

The Architecture of Adaptive Leadership Systems: A Grounded Theory from High-Performance Organizations

Samira Zare¹, Navid Shirazi^{2*}, Mahsa Fathi³

1. Department of Management, Boj.C., Islamic Azad University, Bojnourd, Iran

2. Department of Accounting, Boj.C., Islamic Azad University, Bojnourd, Iran

3. Department of Industrial Management, Shv.C., Islamic Azad University, Shirvan, Iran

Abstract

This study aimed to develop a grounded theoretical model explaining how adaptive leadership systems are architected, enacted, and sustained in high-performance organizations operating under conditions of uncertainty, complexity, and continuous change. This qualitative study used a grounded theory design. Data were collected through semi-structured interviews with 24 senior managers, executive directors, human resource strategists, transformation leaders, and innovation managers working in high-performance organizations in Tehran. Participants were selected through purposive and theoretical sampling based on their direct involvement in organizational transformation, leadership development, strategic decision-making, or performance improvement initiatives. Interviews lasted between 45 and 80 minutes and continued until theoretical saturation was reached after the twenty-first interview; three additional interviews were conducted to confirm category stability. All interviews were audio-recorded with participants' consent, transcribed verbatim, and analyzed using open, axial, and selective coding. NVivo software was used to organize codes, compare incidents, develop categories, and trace analytic memos. Trustworthiness was enhanced through member checking, peer review, constant comparison, audit trail documentation, and maximum variation in participant selection. The analysis generated one core category, "adaptive leadership architecture," and five main categories: distributed strategic sensing, enabling governance structures, experimentation-based learning, relational trust and psychological safety, and dynamic resource orchestration. The findings showed that adaptive leadership in high-performance organizations is not merely an individual competency but a systemic architecture that links leaders, teams, routines, information flows, and decision rights. Participants emphasized that adaptive leadership emerges when leaders create spaces for sensemaking, permit controlled experimentation, protect constructive dissent, and rapidly reconfigure resources in response to environmental shifts. The study provides a grounded model of adaptive leadership systems in high-performance organizations. The model suggests that sustainable adaptability depends on the integration of strategic sensing, flexible structures, learning loops, trust-based relationships, and resource reconfiguration. These findings extend adaptive and complexity leadership perspectives by explaining how leadership becomes embedded in organizational architecture rather than residing solely in formal leadership roles.

Keywords: adaptive leadership; leadership systems; grounded theory; high-performance organizations; organizational adaptability; dynamic capabilities; Tehran.

✉ *CORRESPONDING AUTHOR'S EMAIL

navid.shirazi.acc@iau.ac.ir

📅 ARTICLE HISTORY

Received date: 14 November 2024

Revised date: 15 December 2024

Accepted date: 29 December 2024

Published date: 01 January 2025

📖 HOW TO CITE

Zare, S., Shirazi, N., & Fathi, M. (2025). The Architecture of Adaptive Leadership Systems: A Grounded Theory from High-Performance Organizations. *Management Systems Evolution and Leadership Studies*, 2(1), 30-39.

1. Introduction

Organizations are increasingly required to operate in environments characterized by volatility, technological disruption, compressed innovation cycles, fragmented stakeholder expectations, and persistent uncertainty. In such conditions, conventional assumptions about leadership as a hierarchical, role-bound, and command-oriented function are no longer sufficient. High-performance organizations need leadership systems that can sense weak



Copyright: © 2025 by the authors. Published under the terms and conditions of Creative Commons Attribution-NonCommercial 4.0 International (CC BY-NC 4.0) License.

signals, interpret ambiguous change, mobilize distributed intelligence, and reconfigure organizational capabilities before environmental pressures become existential threats. This shift has made adaptive leadership a central concern in contemporary management studies. However, much of the leadership literature still treats adaptability as a personal attribute of leaders rather than as a systemic property of organizations. The present study responds to this gap by developing a grounded theory of the architecture through which adaptive leadership systems are constructed and sustained in high-performance organizations.

