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Strategic Agility in the Age of Disruption: Rethinking Business Models

Yıkıcı Dönüşüm Çağında Stratejik Çeviklik: İş Modellerini Yeniden Düşünmek

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Abstract

The accelerating pace of disruption, driven by technological innovation, shifting consumer preferences, geopolitical uncertainty, and global crises, is challenging the resilience of traditional business models. This study examines strategic agility as a critical organizational capability that enables firms to anticipate change, respond effectively, and reconfigure resources to sustain competitiveness. Using a conceptual and integrative approach, the article draws on contemporary theories of strategy, innovation, and organizational learning to conceptualize strategic agility as a multidimensional construct. The analysis synthesizes peer-reviewed research and conceptually grounded practice-based illustrations from volatile contexts, with particular attention to Middle Eastern and other developing economy settings. Insights presented in this study were derived by synthesizing recent academic contributions and drawing from the practical experiences of firms operating in dynamic environments. The research strategy involved a comprehensive literature review combined with illustrative examples from case studies in these regions. The findings suggest that strategic agility, through sensing environmental changes, seizing emerging opportunities, and transforming business models, supports both short-term adaptability and long-term organizational resilience. Firms that leverage digital transformation, ecosystem partnerships, and adaptive leadership practices are better positioned to withstand disruption and pursue sustainable growth. The article contributes to the literature by proposing an integrative framework that links agility routines to business model transformation and highlights contextual moderators relevant to emerging markets. As a conceptual analysis, the framework provides a foundation for future empirical testing; subsequent research should examine sector-specific applications of strategic agility and assess its effects on organizational performance across diverse regional contexts.

Keywords: Business models, digital transformation, innovation, organizational resilience, strategic agility

Öz

Teknolojik inovasyon, değişen tüketici tercihleri, jeopolitik belirsizlik ve küresel krizlerin tetiklediği yıkıcı dönüşümün hızlanan temposu, geleneksel iş modellerinin dayanıklılığını sorgulamaktadır. Bu çalışma, firmaların değişimi öngörmesine, etkin bir şekilde yanıt vermesine ve rekabet gücünü sürdürmek için kaynaklarını yeniden yapılandırmasına olanak tanıyan kritik bir örgütsel yetkinlik olarak stratejik çevikliği incelemektedir. Kavramsal ve bütünleştirici bir yaklaşım kullanan makale, strateji, inovasyon ve örgütsel öğrenmeye ilişkin güncel teorilerden yararlanarak stratejik çevikliği çok boyutlu bir yapı olarak kavramsallaştırmaktadır. Analiz, hakemli araş tırmaları ve kavramsal temelli, değişken çevre koşullarından uygulamaya dönük örnek olayları, özellikle Ortadoğu ve diğer gelişmekte olan ekonomi bağlamlarına odaklanarak sentezlemektedir. Bu çalışmada sunulan bulgular, güncel akademik katkıların sentezlenmesi ve dinamik çevrelerde faaliyet gösteren firmaların pratik deneyimlerinden yararlanılması yoluyla elde edilmiştir. Araştırma stratejisi, bu bölgelerdeki vaka çalışmalarından alınan örneklerle birleştirilmiş kapsamlı bir literatür taramasını içermektedir. Bulgular, stratejik çevikliğin, çevresel değişimleri algılama, ortaya çıkan fırsatları değerlendirme ve iş modellerini dönüştürme yoluyla hem kısa vadeli uyum sağlama yeteneğini hem de uzun vadeli örgütsel

WHAT IS ALREADY KNOWN ON THIS TOPIC?

- *Strategic agility isrecognized as a key capability that enables organizations to respond to rapidenvironmental changes and uncertainty.*
- *Prior studies emphasize theimportance of sensing opportunities, seizing them, and reconfiguring resourcesto sustain competitive advantage.Digital transformation andinnovation are widely acknowledged as critical drivers for adapting businessmodels and enhancing organizational resilience during disruptions*

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dayanıklılığı desteklediğini göstermektedir. Dijital dönüşümü, ekosistem ortaklıklarını ve uyum sağlayıcı liderlik uygulamalarını etkin biçimde kullanan firmaların, yıkıcı dönüşüme direnme ve sürdürülebilir büyümeyi hedefleme konusunda daha iyi bir konuma sahip olduğu ifade edilebilir. Makale, çeviklik rutinlerini iş modeli dönüşümüyle ilişkilendiren ve gelişmekte olan piyasalara özgü bağlamsal düzenleyici faktörleri vurgulayarak literatüre katkıda bulunmaktadır. Kavramsal bir analiz niteliği taşıyan bu çerçeve, gelecekte yapılacak ampirik testler için bir temel sağlamakta ve sonraki araştırmaların stratejik çevikliğin sektöre özgü uygulamalarını inceleyerek farklı bölgesel bağlamlarda örgütsel performans üzerindeki etkilerini değerlendirmesini önermektedir.

Anahtar Kelimeler: İş *modelleri, dijital dönüşüm, inovasyon, örgütsel dayanıklılık, stratejik çeviklik*

WHAT THIS STUDY ADDS TO THIS TOPIC?

This study proposes an integrative framework linking strategic agility to business model transformation in dynamic and uncertain environments, provides context-specific insights from Middle Eastern and developing economies, which are underrepresented in existing literature. It highlights how digital transformation, ecosystem partnerships, and adaptive leadership jointly enhance both short-term adaptability and long-term organizational resilience.

Introduction

The 21st century is characterized by unprecedented disruption. Globalization, digital transformation, geopolitical volatility, climate change, and crises such as the COVID-19 pandemic have challenged the resilience of organizations and economies worldwide. Traditional business models, once viewed as stable, are increasingly rendered obsolete by rapid technological and societal change. In this turbulent context, organizations are compelled not only to survive but also to adapt and thrive, elevating strategic agility from a managerial preference to a critical organizational capability.

Strategic agility refers to a firm's ability to sense, seize, and transform in response to environmental change. Unlike traditional strategy approaches grounded in long-term planning and stable assumptions, strategic agility emphasizes flexibility, rapid resource reconfiguration, and continuous learning. It requires organizations to move beyond static conceptions of competitive advantage and adopt dynamic capabilities that enable ongoing renewal. Accordingly, a central challenge for managers and policymakers is how to redesign business models that remain viable in environments characterized by volatility, uncertainty, complexity, and ambiguity (VUCA) (Bennett & Lemoine, 2014).

The importance of this study stems from the growing recognition that competitive success no longer depends solely on efficiency or cost advantage but increasingly on resilience and adaptability. Research in management and strategy has shown that firms able to pivot quickly in times of disruption, through digitalization, innovation, or ecosystem collaboration, are more likely to sustain growth and market relevance. Yet, while the notion of agility is widely discussed, there remains a gap in translating it into concrete frameworks for rethinking business models. This article aims to address this gap by exploring how strategic agility can be operationalized to redesign organizations for long-term resilience and competitive advantage (Farag, 2025a; Farag, 2025c).

The problem under investigation is twofold. First, most existing business models were designed for environments characterized by relative stability, where change was incremental and predictable. In contrast, today's disruptions are systemic, interlinked, and often global in nature, making traditional strategic planning tools insufficient. Second, despite the widespread advocacy for agility, many organizations struggle to embed it in their structures, processes, and leadership practices. As a result, businesses often respond reactively rather than proactively, missing opportunities and exposing themselves to greater risks.

This research therefore seeks to answer the following guiding questions:

1. What is the role of strategic agility in enabling organizations to adapt to disruption?
2. How can business models be reconfigured to enhance resilience and competitiveness in turbulent environments?
3. What practical mechanisms, such as digital transformation, innovation ecosystems, and leadership practices, can firms adopt to embed agility into their operations?
4. What lessons can be drawn for organizations in emerging economies, particularly in the Middle East, where volatility and disruption are compounded by structural challenges?

