

A Delphi Study on Strategic Behaviors from the Adaptive Leadership Framework Used
by Successful CXOs for Business Agility in a Volatility, Uncertainty, Complexity, and
Ambiguity Environment

A Dissertation by
Sevak Markarian

University of Massachusetts Global

A Private Nonprofit Affiliate of the University of Massachusetts

Irvine, California

School of Education

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Committee in charge:

Lisbeth Johnson, Ed.D., Committee Chair

Carlos V. Guzman, Ph.D.

Cheryl-Marie Osborne, Ed.D.

University of Massachusetts Global
A Nonprofit Affiliate of the University of Massachusetts
Doctor of Education in Organizational Leadership

The dissertation of Sevak Markarian is approved.

_____, Dissertation Chair

Lisbeth Johnson, Ed.D.

_____, Committee Member

Carlos V. Guzman, Ph.D.

_____, Committee Member

Cheryl-Marie Osborne, Ed.D.

_____, Associate Dean

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ABSTRACT

A Delphi Study on Strategic Behaviors from the Adaptive Leadership Framework Used by Successful CXOs for Business Agility in a Volatility, Uncertainty, Complexity, and Ambiguity Environment

by Sevak Markarian

Purpose: The purpose of this Delphi study was to identify the strategic leadership behaviors, as outlined in Heifetz et al.'s (2009) adaptive leadership framework, that CXOs use to develop agile and adaptive organizations that succeed in volatility, uncertainty, complexity, and ambiguity (VUCA) change environments. Additionally, the study aimed to assess the effectiveness of these behaviors and determine specific actions that CXOs recommend for implementing them successfully.

Methodology: This mixed-method Delphi study collected data from 20 technology executives through surveys and interviews, using purposive, convenience, and expert sampling. In Round 1, participants identified strategic adaptive leadership behaviors from Heifetz et al.'s (2009) adaptive leadership framework that CXOs use to develop successful business agility organizations in VUCA environments. Round 2 assessed the effectiveness of these behaviors using a 6-point Likert scale, and Round 3 explored recommended actions through expert interviews.

Findings: This study identified 19 adaptive strategic behaviors that CXOs use to build successful business agility organizations in VUCA environments, the most frequently mentioned aligning with Heifetz et al.'s (2009) adaptive leadership framework. Psychological safety, transparency, collaboration, and innovation were rated as the most impactful. Leaders emphasized shared responsibility, independent judgment, and critical

thinking to enhance resilience and long-term success. However, few leaders proposed innovative implementation methods, relying on traditional strategies like open-door policies and all-hands meetings. Participants highlighted that adaptive leadership behaviors are interdependent, with psychological safety and trust as prerequisites for independent judgment and collaboration. Leaders with academic affiliations placed greater emphasis on empathy and vulnerability, suggesting that research exposure enhances emotional intelligence in leadership.

Recommendations: Psychological safety, transparency, and collaboration are essential but require systematic implementation. Frameworks such as Prosci's awareness, desire, knowledge, ability, and reinforcement (ADKAR) model provide a structured approach to managing change. Tools such as the Johari window and DISC assessments enhance self-awareness and leadership effectiveness. Objective and key results (OKRs) align employee motivations with organizational goals, fostering accountability and engagement. Leadership development through case studies and simulations builds adaptive competencies. Agility frameworks such as scaled agile framework enterprise (SAFe) improve execution efficiency and long-term adaptability.

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CHAPTER I: INTRODUCTION

In today's world of volatility, uncertainty, complexity, and ambiguity (VUCA), leaders face significant challenges that demand innovative and adaptive strategies (Elkington et al., 2017). Specifically, the COVID-19 pandemic exemplifies the volatility and uncertainty leaders must navigate (Nurbantoro, 2021). Moreover, the emergence of artificial intelligence (AI) and other cutting-edge technologies add layers of complexity (Busu, 2024) to organizational leadership. Consequently, adaptive leadership behavior is crucial in VUCA environments because it involves being open to new information, a willingness to adjust plans, and empowering teams to experiment with novel solutions (Sarkar, 2016).

On the other hand, achieving business agility in such VUCA environments also involves different types of leadership behavior, such as breaking down traditional hierarchical structures and embracing more collaborative, cross-functional teams (P. Taylor & Gogate, 2021). Perkin and Abraham (2021) defined business agility as an organization's ability to swiftly and effectively respond to rapidly evolving market dynamics, customer demands, and competitive pressures. This concept is closely aligned with Heifetz's (1994) introduction of adaptive leadership, in which he emphasized that adaptability is essential for organizations striving to achieve true agility. Together, these perspectives highlight the critical role of adaptability in enabling organizations to navigate and thrive in a constantly changing environment. The following scenario illustrates a story that exemplifies the need for both adaptive leadership and business agility skills.

On March 13th, 2020, John, the chief executive officer (CEO) of an organization, called for an executive meeting with all his leaders. Without hesitation, he started the meeting: “We are in a situation that our country arguably hasn’t seen in a century.” Though everyone understood the reference to the COVID-19 pandemic, uncertainty lingered about the direction John’s revelation would take.

He continued, “I know some of you think I am asking you to do something impossible, but the fact is we have to close all our offices and ask people to work from home starting Monday.” Justin, the senior vice president (SVP) of operation and support, interjected: “How can I get my team to support customers when most don’t have a computer and network at home?” Kevin, the chief information officer (CIO), with a taunting voice, added, “Well, you should have listened to me when I told you to distribute your team across the globe.” Justin turned back to Kevin and added, “If I did that, then we wouldn’t have the budget to pay for your high-cost department.”

As John reflected on these conflicts and challenges among his leaders, he realized that his leadership team was unprepared for this type of disruption of having people work remotely. He was uncertain about the next steps he should take in his organization as he reviewed the necessary transitional actions that had to be taken. There was no time to reorganize the leadership structure; unity among the leadership team was needed now more than ever. The question looming in John’s mind was how to encourage the leaders to step back from their current individual realities. How could he get them to view the problem holistically, propose collective adaptive and creative ideas, and collaboratively work toward a solution that made the most sense? How could his organization implement solutions efficiently in the shortest amount of time?

John's narrative epitomizes organizations' contemporary dilemmas and how they may need to adapt to unforeseen VUCA (Abidi & Joshi, 2015; Kail, 2010a, 2010b, 2010c, 2011) situations, highlighting the pressing need to cultivate a dynamic and agile (Highsmith, 2013; van Oosterhout, 2010) leadership ecosystem in business. These dilemmas demand that leaders uncover the attributes of adaptive leadership to foster business agility in the organizational culture. Leaders must be empowered to thrive in the ever-shifting landscape of the market. In the face of the relentless onslaught of VUCA elements—volatility, uncertainty, complexity, and ambiguity—organizational leaders require more than foundational leadership knowledge and training. Leadership styles that respond to recent business and client developments are essential, requiring a comprehensive and practical framework of leadership strategies and tactical actions to foster business agility (Orvos, 2019).

Can leaders similar to John leverage leadership styles such as transformational leadership and adaptive leadership (Northouse, 2021) and integrate empirical techniques from these approaches to agilely navigate the profound complexities of the VUCA environment (Horney & O'Shea, 2015)? If so, what key techniques and actions do leaders in today's landscape need for agile navigation? Have leaders who successfully achieved business agility embraced adaptive leadership behavior in their organizations? Conversely, have organizations with business agility have more leaders who demonstrate adaptive behaviors?

Heifetz et. al (2009) summarized the tools leaders need to adapt to an ever-changing world. However, there is limited research on how adaptive leadership behaviors have influenced changes in business organizations during VUCA conditions over the past

decade. Therefore, this study focused on business agility as a response to disruptive conditions in organizational landscapes along with the strategic behaviors that adaptive leaders may employ in organizations facing volatile change.

Background

Today more than ever, organizations need to forge a dynamic leadership ecosystem by using adaptive leadership strategies (Yukl & Mahsud, 2010). To foster business agility, leaders need to learn how to nurture their organizations to succeed amidst the continual flux of the market landscape (De Smet et al., 2018). Perkin and Abraham (2021) defined business agility as the organizational capacity to swiftly and effectively respond to rapidly evolving market dynamics, customer demands, and competitive pressures. Heifetz (1994), a distinguished authority in the realm of leadership, introduced the groundbreaking concept of adaptive leadership, which asserts that adaptability is pivotal for organizations aspiring to attain agility. Heifetz contended that agility necessitates the adeptness to promptly and skillfully address transformative changes (Heifetz & Linsky, 2017).