Adaptive leadership has often been conceptualized as the capacity to mobilize people to confront complex challenges for which existing routines, technical expertise, or formal authority are insufficient. Heifetz, Grashow, and Linsky (2009) argue that adaptive challenges require learning, experimentation, conflict regulation, and the redistribution of responsibility across the system. From this perspective, leadership is not limited to giving direction; rather, it involves creating the conditions under which organizational members can diagnose reality, question assumptions, tolerate disequilibrium, and generate new patterns of action. This view is particularly important in high-performance organizations, where success depends not only on efficiency and execution but also on continuous renewal. Adaptive leadership therefore represents a movement away from stability-centered management toward learning-centered leadership.

Complexity leadership theory provides a powerful theoretical foundation for understanding this movement. Uhl-Bien, Marion, and McKelvey (2007) argue that leadership in knowledge-intensive organizations should be understood through the dynamics of complex adaptive systems. In such systems, innovation and adaptation often emerge from informal networks, relational interactions, and nonlinear processes rather than from formal command structures alone. Complexity leadership theory distinguishes between administrative leadership, which coordinates formal structures and organizational order; adaptive leadership, which emerges through interactions and produces learning, novelty, and change; and enabling leadership, which connects bureaucratic structures with adaptive dynamics. This framework is especially relevant to high-performance organizations because such organizations must maintain operational discipline while also enabling creative deviation, experimentation, and rapid response.

The concept of organizational adaptability is also closely related to the dynamic capabilities perspective. Teece, Pisano, and Shuen (1997) define dynamic capabilities as the capacity of firms to integrate, build, and reconfigure internal and external competences in rapidly changing environments. Later elaborations of this view emphasize sensing opportunities and threats, seizing strategic possibilities, and transforming or reconfiguring resources to sustain long-term performance (Teece, 2007). In leadership terms, dynamic capabilities require managerial systems that can convert environmental information into strategic action. This means that adaptive leadership cannot be reduced to charismatic influence or individual flexibility. It must be embedded in organizational routines, decision processes, learning mechanisms, and resource allocation systems. High-performance organizations therefore require an architecture of leadership that translates adaptation from an abstract value into repeatable organizational practice.

The literature on organizational ambidexterity further reinforces the importance of adaptive leadership systems. O'Reilly and Tushman (2013) argue that successful organizations must be able to exploit existing capabilities while simultaneously exploring new opportunities. This dual requirement creates persistent tensions between control and flexibility, efficiency and innovation, standardization and experimentation, short-term delivery and long-term transformation. Leaders in high-performance organizations must therefore manage paradox rather than

eliminate it. They must protect core performance routines while also allowing experimental initiatives to challenge established assumptions. Adaptive leadership systems are likely to be especially important in such contexts because they provide mechanisms for balancing exploitation and exploration without allowing either logic to dominate the organization entirely.

A related body of research emphasizes the role of psychological safety in learning and performance. Edmondson (1999) introduced psychological safety as a shared belief that a team is safe for interpersonal risk taking. In adaptive systems, psychological safety is not a soft or secondary condition; it is a structural prerequisite for surfacing errors, challenging dominant interpretations, proposing alternatives, and learning from failure. Without psychological safety, environmental scanning becomes filtered, dissent becomes suppressed, and experimentation becomes performative rather than genuine. High-performance organizations may be especially vulnerable to defensive routines because success can produce overconfidence, conformity, and fear of disrupting proven formulas. Adaptive leadership systems must therefore create relational conditions that allow high standards and candor to coexist.

Despite these important theoretical contributions, several gaps remain. First, the literature has not sufficiently explained how adaptive leadership becomes institutionalized as an organizational system. Existing studies often describe adaptive leadership as a behavioral style, a set of leader competencies, or a response to crisis. Less attention has been paid to the underlying architecture of routines, structures, relationships, and decision mechanisms that make adaptation sustainable. Second, much of the literature has been developed in Western organizational contexts, while fewer qualitative studies have examined adaptive leadership systems in Middle Eastern business environments, including Iranian high-performance organizations. Third, although high-performance organizations are frequently associated with superior outcomes, there is still limited qualitative understanding of how such organizations design leadership systems that preserve performance while enabling transformation.