Despite extensive research on strategic agility and dynamic capabilities, fewer studies integrate these ideas explicitly with business model transformation in one coherent framework, particularly in volatile emerging-market contexts. This study addresses this gap by developing an integrative framework linking agility dimensions to business model transformation mechanisms and outcomes under disruption.

The contribution of this research is threefold. First, it conceptualizes strategic agility as a multidimensional capability that extends beyond mere speed or flexibility, incorporating proactive sensing, opportunity capture, and transformative reconfiguration (Farag, 2025c). Second, it applies this lens to the

redesign of business models, positioning them not as static frameworks but as dynamic platforms for continuous adaptation. Third, it contextualizes the discussion within volatile markets, particularly in emerging economies, thereby addressing the underexplored link between strategic agility and business model resilience in regions outside advanced economies (Farag, 2025b; Farag, 2025d).

The structure of the article is organized as follows. Section 2 outlines the methodological approach used to develop the conceptual synthesis and integrative framework. Section 3 reviews the literature on strategic agility and business model transformation, highlighting key themes and research gaps. Section 4 outlines the theoretical foundations of strategic agility, situating it within the broader discourse on dynamic capabilities and organizational resilience. Section 5 examines the limitations of traditional business models in environments characterized by disruption and uncertainty. Section 6 develops a framework for rethinking business models through the lens of strategic agility, emphasizing mechanisms such as digital transformation, innovation ecosystems, and leadership practices. Section 7 presents the results and discussion of the conceptual analysis, translating the sensing–seizing–transforming framework into managerial and policy implications, with particular emphasis on organizations operating in the Middle East and other emerging markets. Finally, Section 8 concludes by summarizing key findings, acknowledging limitations, and offering directions for future research.

Material and Methods

This study adopts a conceptual synthesis approach to develop an integrative framework linking strategic agility to business model transformation under disruption. The methodology is organized into four distinct steps to ensure clarity in the research process: (1) problem framing, (2) literature identification, (3) thematic synthesis, and (4) framework development and refinement.

To identify relevant scholarship, searches were conducted in Scopus, Web of Science, and Google Scholar. The review focused on peer-reviewed research on strategic agility, dynamic capabilities, business model innovation/transformation, and organizational resilience. Search terms included combinations of “strategic agility,” “dynamic capabilities,” “sensing seizing transforming,” “business model innovation,” “business model transformation,” “organizational resilience,” “environmental turbulence,” “ecosystems,” and “emerging markets.” The search emphasized publications from 1997 to 2025 to capture foundational dynamic capabilities work and subsequent developments linking agility to business model change.

Screening was conducted in two stages. First, titles and abstracts were reviewed to exclude studies where agility was treated only as operational flexibility without a strategic or business model dimension. Second, full texts were prioritized if they (a) conceptualized agility through sensing–seizing–transforming routines, (b) linked agility to business model change, and/or (c) examined crisis or high-turbulence contexts. Additional sources were identified through backward and forward citation tracking of seminal contributions.

The methodology was structured as follows:

- Step 1: Problem Framing - Establishing the central research problem, defining key concepts and relationships.
- Step 2: Literature Identification - Comprehensive literature review to identify relevant studies.
- Step 3: Thematic Synthesis - Categorizing studies into themes such as agility routines and business model transformation.
- Step 4: Framework Development and Refinement - Constructing the conceptual framework based on the synthesis of the identified literature.

The synthesis proceeded by coding the retained literature into themes capturing (i) antecedents of agility (leadership, culture, digital infrastructure, turbulence), (ii) agility routines (sensing, seizing, transforming), (iii) business model transformation mechanisms (value proposition, value creation/delivery, value capture), (iv) outcomes (innovation, resilience, performance), and (v) moderators (industry velocity, firm size, and emerging-market constraints). These relationships were consolidated into the integrative framework presented in Figure 1 and refined through iterative comparison across streams to ensure coherence and reduce redundancy.

Literature Review

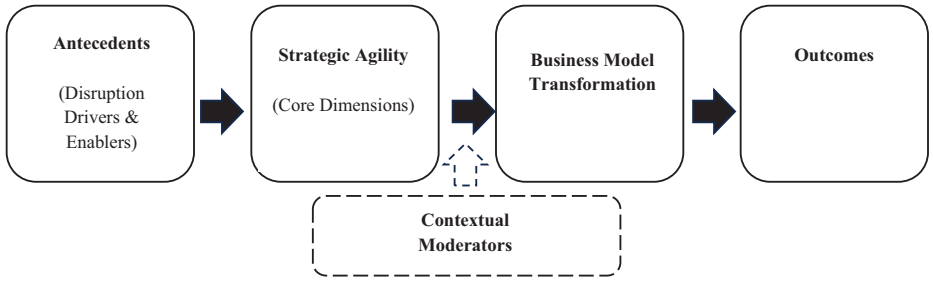
Increasing turbulence in global markets has intensified scholarly interest in strategic agility. Drawing on the dynamic capabilities perspective, strategic agility is defined as an organization’s capacity to sense environmental shifts, seize emerging opportunities, and transform accordingly (Teece et al., 1997). Unlike operational flexibility, agility represents a higher-order capability that enables firms not only to respond rapidly but also to anticipate change and leverage it strategically. This section reviews the literature across four key themes: (1) strategic agility and dynamic capabilities, (2) agility and business model innovation, (3) evidence from crisis contexts, and (4) unresolved research gaps.

Strategic Agility and Dynamic Capabilities

Theoretical discussions of agility are often grounded in dynamic capabilities, which emphasize how firms reconfigure resources in fast-changing contexts (Teece et al., 2016). In this sense, agility is not simply about speed but about orchestrating capabilities in ways that sustain competitiveness. Doz and Kosonen (2010) argue that strategic agility is deeply embedded in leadership practices and organizational culture, making it an enterprise-wide phenomenon rather than a functional attribute.

Empirical research reinforces this connection. Wilden et al. (2016) show that firms with strong dynamic capabilities outperform others in innovation. Similarly, Li et al. (2010) find

Figure 1.
Integrative Conceptual Framework Linking Strategic Agility to Business Model Transformation Under Disruption.



that agility directly enhances competitive advantage in high-velocity environments such as China's industrial sectors. Together, these studies confirm that agility is both an outcome of dynamic capabilities and a mechanism for transforming resources into adaptive strategies (Farag, 2025c).

Agility and Business Model Innovation
Another research stream highlights the role of agility in business model innovation (BMI). Business models define how firms create and capture value, but in disruptive environments, they cannot remain static (Teece, 2010). Clauss et al. (2019) provide evidence that agile firms are more likely to innovate in their value propositions and revenue models, which strengthens performance. Their findings also suggest that BMI mediates the link between agility and long-term success.

Doz and Kosonen (2010) emphasize agility as the basis for "strategic renewal," enabling firms to refresh their value logic continuously. Foss and Saebi (2017) note that rigid organizations struggle to redesign resources effectively, making agility indispensable for successful BMI (Farag, 2025c). Likewise, Aspara et al. (2013) illustrate how agile firms balance exploration of new opportunities with exploitation of existing resources, ensuring adaptability without sacrificing efficiency.

Lessons from Crisis Contexts
The relevance of agility becomes particularly evident in times of crisis. During the COVID-19 pandemic, Ivanov and Dolgui (2020) showed that supply chains with agile features adapted faster than efficiency-focused ones. Clauss et al. (2022) found that Small and Medium-Sized Enterprises (SMEs) with stronger agility, especially in sensing and seizing, were more likely to maintain continuity during lockdowns. Sushil (2020) further highlight that agility was critical for shifting into digital channels, sustaining revenues, and maintaining customer engagement.

Case-based research provides additional insights. Doern et al. (2019) found that agile entrepreneurs leveraged networks and partnerships to survive shocks, while less adaptive firms struggled. These findings confirm that agility is not merely a theoretical construct but a practical determinant of resilience (Farag, 2025b; Farag, 2025d).

