



Adaptive Governance for Strategic Agility: Explaining Organizational Responses to Persistent Environmental Turbulence

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Abstract

Organizations increasingly operate under conditions of persistent environmental turbulence characterized by continuous technological disruption, geopolitical uncertainty, institutional change, and shifting competitive dynamics. Although strategic agility has become essential for organizational adaptation, existing research predominantly explains it through capability-based perspectives, providing limited insight into how organizations coordinate adaptive action under sustained uncertainty. This conceptual paper addresses this theoretical gap by proposing a middle-range theory that positions adaptive governance as the central organizational mechanism linking persistent environmental turbulence to strategic agility. Integrating Adaptive Governance Theory with Dynamic Capabilities Theory, the paper argues that governance architectures characterized by distributed decision authority, continuous organizational learning, adaptive coordination, and iterative feedback enable organizations to transform environmental uncertainty into timely strategic responses. Unlike existing capability-centered explanations, the proposed framework conceptualizes governance as an active coordination mechanism rather than a contextual condition. The study contributes by extending strategic agility research beyond capability-based explanations, broadening the application of Adaptive Governance Theory to strategic management, and developing a theoretically bounded framework that explains how governance mechanisms generate strategic agility under persistent environmental turbulence.

Keywords

adaptive governance; strategic agility; persistent environmental turbulence; dynamic capabilities; organizational coordination; middle-range theory

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1. Introduction

Organizations today operate in an environment characterized by persistent rather than episodic turbulence. Unlike temporary disruptions that allow firms to recover and return to relatively stable operating conditions, persistent environmental turbulence reflects continuous shifts in technological innovation, geopolitical instability, regulatory transformation, climate-related uncertainty, and global supply chain disruptions. These intertwined forces continuously reshape competitive landscapes, making environmental change an enduring organizational condition rather than an exceptional event. Under such circumstances, sustainable competitive advantage increasingly depends on an organization's ability to continuously adapt its strategic direction while maintaining organizational coherence (D'Aveni *et al.*, 2010; D. Teece *et al.*, 2016). Consequently, organizations are challenged not merely to survive isolated crises but to develop adaptive responses capable of functioning under ongoing uncertainty.

The increasingly volatile business environment has fundamentally altered how organizations approach strategic decision-making. Earlier perspectives frequently assumed that environmental disruptions occurred intermittently, allowing organizations sufficient time to reconfigure resources before the next major change. However, contemporary competitive environments rarely provide such recovery periods. Instead, organizations face overlapping technological, institutional, economic, and societal changes that require continuous strategic adjustment (Brown & Eisenhardt, 1997; Farjoun, 2010). This persistent turbulence challenges conventional organizational structures because decision-making systems designed for relatively stable environments often become too rigid to respond effectively to rapidly evolving conditions. As environmental uncertainty becomes continuous rather than episodic, organizations require governance mechanisms capable of facilitating ongoing adaptation rather than occasional strategic change.

Within this context, strategic agility has emerged as one of the most influential concepts in strategic management research. Strategic agility refers to an organization's capability to rapidly sense environmental changes, make timely strategic decisions, and continuously reconfigure resources in response to emerging opportunities and threats (Y. Doz & Kosonen, 2008; Y. L. Doz & Kosonen, 2010; Weber & Tarba, 2014). Strategic agility has been associated with enhanced organizational responsiveness, innovation, competitive performance, and long-term survival, particularly under conditions of high environmental dynamism (Reed, 2021; D. Teece *et al.*, 2016). Recent empirical studies further demonstrate that strategic agility contributes to organizational adaptability across diverse organizational contexts, including multinational enterprises, entrepreneurial firms, and digital organizations (Clauss *et al.*, 2021; de Diego Ruiz *et al.*, 2024; Zahoor *et al.*, 2022). Consequently, understanding how organizations develop and sustain strategic agility has become an increasingly important research agenda.

Despite this growing body of literature, existing explanations of strategic agility remain dominated by capability-based perspectives. Dynamic Capabilities Theory argues that organizations achieve agility by developing higher-order capabilities that enable sensing environmental opportunities, seizing strategic options, and transforming organizational resources (Eisenhardt & Martin, 2000; D. J. Teece, 2007). Complementary perspectives, including organizational ambidexterity and resource orchestration, similarly emphasize organizational capabilities as the principal drivers of adaptive performance (Birkinshaw *et al.*, 2016; O'Reilly & Tushman, 2008; Sirmon *et al.*, 2011). These perspectives have substantially advanced understanding of organizational adaptation by explaining how firms renew capabilities under changing competitive conditions.

Nevertheless, capability-oriented explanations leave an important theoretical question unresolved. Organizations possessing comparable dynamic capabilities frequently display

markedly different levels of strategic agility when confronted with similar environmental turbulence. Some organizations rapidly coordinate strategic responses across multiple organizational units, whereas others struggle despite possessing equivalent technological resources, managerial competencies, or organizational capabilities. This variation suggests that organizational adaptation cannot be fully explained by the possession of capabilities alone. Rather, the organizational arrangements through which strategic decisions are coordinated, authority is distributed, and information is processed may constitute an additional explanatory mechanism that remains insufficiently theorized within the strategic agility literature.

This limitation becomes particularly evident under conditions of persistent environmental turbulence, where adaptation depends not only on organizational capabilities but also on governance arrangements that continuously facilitate coordination, experimentation, distributed decision-making, and organizational learning. Adaptive Governance Theory offers a promising perspective for addressing this gap by emphasizing flexible institutional arrangements, decentralized authority, collaborative learning, and iterative adaptation in response to changing environments (Chaffin *et al.*, 2014; Folke *et al.*, 2005). Rather than assuming organizational stability, adaptive governance conceptualizes governance structures themselves as evolving systems capable of continuous adjustment through feedback, experimentation, and multi-level coordination. More recent studies further argue that adaptive governance enhances organizational responsiveness by balancing flexibility with accountability under highly uncertain conditions (Janssen & van der Voort, 2016, 2020; van Assche *et al.*, 2022)

Although Adaptive Governance Theory has gained considerable attention in public administration, environmental governance, and social-ecological systems research (Chaffin *et al.*, 2014; Folke *et al.*, 2005; Ostrom, 2010), its integration into strategic management remains surprisingly limited. Existing strategic agility studies rarely conceptualize governance structures as active mechanisms that shape organizational responsiveness. Instead, governance is often treated as a contextual variable or an institutional background condition, while theoretical attention continues to focus primarily on organizational capabilities, managerial cognition, or resource deployment. Consequently, current literature provides only limited explanation regarding how governance architectures enable organizations to continuously coordinate strategic adaptation under persistent turbulence.

This conceptual separation creates an important opportunity for theory development. Dynamic Capabilities Theory explains how organizations renew strategic resources, whereas Adaptive Governance Theory explains how organizations organize authority, information, coordination, and learning across multiple organizational actors. These perspectives therefore address different levels of organizational adaptation and should be viewed as theoretically complementary rather than competing explanations. Integrating adaptive governance into the strategic agility literature offers an opportunity to move beyond capability-centered explanations by identifying governance mechanisms that translate distributed organizational knowledge into timely strategic action. Such integration contributes to resolving the "organizational coordination problem" that remains insufficiently addressed within current strategic agility research (Joseph & Gaba, 2020; Peteraf *et al.*, 2013).

Accordingly, this conceptual paper develops a middle-range theory explaining how adaptive governance functions as the primary organizational mechanism through which strategic agility emerges under conditions of persistent environmental turbulence. Specifically, the paper argues that adaptive governance facilitates strategic agility by enabling decentralized decision authority, continuous organizational learning, iterative feedback processes, and dynamic coordination across organizational units. Rather than positioning governance as a contextual characteristic, this study conceptualizes adaptive governance as the central explanatory mechanism linking environmental turbulence to organizational strategic responsiveness.