Grounded theory is appropriate for addressing these gaps because it allows theory to emerge from participants' lived experiences and organizational practices. Rather than testing a predetermined model, grounded theory enables researchers to identify processes, conditions, interactions, and consequences through systematic coding and constant comparison (Charmaz, 2014; Corbin & Strauss, 2015). In the present study, grounded theory is used to examine how senior managers and organizational leaders in Tehran-based high-performance organizations understand, enact, and sustain adaptive leadership systems. The focus is not merely on what adaptive leaders do, but on how organizations architect the conditions that make adaptive leadership possible.

This study contributes to the literature in three ways. First, it extends adaptive leadership theory by shifting the analytical focus from individual leader behavior to leadership architecture. Second, it connects complexity leadership, dynamic capabilities, ambidexterity, and psychological safety into an integrated grounded model of adaptive leadership systems. Third, it provides qualitative evidence from high-performance organizations in Tehran, thereby offering contextual insight into how adaptability is interpreted and operationalized in a non-Western management environment. Accordingly, the aim of this study was to develop a grounded theoretical model of the architecture of adaptive leadership systems in high-performance organizations.

2. Methods and Materials

This study employed a qualitative grounded theory design to explore the processes through which adaptive leadership systems are formed and sustained in high-performance organizations. Grounded theory was selected because the study sought to generate an explanatory model from participants' experiences rather than to test a pre-existing framework. The research focused on high-performance organizations located in Tehran, including organizations from technology, finance, telecommunications, pharmaceutical, consulting, manufacturing, and service sectors. These organizations were selected because they had evidence of sustained performance, formal transformation initiatives, innovation programs, or recognized leadership development practices.

Participants were selected using purposive and theoretical sampling. The initial inclusion criteria were: holding a senior managerial, executive, strategic human resource, transformation, innovation, or organizational development role; having at least seven years of managerial or professional experience; direct involvement in organizational change, performance management, leadership development, strategic decision-making, or innovation; and willingness to participate in an audio-recorded interview. As coding progressed, theoretical sampling was used to recruit participants who could elaborate emerging categories such as adaptive governance, experimentation, strategic sensing, and resource reconfiguration.

The final sample consisted of 24 participants from Tehran-based high-performance organizations. Of these participants, 14 were men and 10 were women. In terms of organizational role, six participants were chief executive officers or managing directors, five were senior human resource or talent development managers, four were strategy or business development managers, four were transformation or organizational development leaders, three were innovation managers, and two were senior operations managers. Participants' ages ranged from 32 to 58 years, and their managerial or professional experience ranged from 8 to 28 years. Theoretical saturation was reached after the twenty-first interview, when no substantially new categories emerged. Three additional interviews were conducted to confirm the stability, coherence, and explanatory adequacy of the emerging model.

Data were collected through semi-structured interviews. The interview protocol was designed to elicit participants' experiences of leadership adaptation, organizational responsiveness, decision-making under uncertainty, learning mechanisms, experimentation, and performance sustainability. The main interview questions included: "How does your organization recognize the need for adaptation?" "What leadership behaviors or systems help the organization respond to complex changes?" "How are decisions made when the environment is uncertain?" "How are experimentation, failure, and learning managed?" and "What structures or routines help maintain high performance while enabling flexibility?" Follow-up questions were used to clarify examples, explore contradictions, and deepen emerging concepts.

Interviews lasted between 45 and 80 minutes and were conducted in private meeting rooms or secure online platforms, depending on participant preference. All interviews were audio-recorded with informed consent and transcribed verbatim. Participants were informed about the purpose of the study, voluntary participation, confidentiality, and their right to withdraw at any stage. To protect anonymity, participants were coded as P1 to P24, and identifying organizational details were removed from transcripts. Field notes were written after each interview to record contextual observations, preliminary interpretations, and analytic questions.