King (1990) posited that behavioral leadership studies are crucial because of the substantial empirical support for a behavioral perspective on leadership. He argued that the findings from these studies provide practical, actionable insights that leaders can implement to enhance their effectiveness. Furthermore, practitioners argued that many traditional conceptual and empirical models fall short in addressing the behavioral challenges faced by leaders in VUCA (Senge, 2006). External environmental factors such as rapid technological advancements, economic instability, and geopolitical shifts further exacerbate these challenges, necessitating a more adaptive approach to leadership

(Bennett & Lemoine, 2014; Johansen, 2017). It was not until Heifetz and Linsky (2002, 2017) introduced behaviors of adaptive leaders that a potential road map to manage disruption and change effectively emerged.

An examination of existing literature, including influential works by pioneers such as Nagel and Dove (1998), van Oosterhout (2010), and Freedman (2023), highlighted the potential connections between business agility and adaptive leadership. However, Denning (2018) contended that despite these valuable insights, a clear understanding of the shared characteristics between business agility and adaptive leadership remains elusive for many business leaders. Hence, further research is needed to understand the interplay between business agility and adaptive leadership, highlighting their symbiotic relationship and shared attributes amid the relentless surge of VUCA elements (Abidi & Joshi, 2015; Questad, 2022).

Theoretical Framework

The theoretical framework selected for this study was developed based on research conducted by Heifetz (1994), Northouse (2021), and Heifetz and Linsky (2017). The theoretical framework for this study included the following components: adaptive leadership and business agility and how these two conceptual frameworks align. The studies by Heifetz et al. (2009) and van Oosterhout (2010) demonstrated how adaptive leadership and business agility align.

Adaptive Leadership

The term *adaptive* in adaptive leadership is rooted in principles from evolutionary biology (Heifetz, 1994). Charles Darwin (1871/1981) originally introduced the concept to describe how species evolve over time. Before Darwin, French naturalist Jean-Baptiste

Lamarck (1830/2011) suggested that evolution was largely influenced by the inheritance of traits that organisms developed as they adapted to their surroundings.

Heifetz (1994) introduced the concept of adaptive leadership. Heifetz described adaptive leadership as a framework designed to guide leaders in navigating complex challenges and operating effectively in uncertain environments. It is about mobilizing people to adapt and thrive amid significant changes, both within the organization and the broader context.

As the pace of VUCA continues to intensify in the marketplace, leaders with skills to navigate disruptive environments could use an adaptive leadership framework to steer their organizations (Highsmith, 2013). Researchers have suggested that effective adaptation enables an organization to proactively address future operational changes. The adaptive capabilities of a top leader play a crucial role in ensuring the organization's overall effectiveness and ongoing adaptability (Day & Lord, 1988; Eichholz, 2017).

Similarly, other scholars emphasized the necessity for both organizations and their leaders to embrace adaptability (Boal & Hooijberg, 2000; Castillo & Trinh, 2019). Heifetz and Laurie (1997) proposed several practices to shift adaptive leadership from an academic summary to practical actions in the workplace. According to Heifetz et al. (2009), creating an adaptive culture requires fostering specific behaviors. These include (a) get on the balcony, (b) diagnosing the system, (c) regulating distress, (d) maintaining disciplined attention, (e) giving the work back to the people, and (f) protecting leadership voices from below. When these methods are implemented, they foster the development of a highly adaptive organization.

Business Agility

The concept of business agility emerged in the United States in the early 1990s as a new approach to manufacturing, building on previous initiatives like lean (focused on waste reduction) and flexible production (Nagel & Dove, 1998). The push for business agility was supported by U.S. Congress, which was concerned about the declining competitiveness of the U.S. manufacturing sector at that time. Nagel and Dove (1998) described agility “as the ability to thrive in a competitive environment of continuous and unanticipated change” (p. 10). Nagel and Dove explained that agility entails the ability to respond swiftly to rapidly evolving and fragmenting global markets, which are dominated by networked competitors with regular access to a global production system. These markets also demand high-quality, high-performance, low-cost products and services that are tailored to individual customer preferences.

Perkin and Abraham (2021) defined business agility as an organization’s ability to respond quickly and effectively to rapidly changing market conditions, customer needs, and competitive pressures. Business agility involves the capacity to adapt, innovate, and pivot strategies when necessary to stay competitive and seize opportunities. van Oosterhout (2010), who studied the impact of information technologies (IT) on business agility in service organizations, described business agility as the ability of organizations to rapidly adapt their business models and processes beyond typical flexibility to effectively handle highly uncertain and unexpected situations. Business agility in organizations is no longer an advantage but a necessity to survive and thrive in the current VUCA environment (Abidi & Joshi, 2015; Questad, 2022). Kotter (2007, 2019), the guru of change management, emphasized the need for agility and adaptability in

organizations to respond to today's business landscape's fast-paced and unpredictable nature. Denning (2018) discussed how organizations can embrace business agility to navigate through rapid changes and create a more responsive and adaptable organizational culture.

Shared Characteristics of Business Agility and Adaptive Leadership

Scholars and practitioners have extensively debated the qualities that lead to executive leadership success (Church et al., 2017). Church et al. (2017) noted that a universally accepted set of core traits has not yet been confirmed through research. However, adaptive skills consistently emerge as critical factors in studies on effective leadership.

In his scholarly exploration, van Oosterhout (2010) suggested that the augmentation of business agility performance within service entities hinges fundamentally the orchestrated alignment of processes and information systems. This alignment should be facilitated through the dynamic and adaptive cycle of sensing, responding, and learning coupled with the harmonious convergence of business and IT functions.

Heifetz et al. (2009) identified four characteristics shared by agile and adaptive leaders—adaptability, learning and exploration, decision making, and embracing uncertainty. Table 1 describes the interconnected relationship between adaptive leadership and business agility.

In the late 1990s, Heifetz et al. (1994) characterized the adaptive leadership style, emphasizing key components such as (a) diagnosing the situation, (b) mobilizing and involving people, (c) handling conflict, (d) experimenting, and (e) offering support and

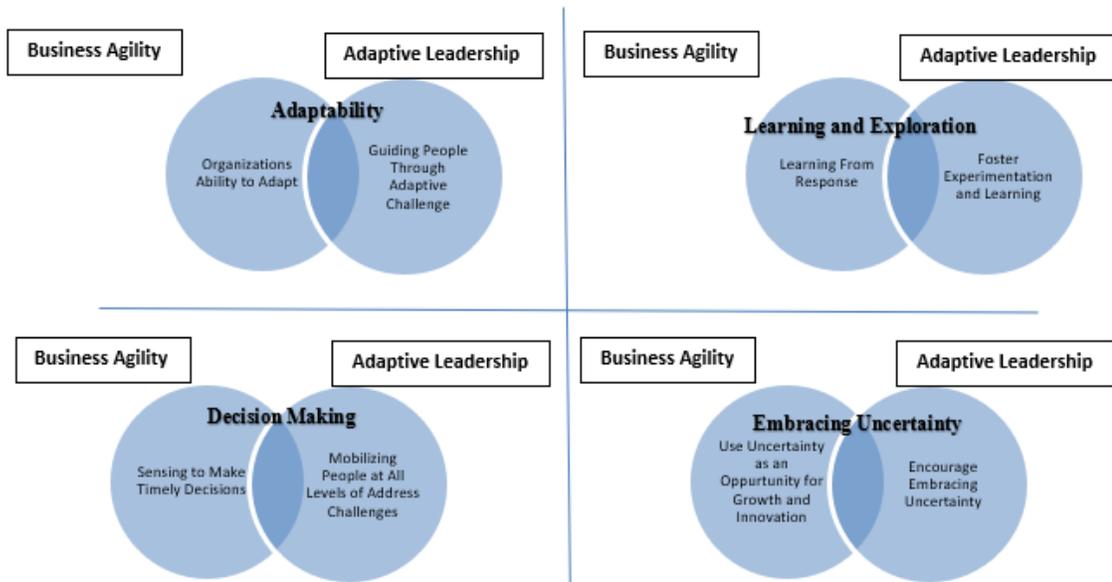
Table 1*The Alignment of the Four Quadrants in Adaptive Leadership and Business Agility*