Research Gaps
Despite substantial progress, key gaps remain. A major issue lies in measurement: studies vary from using speed of decision-making (Doz & Kosonen, 2010) to survey-based constructs (Clauss et al., 2019), making comparisons difficult. Another limitation is methodological: most studies are cross-sectional, leaving unanswered how agility evolves and is sustained over time (Wilden et al., 2016).

The literature also skews toward advanced economies and high-tech industries. Less is known about how firms in emerging markets, such as the Middle East and Africa, build agility amid structural and institutional constraints (Farag, 2025b; Farag, 2025d). Finally, while most studies highlight the benefits of agility, few examine its costs. Frequent restructuring, for example, may waste resources or create inefficiencies (Teece et al., 2016). These trade-offs warrant deeper analysis. Moreover, although agility is frequently linked to business model innovation, the mechanisms connecting sensing, seizing, and transforming to business model transformation outcomes remain insufficiently integrated in a single conceptual explanation.

Theoretical Foundations of Strategic Agility

Strategic agility has become a central construct in contemporary management research as organizations face increasingly dynamic environments. While traditional strategy emphasized long-term planning and efficiency, current conditions underscore the need for agility, flexibility, and continuous adaptation. Strategic agility is a higher-order capability that enables firms to sense opportunities, seize them through timely resource deployment, and transform business models in response to environmental turbulence. This section reviews the concept's theoretical foundations, key dimensions, links to dynamic capabilities, and its role in business model innovation, while highlighting remaining gaps in the literature.

Definition and Conceptual Origins
Strategic agility originated within the literature on dynamic capabilities and strategy renewal. At its core, strategic agility is the organizational capacity to rapidly adapt, proactively anticipate shifts, and implement transformative changes in strategy and business models. Unlike traditional views of strategy,

which prioritize consistency and stability, agility is premised on discontinuity and uncertainty.

Teece et al. (2016) define agility as the ability of firms to engage in transformative adaptation, not merely incremental adjustments, emphasizing its significance in contexts of deep uncertainty. This definition reflects the growing recognition that strategic advantage is less about stability and more about adaptability. Similarly, Clauss et al. (2019) demonstrate empirically that agility is an antecedent of business model innovation (BMI), influencing firms' capacity to reconfigure their value propositions, creation processes, and capture mechanisms. These insights suggest that strategic agility is not a supplementary competency but a foundational requirement for survival in turbulent contexts.

The conceptual evolution of agility also reflects broader theoretical movements in management thought. From early notions of environmental scanning and contingency theory to resource-based perspectives and dynamic capabilities, agility has become recognized as the logical extension of these traditions (Doz & Kosonen, 2008). In this way, it bridges classical concerns with stability and modern imperatives of constant renewal.

Relationship with Dynamic Capabilities
Dynamic capabilities theory provides the theoretical foundation for understanding how strategic agility operates. Defined as the firm's ability to integrate, build, and reconfigure competencies in rapidly changing environments, dynamic capabilities represent the underlying routines that enable agility (Teece et al., 1997).

Teece et al. (2016) identify three central routines: sensing, seizing, and transforming. Strategic agility is inherently built on these capabilities. For instance, sensing involves scanning the environment for weak signals, emerging technologies, or shifts in consumer behavior; seizing refers to mobilizing resources to capture identified opportunities; and transforming involves restructuring business models, processes, or resources to align with the new context.

Empirical evidence reinforces this link. A study of Finnish SMEs during the COVID-19 pandemic (Ritter & Pedersen, 2020) illustrates how firms with strong dynamic capabilities rapidly adjusted their business models by leveraging digital platforms and ecosystem partnerships. Such firms demonstrated that agility is not a static attribute but a learned and cultivated dynamic capability that requires deliberate organizational design and leadership commitment.

Key Dimensions of Strategic Agility
The literature identifies several recurring dimensions that form the pillars of strategic agility. These include:

- Sensing/Environmental Scanning: Continuous monitoring of technological, market, and regulatory signals to detect early shifts (Clauss et al., 2019).
- Seizing/Opportunity Capture: Mobilization of resources to exploit emerging opportunities, often through business model pivots.
- Transforming/Reconfiguration: Renewal of organizational assets and structures to remain aligned with shifting conditions.
- Speed and Flexibility: The ability to act quickly and decisively, avoiding bureaucratic delays (Doz & Kosonen, 2008).
- Leadership and Culture: A leadership style that promotes risk-taking, decentralization, and a culture of learning and innovation (Birkinshaw et al., 2016).

Table 1 summarizes these dimensions and examples from the literature. The table consolidates how prior studies operationalize strategic agility and distinguishes between core routines (sensing, seizing, transforming) and supporting enablers (speed/flexibility and leadership/culture). As such, it provides a structured foundation for the integrative framework developed later in this study.

Two insights emerge from Table 1. First, the literature consistently positions sensing, seizing, and transforming as the core mechanisms through which firms adapt under turbulence, while speed/flexibility and leadership/culture shape how effectively these mechanisms are enacted. Second, the table indicates that agility is achieved through the alignment of multiple dimensions rather than through isolated practices, reinforcing the argument that business model transformation depends on coordinated organizational capabilities. Taken together, these insights underscore that strategic agility is best understood as an integrated capability system, combining core routines with enabling conditions, that supports timely adaptation and sustained renewal in disruptive environments.

This multidimensionality highlights that strategic agility is not a singular trait but a system of interrelated routines and practices.

Strategic Agility, Resilience, and Flexibility
It is crucial to distinguish strategic agility from related constructs such as resilience and flexibility.

- Resilience refers to an organization's ability to withstand shocks and return to a prior state of functioning. While agility overlaps with resilience in resource reconfiguration, resilience is often reactive, focused on recovery rather than proactive transformation (Kantur & İşeri-Say, 2012).
- Flexibility is narrower, typically operational or tactical, such as in supply chain management or production. Strategic agility extends beyond flexibility by encompassing strategic repositioning, innovation, and leadership.
- Comparative research suggests that while resilience ensures survival, agility offers proactive value creation, especially in high-velocity environments (Linnenluecke, 2017).

Thus, agility incorporates resilience and flexibility but extends further to include proactive anticipation and innovation.

Table 1.
Dimensions of Strategic Agility

Dimension	Description	Illustrative Studies
Sensing	Monitoring external trends, threats, and opportunities; attention to weak signals	Clauss et al. (2019); Ritter & Pedersen (2020)
Seizing	Mobilizing resources to exploit opportunities; pivoting business models	Teece et al. (2016); Doz & Kosonen (2008)
Transforming	Renewing resources and structures; reconfiguration of business models	Clauss et al. (2019); Doz & Kosonen (2008)
Speed/flexibility	Rapid decision-making, flexible allocation of resources	Teece et al. (2016); Birkinshaw et al. (2016)
Leadership and culture	Risk-taking leadership, decentralized decisions, culture of innovation	Doz & Kosonen (2008); Birkinshaw et al. (2016)

Strategic Agility and Business Model Innovation
One of the most significant theoretical linkages is between agility and business model innovation (BMI). Agility enables firms to redesign their value creation, delivery, and capture mechanisms, often under turbulent conditions.

Clauss et al. (2019) demonstrate that agility predicts BMI across value dimensions, mediating the relationship between agility and firm performance. Similarly, a case study of a telecommunications company (Doz & Kosonen, 2010) illustrates how strategic agility drove continuous business model renewal, sustaining competitiveness despite disruptive forces.

This connection is crucial: agility is not only about survival but about enabling continuous innovation that allows firms to reinvent themselves over time.

Environmental Turbulence and Contextual Moderators
The effectiveness of strategic agility is contingent on environmental conditions. In high-velocity contexts, agility is not optional but essential. Clauss et al. (2019) show that the positive relationship between agility and BMI strengthens under conditions of turbulence. In contrast, in more stable environments, incremental approaches may suffice.