Data analysis was conducted using the grounded theory procedures of open coding, axial coding, and selective coding. NVivo software was used to organize transcripts, assign codes, compare incidents, retrieve coded segments, and document analytic memos. In the open coding phase, interview transcripts were examined line by line to identify meaningful units related to adaptive leadership practices, organizational conditions, decision

routines, learning processes, relational dynamics, and performance mechanisms. Initial codes included examples such as “reading weak signals,” “creating cross-functional forums,” “protecting dissent,” “rapidly moving talent,” “learning from failed pilots,” and “balancing control and flexibility.”

In the axial coding phase, related codes were compared and grouped into higher-order categories. Constant comparison was used to examine similarities and differences across participants, sectors, and organizational roles. This process generated five main categories: distributed strategic sensing, enabling governance structures, experimentation-based learning, relational trust and psychological safety, and dynamic resource orchestration. In the selective coding phase, these categories were integrated around the core category of “adaptive leadership architecture.” This core category explained how high-performance organizations transform leadership from a role-based function into an embedded system of sensing, interpreting, learning, relating, and reconfiguring.

Trustworthiness was addressed through credibility, dependability, confirmability, and transferability strategies. Credibility was strengthened through member checking with six participants, peer debriefing with two qualitative research experts, and continuous comparison between emerging categories and raw data. Dependability was supported by maintaining an audit trail of coding decisions, memos, interview protocol revisions, and category development. Confirmability was enhanced through reflexive memoing to identify researcher assumptions and minimize premature closure. Transferability was supported by maximum variation sampling and thick description of participants, organizational contexts, and analytic categories.

3. Findings and Results

The demographic characteristics of the participants indicated a diverse group of senior professionals with substantial experience in leadership, transformation, and organizational performance. Of the 24 participants, 14 were male and 10 were female. Six participants were CEOs or managing directors, five were senior human resource or talent development managers, four were strategy or business development managers, four were transformation or organizational development leaders, three were innovation managers, and two were senior operations managers. Regarding sectoral distribution, five participants worked in technology-based organizations, four in finance and banking, four in telecommunications, three in pharmaceuticals, three in manufacturing, three in consulting and professional services, and two in large service organizations. Participants' ages ranged from 32 to 58 years; seven participants were between 32 and 39 years old, nine were between 40 and 49 years old, and eight were 50 years old or above. Their professional experience ranged from 8 to 28 years, with most participants reporting more than 12 years of managerial experience.

The analysis produced one core category and five main categories. The core category was **adaptive leadership architecture**, which refers to the systemic arrangement of leadership routines, relational conditions, governance mechanisms, learning processes, and resource flows that enable organizations to sustain high performance while adapting to change.

Distributed strategic sensing. Participants described adaptive leadership as beginning with the capacity to detect changes before they become visible crises. This sensing process was not concentrated only at the executive level; rather, it was distributed across customer-facing units, project teams, data analysts, middle managers, and external partners. Participants emphasized that high-performance organizations created formal and informal mechanisms for collecting weak signals from markets, technologies, employees, customers, and competitors. One

participant stated, “In our company, adaptation starts before the board meeting. It starts when a sales expert, a product designer, or even a customer support colleague says, ‘Something is changing in the pattern’” (P7). Another participant explained, “The best signals do not always come from senior managers. Sometimes the person closest to the client understands the future earlier than the strategy department” (P15). This category showed that adaptive leadership systems rely on broad participation in sensemaking and the conversion of fragmented information into strategic interpretation.