Adaptability	
Adaptive leadership	Business agility
According to Heifetz and Linsky (2017), this is the ability to guide individuals through complex and challenging adaptive changes.	Harvey (2021) asserted that the hallmark of an agile business resides in its capacity to adjust flexibly.
Learning and exploration	
Adaptive leadership	Business agility
Per Heifetz and Linsky (2017), adaptive leaders champion experimentation and embrace the lessons embedded within failures and successes while building upon the foundations of the past rather than discarding them.	Gothelf and Seiden (2017) emphasized business agility's focus on deriving insights from responses and the paramount significance of organizational adaptability.
Decision making	
Adaptive leadership	Business agility
According to Heifetz and Linsky (2017), by mobilizing people at all levels to address complex challenges, leaders can involve and engage diverse perspectives while encouraging collaboration.	Šmite et al. (2023) argued that effective decision making hinges on timely actions and decentralized authority, fostering an environment of open dialogue and shared responsibility, which is crucial for business agility (van Oosterhout, 2010).
Embracing uncertainty	
Adaptive leadership	Business agility
Heifetz and Linsky (2017) asserted that by fostering a culture where uncertainty is not feared but seen as a catalyst for creative solutions, leaders can cultivate resilience and adaptability within teams.	Jeff Bezos, the visionary founder of Amazon, underscores the critical significance of agility and embracing uncertainty to navigate the dynamic landscape and stay competitive and relevant (Cockcroft, 2015).

protection. Figure 1 shows how these two adaptive leadership and business agility frameworks align in a conceptual framework. This visual alignment in Figure 1 clarifies how adaptive leadership behaviors and business agility overlap. Table 1 provides a more detailed description of how the four quadrants in adaptive leadership and business agility are aligned.

Figure 1

Leadership and the Pillars of Business Agility



Note. Adapted from *The Practice of Adaptive Leadership: Tools and Tactics for Changing Your Organization and the World*, by R. A. Heifetz, R. Heifetz, A. Grashow, and M. Linsky, 2009, Harvard Business Press and from *Business Agility and Information Technology in Service Organizations*, by M. van Oosterhout, 2010, Scholars' Press.

Transformational Leadership and Adaptive Leadership

Northouse (2021) drew connections between transformational and adaptive leadership by highlighting their shared emphasis on change and growth within organizations. According to Northouse, transformational leadership is a process in which leaders actively engage with their followers to elevate motivation and moral standards for both them and their followers. This leadership style, as initially conceptualized by J. M. Burns (1978), is characterized by the ability to inspire and motivate followers to achieve more than they thought possible by fostering an environment of intellectual stimulation, individualized consideration, inspirational motivation, and idealized influence (J. M. Burns, 1978; Northouse, 2021).

Adaptive leadership is a framework developed by Heifetz (1994) that focuses on how leaders help people adapt to change and face challenges. Northouse (2021) explained that adaptive leadership is about the leader's ability to mobilize people to tackle tough challenges and thrive in complex, changing environments. This approach highlights the importance of diagnosing the system, managing distress, sustaining disciplined focus, empowering individuals to take ownership of the work, and protecting emerging voices of leadership within the organization (Heifetz & Linsky, 2002).

Both transformational and adaptive leadership theories recognize the necessity for leaders to address and manage change. However, although transformational leadership tends to focus on the relationship between leaders and followers to achieve higher levels of performance and commitment (J. M. Burns, 1978), adaptive leadership is more concerned with the processes and strategies leaders use to enable individuals and organizations to adapt and thrive amidst uncertainty and complexity (Anderson & Ackerman Anderson, 2010; Northouse, 2021).

VUCA

A growing body of research has described the modern environment as VUCA, representing volatility, uncertainty, complexity, and ambiguity (Abidi & Joshi, 2015; Kail, 2010a, 2010b, 2010c, 2011). Originally introduced by the U.S. Army War College in 1991 (Barbe, 1992), the term VUCA gained widespread use after the September 11, 2001, attacks and became even more prominent following the financial crisis in 2007 and 2008. It is frequently cited in current academic literature focused on advancing effective leadership (Horney & O'Shea, 2015). Practitioners argue that many traditional models are inadequate for addressing the complexities of VUCA environments. As Senge (2006)

noted, these models often “reinforce a focus on short-term events and charismatic heroes, rather than systemic forces” (p. 768).

Typical scenarios of VUCA, for example, in which business agility is necessary to adapt, include such phenomena as AI for tech companies and the global economic impact of the stock market collapse following the September 11, 2001, attack. A description of some of these systemic forces in tech companies includes the following (Biloslavo et al.,2024):

Volatility

Biloslavo et al. (2024) described volatility as the challenge of implementing AI-driven solutions to improve business operations. The core difficulty lies in the rapid evolution of AI technologies and tools, which necessitates that companies continually update their AI models and tools to maintain a competitive edge.

Uncertainty

Biloslavo et al. (2024) described uncertainty as a key issue regarding AI’s influence on business processes and outcomes. The difficulty in predicting the return on investment and the effectiveness of AI solutions stems from their complexity and constant evolution. To navigate this, companies must carry out comprehensive feasibility studies, initiate pilot programs, and remain flexible in their implementation strategies, allowing them to adapt as new data and insights become available.

Complexity

Biloslavo et al. (2024) described complexity as integrating AI solutions with existing business systems and processes. The challenge lies in achieving a seamless integration of AI technologies while ensuring interoperability across diverse platforms.

Ambiguity

Biloslavo et al. (2024) described ambiguity in the challenge surrounding regulations and ethical considerations for AI deployment. Companies must navigate an uncertain regulatory environment and address ethical issues, which necessitates staying informed about evolving regulations and consulting with legal and ethical experts to develop responsible and compliant AI policies.

Statement of the Research Problem

There is a lack of scholarly research on the leadership adaptability behaviors that *CXOs* use to achieve successful business agility in turbulent and uncertain times. *CXO* is a generic term for any chief officer position within an organization, in which *X* can stand for various functional titles. This gap in the literature presents a significant opportunity to expand the body of knowledge with groundbreaking work that can help leaders understand the strategic behavior that influence the success of business agility initiatives in *VUCA* environments (Senge, 2006). By addressing this research gap, this study aimed to provide valuable insights and practical frameworks that *CXOs* can employ to navigate and thrive in rapidly changing business landscapes.

In the current *VUCA* environment, it is not a question of whether the next big disruption will happen but more a matter of when it will occur. Hence, organizations require leaders who can not only survive disruptions but also seize opportunities to promote efficiency and effectiveness. Practitioners have argued that many historical conceptual and empirical models fall short of addressing the challenges posed by *VUCA* leadership (Linsky & Lawrence, 2011).

Although scholars have studied various leadership styles and behaviors for 70 years, it has become increasingly evident that a single style is ineffective in overcoming today's challenges (Northouse, 2021). Hiller and Beauchesne (2014) raised essential questions about whether certain executive leadership behaviors can be cultivated or readily learned by aligning them with technological strategies in the process of digital transformation. Moreover, if indeed, business agility as a framework embraces digital transformation (Highsmith, 2013), to what extent does it enable adaptive leaders in their transformation journey?

This study investigated whether agility and adaptive leadership behaviors share a symbiotic relationship, in which adaptive leadership provides the leadership approach and tools necessary to foster and enhance an organization's business agility. Although business leaders acknowledge that business agility and adaptive leadership influence each other, the literature review in Chapter II reveals a dearth of research on how the characteristics of the two intersect.

Purpose Statement

The purpose of this Delphi study was to identify the strategic leadership behaviors, as outlined in Heifetz et al.'s (2009) adaptive leadership framework, that CXOs use to develop agile and adaptive organizations that succeed in VUCA change environments. The second purpose of this Delphi study was to rate the degree of effectiveness of strategic leadership behaviors, as outlined in Heifetz et al.'s adaptive leadership framework, that CXOs use to develop agile and adaptive organizations that succeed in VUCA change environments. Finally, the third purpose of this study was to identify actions CXOs who use the behaviors from Heifetz et al.'s adaptive leadership

framework recommend to develop agile and adaptive organizations in VUCA change environments.

Research Questions

1. What strategic leadership behaviors from Heifetz et al.'s (2009) adaptive leadership framework do CXOs use to develop agile and adaptive organizations that succeed in VUCA change environments?
2. How do CXOs rate the effectiveness of strategic leadership behaviors from Heifetz et al.'s (2009) adaptive leadership framework in developing agile and adaptive organizations that succeed in VUCA change environments?
3. What actions do CXOs who use the behaviors from Heifetz et al.'s (2009) adaptive leadership framework recommend to develop agile and adaptive organizations in VUCA change environments?