This paper makes three primary theoretical contributions. First, it extends the strategic agility literature by shifting the analytical focus from organizational capabilities toward governance mechanisms that coordinate adaptive action. Second, it integrates Adaptive Governance Theory with strategic management research, thereby expanding the application of adaptive governance beyond its traditional domains of environmental and public governance. Third, it proposes a novel middle-range theoretical framework explaining how adaptive governance generates strategic agility through governance-enabled coordination, organizational learning, and decentralized strategic decision-making under persistent environmental turbulence. By positioning governance as the central explanatory mechanism rather than merely a contextual factor, this paper offers a distinct theoretical perspective that complements existing capability-based explanations while opening new avenues for future conceptual and empirical research.

2. Theoretical Foundations

2.1 Strategic Agility: From Organizational Responsiveness to Continuous Strategic Adaptation

Strategic agility has become a central concept in strategic management because organizations increasingly operate in environments characterized by continuous uncertainty rather than episodic change. Early research conceptualized strategic agility as an organization's ability to rapidly recognize environmental shifts and respond through timely strategic decisions (Y. Doz & Kosonen, 2008). Subsequent studies expanded this perspective by emphasizing that agility is not merely speed in decision-making but also the capacity to repeatedly realign organizational resources, strategies, and business models while maintaining strategic coherence (Y. L. Doz & Kosonen, 2010; Weber & Tarba, 2014).

The development of the strategic agility literature has largely been influenced by Dynamic Capabilities Theory. Organizations are considered agile when they continuously sense environmental changes, seize emerging opportunities, and transform organizational resources to maintain competitiveness (D. Teece *et al.*, 2016; D. J. Teece, 2007). This perspective has generated extensive empirical evidence demonstrating positive relationships between strategic agility and innovation, organizational performance, internationalization, and competitive advantage across various organizational contexts (Clauss *et al.*, 2021; Ferraris *et al.*, 2022; Zahoor *et al.*, 2022). More recent studies further indicate that environmental turbulence, firm age, and international complexity influence the capability configurations that underpin strategic agility (de Diego Ruiz *et al.*, 2024)

Despite these advances, the literature remains predominantly capability-centric. Strategic agility is generally explained as the outcome of superior organizational capabilities, resource orchestration, or managerial competencies (Eisenhardt & Martin, 2000; Pavlou & El Sawy, 2011; Sirmon *et al.*, 2011). While these explanations clarify how organizations develop adaptive capabilities, they provide comparatively limited insight into how strategic decisions are coordinated across organizational units during prolonged environmental turbulence. Consequently, existing studies largely assume that once dynamic capabilities exist, organizational adaptation naturally follows. Such an assumption overlooks the governance mechanisms that determine how information flows, decision authority is allocated, and strategic responses are coordinated throughout the organization.

This capability-oriented emphasis creates an important theoretical limitation. Organizations possessing similar levels of dynamic capabilities frequently exhibit different degrees of strategic agility because organizational adaptation depends not only on what capabilities organizations possess but also on how strategic decisions are governed. Therefore, explaining strategic agility requires extending the analytical focus beyond organizational

capabilities toward the governance architectures that coordinate adaptive organizational action.

2.2 Adaptive Governance: Governing Organizational Adaptation under Persistent Turbulence

Adaptive Governance Theory originated primarily within studies of environmental governance and social-ecological systems to explain how complex systems maintain adaptability under conditions of continuous uncertainty (Folke *et al.*, 2005). Unlike traditional governance models that emphasize stability, hierarchy, and procedural control, adaptive governance views governance arrangements as evolving institutional systems that continuously learn, experiment, and adjust in response to environmental feedback (Chaffin *et al.*, 2014)

Three principles distinguish adaptive governance from conventional governance approaches. First, decision-making authority is distributed rather than concentrated, allowing organizations to respond rapidly through decentralized strategic action. Second, organizational learning becomes continuous through iterative feedback, experimentation, and knowledge integration across organizational levels. Third, coordination is achieved through flexible rather than rigid institutional arrangements, enabling governance structures themselves to evolve alongside environmental change (Karpouzoglou *et al.*, 2016; van Assche *et al.*, 2022)

The concept has subsequently expanded beyond environmental governance into public administration and digital governance. Janssen & van der Voort (2016) argue that adaptive governance balances responsiveness with accountability by creating governance arrangements capable of evolving during periods of uncertainty. During the COVID-19 pandemic, adaptive governance demonstrated how decentralized coordination, rapid information exchange, and flexible institutional arrangements enabled organizations and governments to respond more effectively to unprecedented disruptions (Janssen & van der Voort, 2020) These developments suggest that governance itself constitutes an adaptive organizational capability, not merely a formal administrative structure.

However, despite its growing theoretical maturity, Adaptive Governance Theory has rarely been integrated into strategic management research. Most studies continue to examine adaptive governance within environmental policy, collaborative governance, or public-sector contexts (Ansell & Gash, 2008; Ostrom, 2010) Consequently, its potential contribution to explaining strategic agility within business organizations remains underdeveloped. This omission represents a significant opportunity for theoretical integration because both adaptive governance and strategic agility address organizational adaptation under uncertainty, albeit from different analytical perspectives.

2.3 Dynamic Capabilities as a Complementary Rather than Competing Perspective

Dynamic Capabilities Theory provides one of the most influential explanations of organizational adaptation. Since the seminal work of D. J. Teece *et al.* (1997), dynamic capabilities have been conceptualized as organizational capacities that enable firms to integrate, build, and reconfigure internal and external resources in response to rapidly changing environments. Subsequent theoretical developments further refined these capabilities into the microfoundations of sensing opportunities, seizing opportunities, and transforming organizational assets (D. J. Teece, 2007)

Although Dynamic Capabilities Theory has substantially advanced understanding of organizational adaptation, scholars have increasingly questioned whether it sufficiently explains the mechanisms through which adaptation actually occurs. Barreto (2010) notes

that the concept has become increasingly broad and difficult to operationalize, while Peteraf, Di Peteraf *et al.* (2013) highlight the divergence between theoretical conceptualizations and empirical applications. Similarly, Pavlou & El Sawy (2011) argue that the "black box" connecting dynamic capabilities to organizational outcomes remains insufficiently understood.

One explanation for this theoretical ambiguity is that dynamic capabilities primarily explain organizational resource reconfiguration rather than organizational coordination. The theory clarifies how organizations develop adaptive capacities but offers comparatively limited explanation regarding how strategic authority, organizational learning, and decision-making structures facilitate continuous adaptation across multiple organizational units. Joseph & Gaba (2020) similarly emphasize that organizational information processing and decision architectures play a critical role in adaptive organizational behavior but remain underrepresented in mainstream capability-based explanations.

Rather than viewing Adaptive Governance Theory as an alternative to Dynamic Capabilities Theory, this paper argues that the two perspectives are theoretically complementary. Dynamic capabilities explain what organizations must continually renew to remain competitive, whereas adaptive governance explains how organizational coordination enables those renewal processes to occur effectively under persistent environmental turbulence. Consequently, governance serves not merely as contextual infrastructure but as an active organizational mechanism that translates distributed organizational knowledge into coordinated strategic action.

2.4 Integrating Adaptive Governance and Strategic Agility: Identifying the Theoretical Gap

Although both Strategic Agility Theory and Adaptive Governance Theory seek to explain organizational adaptation, they have evolved largely in parallel with minimal conceptual integration. Strategic agility research concentrates primarily on organizational capabilities, managerial flexibility, and resource reconfiguration, whereas adaptive governance focuses on institutional arrangements, distributed authority, learning processes, and collaborative coordination. As a result, the strategic management literature provides only a partial explanation of why organizations exhibiting comparable capabilities frequently demonstrate substantially different levels of agility when confronted with similar environmental turbulence.

This conceptual separation reveals an unresolved theoretical problem. Existing strategic agility studies generally assume that adaptive capabilities naturally translate into adaptive organizational behavior. However, such an assumption neglects the governance mechanisms that coordinate organizational responses across multiple decision makers, organizational units, and hierarchical levels. Under conditions of persistent turbulence, organizations must continuously process ambiguous information, distribute decision authority, integrate diverse expertise, and revise strategic priorities in real time. These coordination processes cannot be sufficiently explained through capability accumulation alone.