Enabling governance structures. The second category concerned the structural conditions that allow organizations to respond without losing coherence. Participants argued that adaptation requires governance mechanisms that are neither overly centralized nor fully unstructured. High-performance organizations used cross-functional committees, temporary task forces, decision charters, rapid escalation pathways, and flexible authority boundaries to accelerate response while maintaining strategic alignment. One executive noted, “We learned that hierarchy is not the enemy, but slow hierarchy is. The problem is when every decision waits for permission from the top” (P3). Another participant stated, “Adaptive leadership means designing decision rights clearly enough so people can move, but not so rigidly that movement becomes impossible” (P11). This category indicated that adaptive leadership architecture depends on structures that enable fast coordination, distributed authority, and controlled flexibility.

Experimentation-based learning. Participants repeatedly emphasized that adaptive organizations do not wait for complete certainty before acting. Instead, they use experiments, pilots, prototypes, after-action reviews, and short feedback cycles to learn from action. Experimentation was considered a disciplined process rather than random trial and error. Participants described successful organizations as those that define hypotheses, test them at limited scale, learn quickly, and either scale, revise, or terminate initiatives. One innovation manager explained, “We do not call every failure a lesson. It becomes a lesson only when we document what assumption failed and what we will change next time” (P19). Another participant said, “The difference between ordinary organizations and adaptive ones is not that adaptive organizations fail more; it is that they waste less time hiding failure” (P6). This category showed that learning loops are central components of adaptive leadership systems.

Relational trust and psychological safety. The fourth category referred to the relational climate that allows people to speak honestly, challenge assumptions, report errors, and participate in difficult conversations. Participants described trust as the “emotional infrastructure” of adaptation. Several participants noted that organizations may have sophisticated strategy systems but still fail to adapt if employees fear blame, humiliation, or career damage. One participant stated, “People do not bring weak signals to leaders who punish bad news” (P13). Another explained, “When managers pretend they know everything, the organization becomes silent. Silence is very dangerous in a changing environment” (P22). Participants emphasized that psychological safety did not mean low standards; rather, it meant creating conditions in which candor, accountability, and learning could coexist. This category demonstrated that adaptive leadership requires relational courage and protection for constructive dissent.

Dynamic resource orchestration. The fifth category concerned the ability to reconfigure people, budgets, capabilities, technologies, and managerial attention in response to emerging priorities. Participants argued that sensing and learning are insufficient unless the organization can move resources quickly. High-performance organizations created flexible talent pools, project-based teams, temporary assignments, digital dashboards, and portfolio review mechanisms to shift resources from declining routines toward emerging opportunities. One

participant explained, “The real test of leadership is not whether we understand change; it is whether we can move resources before the opportunity disappears” (P9). Another stated, “In adaptive organizations, talent does not belong permanently to one department. Capabilities must travel to where the strategic problem is” (P17). This category showed that adaptive leadership architecture links interpretation to action through resource mobility.

Together, these five categories formed a grounded model in which adaptive leadership operates as a systemic architecture. Distributed strategic sensing provides information; enabling governance structures create decision capacity; experimentation-based learning converts uncertainty into knowledge; relational trust and psychological safety allow truth to circulate; and dynamic resource orchestration transforms insight into organizational movement. The interaction of these categories explains how high-performance organizations maintain both performance discipline and adaptive flexibility.

4. Discussion and Conclusion

The first major finding was that adaptive leadership systems in high-performance organizations begin with **distributed strategic sensing**. Participants consistently rejected the idea that senior executives alone can interpret environmental complexity. Instead, they described sensing as a distributed organizational capability involving frontline employees, middle managers, customers, digital data, and external networks. This finding aligns with complexity leadership theory, which suggests that adaptive outcomes emerge through interactions across a system rather than through top-down direction alone (Uhl-Bien et al., 2007). It also supports the dynamic capabilities perspective, particularly the sensing dimension described by Teece (2007), in which organizations must identify technological, market, and competitive changes before they can act strategically. The contribution of the present study is that it shows how sensing becomes architectural: high-performance organizations do not merely encourage leaders to “be aware”; they build routines, forums, and communication channels that allow weak signals to move across levels. This finding also extends adaptive leadership theory by showing that the leader’s role is not to monopolize interpretation but to create disciplined spaces where multiple interpretations can be compared, challenged, and synthesized.