The COVID-19 pandemic offers a stark example. Firms operating with agility were able to pivot quickly, whether through digital platforms, product diversification, or remote work arrangements, while rigid firms faltered (Ritter & Pedersen, 2020). This underscores that turbulence amplifies both the necessity and value of agility.

Gaps in the Literature
Despite significant progress, several gaps remain in the literature:

1. Measurement and operationalization: There is a lack of standardized scales for measuring strategic agility.
2. Longitudinal research: Few studies assess agility over time, limiting insights into sustainability.
3. Context specificity: Research often focuses on developed economies; less is known about SMEs in emerging markets.
4. Integration with BMI: While agility is linked to BMI, the mechanisms of interaction require further exploration.
5. Costs and trade-offs: Agility entails inefficiencies and redundancies; research is needed on balancing agility with stability.

Proposed Integrative Framework
An integrative framework positions strategic agility as a multidimensional construct shaped by antecedents, core components, moderators, and outcomes. Figure 1 illustrates this integrative framework and summarizes the proposed relationships among disruption-related antecedents, agility dimensions, business model transformation, and outcomes.

Figure 1 presents the integrative conceptual framework developed in this study. The model links disruption-related antecedents to business model transformation through the mediating role of strategic agility. Specifically, antecedents such as leadership, culture, digital infrastructure, and environmental turbulence strengthen firms' ability to sense emerging changes, seize opportunities through timely resource deployment, and transform organizational configurations. These agility dimensions support business model transformation across value proposition, value creation and delivery, and value capture. The framework anticipates outcomes such as business model innovation, enhanced resilience, and improved long-term performance. The model also incorporates contextual moderators, such as industry velocity, firm size, and country context, that may shape the strength and feasibility of agility-driven transformation, particularly in emerging markets. This figure visually consolidates the causal pathway developed in Sections 3–5 and serves as the conceptual core of the study, guiding the practical implications derived in Section 6.

- Antecedents: Leadership style, culture, digital infrastructure, environmental turbulence.
- Core components: Sensing, seizing, transforming, speed, leadership.
- Moderators: Industry velocity, firm size, country context.
- Outcomes: Business model innovation, resilience, long-term performance.

This framework synthesizes existing knowledge while pointing toward research gaps for future exploration.

Theoretical Contribution

This study advances the strategic agility literature by moving beyond descriptive synthesis and offering an integrated, mechanism-based explanation of how organizations renew business models under disruption. Rather than treating agility, business model innovation, and resilience as separate streams, the study connects them within a unified framework that clarifies the pathways through which firms adapt and reposition in turbulent environments.

The theoretical contribution is fourfold:

- Integrative lens: The study bridges the dynamic capabilities perspective with business model innovation research by positioning strategic agility as a capability system that enables business model renewal under disruption.
- Mechanism clarity: It specifies the internal logic linking agility routines; sensing, seizing, and transforming; to business model transformation across value proposition, value creation and delivery, and value capture.
- Context sensitivity: The framework incorporates contextual boundary conditions relevant to emerging markets (e.g., institutional volatility, infrastructure constraints, and governance structures), extending insights beyond advanced-economy settings where most prior models are developed and tested.
- Research scaffold: The study provides a basis for future empirical testing by identifying key constructs and relationships that can be operationalized and examined across industries, regions, and levels of environmental turbulence.

Limitations of Traditional Business Models in Disruptive Environments

Traditional business models have historically offered structured frameworks for value creation, delivery, and capture, largely assuming stable environments with linear growth and incremental innovation. These assumptions, however, expose structural weaknesses under conditions of rapid technological change, evolving customer expectations, and systemic global shocks. This section identifies four key limitations of traditional business models: rigidity and inflexibility, reliance on linear value chains, dependence on scale-driven efficiency, and limited integration of digital and data-driven capabilities.

Rigidity and Inflexibility in Strategic Orientation

Traditional business models are often anchored in rigid planning processes, hierarchical decision-making, and long-term forecasts. While these practices offer stability in predictable markets, they restrict responsiveness when environments shift quickly (Doz & Kosonen, 2010). Conventional models tend to emphasize optimization of existing processes rather than the exploration of new opportunities. For instance, firms in manufacturing and retail traditionally relied on multi-year strategic plans that assumed incremental market changes. Yet disruptive innovations, such as digital platforms in retail or renewable technologies in energy, emerged unexpectedly and shifted competitive dynamics faster than many legacy firms could adjust (Christensen et al., 2015).

The rigidity of these models results in:

- Delayed decision-making due to bureaucratic structures.
- Inertia in resource allocation, where firms continue investing in declining areas.
- Resistance to change, often reinforced by corporate culture and sunk costs.

Thus, rigidity leaves organizations vulnerable to agile competitors who can pivot rapidly in response to disruptions.

Linear Value Chains in a Nonlinear World

Traditional business models are typically structured around linear value chains, where inputs move predictably through production, distribution, and delivery channels (Porter, 2008). This logic assumes relatively stable supply conditions and predictable demand, which limits firms' ability to adapt when shocks occur or when value creation shifts toward network-based coordination. For example, the COVID-19 pandemic exposed the fragility of global supply chains, where disruption in one node produced cascading effects across industries (Gereffi, 2020). Similarly, digital platforms such as Amazon or Alibaba have redefined value creation as ecosystems rather than linear chains, integrating suppliers, partners, and consumers into interconnected networks.

Table 2 highlights the contrast between linear value chains and ecosystem-based models. The table provides a structured comparison of how value creation and coordination differ across the two logics, emphasizing the implications for flexibility, innovation, and resilience. By summarizing these differences, the table clarifies why the linear value chain assumption becomes increasingly restrictive in turbulent and digitally mediated environments.

Two insights emerge from Table 2. First, ecosystems shift value creation from a sequential process to a networked logic, where multiple actors jointly shape innovation and delivery, which expands the sources of value beyond firm boundaries. Second, ecosystem-based models tend to be more disruption-tolerant because value creation does not depend on a single linear pathway; instead, redundancy, partnerships, and recombinable resources allow reconfiguration when shocks occur. This contrast helps explain why organizations that remain locked into linear value chain thinking may struggle to capture opportunities that increasingly arise through collaboration, platforms, and multi-actor coordination.

The persistence of linear value chain thinking prevents organizations from capturing opportunities in emerging ecosystems, where collaboration and adaptability are crucial.

Table 2.
Traditional Linear Value Chains vs. Ecosystem-Based Models

Dimension	Traditional Value Chains	Ecosystem-Based Models
Structure	Sequential, linear	Networked, nonlinear
Flexibility	Low	High
Innovation sources	Internal R&D only	Distributed, co-created
Resilience to disruption	Limited	Stronger through redundancy
Customer role	Passive recipient	Active co-creator

Source: Adapted from Porter (2008) and Jacobides et al. (2018).

Efficiency Bias and the Limits of Scale
Another limitation of traditional business models lies in their overemphasis on efficiency and economies of scale. Historically, scaling operations reduced costs and increased profitability, leading firms to invest in mass production, standardized products, and global distribution networks as sources of competitive advantage (Chandler, 2009). However, scale alone does not guarantee resilience or adaptability when conditions shift rapidly. In practice, an excessive efficiency focus can increase vulnerability in at least three ways:

- Just-in-time supply systems minimize costs but collapse under shocks.
- Standardization of products reduces firms' ability to customize offerings for evolving customer needs.
- Fixed asset investments create rigidity when industries face technological shifts.

For example, Nokia's reliance on scale in mobile hardware production did not shield it from the software-driven shift introduced by Apple's iOS and Google's Android ecosystems (Vuori & Huy, 2016). Similarly, many legacy retailers optimized physical store networks for efficiency, while digital-first firms leveraged platform-based models to scale faster and at lower marginal costs. Thus, efficiency-oriented business models may undermine resilience because they prioritize short-term optimization over long-term adaptability.