Accordingly, this paper proposes that adaptive governance represents the missing organizational mechanism connecting environmental turbulence to strategic agility. Specifically, adaptive governance facilitates decentralized decision-making, continuous organizational learning, iterative feedback integration, and flexible coordination, thereby enabling organizations to transform environmental uncertainty into coherent strategic action. By integrating Adaptive Governance Theory with Strategic Agility Theory, this study develops a middle-range theoretical explanation that extends existing capability-based perspectives while providing a more comprehensive account of organizational adaptation under persistent environmental turbulence.

The preceding discussion highlights that existing theoretical perspectives explain organizational adaptation from different viewpoints but leave an important coordination gap unresolved. The following synthesis clarifies the positioning of the proposed theoretical contribution.

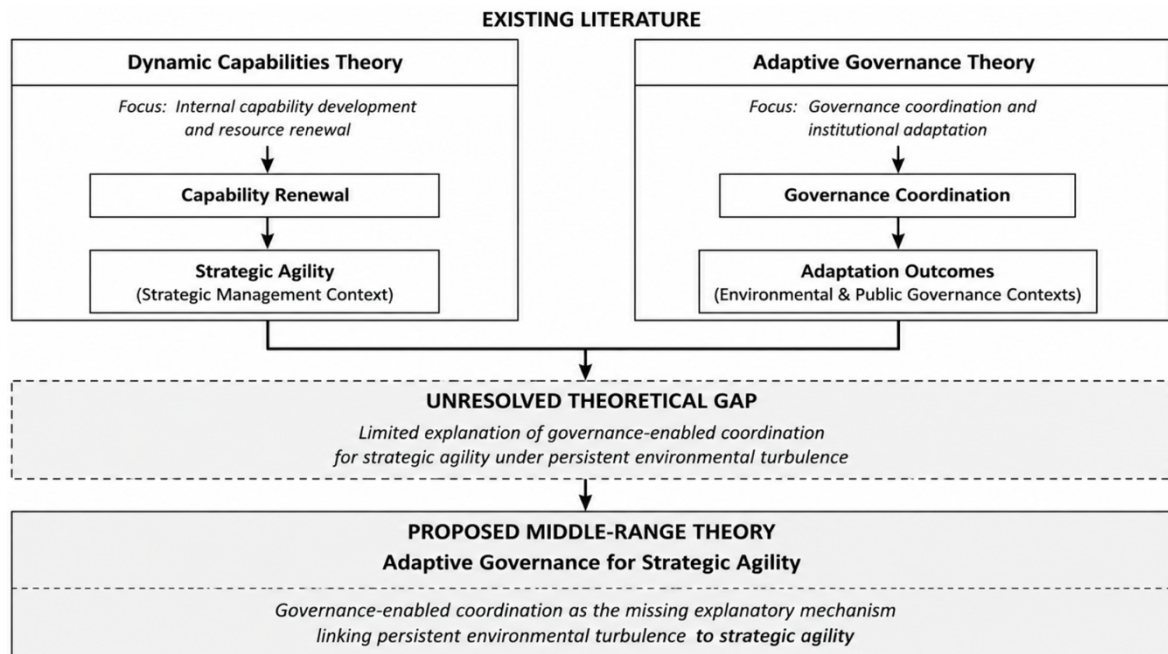


Figure 1. Theoretical Positioning of Adaptive Governance in Explaining Strategic Agility
Source: Developed by the author based on Dynamic Capabilities Theory and Adaptive Governance Theory.

Figure 1 illustrates the theoretical positioning of the proposed study by identifying the unresolved coordination gap between capability-based explanations of strategic agility and governance-based explanations of organizational adaptation. It demonstrates that the proposed middle-range theory complements rather than replaces existing perspectives by introducing governance-enabled coordination as the missing explanatory mechanism linking persistent environmental turbulence to strategic agility.

To clarify the distinct explanatory roles of the major theoretical perspectives discussed above, the following comparison synthesizes their assumptions, strengths, limitations, and opportunities for theoretical integration.

Table 1. Comparison of Theoretical Perspectives Explaining Strategic Agility under Environmental Turbulence

Theory	Primary Explanatory Focus	Core Mechanism	Key Strength	Principal Limitation	Opportunity for Integration
Dynamic Capabilities Theory	Resource renewal	Sensing, seizing, transforming	Explains capability development	Limited explanation of governance coordination	Complement with adaptive governance mechanisms
Strategic Agility Literature	Organizational responsiveness	Rapid strategic adaptation	Explains adaptive outcomes	Capability-dominant perspective	Incorporate governance as the enabling mechanism
Adaptive Governance Theory	Organizational coordination	Distributed authority, learning, feedback, adaptive coordination	Explains governance under uncertainty	Limited application in strategic management	Extend into strategic agility research

Theory	Primary Explanatory Focus	Core Mechanism	Key Strength	Principal Limitation	Opportunity for Integration
Organizational Information Processing	Decision quality under uncertainty	Information integration and decision architecture	Explains coordination and information processing	Does not explicitly address governance evolution	Strengthen governance-enabled agility framework

Source: Developed by the author.

Table 1 demonstrates that existing theories explain different dimensions of organizational adaptation rather than competing explanations of the same phenomenon. The comparison reveals that Adaptive Governance Theory complements capability-based perspectives by addressing governance-enabled coordination, thereby providing the missing theoretical mechanism required to explain strategic agility under persistent environmental turbulence.

3. Conceptual Theory Development

3.1 Defining the Core Constructs

The proposed middle-range theory is developed around three primary constructs: persistent environmental turbulence, adaptive governance, and strategic agility. These constructs are conceptually distinct yet causally interconnected. Rather than viewing environmental turbulence as merely an external contingency, this study conceptualizes persistent turbulence as the initiating condition that continuously generates strategic uncertainty and necessitates ongoing organizational adaptation.

Persistent environmental turbulence refers to a prolonged state of uncertainty characterized by continuous changes in technologies, regulations, markets, geopolitical conditions, and competitive dynamics that collectively reshape organizational operating environments (D'Aveni *et al.*, 2010; D. Teece *et al.*, 2016). Unlike episodic disruptions, persistent turbulence is not followed by a return to equilibrium. Instead, organizations must repeatedly revise strategic priorities while simultaneously maintaining operational continuity. Consequently, adaptation becomes a permanent organizational requirement rather than an occasional strategic response.

Adaptive governance constitutes the central explanatory construct of this study. Building on Adaptive Governance Theory, adaptive governance is defined as an organizational governance architecture that continuously adjusts decision authority, coordination mechanisms, organizational learning processes, and information flows in response to changing environmental conditions (Chaffin *et al.*, 2014; Folke *et al.*, 2005; van Assche *et al.*, 2022). Importantly, adaptive governance is not equivalent to organizational flexibility. Whereas flexibility describes an organizational capability to change, adaptive governance explains how organizations organize and coordinate such change through evolving governance arrangements.

Strategic agility represents the primary organizational outcome. Consistent with previous research, strategic agility is conceptualized as an organization's capacity to continuously recognize environmental changes, rapidly evaluate strategic alternatives, and effectively reconfigure strategic actions without sacrificing organizational coherence (Clauss *et al.*, 2021; Y. L. Doz & Kosonen, 2010; Weber & Tarba, 2014). In this study, strategic agility is viewed not simply as the consequence of possessing superior capabilities but as the outcome of governance mechanisms that enable coordinated strategic adaptation across multiple organizational actors.

Collectively, these constructs establish the theoretical foundation of the proposed framework. Persistent environmental turbulence creates adaptive pressure, adaptive governance

functions as the organizational coordination mechanism, and strategic agility emerges as the organizational capability manifested through governance-enabled strategic responsiveness. The proposed middle-range theory relies on clearly differentiated constructs that define the explanatory scope of the conceptual framework and establish their respective theoretical roles.