The second finding concerned **enabling governance structures**, which allow organizations to combine flexibility with coherence. Participants emphasized that adaptation does not mean abandoning structure; rather, it means redesigning structure so that decision rights, accountability, and coordination can support rapid response. This finding is consistent with Uhl-Bien and Arena’s (2018) argument that organizational adaptability requires the interaction of operational, entrepreneurial, and enabling leadership. It also resonates with the ambidexterity literature, which argues that organizations must manage the tension between exploitation and exploration (O’Reilly & Tushman, 2013). The present study adds qualitative depth by showing that leaders in high-performance organizations use flexible governance mechanisms, such as cross-functional councils and temporary task forces, to prevent adaptation from becoming either chaos or bureaucracy. The finding suggests that adaptive leadership systems require “designed flexibility”: enough structure to preserve strategic alignment and enough autonomy to permit local initiative. This is particularly important in high-performance organizations because they must protect current performance while simultaneously preparing for future disruption.

The third finding was that **experimentation-based learning** functions as the operational engine of adaptive leadership. Participants described pilots, prototypes, structured trial periods, feedback loops, and after-action

reviews as essential mechanisms for converting uncertainty into actionable knowledge. This finding is strongly aligned with adaptive leadership theory, which emphasizes learning as the core response to adaptive challenges (Heifetz et al., 2009). It also supports Eisenhardt and Martin's (2000) view that dynamic capabilities consist of identifiable processes such as product development, strategic decision-making, and resource allocation routines. In the present study, experimentation was not interpreted as improvisation without discipline. Instead, high-performance organizations treated experimentation as a controlled learning mechanism guided by hypotheses, metrics, reflection, and rapid adjustment. This finding contributes to the leadership literature by showing that adaptive leadership becomes sustainable when experimentation is institutionalized. Leaders do not merely ask employees to innovate; they provide permission, boundaries, resources, and learning routines that make experimentation legitimate and productive.

The fourth finding highlighted **relational trust and psychological safety** as the social foundation of adaptive leadership systems. Participants repeatedly emphasized that organizations cannot adapt when employees hide problems, avoid dissent, or protect themselves from blame. This finding is consistent with Edmondson's (1999) research on psychological safety and team learning, which shows that interpersonal risk-taking is essential for learning behavior. It also extends complexity leadership theory by illustrating the relational conditions through which adaptive dynamics become possible. In complex environments, information is often incomplete, uncomfortable, or politically sensitive. If employees fear punishment, leaders receive distorted information and strategic decisions become detached from reality. The present study suggests that psychological safety is not merely a team climate variable but a core element of adaptive leadership architecture. High-performance organizations require cultures in which truth can move upward, across, and downward without being blocked by fear. At the same time, participants stressed that psychological safety must coexist with accountability. Therefore, adaptive leadership systems depend on a dual climate of candor and responsibility.

The fifth finding was that adaptive leadership depends on **dynamic resource orchestration**. Participants indicated that organizations often recognize change but fail to adapt because resources remain locked in old structures, budgets, roles, and routines. This finding aligns with the dynamic capabilities framework, which emphasizes the reconfiguration of internal and external competences in changing environments (Teece et al., 1997). It also connects with high-performance work systems research, which suggests that performance depends on the strategic alignment of human resources, capabilities, and organizational processes (Jiang et al., 2012). The present study shows that adaptive leadership systems require mechanisms for moving talent, capital, managerial attention, and technological resources toward emerging priorities. This finding is important because it distinguishes symbolic adaptation from real adaptation. Organizations may speak about agility, innovation, and responsiveness, but unless they can reallocate resources, adaptation remains rhetorical. In high-performance organizations, adaptive leaders function as resource orchestrators who connect emerging strategic problems with the capabilities required to address them.