Weakness in Digital and Data-Driven Capabilities
Traditional models were developed in eras when data was scarce, slow to collect, and secondary to physical assets. Today, digital technologies generate vast streams of real-time data that increasingly shape competitive advantage, yet many legacy firms struggle to transition from asset-centered to data-centric models (Brynjolfsson & McAfee, 2014). When firms cannot leverage digital and data-driven tools effectively, three limitations become evident:

- Missed opportunities in predictive analytics and customer insights.
- Weak integration with digital ecosystems and platform economies.
- Slower response to disruptions compared to data-native firms.

For example, traditional taxi companies were outpaced by Uber and Lyft, which built business models around data algorithms, network effects, and customer personalization. Similarly, in financial services, digital-native fintech firms have challenged incumbent banks by exploiting analytics-driven, customer-centric digital platforms (Gomber et al., 2018). Overall, these patterns highlight the widening gap between legacy business models and the capabilities required for digitally mediated competition.

The Cultural and Leadership Dimension
Traditional business models often rest on hierarchical leadership and risk-averse cultures, which are poorly suited for disruption. Leaders in traditional firms may resist experimentation due to fear of failure or focus excessively on protecting existing revenue streams (Kotter, 2012).

By contrast, disruptive environments demand adaptive leadership, psychological safety for experimentation, and a culture of continuous learning. Without these cultural and leadership shifts, even firms with sufficient resources may fail to pivot effectively.

Summary of Limitations
The limitations of traditional business models can be summarized as:

1. Rigidity and inflexibility that restrict adaptation.
2. Linear value chains unable to accommodate networked disruption.
3. Efficiency bias that undermines resilience.
4. Weak digital and data-driven capabilities.
5. Cultural and leadership barriers to change.

These shortcomings illustrate why organizations must rethink their strategies and embrace strategic agility as the foundation for sustainable competitiveness.

Rethinking Business Models Through Strategic Agility

Traditional business models prioritize linearity, efficiency, and stability, often limiting firms' capacity to adapt under rapid change. Strategic agility offers an alternative lens by enabling organizations to sense environmental shifts, seize emerging opportunities, and reconfigure resources. Accordingly, this section introduces a strategic agility framework for business model renewal centered on three mechanisms: digital transformation, ecosystem partnerships, and adaptive leadership, that jointly enhance responsiveness, resilience, and long-term competitiveness.

Digital Transformation as a Catalyst for Agility
Digital transformation enhances strategic agility by strengthening real-time visibility, decision speed, and adaptive reconfiguration across the organization, enabling firms to sense

environmental shifts earlier, seize emerging opportunities more effectively, and transform business model components in response to disruption. Unlike incremental automation, digital transformation involves restructuring organizational processes, customer interfaces, and value-creation logics through digital technologies (Vial, 2021).

Digital Technologies and Business Model Innovation
The integration of artificial intelligence (AI), blockchain, big data, and cloud computing enables organizations to pivot quickly in response to market disruptions. For instance, AI-powered analytics allow firms to anticipate consumer trends, while cloud-based systems enhance operational flexibility and scalability (Brynjolfsson & McAfee, 2014).

Digital technologies reshape traditional models in three ways:

- Data-driven decision-making, enhancing responsiveness.
- Platform-based business models, which replace linear value chains with multi-sided ecosystems.
- Personalized customer engagement, fostering loyalty in turbulent markets.

A well-known example is Netflix, which transitioned from a DVD rental service to a global streaming platform by leveraging data analytics and digital infrastructure (Souza, & Romero, 2021).

Barriers to Digital Agility
Despite its potential, digital transformation faces barriers: legacy IT infrastructure, skills gaps, and cultural resistance. Firms that fail to align digital investments with strategic agility risk "technology for technology's sake" without achieving meaningful adaptation (Westerman et al., 2014).

Ecosystem Partnerships and Collaborative Agility
Ecosystem partnerships enhance strategic agility by expanding access to complementary resources, capabilities, and information across networks, enabling firms to sense shifts through richer signals, seize opportunities via coordinated action, and transform business models through shared experimentation under disruption. Traditional business models often focused on internal value chains, but disruptive contexts increasingly require ecosystem thinking. Strategic agility therefore demands that firms collaborate with partners, competitors, startups, and even customers to co-create value (Jacobides et al., 2018).

From Linear Chains to Ecosystem Platforms
Unlike linear models, ecosystems thrive on interconnected networks of actors who share resources and capabilities. For example, Apple's iOS ecosystem integrates developers, suppliers, and users, enabling continuous innovation and rapid scalability. Similarly, Tesla leverages partnerships with suppliers and governments to accelerate renewable energy adoption.

Table 3 illustrates how ecosystems expand organizational agility compared to traditional partnerships. The table offers a structured comparison between bilateral partnership logic and ecosystem collaboration logic, highlighting how differences in coordination, knowledge exchange, and risk-sharing can shape a firm's ability to respond and adapt under turbulence.

Two insights emerge from Table 3. First, ecosystem collaborations tend to accelerate adaptation by enabling richer and faster knowledge flows across multiple actors, which broadens the sources of innovation and shortens response cycles. Second, ecosystems distribute risks and capabilities across participants, allowing firms to reconfigure resources through partnerships rather than relying solely on internal capacity. This helps explain why ecosystem platforms can provide greater agility than traditional partnerships, particularly when rapid experimentation and scaling are required.

Strategic Agility through Ecosystem Engagement
By engaging in ecosystems, firms achieve agility through:

- Access to diverse resources and capabilities.
- Rapid scaling via networks rather than internal assets.
- Shared risk management across multiple partners.

For instance, during the COVID-19 pandemic, pharmaceutical firms accelerated vaccine development through cross-industry collaborations and public-private partnerships, demonstrating ecosystem agility (Chesbrough, 2020).

Leadership Practices for Strategic Agility
Leadership practices strengthen strategic agility by shaping decision speed, empowerment, and organizational learning, enabling firms to sense weak signals, seize opportunities through timely resource commitment, and transform structures and routines to sustain renewal under disruption. Even with advanced technologies and ecosystem partnerships, strategic agility cannot be realized without the right leadership practices and cultural orientation. Leaders play a central role in embedding agility into business models by shaping vision, fostering experimentation, and enabling adaptive governance.

Table 3.
Traditional Partnerships vs. Ecosystem Collaborations

Dimension	Traditional Partnerships	Ecosystem Collaborations
Value creation focus	Bilateral agreements	Multi-stakeholder synergy
Knowledge flow	Limited, contractual	Open, dynamic, networked
Agility level	Moderate	High
Innovation approach	Internal R&D	Co-creation, distributed
Risk distribution	Concentrated	Shared across ecosystem

Source: Adapted from Jacobides et al. (2018).

Adaptive Leadership and Decision-Making
Adaptive leaders embrace flexible decision-making rather than rigid planning. They encourage scenario planning, iterative experimentation, and rapid feedback loops (Kotter, 2012). Instead of protecting legacy revenues, they focus on strategic renewal through bold investments in innovation.

Cultural Foundations of Agility
Organizational culture is a determinant of agility. Cultures rooted in psychological safety, continuous learning, and openness to failure empower employees to respond to disruptions proactively (Edmondson, 2018). For example, Amazon institutionalized a culture of "Day One" thinking, where employees continuously challenge assumptions and explore new opportunities.

Governance for Agility
Traditional governance emphasizes control and predictability, whereas agile governance emphasizes autonomy, distributed decision-making, and real-time accountability (Rigby et al., 2018). Firms adopting agile governance structures, such as cross-functional teams or networked decision frameworks, are better equipped to pivot during crises.

Taken together, digital transformation, ecosystem partnerships, and leadership practices operate as complementary levers that reinforce sensing, seizing, and transforming, thereby enabling coherent business model renewal rather than fragmented change initiatives.

Toward an Integrated Framework of Strategic Agility
Strategic agility integrates digital transformation, ecosystem partnerships, and leadership practices into a cohesive framework for business model renewal.