Significance of the Study

Although numerous scholars have highlighted the significance of adaptive leadership in driving business agility within organizations, there remains a gap in the empirical understanding of what constitutes adaptive leadership and the behaviors linked to adaptive leaders' success (Church et al., 2017). According to Church et al. (2017), this lack of clarity hinders the development of necessary behaviors for effective adaptive leadership. Consequently, there is a critical need for research that delineates the behaviors essential for adaptive leadership, as suggested by various studies (Castillo & Trinh, 2019).

In this study, adaptive leadership has not been extensively examined in terms of executive leadership roles, such as what CXOs of tech companies might do to

demonstrate adaptiveness. Several scholars have argued that CXOs are crucial in fostering an organizational culture of agility, resilience, and continuous learning to successfully navigate the challenges a VUCA environment poses (Wiggins, 2024). However, these discussions often fall short of offering practical strategic behaviors that leaders can adopt to enhance their effectiveness and drive their organizations toward business agility.

This study aimed to bridge this gap by elucidating how adaptive leadership can positively impact an organization's success during its transition toward business agility. By doing so, the study aimed to contribute valuable insights to at least three distinct sectors within an organization, including (a) leaders, (b) organizations, and (c) human Resources and leadership development departments, thereby fostering a mutually beneficial relationship between adaptive leadership and the transformation process toward business agility.

Definitions

Theoretical Definitions

A theoretical definition explains the meaning of a term as a construct within a theoretical context (Roberts & Hyatt, 2019). These definitions were formulated using insights from existing research studies and publications, which helps to establish a foundation for understanding the constructs being studied.

Adaptive challenge. Unlike well-defined technical challenges with known solutions, adaptive challenges are complex, not fully understood, and lack clear solutions (Heifetz, 1994).

Adaptive leadership. According to Heifetz et al. (2009), “Adaptive leadership is the practice of mobilizing people to tackle tough challenges and thrive” (p. 14).

Transformational leadership. Transformational leadership is a style in which leaders inspire and motivate their followers to prioritize the organization’s goals over personal interests and strive for exceptional achievements (Bass, 1990).

Operational Definitions

Operational definitions specify the key terms of a study by detailing how the researcher has chosen to measure each concept. These definitions were tailored to the study’s purpose, ensuring that the variables’ logic, ideas, and perspectives are clearly conveyed (Roberts & Hyatt, 2019).

Artificial intelligence. Artificial intelligence (AI) encompasses the development and application of systems that simulate human cognitive functions in machines. AI enables machines to process information, adapt to new data, and perform tasks in ways similar to human intelligence.

Chief executive officer. A chief executive officer, commonly known simply as a CEO, is the highest-ranking executive and primary decision maker of any given company. The company’s major decisions, overall management, and administration lie within the responsibility of the CEO.

Chief information officer. The chief information officer, or CIO, is a senior position that concerns the development of an IT strategy and computer systems necessary to support unique organizational objectives and goals. The CIO’s primary role involves overseeing the development and implementation of IT initiatives that align with the

company's business strategies, ensuring the organization remains competitive and efficient.

CXO. CXO is a generic term for any chief officer position within an organization, where in which X can stand for various functional titles. Common CXO roles include CEO, CFO, chief operating officer (COO), CIO, chief technology officer (CTO), chief marketing officer (CMO), chief human resources officer (CHRO), and chief information security officer (CISO).

Flexible production. Flexible production concept refers to a manufacturing system or strategy that is designed to adapt quickly and efficiently to changes in product type, production volume, and process requirements.

Lean. Lean is a production methodology and is centered on maximizing value for the customer while minimizing waste.

Senior vice president. SVP stands for senior vice president. An SVP is a high-ranking executive within an organization, typically just below the level of an executive vice president and CEO. The SVP plays a critical role in the management team and is often responsible for overseeing one or more key functions or divisions within the company.

Top executive. A top executive is the senior manager of an organization responsible for major corporate decisions, overall operations, and the determination of company general direction. These include CEOs, COOs, CFOs, vice presidents, and directors, who are accountable to the board of directors and shareholders for the organization's performance and long-term success.

Volatility, uncertainty, complexity, and ambiguity. VUCA stands for volatility, uncertainty, complexity, and ambiguity and originated in the U.S. military when the multilateral world faced after the Cold War (Bennett & Lemoine, 2014). It describes the challenging conditions and dynamics organizations face in the contemporary business environment.

Delimitations

The delimitation of this study was that it focused on top tech executives who operate in California. The participants consisted of 20 executives, including both males and females, from California and do not include the entire population of these top tech executives. Most of these executives represent tech companies and/or organizations with a workforce of approximately 1,000 employees; therefore, organizations with fewer or greater than these employees were not a part of this research.

Organization of the Study

This research study is organized into five chapters, references, and appendices. Chapter I introduced the topics of adaptability and business agility, establishing a theoretical framework for these concepts. It also outlined the research problem, purpose statement, and research questions. Chapter II provides a detailed literature review that expands on Chapter I's foundation. It examines key authors and influential works in adaptive leadership theory, particularly the foundational contributions of Heifetz and Linsky (2017) and recent insights and trends in adaptive leadership and business agility. Chapter III explains the Delphi methodology and the mixed-method data collection process used in this study. Chapter IV presents the data collected from surveys and interviews, focusing on significant findings through an analysis of emerging themes.

Finally, Chapter V synthesizes the study's findings, offers conclusions, discusses practical implications, and provides recommendations for future research.

CHAPTER II: REVIEW OF THE LITERATURE

Chapter II presents a comprehensive overview of relevant literature, offering context and background essential to this study. This study sought to identify the strategic leadership behaviors, as outlined in Heifetz et al.'s (2009) adaptive leadership framework, that CXOs use to develop agile and adaptive organizations that succeed in VUCA change environments. Additionally, this study sought to identify actions of CXOs who use the behaviors from Heifetz et al.'s adaptive leadership framework recommended to develop agile and adaptive organizations in VUCA change environments. To support the analysis for this chapter's literature review, the researcher created and used a synthesis matrix (see Appendix A).

This chapter is divided into two main sections—the first provides a historical background and context for the scholarly study of tech companies and leadership, and the second focuses on key theoretical foundations. These foundations encompass transformational, situational, and adaptive leadership, offering a comprehensive framework for understanding adaptive leadership and examining each aspect of adaptive leadership behavior as outlined by Heifetz et al. (2009).

Thriving in VUCA World: Essential Leadership Skills for Tech Executives

In today's VUCA environment, as highlighted by Friedman et al. (2016), even the most capable leaders face challenges as their skills rapidly become outdated alongside the swift changes in their organizations. Friedman et al. argued that to thrive in this unpredictable landscape, leadership agility and adaptability have become essential. According to Horney and O'Shea (2015), successful leaders must continually adapt their

approach to people, processes, technology, and structures, demonstrating flexibility and swift decision making.

A. Taylor et al. (2012) underscored the need for organizations to evolve their business models and leadership skills to become adaptive firms. These firms—such as Apple, Google, 3M, Target, and Amazon—are characterized by their ability to adjust and learn faster, more efficiently, and more economically than their competitors.

Petrie (2011) also underscored that today's VUCA business landscape requires leaders who possess complex and adaptive thinking skills. These insights are crucial for human resources and talent management professionals who aim to prepare their organizations for success in a turbulent environment by cultivating agile leaders (Sullivan, 2012). Sullivan (2012) proposed that using the VUCA model as a foundation for reshaping leadership development strategies can help human resources and talent professionals more effectively identify and develop the leaders their organizations need now and for the future.

Background of Study on Leadership

Leadership is frequently described as a process in which a leader influences followers through traits, actions, values, and beliefs (Bass, 2008). This literature review offers an overview of key leadership theories to contextualize adaptive leadership and clarify its role within the broader landscape of leadership models.

After considering multiple leadership theories as potential frameworks for this research, the researcher selected adaptive leadership as the primary focus. Adaptive leadership is particularly effective in mobilizing people to navigate and overcome challenging situations, leading to success (Heifetz, 1994). It emphasizes the importance

of adapting to change, allowing organizations to thrive in dynamic environments. In this study, adaptive leadership, along with its key components and elements, serves as the framework for evaluating leadership behavior to achieve successful business agility within tech companies.

Transformational Leadership

The concept of transformational leadership was first introduced by J. M. Burns in 1978. Since then, it has become a leading leadership model that has inspired extensive research (Northouse, 2021). Transformational leadership emphasizes the leader's ability to understand and adapt to the needs and motivations of their followers. This leadership style involves transforming followers by focusing on their internal motivation and development. Transformational leaders inspire followers to exceed their personal expectations by empowering them to achieve high standards. They do this by demonstrating and modeling behaviors that others can emulate (Bass & Riggio, 2006). This empowerment enables followers to exceed expected performance and experience increased satisfaction. Bass and Riggio (2006) further suggested that transformational leadership fundamentally involves aligning followers' individual goals with the broader objectives of the leader and organization, thereby fostering transformation and change.