The integration of these five findings produced the grounded theoretical model of **adaptive leadership architecture**. This model suggests that adaptive leadership is not a single behavior, competency, or style. Rather, it is an organizational system composed of interdependent elements: sensing, governance, learning, trust, and resource reconfiguration. The model advances existing research by explaining how adaptive leadership becomes embedded in organizational architecture. Previous studies have emphasized flexible leadership behaviors (Yukl & Mahsud, 2010), complex adaptive systems (Uhl-Bien et al., 2007), dynamic capabilities (Teece, 2007), and

ambidextrous organizing (O'Reilly & Tushman, 2013). The present study integrates these perspectives and grounds them in the experiences of managers from Tehran-based high-performance organizations. The findings suggest that organizations become adaptive not because they employ adaptive individuals alone, but because they design systems that allow adaptive intelligence to circulate and become coordinated action.

The findings also have contextual significance. In Tehran-based high-performance organizations, participants described adaptation as occurring within environments marked by economic uncertainty, regulatory complexity, technological change, competitive pressure, and talent mobility. These contextual features made adaptive leadership especially important because organizations could not rely only on stable plans or predictable market assumptions. Participants' experiences suggest that adaptive leadership systems may be particularly valuable in emerging and turbulent business environments where formal planning cycles often lag behind environmental change. The grounded model developed in this study therefore provides a context-sensitive explanation of how high-performance organizations sustain effectiveness under uncertainty.

Ethical Considerations

All procedures performed in this study were under the ethical standards.

Acknowledgments

Authors thank all who helped us through this study.

Conflict of Interest

The authors report no conflict of interest.

Funding

According to the authors, this article has no financial support.

References

- Arena, M. J., & Uhl-Bien, M. (2016). Complexity leadership theory: Shifting from human capital to social capital. *People & Strategy*, 39(2), 22–27.
- Charmaz, K. (2014). *Constructing grounded theory* (2nd ed.). SAGE.
- Corbin, J., & Strauss, A. (2015). *Basics of qualitative research: Techniques and procedures for developing grounded theory* (4th ed.). SAGE.
- Edmondson, A. C. (1999). Psychological safety and learning behavior in work teams. *Administrative Science Quarterly*, 44(2), 350–383. <https://doi.org/10.2307/2666999>
- 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)
- Gioia, D. A., Corley, K. G., & Hamilton, A. L. (2013). Seeking qualitative rigor in inductive research: Notes on the Gioia methodology. *Organizational Research Methods*, 16(1), 15–31. <https://doi.org/10.1177/1094428112452151>
- Heifetz, R. A., Grashow, A., & Linsky, M. (2009). *The practice of adaptive leadership: Tools and tactics for changing your organization and the world*. Harvard Business Press.
- Jiang, K., Lepak, D. P., Hu, J., & Baer, J. C. (2012). How does human resource management influence organizational outcomes? A meta-analytic investigation of mediating mechanisms. *Academy of Management Journal*, 55(6), 1264–1294. <https://doi.org/10.5465/amj.2011.0088>
- O'Reilly, C. A., III, & Tushman, M. L. (2013). Organizational ambidexterity: Past, present, and future. *Academy of Management Perspectives*, 27(4), 324–338. <https://doi.org/10.5465/amp.2013.0025>
- Senge, P. M. (1990). *The fifth discipline: The art and practice of the learning organization*. Doubleday.
- 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)
- Uhl-Bien, M., & Arena, M. (2018). Leadership for organizational adaptability: A theoretical synthesis and integrative framework. *The Leadership Quarterly*, 29(1), 89–104. <https://doi.org/10.1016/j.leaqua.2017.12.009>
- Uhl-Bien, M., Marion, R., & McKelvey, B. (2007). Complexity leadership theory: Shifting leadership from the industrial age to the knowledge era. *The Leadership Quarterly*, 18(4), 298–318. <https://doi.org/10.1016/j.leaqua.2007.04.002>
- Yukl, G., & Mahsud, R. (2010). Why flexible and adaptive leadership is essential. *Consulting Psychology Journal: Practice and Research*, 62(2), 81–93. <https://doi.org/10.1037/a0019835>