Table 4 summarizes this framework. The table consolidates the three mechanisms emphasized in this study and clarifies their distinct roles in enabling agility. By presenting these elements side by side, it provides a concise synthesis of how firms can operationalize agility through complementary organizational levers rather than isolated initiatives.

Two insights emerge from Table 4. First, agility is reinforced when these mechanisms work in combination: digital transformation strengthens sensing and rapid response, ecosystem partnerships expand opportunity access and scaling capacity, and leadership practices sustain agility through governance and culture. Second, the framework implies that business model renewal is more likely when firms align technology, networks, and leadership as mutually supporting capabilities rather than treating them as separate programs. Together, these mechanisms help firms respond to disruption while also enabling proactive experimentation and market shaping.

This integrated approach ensures that firms are not only responsive to disruptions but are also proactive in shaping new market dynamics.

Results

Translating the Sensing–Seizing–Transforming Framework
This conceptual analysis identifies three core results. First, strategic agility functions through interconnected sensing, seizing, and transforming routines that collectively enable business model change, rather than through isolated managerial actions. Second, digital transformation, ecosystem collaboration, and adaptive leadership strengthen these routines by enhancing environmental awareness, accelerating resource mobilization and experimentation, and enabling organizational reconfiguration. Third, emerging-market conditions, such as institutional volatility, infrastructure gaps, and regulatory constraints, act as boundary conditions that shape how agility can be operationalized.

Building on these findings, this section translates the proposed framework into actionable practical implications for managers and policymakers in emerging-market contexts, particularly in the Middle East, where structural constraints and uneven digital infrastructure influence organizational responses to disruption. The discussion aligns managerial and policy actions with sensing, seizing, and transforming routines.

Overall, the results are consistent with dynamic capabilities theory (Teece et al., 1997; Teece et al., 2016) while extending prior research by explicitly linking agility routines to business model transformation mechanisms under emerging-market constraints.

Discussion

Managerial Implications in Emerging Markets
Managers in emerging economies, such as those in the Middle East, face a dual challenge: they must stabilize operations under uncertainty while also building strategic agility as an organizational capability that supports sensing, seizing, and transforming in response to future disruptions.

Table 4.
Strategic Agility Framework for Business Model Rethinking

Mechanism	Role in Agility	Illustrative Example
Digital transformation	Enables real-time responsiveness through data, platforms, and customer-centricity	Netflix, Uber
Ecosystem partnerships	Provides network-based innovation, shared risk, and rapid scaling	Apple iOS, vaccine collaborations
Leadership practices	Embeds agility into culture, governance, and vision	Amazon, Spotify

Transforming: Strategic Leadership in Uncertain Contexts
Managers should shift from control-oriented leadership styles to adaptive, participatory approaches that empower employees and encourage experimentation (Edmondson, 2018). This is especially relevant in hierarchical contexts where decision-making has historically been centralized, such as in Gulf Cooperation Council (GCC) environments (Doz & Kosonen, 2010; Farag, 2025a; Farag, 2025c). For example, leadership in Middle Eastern energy companies must balance long-term investments in hydrocarbons with diversification into renewables and digital solutions (Atlantic Council, 2020). Such dual strategies require leadership that supports calculated risk-taking while maintaining institutional legitimacy.

Seizing: Balancing Efficiency with Resilience
Many firms in emerging markets have traditionally emphasized efficiency and cost control. However, disruptions such as the COVID-19 pandemic highlighted the vulnerabilities of efficiency-driven supply chains (Ivanov & Dolgui, 2020). Managers should adopt a dual orientation: preserving efficiency in stable operations while building resilience and flexibility into supply chain design. This involves:

- Diversifying suppliers beyond single regions.
- Using digital technologies for real-time monitoring.
- Creating contingency resource buffers.

Sensing and Seizing: Embedding Digital Transformation
The rise of smart cities in the Middle East (e.g., Saudi Arabia's NEOM project, Dubai's Smart Government initiative) demonstrates how digital transformation can enhance agility at both organizational and national levels (Al-Khouri, 2012). Managers should integrate digital tools not only for operational efficiency but also for business model innovation, from e-commerce in Egypt to fintech in the UAE (Vial, 2021). Barriers include limited digital talent pools, uneven infrastructure, and resistance to change. Addressing these barriers typically involves investing in workforce upskilling, forming partnerships with global technology providers, and fostering digital-first mindsets.

Transforming: Navigating Institutional and Cultural Constraints
Emerging markets often present institutional voids, including weak legal systems, unclear regulations, or informal market dynamics (Khanna & Palepu, 2010). Managers can develop agility by adapting strategies to fluid "rules of the game" while avoiding overdependence on government protection. For instance, family-owned businesses in the Middle East, which dominate many industries, can strengthen competitiveness by professionalizing governance structures and adopting agile practices to compete with multinational corporations. This may include more decentralized decision-making and transparent performance metrics.

Policy Implications for Governments and Regulators
Policymakers play a foundational role in fostering ecosystems where strategic agility can thrive. In the Middle East and other emerging markets, governments are not only regulators but often major economic actors, shaping industries through ownership stakes, subsidies, and national visions. Policy interventions can therefore strengthen firm-level agility by enabling better sensing (information, skills, infrastructure), more effective seizing (experimentation, financing, partnerships), and sustained transforming (institutional support for renewal).

Building Innovation Ecosystems
Agility is more likely to emerge in ecosystems that connect startups, universities, investors, and regulators. Policymakers can foster such ecosystems by:

- Establishing innovation hubs and accelerators (e.g., Dubai Internet City, Saudi Arabia's KAUST).
- Facilitating access to venture capital and seed funding.
- Supporting public–private partnerships in high-technology sectors.

Such ecosystems enhance knowledge spillovers and enable firms to co-create solutions, accelerating business model innovation (Jacobides et al., 2018).

Regulatory Flexibility and Experimentation
Rigid regulatory environments can constrain agility. Governments can implement sandbox models, controlled environments where firms can test innovations such as fintech or AI-driven solutions without full regulatory compliance (Zetzsche et al., 2017). The UAE's regulatory sandbox for fintech provides a model that allows firms to innovate while regulators learn in real time, balancing experimentation with risk management.

Human Capital Development for Agility
Strategic agility depends on a workforce capable of continuous learning and adaptation. Policymakers should invest in education and training systems that prioritize problem-solving, critical thinking, and digital literacy. National programs such as Saudi Vision 2030 and Egypt Vision 2030 emphasize skills for the digital economy, but effective implementation requires closer alignment between universities, industry needs, and government-led training initiatives.

Infrastructure for Digital Agility
Governments should expand access to high-speed internet, cloud infrastructure, and cybersecurity frameworks. Unequal digital access between urban and rural areas in emerging economies remains a barrier to agility (World Bank, 2020). Ensuring inclusivity will allow SMEs, the backbone of many Middle Eastern economies, to integrate into agile ecosystems.

Comparative Lessons: Middle East and Other Emerging Markets
A comparison of Middle Eastern experiences with those of other emerging economies provides insights for both managers and policymakers. Table 5 synthesizes key challenges shaping strategic agility across selected emerging-market regions and pairs them with indicative managerial and policy responses. The table is intended to show how institutional and

structural constraints influence the specific forms agility takes in practice, while also illustrating how organizational initiatives and public policies can operate in complementary ways.

Two insights emerge from Table 5. First, the constraints shaping agility differ across regions, ranging from institutional volatility and governance structures to infrastructure gaps and regulatory burdens, indicating that "best practices" for agility should be adapted rather than copied. Second, the table suggests that managerial and policy responses are interdependent: firm-level initiatives (e.g., governance professionalization, supply chain agility, or mobile-based innovation) tend to be more effective when supported by enabling policies (e.g., regulatory flexibility, skills development, and investment in connectivity). Overall, this comparative lens underscores that while strategic agility is broadly relevant, it is enacted through context-specific pathways.