Table 2. Definitions of the Core Constructs in the Proposed Middle-Range Theory

Construct	Definition	Role in Theory	Representative References
Persistent Environmental Turbulence	Continuous and overlapping environmental uncertainty requiring ongoing adaptation	Antecedent	D'Aveni <i>et al.</i> (2010); Teece <i>et al.</i> (2016)
Adaptive Governance	Dynamic governance architecture characterized by distributed authority, continuous learning, adaptive coordination, and iterative feedback	Central explanatory mechanism	Folke <i>et al.</i> (2005); Chaffin <i>et al.</i> (2014); Janssen & van der Voort (2020)
Strategic Agility	Organizational capacity to continuously sense, decide, and rapidly reconfigure strategic actions under uncertainty	Outcome	Doz & Kosonen (2010); Weber & Tarba (2014); Clauss <i>et al.</i> (2021)

Source: Developed by the author.

Table 2 specifies the conceptual meaning of each construct and clarifies its function within the proposed theoretical framework. The distinctions among antecedent, explanatory mechanism, and outcome reinforce the internal consistency of the theory and reduce conceptual ambiguity in subsequent proposition development.

3.2 Adaptive Governance as the Organizational Coordination Mechanism

The central proposition of this paper is that adaptive governance functions as the missing organizational mechanism linking environmental turbulence to strategic agility. Existing strategic agility literature has primarily emphasized organizational capabilities while paying relatively limited attention to the governance arrangements through which adaptive decisions are coordinated. Consequently, capability-based explanations often overlook the organizational processes that transform dispersed information into coherent strategic action.

Adaptive governance addresses this limitation by emphasizing four interrelated governance mechanisms.

First, adaptive governance redistributes decision authority toward organizational units possessing the most relevant contextual knowledge. Rather than relying exclusively on centralized hierarchical control, adaptive governance encourages decentralized strategic decision-making, allowing organizations to respond more rapidly to environmental changes (Folke *et al.*, 2005; Ostrom, 2010). Distributed authority reduces decision latency while increasing organizational responsiveness to emerging threats and opportunities.

Second, adaptive governance institutionalizes continuous organizational learning. Organizations operating under persistent turbulence cannot rely solely on previously accumulated knowledge because environmental conditions evolve continuously. Instead, governance structures must facilitate experimentation, iterative learning, and systematic incorporation of environmental feedback into strategic decision-making (Chaffin *et al.*, 2014; Janssen & van der Voort, 2020). Continuous learning therefore becomes embedded within governance processes rather than remaining an isolated organizational activity.

Third, adaptive governance strengthens horizontal coordination across organizational boundaries. Strategic adaptation increasingly requires integrating information originating

from multiple functional units, geographical regions, and organizational levels. Adaptive governance enables such coordination by creating governance arrangements that facilitate collaboration while avoiding excessive bureaucratic rigidity (Ansell & Gash, 2008; van Assche *et al.*, 2022). Consequently, organizations become capable of developing coherent strategic responses despite increasing organizational complexity.

Finally, adaptive governance establishes recursive feedback mechanisms that continuously evaluate strategic outcomes and adjust governance arrangements accordingly. Unlike traditional governance systems that prioritize stability and procedural compliance, adaptive governance treats governance structures themselves as evolving organizational mechanisms. Governance therefore becomes adaptive rather than static, enabling organizations to repeatedly recalibrate strategic coordination as environmental turbulence evolves (Folke *et al.*, 2005; Karpouzoglou *et al.*, 2016)

Taken together, these governance mechanisms explain how organizations convert environmental uncertainty into coordinated strategic action. Rather than replacing dynamic capabilities, adaptive governance provides the organizational infrastructure through which dynamic capabilities can be effectively mobilized.

3.3 The Governance-Enabled Causal Mechanism of Strategic Agility

Building upon the preceding discussion, this paper proposes a governance-enabled causal mechanism explaining the emergence of strategic agility under persistent environmental turbulence. The mechanism consists of a sequential process rather than a direct relationship.

Persistent environmental turbulence first increases information ambiguity, strategic complexity, and decision uncertainty. Under such conditions, centralized governance structures experience increasing coordination burdens because information accumulates more rapidly than hierarchical decision systems can process (Joseph & Gaba, 2020). Consequently, organizations relying on rigid governance architectures experience delayed strategic responses despite possessing considerable organizational capabilities.

Adaptive governance alters this dynamic by restructuring how organizations process environmental information. Distributed decision authority enables local organizational units to interpret emerging environmental signals more rapidly, while iterative learning mechanisms facilitate continuous updating of organizational knowledge. Simultaneously, flexible coordination mechanisms integrate dispersed organizational expertise into coherent strategic responses. The combined effect is a substantial reduction in organizational response latency accompanied by increased decision quality.

These governance processes subsequently generate strategic agility. Rather than emerging solely from superior organizational capabilities, strategic agility develops because governance arrangements continuously coordinate sensing activities, integrate organizational knowledge, prioritize strategic alternatives, and facilitate timely resource reconfiguration. Strategic agility therefore represents the organizational manifestation of governance-enabled coordination rather than simply the accumulation of adaptive capabilities.

The proposed mechanism also explains why organizations possessing similar dynamic capabilities frequently demonstrate different levels of strategic agility. Capability possession alone does not guarantee adaptive organizational behavior. Instead, governance determines whether organizational capabilities can be effectively coordinated under conditions of persistent uncertainty. Adaptive governance therefore functions as the organizational mechanism that transforms potential adaptive capacity into observable strategic responsiveness.

The proposed explanatory logic can be synthesized into a sequential causal mechanism illustrating how governance processes transform persistent environmental turbulence into strategic agility through coordinated organizational adaptation.

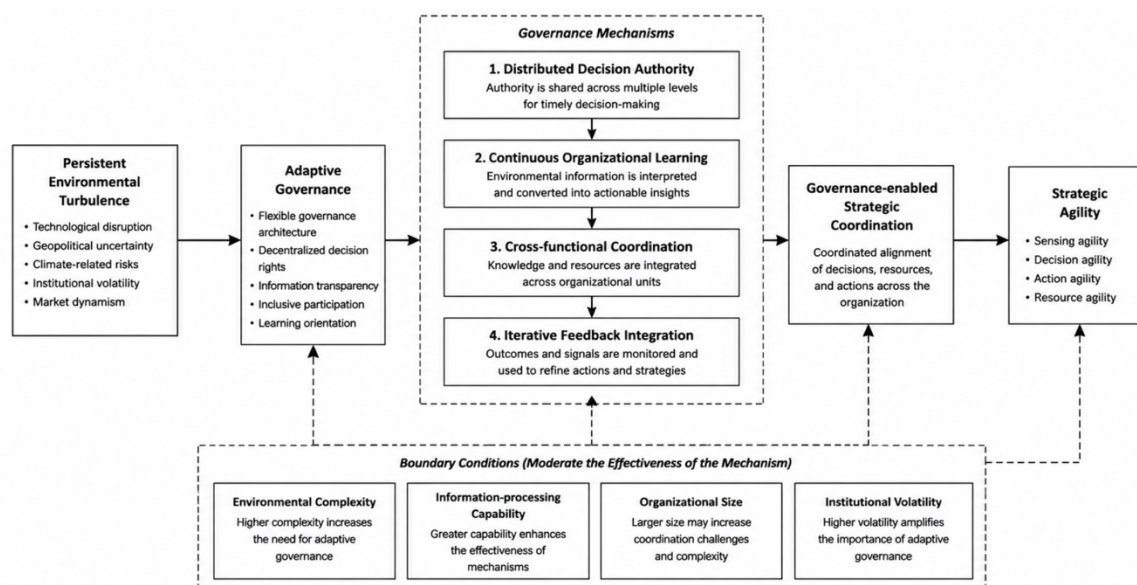


Figure 2. Governance-Enabled Mechanism Linking Persistent Environmental Turbulence to Strategic Agility

Source: Developed by the author

Figure 2 illustrates the proposed causal mechanism underlying the middle-range theory. Rather than directly linking environmental turbulence to strategic agility, the framework explains that adaptive governance enables distributed decision authority, continuous learning, cross-functional coordination, and iterative feedback, which collectively generate governance-enabled strategic coordination. The effectiveness of this mechanism is contingent upon the specified boundary conditions that shape its explanatory scope.

3.4 Boundary Conditions of the Proposed Theory

Although adaptive governance is expected to enhance strategic agility, its explanatory power is contingent upon several boundary conditions.