Situational Leadership

Situational leadership was developed by Paul Hersey and his colleagues (Hersey, 1985). This leadership model is grounded in the idea that no single leadership style is universally effective. Instead, leaders must adapt their approach to best suit the specific leadership challenge at hand (Bass, 2008). A leader's effectiveness is not defined by the ability to apply a single style universally but rather by the capacity to balance and

prioritize interactions based on the appropriate combination of task and relationship behaviors needed by their followers. Bass (2008) argued that leadership is most effective when leaders accurately assess the developmental level of their subordinates in each context and then adopt a style that aligns with the needs of both the situation and the followers.

Adaptive Leadership

Adaptive leadership centers on the capacity to mobilize teams and organizations to respond effectively to complex challenges and evolving environments (Heifetz et al., 2009). Although early research in this area began with Levinthal and March (1981), Heifetz is widely regarded as a seminal figure in developing this field. Adaptive leadership stands apart from other leadership theories by prioritizing the creation of organizations that are adaptable, resilient, and skilled in proactive problem solving amid constant change.

Although adaptive leadership is relatively new, it has gained increasing attention from researchers. DeRue et al. (2011) found that behavior-based leadership theories, including adaptive leadership, show stronger connections to positive leadership outcomes than trait-based theories. Although DeRue et al.'s study did not focus solely on adaptive leadership, it laid essential groundwork for understanding its effectiveness. Furthermore, Walker and McGraw (2017) provided more targeted research, demonstrating that adaptive leadership positively impacts employee well-being, which in turn suggests beneficial outcomes for organizations.

Despite the growing body of literature highlighting the organizational advantages of adaptive leadership, these findings are not without limitations. Bergman and Scully-

Russ (2018) examined the drawbacks of adaptive leadership, particularly in relation to follower characteristics that have been overlooked in other studies. They argued that although adaptive leadership presents evident benefits, there is not yet enough evidence to confirm its universal effectiveness, especially in cases when followers might resist or feel unprepared for change.

Northouse (2021) identified several weaknesses in adaptive leadership. First, he noted that despite the conceptual framework being introduced over 20 years ago by Heifetz's (1994), little empirical research has been conducted to validate the claims of adaptive leadership theory. Although some preliminary research has recently surfaced, Northouse suggested that the principles of the model should still be approached with caution. Secondly, he argued that the concept of adaptive leadership needs further refinement because the key factors and their interrelationships within the adaptive process remain unclear. Third, Northouse criticized the approach for being too broad and abstract, with wide-ranging prescriptions that often lack specificity, making them difficult to implement or analyze. This vagueness can lead to varied interpretations by leaders, potentially straying from the original intent. In addition, adaptive leadership may create discomfort among followers because of its emphasis on conflict, and the theory does not adequately address how to ensure a safe environment for open dialogue (Nelson & Squires, 2017). Last, Northouse explained that although the framework suggests a moral dimension, it fails to clearly explain how adaptive work leads to socially beneficial outcomes such as equality and justice.

However, there is considerable evidence regarding the role of adaptive leadership in promoting team resilience, which leads to improved organizational outcomes and

effective change management (DeRue et al., 2011). The literature has also emphasized the importance of adaptive leadership behaviors during periods of change and crisis. Owens and Valesky (2014) noted that leadership strategies should account for the degree of change or stability within the environment. It means that the concept of adaptive leadership is most relevant to business agility. The development of an understanding of major components of adaptive leadership's theoretical framework needs further explication.

Additional Applications of Adaptive Leadership

Bronznick et al. (2008) applied the adaptive leadership framework to promote women in Jewish organizational life. They did this by modeling the behaviors, setting examples, using case studies, and providing a usable framework for the reader. According to Bradberry and Greaves (2012), adaptive leadership is a “distinct combination of skills, perspective and guided effort that makes true excellence possible” (p. 32). They also identified various elements of adaptive leadership, which included emotional intelligence, organizational justice, character, and development. Ford (2008) examined how adaptive leadership is used to expand and grow church organizations, using stakeholders to assist the church in enhancing its processes and functions when times are hard. Kaminsky (2012) studied the applicability of Heifetz et al.'s (2009) adaptive leadership theory regarding investigating the leadership practices of IT project managers, considering nontechnical leadership practices by the IT project manager.

Adaptive Leadership Theory

The adaptive leadership theory, still in its developmental stages, has often been viewed as contradictory to traditional leadership theories by many researchers (Allio,

2013; Latham, 2014). Rooted in evolutionary biology and evolutionary theory, this framework was largely shaped by the work of Heifetz and his colleagues (Heifetz, 1994). From the outset, Heifetz (1994) sought to create a distinct approach to leadership. Unlike traditional views that cast the leader as a problem-solving figurehead, they envisioned the leader as someone who mobilizes others to confront difficult challenges.

According to Heifetz et al. (2009), adaptive leadership is the practice of mobilizing people to tackle tough challenges and thrive. This approach encourages leaders to challenge their followers to face complex issues, providing them with the opportunity to learn new ways of addressing the inevitable changes in assumptions, perceptions, beliefs, attitudes, and behaviors (Northouse, 2021). Northouse (2009) and Heifetz agreed that the adaptive leaders are mainly involved in activities aimed at mobilizing, motivating, organizing, orienting, and focusing the attention of the other individuals. This style of leadership also renegotiates a way for one to explore and transform their values so that, ultimately, the growth and resilience in response to change are allowed.

Adaptive leadership is fundamentally different from traditional leadership theories, which typically prescribe specific behaviors, traits, and attributes linked to a single theoretical model (Allio, 2013). In contrast, adaptive leadership advocates for a flexible approach, in which leaders must adapt to changing situations by employing a combination of behaviors and attributes drawn from multiple traditional leadership theories. Although traditional leadership theories, such as transactional and transformational leadership, have dominated the field for decades, adaptive leadership recognizes the need to go beyond the limitations of any single theory (Heifetz, 1994).

Traditional theories often impose rigid practices with little room for deviation, as exemplified by the great man theory, which suggests that only certain individuals are born leaders (Northouse, 2021). Adaptive leadership, on the other hand, posits that anyone, regardless of background, can become a leader (Allio, 2013). The transactional model of leadership is becoming outdated as modern followers seek leaders who view them as active participants in organizational planning and outcomes (Bligh, 2017). Torres and Reeves (2014) argued that leaders who adhere to traditional leadership practices are less successful because they fail to anticipate the needs and input of their followers and lack the confidence and adaptability required in today's environment. Adaptive leaders, therefore, must understand and address the diverse needs, perceptions, skills, and approaches of their followers (Bligh, 2017).

The increasing complexity, transparency, and involvement of educated followers have rendered traditional leadership practices less effective (Apenko & Chernobaeva, 2016). Adaptive leadership practitioners do not rely on traditional routines but instead develop their own methods and behaviors to adapt quickly, ensuring continual operational efficiency and follower engagement (Brothers & Schnurman-Crook, 2015; Zimmerly, 2016). Trivellas and Santouridis (2009) identified that adaptive leadership presupposes the ability of the leader to be able to cause transformative change—unprecedented change—through more innovative ways of looking at and thereby solving the problem created by the reality of their status quo. This is a suggestion that the adaptive leader can deal with and lead within increasingly complex environments.

Heifetz and Linsky (2017) suggested that adaptive leadership is built on leadership as process, not as person. Adaptive leadership embraces complexity and

ambiguity, fostering innovative solutions through effective organizational leadership, creative problem solving, experimentation, and collaboration (Kezar & Holcombe, 2017). Kezar and Holcombe (2017) argued that adaptive leaders and their followers concentrate on the specific problems at hand, working together to refine their approach to finding solutions. This process involves rethinking and adjusting how problems are addressed. Therefore, leaders who apply adaptive leadership principles go beyond merely solving issues—they anticipate potential problems, identify root causes, and develop the skills necessary to make informed decisions about which risks are worth taking (Choflet et al., 2021). This approach enables them to cultivate the essential adaptive skills needed to ensure effective leadership within their organizations. Moreover, adaptive leaders focus on making key decisions with reflective and rational thinking (Grissom & Condon, 2021).

