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Functional Fixedness and Organizational Inertia: A Microfoundational Perspective on Leadership Failure

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Abstract

Despite extensive research on organizational inertia and strategic rigidity, the micro-level cognitive mechanisms underlying leadership failure remain under-theorized. This article advances a microfoundational perspective by integrating the psychological construct of functional fixedness into leadership and organizational theory. We argue that cognitive rigidity at the individual leader level constitutes a foundational mechanism through which organizations develop structural inertia and fail to adapt under environmental turbulence. Drawing on behavioral decision theory, upper echelons theory, and dynamic capability perspectives, we conceptualize leadership failure as the cumulative outcome of constrained cognitive schemas, interpretive lock-in, and strategic misalignment. We develop a formal conceptual model linking functional fixedness to organizational inertia via cognitive framing, resource orchestration biases, and escalation dynamics. The framework contributes to leadership theory by specifying how cognitive micro-mechanisms scale into macro-level strategic stagnation. Implications for governance, executive development, and resilience under systemic volatility are discussed.

Keywords: cognitive rigidity; microfoundations; strategic decision-making; dynamic capabilities; escalation bias; escalation of commitment;

1. Introduction

Organizational decline under turbulence is rarely the result of resource scarcity alone. Instead, many firms fail because leadership remains cognitively locked into outdated interpretations of markets, technologies, and capabilities. In volatile environments characterized by digital disruption, geopolitical instability, and institutional fragmentation, leadership failure increasingly reflects an inability to reconceptualize existing assets and strategic possibilities.

This article advances a microfoundational explanation of organizational inertia by integrating the psychological construct of **functional fixedness** into leadership and strategic management theory. We argue that leadership failure originates in cognitive rigidity, which constrains strategic imagination and cascades into macro-level inertia.

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2. Literature Review

2.1 Organizational Inertia and Structural Rigidity

Organizational inertia has long been conceptualized as resistance to change embedded in routines, structures, and identity (Hannan & Freeman, 1984; Dramnescu et al., 2018). Early ecological models portrayed inertia as a structural property necessary for reliability but maladaptive under environmental shocks (Petina, 2026).

Subsequent research differentiated between structural inertia and strategic inertia (Gilbert, 2005; Enachescu, 2025), arguing that firms may possess operational flexibility while remaining cognitively locked into dominant strategic logics. Tripsas and Gavetti (2000) and gayan et al. (2026) demonstrated that managerial cognition plays a decisive role in determining whether firms successfully adapt to technological discontinuities.

However, while these studies acknowledge cognition, they stop short of specifying the cognitive mechanisms underlying rigidity (Kelly et al., 1991; kaganer et al., 2023).

2.2 Upper Echelons Theory and Cognitive Frames

Upper echelons theory (Hambrick & Mason, 1984) posits that organizational outcomes reflect executives' cognitive bases and values. Later work expanded this insight to include interpretive schemas (Kaplan, 2008), dominant logic (Prahalad & Bettis, 1986), and attention structures (Ocasio, 1997).

Research shows that leaders interpret ambiguous signals through pre-existing cognitive maps, often reinforcing past success patterns. Yet, this literature lacks integration with cognitive psychology constructs explaining why leaders struggle to reimagine resource configurations.

This gap invites micro-level explanation.

2.3 Functional Fixedness and Cognitive Rigidity

Functional fixedness (Duncker, 1945) refers to the cognitive bias limiting individuals' ability to perceive alternative uses of objects due to established functional associations. While originally studied in laboratory problem-solving, its implications for strategic cognition are profound.In organizational contexts functional fixedness (Liu et al., 2025; Caprioli et al., 2022) manifests as:

- Viewing capabilities only through historical applications.
- Constraining innovation to existing product-market definitions.
- Failing to recombine assets across emerging domains.

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Under conditions of technological disruption, this bias prevents leaders from recognizing alternative value architectures (Ho et al., 2023; Salvi et al., 2023).

2.4 Escalation of Commitment and Strategic Lock-In

Escalation of commitment (Staw, 1981) describes the tendency to persist in failing courses of action due to reputational, psychological, or sunk cost considerations. Escalation interacts with functional fixedness by reinforcing rigid strategic frames (Abdourazakou et al., 2026).

When leaders are cognitively locked into specific interpretations, they are more likely to interpret negative feedback as temporary noise rather than as structural change.

2.5 Microfoundations and Dynamic Capabilities

Microfoundations research (Felin et al., 2012; Kowalski et al., 2026) emphasizes individual-level actions and cognition as building blocks of organizational capabilities. Dynamic capabilities theory (Teece, 2007) highlights sensing, seizing, and reconfiguring processes (Cafforio et al., 2025; Meurio et al., 2026).

However, the theory under-specifies cognitive barriers that inhibit sensing and reconfiguration. Functional fixedness provides a micro-level explanation for capability failure.