The first boundary condition concerns environmental complexity. Adaptive governance becomes increasingly valuable as environmental turbulence involves multiple interacting sources of uncertainty rather than isolated environmental shocks (Schilke *et al.*, 2018; Wilden *et al.*, 2013). Under relatively stable environments, the costs associated with maintaining adaptive governance structures may outweigh their strategic benefits.

Second, organizational information-processing capacity influences the effectiveness of adaptive governance. Organizations possessing advanced digital infrastructures and effective knowledge integration systems are better positioned to exploit decentralized governance arrangements because information can be rapidly shared across organizational units (Joseph & Gaba, 2020; Tallon *et al.*, 2019). Conversely, weak information-processing systems may reduce the effectiveness of distributed governance by generating fragmented decision-making.

Third, organizational size and structural complexity influence governance effectiveness. Large organizations typically require more sophisticated governance architectures because strategic adaptation involves coordinating multiple business units, geographical regions, and functional specializations. Consequently, adaptive governance is expected to produce stronger effects in highly differentiated organizations than in relatively simple organizational structures (Lawrence & Lorsch, 1967).

Finally, institutional volatility strengthens the relevance of adaptive governance. Frequent regulatory changes, shifting stakeholder expectations, and evolving institutional arrangements increase the importance of governance mechanisms capable of continuously integrating external environmental signals into organizational strategic decision-making (Janssen & van der Voort, 2020; van Assche *et al.*, 2022)

3.5 Proposition Development

Based on the proposed theoretical mechanism, six propositions are advanced.

Proposition 1.

Persistent environmental turbulence increases the organizational need for adaptive governance by creating continuous strategic uncertainty that cannot be effectively managed through static governance structures.

Proposition 2.

Adaptive governance enhances decentralized strategic decision-making by distributing decision authority to organizational actors possessing context-specific knowledge.

Proposition 3.

Adaptive governance facilitates continuous organizational learning through iterative feedback integration, experimentation, and adaptive knowledge renewal.

Proposition 4.

Adaptive governance strengthens cross-functional and cross-level organizational coordination, enabling organizations to integrate dispersed information into coherent strategic responses.

Proposition 5.

Adaptive governance positively influences strategic agility by enabling governance-supported coordination of strategic adaptation under persistent environmental turbulence.

Proposition 6.

The positive relationship between adaptive governance and strategic agility becomes stronger under conditions of high environmental complexity, advanced organizational information-processing capability, and elevated institutional volatility.

The theoretical arguments developed throughout this section culminate in a set of propositions that collectively articulate the causal logic underpinning the proposed middle-range theory.

Table 3. Summary of Theoretical Propositions and Their Supporting Logic

	Proposition & Core Logic	Supporting Theoretical Perspective
P1	Persistent turbulence increases the need for adaptive governance.	Adaptive Governance Theory
P2	Adaptive governance improves decentralized strategic decision-making.	Polycentric Governance; Organizational Information Processing
P3	Adaptive governance strengthens continuous organizational learning.	Adaptive Governance Theory
P4	Adaptive governance enhances organizational coordination across decision units.	Organizational Information Processing Theory
P5	Governance-enabled coordination generates strategic agility.	Integration of Adaptive Governance and Strategic Agility

Source: Developed by the author.

Table 3 consolidates the proposed propositions by linking each relationship to its underlying theoretical rationale. This synthesis highlights how adaptive governance operates as the central explanatory mechanism that transforms persistent environmental turbulence into strategic agility through governance-enabled organizational coordination.

4. Discussion

The primary objective of this conceptual paper is to explain how organizations develop strategic agility under conditions of persistent environmental turbulence by positioning adaptive governance as the central organizational coordination mechanism. Unlike previous studies that primarily attribute strategic agility to organizational capabilities, this paper argues that governance structures play a more fundamental explanatory role because they determine how organizations distribute decision authority, integrate information, coordinate strategic actions, and continuously learn from environmental feedback. Accordingly, the proposed middle-range theory shifts the analytical focus from capability possession toward governance-enabled coordination as the mechanism through which strategic agility emerges.

4.1 Theoretical Contributions

The first theoretical contribution concerns the strategic agility literature. Existing research has generated substantial evidence demonstrating that strategic agility enhances organizational adaptability, innovation, and competitive performance (Clauss *et al.*, 2021; Y. L. Doz & Kosonen, 2010; Weber & Tarba, 2014). However, most studies explain agility through organizational capabilities, resource orchestration, or managerial competencies (Sirmon *et al.*, 2011; D. Teece *et al.*, 2016; D. J. Teece, 2007). Although these perspectives successfully explain how organizations accumulate adaptive capacities, they provide comparatively limited explanation regarding how organizations coordinate adaptive action under conditions of continuous uncertainty.

The present study extends this literature by introducing adaptive governance as the missing organizational coordination mechanism. Rather than assuming that strategic agility naturally follows from the existence of dynamic capabilities, this paper argues that governance architectures determine whether organizational capabilities can be effectively mobilized into coordinated strategic responses. Consequently, governance becomes an explanatory mechanism rather than a contextual variable. This reconceptualization advances the strategic agility literature by demonstrating that adaptive organizational behavior depends not only on organizational capabilities but also on governance arrangements that facilitate decentralized decision-making, continuous learning, and dynamic coordination.

The second contribution lies in extending Adaptive Governance Theory into the strategic management domain. Previous adaptive governance research has primarily focused on environmental governance, collaborative governance, and public-sector management (Ansell & Gash, 2008; Chaffin *et al.*, 2014; Folke *et al.*, 2005; Ostrom, 2010). Although these studies provide valuable insights into governance under uncertainty, their application to business organizations has remained relatively limited. By integrating adaptive governance with strategic agility, this paper demonstrates that governance principles originally developed for complex adaptive systems are equally relevant for explaining organizational adaptation in highly dynamic competitive environments.

More specifically, this study reconceptualizes adaptive governance as an organizational capability embedded within governance architecture rather than merely an institutional arrangement. Governance therefore evolves from being viewed as an administrative structure toward becoming an adaptive coordination system capable of continuously processing environmental signals, reallocating decision authority, and integrating distributed organizational knowledge. Such an extension broadens the theoretical scope of Adaptive Governance Theory while simultaneously enriching strategic management research.

A third theoretical contribution concerns the relationship between Adaptive Governance Theory and Dynamic Capabilities Theory. Previous literature often treats these perspectives as separate streams explaining organizational adaptation from different viewpoints. Dynamic

Capabilities Theory focuses primarily on resource renewal and capability development (Eisenhardt & Martin, 2000; D. J. Teece, 2007), whereas Adaptive Governance Theory emphasizes evolving governance arrangements that facilitate organizational adaptation (Folke *et al.*, 2005; Janssen & van der Voort, 2020). This paper argues that the two perspectives should not be viewed as competing explanations but rather as complementary theoretical lenses addressing different analytical levels.

Specifically, Dynamic Capabilities Theory explains what organizations need to renew, whereas Adaptive Governance Theory explains how organizations organize the renewal process. Governance provides the institutional architecture that enables sensing activities to be coordinated, strategic alternatives to be evaluated collectively, organizational learning to occur continuously, and resource reconfiguration to be executed effectively. This complementary relationship contributes to addressing the long-recognized "black box" linking dynamic capabilities to organizational outcomes (Pavlou & El Sawy, 2011; Peteraf *et al.*, 2013). In doing so, the proposed theory offers a more comprehensive explanation of organizational adaptation under persistent environmental turbulence.

Finally, this study contributes to middle-range theory development in strategic management. Rather than proposing a universal theory applicable across all organizational settings, the proposed framework specifies clearly defined constructs, causal mechanisms, and boundary conditions that explain governance-enabled strategic agility under persistent environmental turbulence. This level of theoretical specification aligns with the objective of middle-range theorizing, which seeks to develop contextually bounded yet generalizable explanations of organizational phenomena. By identifying adaptive governance as the central explanatory mechanism, the proposed theory advances a more precise understanding of how organizations translate environmental uncertainty into coordinated strategic action.

