business evolvability: Strategic agility's mediating role for innovation and collaboration. Future Business Journal.

Pelletier, C., L'Écuyer, F., & Raymond, L. (2025). Building organizational agility through digital transformation: A configurational approach in SMEs. Industrial Management & Data Systems.

Prieto, L., & Talukder, M. F. (2023). Resilient agility: A necessary condition for employee and organizational sustainability. Sustainability, 15(2), 1552.

Putra, R., & Masnita, A. (2025). Leveraging digital transformation leadership and customer agility to enhance SME performance in the Riau Islands, Indonesia. International Journal of Business Ecosystem & Strategy, 7(2).

Rawashdeh, A., Abdallah, A. B., Alfawaeer, M., Al Dweiri, M., & Al-Jaghbeer, F. (2024). The impact of strategic agility on environmental sustainability: The mediating role of digital transformation. Sustainability, 16(3), 1338.

Reed, M. (2022). Leveraging strategic agility in the pandemic environment. Global Journal of Entrepreneurship, 6(1).

ISSN: 2462 1692 e-ISSN: 2289 8042 Vol. 12, No. 2, (Nov, 2025)

Renfrew, D., Vasilaki, V., McLeod, A., Lake, A., Danishvar, S., & Katsou, E. (2022). Where is the greatest potential for resource recovery in wastewater treatment plants? Water Research, 220, 118673.

Schlosser, K. P., Spilbergs, A., & Volkova, T. (2023). The effect of ambidextrous strategic leadership on creating shared value. International Journal of Economics and Business Administration, 11(2), 34–49.

Shams, R., Vrontis, D., Weber, Y., & Tsoukatos, E. (2023). The role of dynamic capabilities in organizational agility and business model innovation during crises. Journal of Business Research, 165, 114047.

Shojaee, A., & Vasa, L. (2024). Relationship between dynamic capability view and organizational resilience: Findings from a symmetric approach. Problems and Perspectives in Management, 22(4), 51–63.

Sidabutar, A., & Siswanto, J. (2024). The impact of digital transformation in the food and beverage sector SMEs: The role of leadership and organizational agility. E3S Web of Conferences, 484, 01017.

Trieu, P. Q., & Nguyen, T. D. (2025). Information technology capabilities enhance business performance: The role of organisational agility, ambidexterity, and regulatory support. Asian Academy of Management Journal, 30(1).

Uddin, A., Cetindamar, D., Hawryszkiewycz, I., & Sohaib, O. (2023). The role of dynamic cloud capability in improving SMEs' strategic agility and resource flexibility: An empirical study. Sustainability, 15(11), 8467.

Ürü, F., Gözükara, E., & Ünsal, A. A. (2024). Organizational ambidexterity, digital transformation, and strategic agility for gaining competitive advantage in SMEs. Sosyal Mucit Academic Review, 1(1), 22–40.

Williams, T. A., Gruber, D. A., Sutcliffe, K. M., Shepherd, D. A., & Zhao, E. Y. (2023). Organizational response to adversity: A review and roadmap for future research. Journal of Management, 49(5), 1763-1802.

Xu, X., & Zhang, Y. (2024). How digital transformation enhances corporate innovation performance: The mediating roles of big data capabilities and organizational agility. Heliyon, 10(6), e34905.

YahiaMarzouk, Y., & Jin, J. (2022). The relationship between environmental scanning and organizational resilience: Roles of process innovation and environmental uncertainty. Frontiers in Environmental Science, 10.

Yuen, T. M., & Baskaran, S. (2024). Optimizing sustainable business performance: The role of SME agility in digitalization. International Journal of Academic Research in Business and Social Sciences, 14(1).

Zahoor, N., Golgeci, I., Haapanen, L., Ali, I., & Arslan, A. (2022). The role of dynamic capabilities and strategic agility of B2B high-tech small and medium-sized enterprises during COVID-19 pandemic. Industrial Marketing Management, 105, 502–514.

Zhang, J., Li, H., & Zhao, H. (2025). The impact of digital transformation on organizational resilience: The role of innovation capability and agile response. Systems, 13(2), 75.

Zhang, Y., & Chen, X. (2024). Top of tide: Nexus between organizational agility, digital capability, and top management support in SME digital transformation. Heliyon, 10(2), e31579.