Synthesis and Future Outlook

For managers in the Middle East and other emerging markets, a key implication is that strategic agility should be developed as an integral organizational capability embedded in leadership, culture, and digital infrastructure. For policymakers, the implication is to create enabling environments, through flexible regulation, human capital investment, and innovation ecosystems, that support organizational adaptation and innovation under uncertainty. As geopolitical, technological, and climate-related disruptions intensify, firms and governments that do not invest in agility capabilities may face declining competitiveness over time. By contrast, those that build and sustain agility are more likely to absorb shocks and shape new opportunities across industries and economies.

Framework-to-Action Mapping

To ensure consistency between the proposed framework and the practical implications, managers can view sensing, seizing, and transforming as three linked implementation priorities. Sensing can be strengthened through investment in real-time visibility, customer insight, and early-warning systems. Seizing can be enabled by clear decision rights, rapid resource reallocation, and ecosystem collaboration that accelerates experimentation. Transforming requires governance renewal, cultural reinforcement of learning, and capability development to sustain business model change over time. For policymakers, complementary measures, such as regulatory sandboxes, innovation ecosystems, skills development, and digital infrastructure, can reduce constraints that otherwise limit firms' ability to operationalize these routines.

Theoretical Implications

The framework conceptualizes strategic agility as a configurational capability in which sensing, seizing, and transforming are mutually reinforcing rather than independent. It further suggests that the impact of agility on business model transformation is mechanism-specific: digital transformation mainly enhances sensing and seizing, ecosystem collaboration supports seizing through distributed experimentation, and leadership practices enable transforming via governance and cultural renewal. The analysis also identifies emerging-market contexts as boundary conditions that shape feasible agility configurations, underscoring the need to incorporate institutional and infrastructural constraints more explicitly in agility theory.

These insights are consolidated in the conclusion, which summarizes the main findings, outlines study limitations, and identifies directions for future research.

Conclusion, Limitations, Policy Recommendations, and Future Research Directions

This article argues that strategic agility is essential for organizations in an age of disruption. Traditional models, focused on efficiency and stability, are inadequate amid technological shifts, changing customer expectations, and geopolitical uncertainty. Strategically agile organizations can sense changes, seize opportunities, and transform their business models to maintain resilience and competitiveness.

Main contribution: The study proposes an integrative framework linking agility routines (sensing–seizing–transforming) to business model transformation mechanisms (digital transformation, ecosystem collaboration, adaptive leadership), highlighting emerging-market conditions that affect feasibility and implementation.

Table 5.
Strategic Agility Challenges in Emerging Markets

Region	Key Challenge	Managerial Response	Policy Response
Middle East	Institutional volatility, family-owned dominance	Professionalize governance, embrace digital platforms	Vision-based reforms, regulatory sandboxes
Sub-Saharan Africa	Weak infrastructure, fragmented markets	Leverage mobile-based innovations, informal partnerships	Invest in connectivity, regional integration
Latin America	Political instability, resource dependency	Diversify revenue streams, agility in supply chains	Encourage open trade, stabilize institutions
South Asia	Overregulation, skills gap	Adopt frugal innovation, build agile SMEs	Skills development, flexible regulation

Source: Author's synthesis based on World Bank (2020), Khanna and Palepu (2010), and regional studies.

Key Findings and Synthesis
This study highlighted several important findings. First, traditional business models are inherently limited by rigidity and linear planning assumptions, which constrain organizational responsiveness in fast-moving environments. Second, strategic agility offers a framework for rethinking business models, emphasizing adaptability, speed, and collaborative advantage rather than static control. Third, the mechanisms of strategic agility, including digital transformation, ecosystem collaboration, and adaptive leadership practices, provide actionable pathways for firms to thrive amid uncertainty. Finally, the study revealed that the context of emerging markets, particularly in the Middle East, presents both unique challenges and opportunities, requiring managers and policymakers to tailor agility strategies to resource constraints, institutional complexity, and socio-political volatility.

Limitations of the Study
Despite its contributions, this article faces several limitations that should be acknowledged.

Conceptual Scope
The analysis remains largely conceptual and interpretive, synthesizing existing scholarly literature without presenting primary empirical data. Although this strengthens its theoretical depth, it limits generalizability to real-world business contexts.

Regional Specificity
While the article draws attention to the Middle East and emerging markets, the discussion is necessarily broad. More context-specific case studies, such as those in energy, logistics, or fintech sectors, would provide stronger evidence of how strategic agility is practiced in distinct industries.

Temporal Constraints
Strategic agility is inherently dynamic and time-sensitive. Given the fast pace of technological innovation, insights presented today may require continuous updating to reflect new disruptions, such as advances in generative AI, green technologies, or shifting global trade patterns.

Measurement Challenges
Although strategic agility is widely discussed in academic literature, standardized measurement tools and performance indicators remain underdeveloped. This limitation complicates comparative research across sectors and regions.

Policy Recommendations
Given these findings and limitations, several recommendations can be offered for managers and policymakers:

Embed Agility into National Development Agendas
Governments in emerging markets should incorporate strategic agility into industrial and economic diversification strategies. For instance, initiatives such as Saudi Arabia's Vision 2030 and the UAE's Centennial 2071 illustrate how agility principles can be institutionalized at the policy level to prepare for disruptive futures.

Promote Digital Transformation Infrastructure
Policymakers must prioritize investments in digital infrastructure, data governance, and cybersecurity. These foundational enablers allow firms to harness big data, AI, and digital platforms to remain competitive.

Foster Innovation Ecosystems
Both firms and states should encourage collaboration across startups, corporations, universities, and public institutions. Innovation clusters, regulatory sandboxes, and cross-border partnerships can accelerate knowledge transfer and agility adoption.

Develop Leadership and Human Capital
Organizations must prioritize leadership development programs that foster adaptive, resilient, and future-oriented decision-making. Simultaneously, education systems should be reoriented to emphasize lifelong learning, digital skills, and entrepreneurial mindsets.

Build Institutional Resilience
Policymakers should design flexible regulatory frameworks that allow for experimentation while maintaining accountability. This includes adaptive labor laws, dynamic competition policies, and flexible trade regulations that can respond to global shocks.

Directions for Future Research
Future scholarship can advance the study of strategic agility in several promising directions:

Empirical Case Studies in Emerging Markets
More industry-specific studies, particularly in the Middle East, Africa, and Asia, are needed to examine how firms operationalize strategic agility in resource-constrained and politically volatile environments.

Quantitative Measurement Tools
Developing standardized instruments to measure strategic agility would strengthen empirical analysis. Future studies could design metrics to assess agility's impact on firm performance, resilience, and innovation outcomes.

Longitudinal Analyses
Research tracking organizations over time can illuminate how strategic agility evolves across different stages of disruption. This would enrich understanding of the balance between short-term responsiveness and long-term adaptability.

Role of Technology in Agility
Further work is needed to examine how emerging technologies, such as generative AI, blockchain, and green tech, reshape agility practices, especially in traditional industries such as energy and manufacturing.

Comparative Policy Studies
Future research should compare how governments across different regions integrate agility into policy frameworks, highlighting lessons transferable across contexts.

Concluding Remarks

The age of disruption demands a profound rethinking of business models. Firms that cling to outdated logics of efficiency and stability will struggle, while those that embrace agility, adaptability, and innovation will prosper. By bridging insights from strategy, technology, and leadership, this article underscores that strategic agility is not merely a competitive advantage but a survival imperative. For managers and policymakers, particularly in the Middle East and other emerging economies, adopting agility-centered frameworks is crucial to ensuring resilience and sustainable growth in an unpredictable world.

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References

Al-Khouri, A. M. (2012). eGovernment strategies: The case of the United Arab Emirates (UAE). *European Journal of ePractice*, *17*(September), 126–150.