The theoretical contributions developed throughout this study can be synthesized into an integrated architecture illustrating the scope, explanatory logic, and distinctive contribution of the proposed middle-range theory.

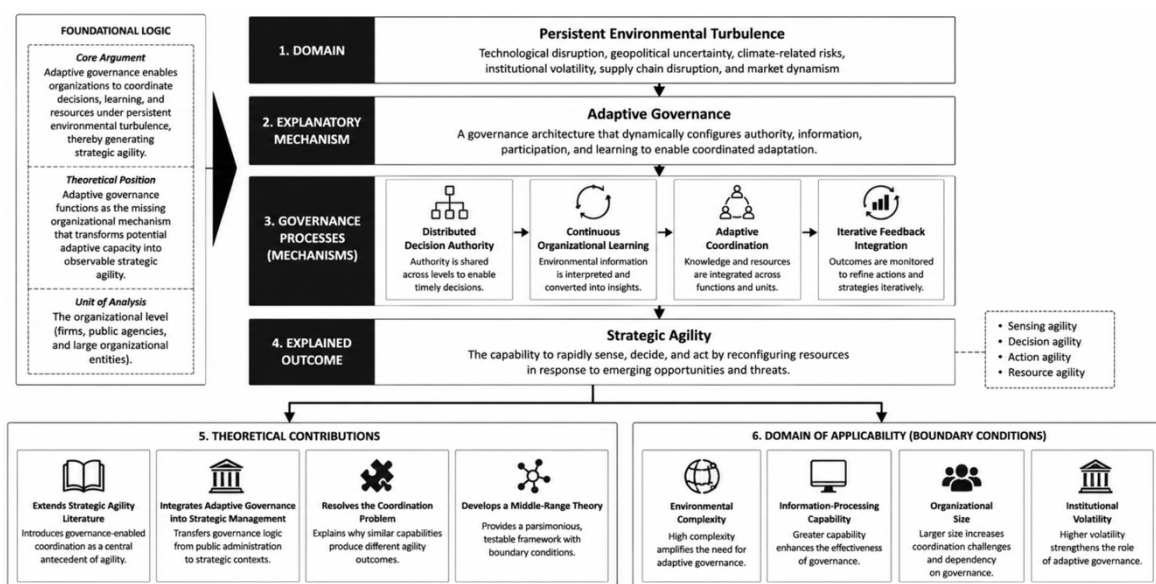


Figure 3. Integrated Middle-Range Theory of Adaptive Governance for Strategic Agility
Source: Developed by the author.

Figure 3 presents the overall architecture of the proposed middle-range theory by integrating its domain, central explanatory mechanism, governance processes, organizational outcome, theoretical contributions, and contextual applicability.

4.2 Managerial Implications

The proposed theory also provides important managerial implications for organizational leaders operating in turbulent environments. Contemporary organizations frequently respond to uncertainty by investing in technological capabilities, digital transformation initiatives, or organizational restructuring. While these investments remain important, the present study suggests that such initiatives alone are insufficient if governance systems remain centralized, rigid, or poorly coordinated.

Managers should therefore view governance architecture as a strategic asset rather than merely an administrative necessity. Adaptive governance requires organizations to redesign decision-making structures so that authority is distributed to organizational actors possessing the most relevant contextual knowledge. Such decentralization enables faster responses without sacrificing strategic coherence because governance mechanisms simultaneously maintain coordination across organizational units.

The proposed framework further emphasizes the importance of embedding continuous learning into governance processes. Managers should establish systematic mechanisms for organizational experimentation, environmental scanning, feedback integration, and cross-functional knowledge sharing. Rather than treating organizational learning as a periodic activity, adaptive governance institutionalizes learning as a continuous governance process that supports strategic adaptation.

Moreover, organizations should strengthen horizontal coordination mechanisms capable of integrating diverse expertise across functional, geographical, and hierarchical boundaries. Under persistent turbulence, effective strategic responses increasingly depend upon collective organizational intelligence rather than individual managerial judgment. Governance systems that encourage collaboration, information transparency, and adaptive coordination are therefore likely to generate higher levels of strategic agility.

4.3 Policy Implications

Although developed primarily within the context of business organizations, the proposed theory also has broader implications for public governance and multi-stakeholder organizational systems. Governments, public agencies, healthcare organizations, and platform ecosystems increasingly confront persistent environmental turbulence arising from technological disruption, climate change, public health emergencies, and geopolitical uncertainty. Traditional hierarchical governance models frequently struggle to coordinate timely responses under such conditions.

Adaptive governance offers an alternative governance logic emphasizing distributed authority, collaborative learning, and iterative policy adaptation. Public-sector organizations may therefore benefit from governance arrangements that enable rapid information exchange across administrative levels while maintaining institutional accountability (Janssen & van der Voort, 2020). Similarly, collaborative governance networks involving governments, private organizations, and civil society may improve adaptive capacity by establishing governance mechanisms that facilitate collective learning and coordinated decision-making (Ansell & Gash, 2008)

Accordingly, policymakers should recognize that improving organizational responsiveness requires more than increasing operational resources. Equally important is the development of governance architectures capable of continuously adapting institutional arrangements to evolving environmental conditions. Such an approach is particularly relevant for addressing complex societal challenges characterized by high uncertainty and interdependence.

4.4 Limitations

Several limitations should be acknowledged. First, this study is conceptual in nature and therefore does not empirically test the proposed causal relationships. Future empirical research is necessary to examine the validity of the proposed propositions across different organizational contexts, industries, and institutional environments.

Second, the proposed framework intentionally focuses on persistent environmental turbulence. The explanatory power of adaptive governance may differ under relatively stable environments where centralized governance structures remain efficient and the costs of maintaining adaptive governance exceed their potential benefits. Accordingly, environmental stability represents an important boundary condition requiring future empirical investigation.

Third, the present theory conceptualizes adaptive governance primarily at the organizational level. Future studies could extend the framework by examining governance adaptation across interorganizational networks, digital platform ecosystems, multinational enterprises, or public-private partnerships. Such extensions may reveal additional governance mechanisms operating across multiple organizational levels.

Finally, although this study integrates Adaptive Governance Theory and Strategic Agility Theory, additional theoretical perspectives—including organizational resilience, institutional theory, complexity theory, and organizational sensemaking—may further enrich future theoretical development. Integrating these complementary perspectives could provide a more comprehensive understanding of organizational adaptation while preserving the governance-centered explanatory mechanism proposed in this paper.

5. Future Research Agenda

The middle-range theory proposed in this paper establishes adaptive governance as the central organizational mechanism linking persistent environmental turbulence to strategic agility. While this conceptual framework advances theoretical understanding of organizational adaptation, it also opens several avenues for future research. These opportunities extend beyond empirical validation of the proposed propositions and include theoretical refinement, contextual expansion, and methodological development. Advancing this research agenda will contribute to a more comprehensive understanding of how governance architectures shape organizational adaptation in increasingly turbulent environments.

A first research direction concerns the empirical validation of the proposed causal mechanism. Future studies should examine whether adaptive governance mediates the relationship between persistent environmental turbulence and strategic agility across different organizational contexts. Quantitative research employing structural equation modeling or longitudinal panel designs could evaluate the strength of the proposed relationships and assess whether governance-enabled coordination explains organizational responsiveness more effectively than capability-based models alone. Such empirical investigations would provide important evidence regarding the explanatory power and generalizability of the proposed theory.