Northouse (2021) explained how the process of adaptive leadership brings together insights from four perspectives, namely systems, biological perspective, service orientation, and psychotherapy. First, is the systems perspective—beautifully described by adaptive leadership—that most problems can be understood to be stuck in complex interactive systems. The problems are multifaceted and dynamic, interrelating with others within a web of relationships. The biological perspective is that people evolve to adapt to internal cues and external environments for survival under new circumstances. Adaptive leadership embeds the service orientation whereby leaders, like physicians, use their expertise to diagnose problems and then prescribe potential solutions to serve their people. Finally, the psychotherapy perspective used here explains how individuals

accomplish adaptive work in guiding their mindset through the process of addressing and resolving challenges.

Adaptive Mindset

Ehrlichman (2021) emphasized that organizations today need an adaptive mindset capable of embracing complexity and collaborating effectively across diverse stakeholder systems to address modern challenges. This adaptive mindset is inherently experimental, enabling the person at the level of execution to confidently navigate through complexity (Heifetz et al., 2009). Heifetz et al. (2009) argued this is based on ability to adapt to evolving circumstances and being prepared to adjust as those circumstances continue to evolve. This allows individuals to confidently make decisions and still open themselves up to the likelihood that such decisions may have to be reviewed.

Heifetz et al. (2009) argued that one of the biggest failures of leaders is that they cannot distinguish technical from adaptive problems. Technical challenges are issues that have apparently defined solutions and, hence, can be addressed through known procedures and competencies. Adaptive challenges are more complicated and involve changes in values, beliefs, and habits. Leaders are supposed to rise to the challenge of adapting to these changes by getting people to accept new realities and change.

It is crucial for leaders to make a distinction between these two types of challenge because they vary regarding approaches to the way the leader leads. Although technical problems may be effectively addressed through authoritative decision making, adaptive challenges require a more collaborative leadership approach that engages people in decision making aligned with shared values, beliefs, and behaviors that advance organizational goals. Heifetz et al. (2009) explained that adaptive leadership involves

recognizing when to apply technical solutions and when adaptive strategies are more appropriate.

Adaptive leaders are also attuned to the impact of emotions on any given situation and the tasks at hand (Heifetz et al., 2009). Heifetz et al. (2009) suggested that leaders with an adaptive mindset are careful to manage their own emotions, especially in times of crisis or conflict. By raising the temperature in an organization just enough to drive employees toward peak performance without causing overwhelm, an adaptive leader ensures that people understand expectations.

Emotional Intelligence

Emotional intelligence—the ability to monitor and manage one’s emotions—significantly influences how leaders execute tasks and interact with others (Bradberry & Greaves, 2012). Bradberry and Greaves (2012) explained that people often respond to change emotionally, with varying levels of acceptance. Leaders with strong emotional intelligence understand how their own emotions can impact their leadership style and influence others (Northouse, 2021). Both Heifetz et al. (2009) and Northouse (2021) highlighted that social competence, which includes communication and conflict management skills, equips leaders to guide adaptive change effectively. During such change, both leaders and followers must manage their thoughts and emotions, skillfully balancing competing ideas as they move through transitions.

Adaptive leaders recognize that adaptive change is inherently complex and often requires the ability to consider conflicting ideas at once (Heifetz et al., 2009). This dual focus creates a manageable level of tension, which adaptive leaders carefully monitor. They provide direction while pacing the rate of change to ensure that the tension remains

productive, avoiding excessive stress within the organization. Social-emotional intelligence helps leaders prioritize effectively, both for themselves and the organization, aligning focus with organizational goals (Northouse, 2021).

The adaptive leadership approach acknowledges that adaptive work transcends traditional hierarchical leader-follower dynamics. It encourages leaders to connect with organizational networks and engage with individuals according to their interest and commitment to adaptive work (Ehrlichman, 2021). This mindset is becoming increasingly essential as leaders encounter more complex organizational challenges (Arthur-Mensah & Zimmerman, 2017).

Heifetz Adaptive Leadership Theoretical Framework

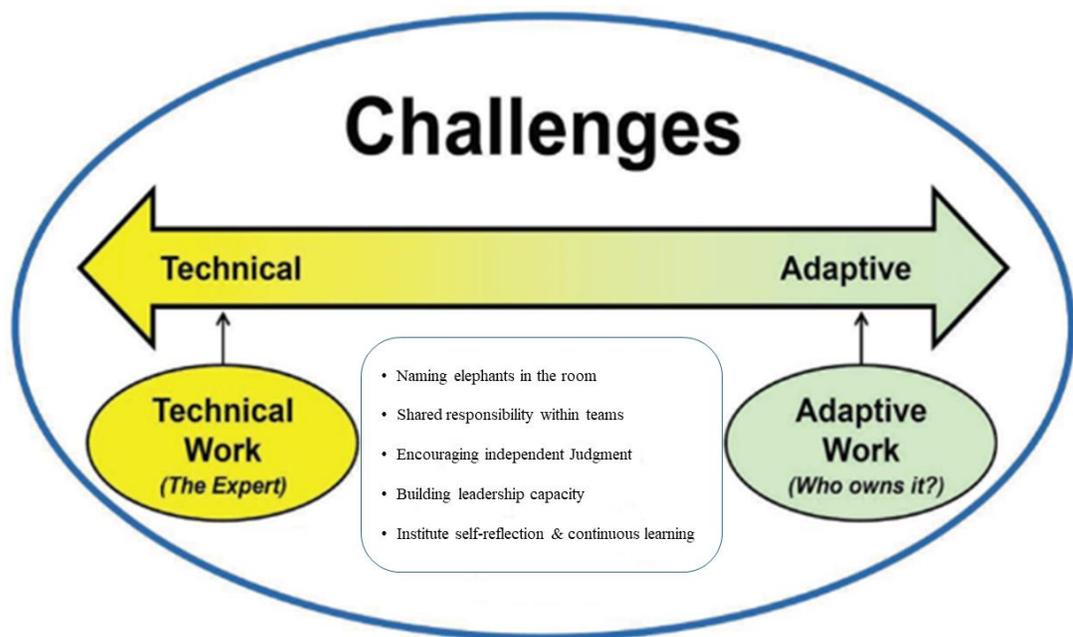
The adaptive leadership framework categorizes challenges organizations encounter during change into two types: technical and adaptive challenges (Heifetz et al., 2009). Heifetz et al. (2009) explained that technical challenges can be resolved through expert knowledge, and adaptive challenges are more complex and require fresh learning and approaches. Unlike traditional leadership, adaptive leadership recognizes that leaders do not need to have all the answers; instead, it emphasizes that true transformation occurs through adaptation and collaborative learning.

Heifetz et al.'s (2009) adaptive leadership framework emphasizes the following five adaptive behaviors: addressing constructive conflicts, often referred to as naming the elephants in the room; fostering shared responsibility among teams; encouraging independent thinking; building leadership capacity; and embedding self-reflection and continuous learning in the institution. Thought leaders and empirical researchers assert the importance of these behaviors because of their beneficial impact on organizational

performance, as reiterated in the works of Lencioni (2012), Schein (2010), and Senge (2010). Figure 2 illustrates the conceptualization of the Heifetz theoretical framework.

Figure 2

The Heifetz Theoretical Framework



Note. Adapted from *The Practice of Adaptive Leadership: Tools and Tactics for Changing Your Organization and the World*, by R. A. Heifetz, R. Heifetz, A. Grashow, and M. Linsky, 2009, Harvard Business Press.

Naming Elephants in the Room

Heifetz et al. (2009) defined naming elephants in the room as the ability to openly discuss conflicts or taboo issues within a psychologically safe environment. This behavior fosters transparency and challenges assumptions, both essential qualities of an adaptive organization. Ryan and Oestreich (1998) referred to this practice as “discussing the undiscussables,” aiming to foster trust and enhance organizational performance (p. 45). Adaptive leaders and organizations take a proactive approach in addressing issues openly, avoiding the tendency to sidestep these matters publicly. Adaptive leaders must

ensure that employees who participate in these discussions are shielded from negative consequences, creating a culture in which concerns can be voiced freely, helping identify and address potential crises swiftly (Heifetz et al., 2009).

Elgoibar et al. (2016) referred to naming elephants in the room as constructive conflict management. Beyond creating safe spaces, adaptive leaders should use constructive controversy to promote functional confrontation as a pathway to organizational success (Schlaerth et al., 2013). Schlaerth et al. (2013) contended that effective conflict management depends on essential qualities such as emotional intelligence, collaboration, communication, and fostering psychological safety at all levels. Emotional intelligence is crucial for managing constructive conflict and is positively linked to adaptive performance (Chen et al., 2019).