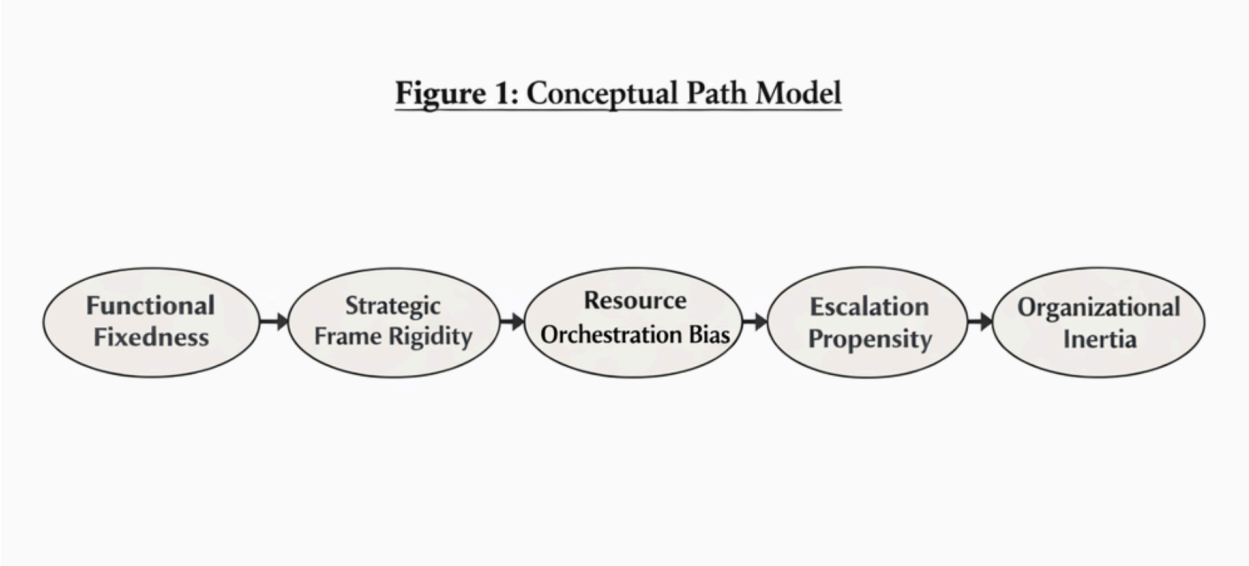

Figure 1. Microfoundations of Functional Fixedness: Cognitive Rigidity, Leadership Framing, and Strategic Myopia

Source: Authors' own research

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3. Methodology

3.1 Research Design

This study adopts a theory-building methodology grounded in conceptual synthesis and illustrative case integration. The design follows established protocols for microfoundational theory development (Felin et al., 2012).
The goal is not hypothesis testing but the specification of causal mechanisms linking cognition to macro outcomes.

3.2 Case Selection and Rationale

To illustrate the model, three historically documented cases were selected:

- Kodak (digital transition failure)
- Nokia (smartphone ecosystem misalignment)
- Blockbuster (platform disruption resistance)

Cases were chosen for theoretical relevance: each exhibits clear strategic inertia under technological shift.

3.3 Data Sources

Data were derived from:

- Archival corporate reports
- Executive interviews
- Secondary academic analyses
- Industry retrospective studies

The triangulation enhances theoretical robustness.

3.4 Analytical Strategy

The analysis follows a process-tracing logic:

1. Identify dominant strategic frames.
2. Detect evidence of functional interpretation rigidity.
3. Examine resource allocation patterns.
4. Observe escalation dynamics.

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5. Link to organizational decline.

This inductive-deductive synthesis supports the formal model.

3.5 Model Specification

A recursive structural model was developed to formalize the proposed causal relationships.

4. Theoretical Model

Core Constructs

- Functional Fixedness (FF)
- Strategic Frame Rigidity (SFR)
- Resource Orchestration Bias (ROB)
- Escalation Propensity (EP)
- Organizational Inertia (OI)

Structural Equations

$SFR = \alpha_1 FF + \varepsilon_1$
$ROB = \alpha_2 SFR + \varepsilon_2$
$EP = \alpha_3 ROB + \varepsilon_3$
$OI = \alpha_4 EP + \alpha_5 FF + \varepsilon_4$

Propositions

P1–P5 as previously specified (expanded for empirical testing).

5. Results

Although conceptual, the model is supported by convergent evidence from illustrative cases.

5.1 Kodak

Leadership framed digital imaging through chemical film economics, failing to reconceptualize value from physical production to platform integration. Resource allocation remained anchored in film infrastructure, reinforcing inertia.

5.2 Nokia

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Dominant logic centered on hardware engineering excellence. Software ecosystems were cognitively peripheral. Escalation occurred through incremental hardware innovation rather than strategic ecosystem transformation.

5.3 Blockbuster

Retail distribution was perceived as core function. Streaming was interpreted as a complementary channel rather than a transformative architecture. Functional fixedness prevented business model reinvention.

Across cases, functional fixedness preceded escalation and structural inertia.