A second research direction involves examining the boundary conditions identified in this study. The proposed framework suggests that the effectiveness of adaptive governance is contingent upon environmental complexity, organizational information-processing capability, organizational size, and institutional volatility. Future empirical studies should investigate how these contextual conditions strengthen or weaken governance-enabled strategic agility. Comparative studies across industries with varying levels of technological dynamism, regulatory uncertainty, and competitive intensity may provide valuable insights into the

contextual applicability of the proposed theory (Joseph & Gaba, 2020; Schilke *et al.*, 2018; Wilden *et al.*, 2013)

Third, future research should explore the multilevel nature of adaptive governance. Although the present study conceptualizes governance primarily at the organizational level, governance processes frequently operate simultaneously across teams, business units, interorganizational networks, and institutional systems. Multilevel research designs could examine how governance arrangements at one level influence adaptive behavior at other organizational levels. Such investigations would contribute to a more nuanced understanding of governance-enabled coordination within increasingly complex organizational ecosystems (Ansell & Gash, 2008; Ostrom, 2010)

A fourth avenue involves extending the proposed theory into emerging organizational contexts. Digital platform ecosystems, multinational enterprises, public–private partnerships, healthcare systems, and sustainability-oriented organizations increasingly operate under persistent environmental turbulence characterized by technological disruption, institutional change, and stakeholder complexity. These contexts provide valuable opportunities to examine whether adaptive governance mechanisms function similarly across different organizational forms or whether governance architectures require contextual modification. Such comparative research would strengthen the external validity of the proposed middle-range theory.

Future studies should also investigate the interaction between adaptive governance and other organizational theories. Although this paper positions Adaptive Governance Theory as complementary to Dynamic Capabilities Theory, additional theoretical integration may further enrich understanding of organizational adaptation. For example, organizational resilience may explain how organizations recover following disruption, whereas adaptive governance explains how organizations coordinate continuous adaptation before and during disruption (Hillmann & Guenther, 2021). Similarly, organizational sensemaking may illuminate how managers interpret environmental ambiguity before governance mechanisms translate those interpretations into coordinated strategic action (Weick *et al.*, 2005). Exploring these complementary relationships offers promising opportunities for cumulative theory development while preserving the governance-centered explanatory logic proposed in this study.

Methodologically, future research would benefit from adopting longitudinal and process-oriented approaches. Adaptive governance is inherently dynamic, evolving through repeated cycles of learning, experimentation, coordination, and institutional adjustment. Consequently, cross-sectional research designs may inadequately capture the temporal evolution of governance mechanisms. Longitudinal case studies, mixed-method designs, and comparative process analyses could therefore provide richer insights into how governance architectures evolve over time and how these evolutionary processes shape strategic agility under persistent environmental turbulence.

Ultimately, future research should move beyond asking whether organizations possess adaptive capabilities and instead investigate how governance systems organize, coordinate, and continuously renew those capabilities under conditions of enduring uncertainty. Such a shift in research emphasis has the potential to deepen theoretical understanding of organizational adaptation while providing stronger explanatory foundations for future strategic management research.

To consolidate the proposed research agenda, the following table summarizes the principal directions for future inquiry, highlighting their central research questions, recommended methodological approaches, and anticipated theoretical contributions.

Table 4. Future Research Agenda for Advancing Adaptive Governance Theory in Strategic Agility

Research Direction	Key Question	Recommended Method	Expected Theoretical Contribution
Empirical validation	Does adaptive governance mediate the relationship between persistent environmental turbulence and strategic agility?	Structural equation modeling, longitudinal survey	Validate the proposed middle-range theory
Boundary conditions	Under what environmental and organizational conditions is adaptive governance most effective?	Comparative and multi-industry studies	Refine contextual boundaries of the theory
Multilevel governance	How do governance mechanisms operate across teams, organizations, and networks?	Multilevel modeling, mixed methods	Extend governance theory across levels of analysis
Emerging organizational contexts	Does adaptive governance function similarly across different organizational forms?	Comparative case studies	Improve external validity and contextual generalizability
Theory integration	How does adaptive governance interact with resilience, sensemaking, or institutional theory?	Conceptual and empirical integration studies	Advance cumulative theory building
Process perspective	How do governance architectures evolve over time under persistent turbulence?	Longitudinal case studies and process research	Explain temporal dynamics of adaptive governance

Source: Developed by the author.

Table 4 integrates the principal avenues for future research by connecting each research direction with its corresponding question, methodological approach, and expected theoretical contribution. Collectively, these priorities provide a coherent roadmap for empirically validating, refining, and extending the proposed middle-range theory across diverse organizational contexts while preserving its governance-centered explanatory logic.

6. Conclusion

Organizations increasingly operate in environments characterized by persistent environmental turbulence, where technological disruption, institutional change, geopolitical uncertainty, and shifting market dynamics occur simultaneously and continuously. Under these conditions, organizational adaptation can no longer be understood as an occasional response to isolated disruptions but must instead be viewed as an ongoing strategic process. Although strategic agility has become a central construct for explaining organizational responsiveness, existing literature has predominantly interpreted agility through the lens of organizational capabilities. As a result, relatively limited attention has been devoted to understanding how governance structures coordinate adaptive organizational action under sustained environmental uncertainty.

This conceptual paper addresses that limitation by proposing a middle-range theory that positions adaptive governance as the central organizational mechanism linking persistent environmental turbulence to strategic agility. Rather than viewing governance as a contextual or administrative arrangement, the proposed framework conceptualizes adaptive governance as a dynamic organizational architecture that continuously redistributes decision authority, facilitates organizational learning, integrates dispersed knowledge, and coordinates strategic action across multiple organizational actors. Through these governance mechanisms, organizations are better positioned to transform environmental uncertainty into timely and coherent strategic responses.

The proposed theory contributes to the strategic management literature in three important ways. First, it extends the strategic agility literature by shifting the analytical focus from capability possession to governance-enabled coordination as the primary explanatory mechanism of organizational adaptation. Second, it broadens the application of Adaptive Governance Theory beyond its traditional domains of environmental and public governance by demonstrating its relevance for explaining strategic adaptation within business organizations. Third, it integrates Adaptive Governance Theory with Dynamic Capabilities Theory in a complementary manner, arguing that dynamic capabilities explain what organizations must continuously renew, whereas adaptive governance explains how those renewal processes are coordinated and translated into strategic action. This theoretical integration provides a more comprehensive explanation of organizational adaptation under persistent environmental turbulence while contributing to the ongoing refinement of middle-range theorizing in strategic management.

The proposed framework also offers practical implications for organizational leaders and policymakers. The findings suggest that organizations seeking to enhance strategic agility should devote greater attention to designing governance architectures that support decentralized decision-making, continuous organizational learning, adaptive coordination, and iterative feedback processes. Investments in organizational capabilities alone may be insufficient if governance systems remain rigid and unable to coordinate adaptive responses across organizational units. Consequently, governance should be recognized as a strategic organizational resource that enables firms to sustain adaptive capacity in increasingly volatile environments.

As a conceptual study, the proposed theory requires empirical examination across diverse organizational settings. Future research should evaluate the proposed propositions using longitudinal and multilevel research designs while investigating the contextual conditions under which adaptive governance is most effective. Such efforts will not only strengthen the empirical validity of the proposed framework but also contribute to the continued development of governance-centered explanations of organizational adaptation.

In conclusion, this paper argues that persistent environmental turbulence requires a shift in strategic management research from asking whether organizations possess adaptive capabilities to understanding how governance systems organize, coordinate, and continuously renew those capabilities. By positioning adaptive governance as the central coordination mechanism underlying strategic agility, this study advances a theoretically integrated and contextually bounded middle-range theory that enriches contemporary understanding of organizational adaptation and provides a promising foundation for future conceptual and empirical research.