The empirical value of addressing elephants in the room is well-supported by studies showing that employees who can bring up sensitive topics without fear of harming relationships contribute valuable insights, which support both tactical and organizational goals (Blackmore & Sachs, 2007). Blackmore and Sachs (2007) argued that creating a psychologically safe environment encourages open dialogue, bringing critical issues into focus and advancing organizational learning. Conversely, when employees fear retaliation, silence can prevail, undermining morale and engagement.

Research underscores the negative consequences when leaders neglect this adaptive principle. Baker (2004) and Klonsky (2010) discussed how avoiding undiscussables can harm employee engagement, retention, and leader confidence. Similarly, Chen et al. (2009) highlighted the detrimental effects on employee engagement when challenging ethical issues remain unaddressed. Although these studies relied on

relatively small samples, their findings suggest broader implications for fostering an adaptive organizational culture and sustaining improvement during change.

Shared Responsibility

Among the main behaviors of the adaptive leader is binding shared responsibility throughout the whole organization, directly supporting the core of team mobilization (Heifetz et al., 2009). This behavior will have every individual look beyond their assigned roles, actively engage in problem solving, and work together on enhancing initiatives or products. According to Heifetz et al. (2009), this behavior is particularly beneficial in organizations with diverse stakeholders, in which decision makers may not always be aware of all available options and their consequences. By incorporating multiple perspectives, organizations can navigate the complex nature of modern challenges and ensure decisions are ethically sound.

Shared responsibility within organizations offers numerous benefits, such as enhanced flexibility and adaptability, greater learning and development opportunities, higher employee engagement, strengthened accountability, and improved collaboration. Edmondson (2013) described shared responsibility as a form of collective accountability, where each team member is invested in the project's outcome. This shared accountability fosters collaboration, encourages knowledge sharing, and enables teams to adapt more quickly to evolving circumstances, thereby contributing to effective organizational leadership.

Empirical studies have illustrated the impacts of shared responsibility on organizational performance (Heifetz et al., 2009). One of the first studies to show that shared responsibility among team members leads to better operational outcomes than

traditional hierarchical structures was by Doorewaard et al. (2002). They found that clear objectives, roles, and responsibilities promote shared accountability and cooperation within teams.

Although Doorewaard et al.'s (2002) older study provided a foundational empirical basis for the importance of shared responsibility in achieving positive organizational outcomes, more recent research has expanded on its significance. Zhang et al. (2020) explored shared responsibility within virtual teams and found, consistent with Doorewaard et al. (2002), that shared responsibility enhances team cohesion and trust, even in remote settings. This cohesion facilitates effective knowledge sharing, which in turn improves team performance and overall organizational success.

Encouraging Independent Judgment

According to Heifetz et al. (2009), encouraging independent judgment is a core behavior in adaptive leadership. Heifetz et al. argued that adaptive leadership should prioritize empowering individuals to think critically, make informed decisions, and take ownership of their work based on personal insights, expertise, and values. When organizations cultivate this approach, teams engage in meaningful discussions, challenge limiting norms, and question underlying assumptions (Lencioni, 2012). By shifting away from a purely hierarchical decision-making model, adaptive organizations can integrate diverse perspectives into problem solving and encourage collective participation in crafting optimal solutions.

Encouraging independent judgment offers numerous benefits, including enhanced innovation, greater employee engagement and ownership, increased agility, and leadership capacity development (Edmondson, 2013). Pink (2011) echoed this by

asserting that autonomy strengthens intrinsic motivation, fueling both individual and organizational success. Senge (2010) further noted that fostering independent judgment builds a productive learning culture essential for organizational growth. Edmondson (2013) emphasized that independent thinking thrives in environments with genuine psychological safety. Ultimately, high employee morale and strong learning cultures contribute to positive organizational outcomes, making independent judgment a crucial element of effective organizational leadership (Senge, 2010).

Building Leadership Capacity

Another essential behavior in adaptive leadership, as outlined by Heifetz et al. (2009), is fostering leadership capacity across the organization. Heifetz et al. argued that this involves a structured approach where competencies and resources are expanded, while actively motivating individuals and groups to enhance their leadership potential proactively. Developing leadership capacity, he emphasized, requires a strategic, long-term focus from those invested in the organization's future. Sharratt and Fullan (2009) echoed this view, stressing that effective leadership should not rest on a single individual but should be shared throughout the organization, making capacity-building a deliberate effort to foster collective ownership.

Heifetz et al. (2009) further noted that organizations committed to developing leadership capacity aim to empower their people. Planned activities, such as mentorship, targeted leadership development, and job shadowing, maximize intellectual capital, boost productivity, and improve services (Fullan et al., 2015). Dimmock (2011) highlighted that increasing leadership capacity enhances the effective use of intellectual and social capital, adding value through innovation, continual learning, and improved market

performance (Bhatti et al., 2014). Moreover, investing in leadership capacity has been shown to attract and retain top talent, a critical factor for organizational success (Collins & Holton, 2004; Maxwell, 2022).

Empirical research has supported the advantages of building leadership capacity, especially during periods of change. Weiss and Molinaro (2010) found that strengthening leadership capacity in complex environments positively impacts change management. Similarly, Tomblin Murphy et al. (2022) showed that a well-implemented leadership development program at all organizational levels improved productivity and enhanced services, even within a medical clinic setting.

Institutionalization of Reflection and Continuous Learning

Heifetz et al. (2009) described institutionalizing reflection and continuous learning as establishing a culture that supports the safe exploration of innovative ideas, and the sharing of insights gained from both individual and organizational perspectives. This approach seeks to create a sustainable learning environment that encourages challenging established mental models at every organizational level (Cojocar, 2009). Dewey (1910/1997) introduced reflection as a systematic approach to organizing ideas to reach well-reasoned conclusions that should be continually revisited to inform decision making. Schön expanded on this in 1982 by introducing reflection-in-action, which happens during active situations, and reflection-on-action, which occurs afterward and emphasizes experiential learning. Dewey and Schön both underscored the importance of action-based knowledge for professional growth, laying the foundation for experience-based learning crucial to leadership development. Building on this, Argyris (2006) presented the concept of double-loop learning, whereby reflection challenges

assumptions and mental models, emphasizing introspection as essential for both personal and organizational growth.

Dilworth (1996) further highlighted the need for continuous learning at both individual and organizational levels, setting the stage for modern studies on organizational improvement. Later, Senge (2010) introduced the concept of the learning organization, which focuses on ongoing capacity development and adaptive thinking.

Similarly, Heifetz (2008) emphasized institutionalized reflection through the metaphor of getting on the balcony, which involves stepping back from routine tasks to gain a broader perspective. This reflective distance allows leaders to discern patterns and dynamics that may hinder progress, supporting better strategic decision making.

Dweck (2006) explored the impact of mindset on achievement, distinguishing between growth and fixed mindsets. Individuals with a growth mindset view abilities as developable through effort and learning, embracing challenges and viewing setbacks as opportunities for growth, which significantly enhances both personal and professional success.

Research has strongly supported the benefits of reflection and continuous learning. Quansah (2019) found that successful companies use reflective practices to make informed decisions, which contribute to organizational success. His study on adaptive leadership in small- and medium-sized businesses during change emphasized the importance of continual reflection as an assessment of both successes and challenges within business operations.

Similarly, Roth (2022) studied adaptive crisis management during uncertain times, affirming Quansah's (2019) findings by demonstrating how responses informed by

previous crisis experience led to successful business navigation. Table 2 outlines five adaptive leadership behaviors from Heifetz et al. (2009) and their alignment with other adaptive leadership principles and empirical success outcomes.

Table 2

Five Adaptive Leadership Behaviors, Their Alignment With Other Theories, and Empirical Success

Adaptive leadership behavior (Heifetz et al., 2009)	Alignment with adaptive leadership	Empirical success results
Naming the elephants in the room	Creates psychological safety, promotes transparency, and challenges assumptions.	Resolves hidden conflicts, enhances team alignment, and drives effective adaptive leadership outcomes.
Sharing responsibilities	Empowers individuals, fosters collaboration, and distributes decision making to address complex challenges effectively	Increases team engagement, drives problem solving, enhances learning and development, promotes greater accountability, and improves collaboration.
Encouraging independent judgment	Fosters critical thinking, empowers individuals to think critically to make decisions, and increases innovations	Enhances creativity, builds confidence, and improves employee morale.
Building leadership capacity	Intentionally motivate individuals to enhance their leadership capacity, and create collective ownership culture	Build leadership capacity through mentorship, training, and shadowing to achieve higher intellectual capital and attract, retain top talent.
Institutionalization of reflection and continuous learning	Introduce the concept of reflection and establish sustainable learning environment from reasoned conclusions.	Develop a "reflection-in-action" approach and implement post-action learning as a foundation for experiential learning, fostering a growth mindset within the organization.