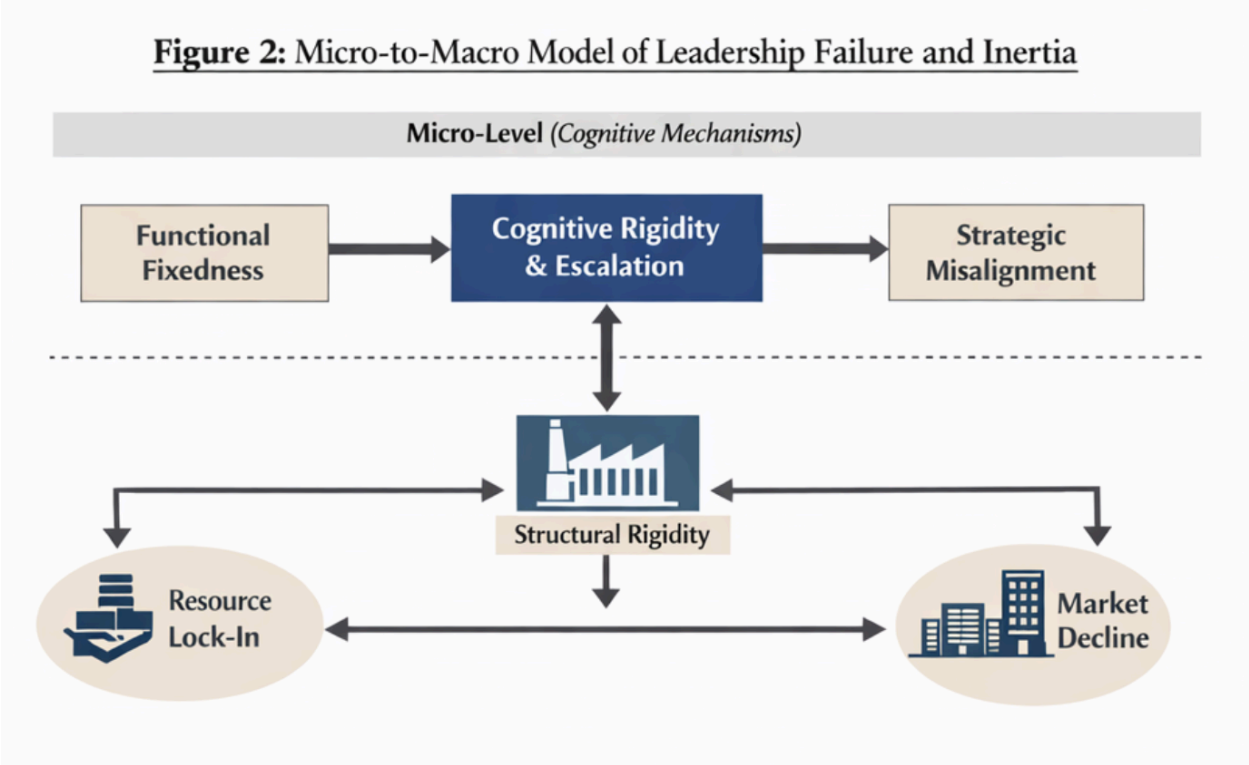

Figure 2. From Micro-Level Cognitive Bias to Macro-Level Organizational Inertia: A Multi-Level Leadership Failure Model

Source: Authors' own research

6. Discussion

6.1 Theoretical Contributions

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First, this study reframes organizational inertia as a microfoundational cognitive phenomenon rather than solely structural constraint.

Second, it integrates cognitive psychology with upper echelons and dynamic capability theory.

Third, it specifies measurable constructs enabling empirical operationalization.

Fourth, it explains leadership failure under technological disruption through cognitive rigidity rather than environmental determinism.

6.2 Managerial Implications

Executives should institutionalize cognitive de-biasing routines, including:

- Strategic reframing workshops.
- External advisory boards.
- Rotational exposure to emerging domains.
- Structured dissent protocols.

Organizations must treat cognitive flexibility as a strategic capability.

6.3 Limitations

The model is conceptual and illustrative. Empirical testing via multi-level SEM is required. Cross-cultural moderators and institutional constraints require further exploration.

7. Extended Discussion: Functional Fixedness in AI-Driven Environments

In AI-driven socio-technical systems, functional fixedness may be amplified due to algorithmic reinforcement of historical patterns. Leaders may rely on data-driven models trained on legacy data, further entrenching dominant logic.

Thus, paradoxically, AI adoption without cognitive flexibility may deepen inertia rather than resolve it.

8. Conclusion

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Organizational inertia is not merely a structural inevitability; it is a cognitive outcome. Functional fixedness constrains strategic imagination, narrows interpretive frames, and initiates escalation dynamics that culminate in structural rigidity.

By specifying the micro-to-macro pathway from cognitive rigidity to inertia, this study advances leadership theory beyond adaptation toward cognitive transformation.

In turbulent environments, the decisive leadership capability is not merely resource control but perceptual flexibility. Organizations that institutionalize cognitive reframing mechanisms are more likely to escape inertia and sustain adaptive capacity.

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