References

- Ansell, C., & Gash, A. (2008). Collaborative Governance in Theory and Practice. *Journal of Public Administration Research and Theory*, 18(4), 543–571. <https://doi.org/10.1093/jopart/mum032>
- Barreto, I. (2010). Dynamic Capabilities: A Review of Past Research and an Agenda for the Future. *Journal of Management*, 36(1), 256–280. <https://doi.org/10.1177/0149206309350776>
- 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. <https://doi.org/10.1525/cmr.2016.58.4.36>
- Brown, S. L., & Eisenhardt, K. M. (1997). The Art of Continuous Change: Linking Complexity Theory and Time-Paced Evolution in Relentlessly Shifting Organizations. *Administrative Science Quarterly*, 42(1), 1. <https://doi.org/10.2307/2393807>
- Chaffin, B. C., Gosnell, H., & Cosens, B. A. (2014). A decade of adaptive governance scholarship: synthesis and future directions. *Ecology and Society*, 19(3), art56. <https://doi.org/10.5751/ES-06824-190356>

- Clauss, T., Kraus, S., Kallinger, F. L., Bican, P. M., Brem, A., & Kailer, N. (2021). Organizational ambidexterity and competitive advantage: The role of strategic agility in the exploration-exploitation paradox. *Journal of Innovation & Knowledge*, 6(4), 203–213. <https://doi.org/10.1016/j.jik.2020.07.003>
- D'Aveni, R. A., Dagnino, G. B., & Smith, K. G. (2010). The age of temporary advantage. *Strategic Management Journal*, 31(13), 1371–1385. <https://doi.org/10.1002/smj.897>
- de Diego Ruiz, E., Almodóvar, P., & Birkinshaw, J. (2024). The effects of a firm's internationalization, age, and environmental turbulence on the capabilities that comprise strategic agility. *International Entrepreneurship and Management Journal*, 20(3), 1935–1961. <https://doi.org/10.1007/s11365-024-00971-9>
- Doz, Y., & Kosonen, M. (2008). The Dynamics of Strategic Agility: Nokia's Rollercoaster Experience. *California Management Review*, 50(3), 95–118. <https://doi.org/10.2307/41166447>
- Doz, Y. L., & Kosonen, M. (2010). Embedding Strategic Agility. *Long Range Planning*, 43(2–3), 370–382. <https://doi.org/10.1016/j.lrp.2009.07.006>
- Eisenhardt, K. M., & Martin, J. A. (2000). Dynamic capabilities: what are they? *Strategic Management Journal*, 21(10–11), 1105–1121. [https://doi.org/10.1002/1097-0266\(200010/11\)21:10/11<1105::AID-SMJ133>3.0.CO;2-E](https://doi.org/10.1002/1097-0266(200010/11)21:10/11<1105::AID-SMJ133>3.0.CO;2-E)
- Farjoun, M. (2010). Beyond Dualism: Stability and Change As a Duality. *Academy of Management Review*, 35(2), 202–225. <https://doi.org/10.5465/amr.35.2.zok202>
- Ferraris, A., Degbey, W. Y., Singh, S. K., Bresciani, S., Castellano, S., Fiano, F., & Couturier, J. (2022). Microfoundations of Strategic Agility in Emerging Markets: Empirical Evidence of Italian MNEs in India. *Journal of World Business*, 57(2), 101272. <https://doi.org/10.1016/j.jwb.2021.101272>
- Folke, C., Hahn, T., Olsson, P., & Norberg, J. (2005). ADAPTIVE GOVERNANCE OF SOCIAL-ECOLOGICAL SYSTEMS. *Annual Review of Environment and Resources*, 30(1), 441–473. <https://doi.org/10.1146/annurev.energy.30.050504.144511>
- Hillmann, J., & Guenther, E. (2021). Organizational Resilience: A Valuable Construct for Management Research? *International Journal of Management Reviews*, 23(1), 7–44. <https://doi.org/10.1111/ijmr.12239>
- Janssen, M., & van der Voort, H. (2016). Adaptive governance: Towards a stable, accountable and responsive government. *Government Information Quarterly*, 33(1), 1–5. <https://doi.org/10.1016/j.giq.2016.02.003>
- Janssen, M., & van der Voort, H. (2020). Agile and adaptive governance in crisis response: Lessons from the COVID-19 pandemic. *International Journal of Information Management*, 55, 102180. <https://doi.org/10.1016/j.ijinfomgt.2020.102180>
- Joseph, J., & Gaba, V. (2020). Organizational Structure, Information Processing, and Decision-Making: A Retrospective and Road Map for Research. *Academy of Management Annals*, 14(1), 267–302. <https://doi.org/10.5465/annals.2017.0103>
- Karpouzoglou, T., Dewulf, A., & Clark, J. (2016). Advancing adaptive governance of social-ecological systems through theoretical multiplicity. *Environmental Science & Policy*, 57, 1–9. <https://doi.org/10.1016/j.envsci.2015.11.011>
- Lawrence, P. R., & Lorsch, J. W. (1967). Differentiation and Integration in Complex Organizations. *Administrative Science Quarterly*, 12(1), 1. <https://doi.org/10.2307/2391211>
- O'Reilly, C. A., & Tushman, M. L. (2008). Ambidexterity as a dynamic capability: Resolving the innovator's dilemma. *Research in Organizational Behavior*, 28, 185–206. <https://doi.org/10.1016/j.riob.2008.06.002>
- Ostrom, E. (2010). Polycentric systems for coping with collective action and global environmental change. *Global Environmental Change*, 20(4), 550–557. <https://doi.org/10.1016/j.gloenvcha.2010.07.004>
- Pavlou, P. A., & El Sawy, O. A. (2011). Understanding the Elusive Black Box of Dynamic Capabilities. *Decision Sciences*, 42(1), 239–273. <https://doi.org/10.1111/j.1540-5915.2010.00287.x>
- Peteraf, M., Di Stefano, G., & Verona, G. (2013). The elephant in the room of dynamic capabilities: Bringing two diverging conversations together. *Strategic Management Journal*, 34(12), 1389–1410. <https://doi.org/10.1002/smj.2078>

- Reed, J. H. (2021). Strategic agility and the effects of firm age and environmental turbulence. *Journal of Strategy and Management*, 14(2), 129–149. <https://doi.org/10.1108/JSMA-07-2020-0178>
- Schilke, O., Hu, S., & Helfat, C. E. (2018). Quo Vadis, Dynamic Capabilities? A Content-Analytic Review of the Current State of Knowledge and Recommendations for Future Research. *Academy of Management Annals*, 12(1), 390–439. <https://doi.org/10.5465/annals.2016.0014>
- Sirmon, D. G., Hitt, M. A., Ireland, R. D., & Gilbert, B. A. (2011). Resource Orchestration to Create Competitive Advantage. *Journal of Management*, 37(5), 1390–1412. <https://doi.org/10.1177/0149206310385695>
- Tallon, P. P., Queiroz, M., Coltman, T., & Sharma, R. (2019). Information technology and the search for organizational agility: A systematic review with future research possibilities. *The Journal of Strategic Information Systems*, 28(2), 218–237. <https://doi.org/10.1016/j.jsis.2018.12.002>
- Teece, D. J. (2007). Explicating dynamic capabilities: the nature and microfoundations of (sustainable) enterprise performance. *Strategic Management Journal*, 28(13), 1319–1350. <https://doi.org/10.1002/smj.640>
- Teece, D. J., Pisano, G., & Shuen, A. (1997). Dynamic capabilities and strategic management. *Strategic Management Journal*, 18(7), 509–533. [https://doi.org/10.1002/\(SICI\)1097-0266\(199708\)18:7<509::AID-SMJ882>3.0.CO;2-Z](https://doi.org/10.1002/(SICI)1097-0266(199708)18:7<509::AID-SMJ882>3.0.CO;2-Z)
- 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. <https://doi.org/10.1525/cmr.2016.58.4.13>
- van Assche, K., Valentinov, V., & Verschraegen, G. (2022). Adaptive governance: learning from what organizations do and managing the role they play. *Kybernetes*, 51(5), 1738–1758. <https://doi.org/10.1108/K-11-2020-0759>
- Weber, Y., & Tarba, S. Y. (2014). Strategic Agility: A State of the Art Introduction to the Special Section on Strategic Agility. *California Management Review*, 56(3), 5–12. <https://doi.org/10.1525/cmr.2014.56.3.5>
- Weick, K. E., Sutcliffe, K. M., & Obstfeld, D. (2005). Organizing and the Process of Sensemaking. *Organization Science*, 16(4), 409–421. <https://doi.org/10.1287/orsc.1050.0133>
- Wilden, R., Gudergan, S. P., Nielsen, B. B., & Lings, I. (2013). Dynamic Capabilities and Performance: Strategy, Structure and Environment. *Long Range Planning*, 46(1–2), 72–96. <https://doi.org/10.1016/j.lrp.2012.12.001>
- 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: Exploratory case studies from Finland. *Industrial Marketing Management*, 105, 502–514. <https://doi.org/10.1016/j.indmarman.2022.07.006>