Aspara, J., Lamberg, J. A., Laukia, A., & Tikkanen, H. (2013). Corporate business model transformation and inter-organizational cognition: The case of Nokia. *Long Range Planning*, *46*(6), 459–474. [CrossRef]

Atlantic Council. (2020). The Saudi Aramco–SABIC merger: How acquiring SABIC fits into Aramco's long-term diversification strategy (Issue brief). https://www.atlanticcouncil.org/in-depth-research-reports/issue-brief/the-saudi-aramco-sabic-merger-how-acquiring-sabic-fits-into-aramcos-long-term-diversification-strategy/.

Bennett, N., & Lemoine, J. (2014). What VUCA really means for you. *Harvard Business Review*, *92*, (1/2). https://ssrn.com/abstract=2389563.

Birkinshaw, J., Zimmermann, A., & Raisch, S. (2016). How do firms adapt to discontinuous change? Bridging the dynamic capabilities and ambidexterity perspectives. *California Management Review*, *58*(4), 36–58. [CrossRef]

Brynjolfsson, E., & McAfee, A. (2014). *The second machine age: Work, progress, and prosperity in a time of brilliant technologies*. WW Norton & company.

Chandler, A. D., Hikino, T., & Chandler, A. D. (2009). *Scale and scope: The dynamics of industrial capitalism*. Harvard University Press.

Chesbrough, H. (2020). To recover faster from Covid-19, open up: Managerial implications from an open innovation perspective. *Industrial Marketing Management*, *88*, 410–413. [CrossRef]

Christensen, C. M., Raynor, M., & McDonald, R. (2015). Disruptive innovation. *Harvard Business Review*, *93*(12), 44–53. https://www.interaction-design.org/literature/book/the-encyclopedia-of-human-computer-interaction-2nd-ed/disruptive-innovation.

Clauss, T., Abebe, M., Tangpong, C., & Hock, M. (2019). Strategic agility, business model innovation, and firm performance: An empirical investigation. *IEEE Transactions on Engineering Management*, *68*(3), 767–784. [CrossRef]

Clauss, T., Breier, M., Kraus, S., Durst, S., & Mahto, R. V. (2022). Temporary business model innovation: SMEs' innovation response to the Covid-19 crisis. *RandD Management*, *52*(2), 294–312. [CrossRef]

Doern, R., Williams, N., & Vorley, T. (2019). Special issue on entrepreneurship and crises: Business as usual? An introduction and review of the literature. *Entrepreneurship and Regional Development*, *31*(5–6), 400–412. [CrossRef]

Doz, Y. L., & Kosonen, M. (2008). *Fast strategy: How strategic agility will help you stay ahead of the game*. Pearson Education.

Doz, Y. L., & Kosonen, M. (2010). Embedding strategic agility: A leadership agenda for accelerating business model renewal. *Long Range Planning*, *43*(2–3), 370–382. [CrossRef]

Edmondson, A. C. (2018). *The fearless organization: Creating psychological safety in the workplace for learning, innovation, and growth*. John Wiley & Sons.

Farag, M. I. H. (2025a). Sustainability as a management strategy: Integrating environmental, social, and governance practices into business administration. *Management Science Advances*, *3*(1), 20–44. [CrossRef]

Farag, M. I. H. (2025b). The role of SWOT analysis in enhancing business growth and long-term management sustainability. *Management Science Advances*, *2*(1), 304–329. [CrossRef]

Farag, M. I. H. (2025c). *Critical success factors (CSFs) affecting the Sustainable Development Goals (SDGs)* (Doctoral dissertation, Helwan University). [CrossRef]

Farag, M. I. H. (2025d). Bridging inequality: Contemporary challenges to achieve sustainable development goals across and within nations. *International Journal of Sustainable Development Goals*, *1*, 333–352. [CrossRef]

Foss, N. J., & Saebi, T. (2017). Fifteen years of research on business model innovation: How far have we come, and where should we go? *Journal of Management*, *43*(1), 200–227. [CrossRef]

Gereffi, G. (2020). What does the COVID-19 pandemic teach us about global value chains? The case of medical supplies. *Journal of International Business Policy*, *3*(3), 287–301. [CrossRef]

Gomber, P., Kauffman, R. J., Parker, C., & Weber, B. W. (2018). On the fintech revolution: Interpreting the forces of innovation, disruption, and transformation in financial services. *Journal of Management Information Systems*, *35*(1), 220–265. [CrossRef]

Ivanov, D., & Dolgui, A. (2020). Viability of intertwined supply networks: Extending the supply chain resilience angles towards survivability. A position paper motivated by COVID-19 outbreak. *International Journal of Production Research*, *58*(10), 2904–2915. [CrossRef]

Jacobides, M. G., Cennamo, C., & Gawer, A. (2018). Towards a theory of ecosystems. *Strategic Management Journal*, *39*(8), 2255–2276. [CrossRef]

Kantur, D., & İşeri-Say, A. (2012). Organizational resilience: A conceptual integrative framework. *Journal of Management and Organization*, *18*(6), 762–773. [CrossRef]

Khanna, T., & Palepu, K. G. (2010). *Winning in emerging markets: A road map for strategy and execution*. Harvard Business Press.

Kotter, J. P. (2012). *Leadership and leading change*. Harvard Business Review Press.

Linnenluecke, M. K. (2017). Resilience in business and management research: A review of influential publications and a research agenda. *International Journal of Management Reviews*, *19*(1), 4–30. [CrossRef]

Porter, M. E. (2008). *Competitive advantage: Creating and sustaining superior performance*. Simon and Schuster.

Rigby, D. K., Sutherland, J., & Noble, A. (2018). Agile at scale. *Harvard Business Review*, *96*(3), 88–96.

Ritter, T., & Pedersen, C. L. (2020). Digitization capability and the digitalization of business models in business-to-business firms: Past, present, and future. *Industrial Marketing Management*, *86*, 180–190. [CrossRef]

Souza, I. T., & Romero, F. (2021). Strategic innovation management at Netflix: A case study. In *Proceedings of the European conference on innovation and entrepreneurship 2021*. Academic Conferences International Ltd. [CrossRef]

Sushil. (2020). Revisiting flexibility research: Reviewing the past to shape the future. *Global Journal of Flexible Systems Management*, *21*(3), 207–217. [CrossRef]

Teece, D., Peteraf, M., & Leih, S. (2016). Dynamic capabilities and organizational agility: Risk, uncertainty, and strategy in the innovation economy. *California Management Review*, *58*(4), 13–35. [CrossRef]

Teece, D. J. (2010). Business models, business strategy, and innovation. *Long Range Planning*, *43*(2–3), 172–194. [CrossRef]

Teece, D. J., Pisano, G., & Shuen, A. (1997). Dynamic capabilities and strategic management. *Strategic Management Journal*, *18*(7), 509–533. [CrossRef]

Vial, G. (2021). Understanding digital transformation: A review and a research agenda. *Managing digital transformation* (pp. 13–66). [CrossRef]

Vuori, T. O., & Huy, Q. N. (2016). Distributed attention and shared emotions in the innovation process: How Nokia lost the smartphone battle. *Administrative Science Quarterly*, *61*(1), 9–51. [CrossRef]

Westerman, G., Bonnet, D., & McAfee, A. (2014). *Leading digital: Turning technology into business transformation*. Harvard Business Press.

Wilden, R., Devinney, T. M., & Dowling, G. R. (2016). The architecture of dynamic capability research: Identifying the building blocks of a configurational approach. *Long Range Planning*, *49*(3), 300–316. [CrossRef]

World Bank. (2020). *World Development Report 2020: Trading for Development in the Age of Global Value Chains*. World Bank. [CrossRef]

Li, Y., Su, Z., & Liu, Y. (2010). Can strategic flexibility help firms profit from product innovation? *Technovation*, *30*(5–6), 300–309. [CrossRef]

Zetzsche, D. A., Buckley, R. P., Arner, D. W., & Barberis, J. N. (2017). Regulating a revolution: From regulatory sandboxes to smart regulation. *SSRN Electronic Journal*, *23*(1), 31–103. [CrossRef]