Note. Adapted from *The Practice of Adaptive Leadership: Tools and Tactics for Changing Your Organization and the World*, by R. A. Heifetz, R. Heifetz, A. Grashow, and M. Linsky, 2009, Harvard Business Press.

Adaptive Leadership Framework From Other Scholars

A comprehensive understanding of the various dimensions of adaptive leadership highlights the crucial role of leadership in situations in which both the problem and solution are unclear, requiring participants to engage in cooperative experimentation to discover effective solutions (Drago-Severson et al., 2012). This process fosters a sense of empowerment and engagement among followers (Gill, 2002), which is essential in navigating the uncertainty and unpredictability inherent in organizational change. Northouse (2021) argued that although adaptive leadership is still in the early stages of theoretical development, the foundational writings on this approach have paved the way for the formulation of different theories by various authors.

One such theory, developed by Bligh (2017), seeks to enhance adaptive leadership by encouraging leaders to mobilize their followers. This approach promotes a collaborative problem-solving process where leaders and followers work together through a win-win strategy, learning, experimenting, and adapting new techniques to achieve constructive outcomes.

Highsmith's (2013) theory of adaptive leadership focuses on the following three key activities: (a) examining events and patterns within both personal and organizational contexts, (b) interpreting these observations to develop multiple theories about what is occurring, and (c) creating interventions based on these observations to address identified adaptive challenges. These components allow leaders to continually refine their understanding and responses through repeated cycles of observation, interpretation, and intervention. Highsmith argued that this process enables adaptive leaders to define problems more accurately and respond effectively.

Building on these ideas, Gilani and Kahn (2019) developed a theory of adaptive leadership with four key components: navigating the environment, leading with empathy, learning through self-correction and reflection, and creating win-win solutions. This theory suggests that leaders can better prepare for unpredictable environments by considering these dimensions. Adaptive leaders manage the context by fostering diverse perspectives, allowing leadership to emerge naturally, and questioning the status quo. Gilani and Kahn continued that leading with empathy involves seeing the world from others' perspectives, creating a shared sense of purpose, and rewarding accomplishments with autonomy. Through self-correction and reflection, adaptive leaders enable learning through experimentation, enhancing the organization's agility. Finally, Gilani and Kahn argued that by creating win-win solutions, adaptive leaders build platforms for cooperation and capitalize on them.

Arthur-Mensah and Zimmerman (2017) suggested that adaptive leadership promotes inclusiveness between leaders and team members, emphasizing the need for both to adapt to the organization's evolving challenges and changes (Doyle, 2017). Doyle (2017) underscored that the essence of adaptive leadership lies in a people-centered approach, encouraging leaders to actively engage stakeholders in tackling complex and challenging issues. This model fosters the growth of an adaptive culture, in which leaders drive adaptive work by embracing and incorporating new values and attitudes.

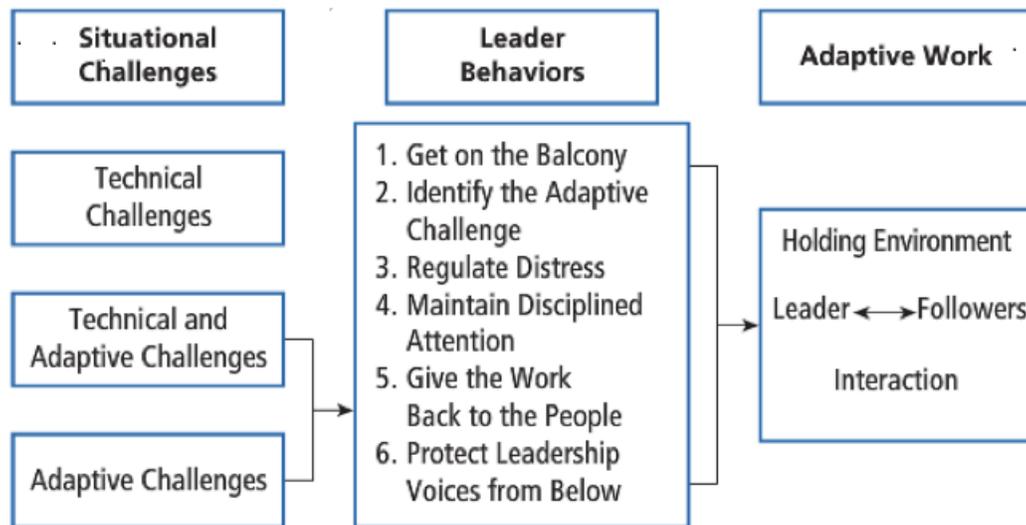
Northouse Theory of Adaptive Leadership

In addition to these theories, Northouse (2021) presented a more recent theory of adaptive leadership that views the approach as a complex process involving multiple components, including situational challenges, leadership behaviors, and adaptive work

(see Figure 3). Northouse’s theory serves as a foundation for clarifying the adaptive leadership process and supports empirical research aimed at validating and refining its concepts and principles.

Figure 3

Northouse’s Model of Adaptive Leadership



Note. Adapted from *Leadership: Theory and Practice*, by P. G. Northouse, 2021, SAGE Publications.

The dimensions of adaptive leadership based on the writings of Northouse (2021) are described as

- situational challenges. Effective leadership requires leaders to navigate three types of situational challenges: primarily technical challenges, those with both technical and adaptive components, and predominantly adaptive challenges. It is essential to recognize that not all challenges are adaptive in nature. Adaptive leadership focuses on guiding people through adaptive challenges (Northouse, 2021).

- technical challenges. Technical challenges are issues that can be resolved using existing knowledge, prior training, and available resources or processes (Ackerman et al., 2018). They usually call for straightforward, well-defined solutions that fit within current beliefs and values (Daly & Chrispeels, 2008). These challenges are predictable, clearly defined, and come with established solutions, often solvable by experts. In such cases, people typically rely on the leader's expertise and authority to address the problem, eliminating the need for adaptive leadership.
- technical and adaptive challenges. Certain challenges involve both technical and adaptive elements. Although these challenges may be clearly defined, they lack straightforward solutions within the existing organizational framework (Heifetz, 1994). Addressing these challenges requires a shared effort between the leader and the team. The leader may serve as a resource and offer support, but it is ultimately up to the team members to do the work—they must learn, adapt, and change to effectively tackle the issue.
- adaptive challenges. Adaptive challenges arise when established responses are no longer effective in addressing a problem, necessitating new learning, mindsets, and dispositions throughout the organization (Ackerman et al., 2018). These challenges require organizations to step into uncharted territory, disrupting the existing balance and allowing leaders to unlock the potential of people and systems to adapt to a constantly changing environment (Holcombe & Kezar, 2017). Adaptive challenges also require time and may involve significant shifts in organizational culture, demanding a strong commitment and willingness to

embrace change (Rapanta et al., 2020). These challenges frequently require a shift in values and norms, differing from technical challenges that align with established beliefs and values (Daly & Chrispeels, 2008). Daly and Chrispeels (2008) argued that adaptive leadership plays a vital role in bridging the gap between the organization's current reality and its underlying beliefs, making it essential for effectively addressing these challenges.

- leader behaviors. The model of adaptive leadership outlines six key leader behaviors or activities that are crucial in the adaptive leadership process. According to Northouse (2021), these behaviors serve as general guidelines for leaders when they assist others in confronting difficult challenges and navigating the inevitable changes that come with them. Although adaptive leadership involves a variety of leader behaviors and activities, there is no strict sequence in which these behaviors must be applied. Northouse explained that adaptive leadership requires the simultaneous and interdependent use of various behaviors; some take precedence at the outset and others become more significant as the process unfolds. Although there is a general progression in leader behaviors throughout the adaptive leadership process, many of these behaviors overlap and should be demonstrated concurrently by leaders. Collectively, these leader behaviors form a framework for practicing adaptive leadership.

Get on the Balcony

Getting on the balcony, a key concept in adaptive leadership, serves as a metaphor for stepping back from the immediate situation to gain a wider perspective. This approach helps leaders see the big picture and understand underlying dynamics. Nicolaidis and

McCallum (2013) illustrated that for those tackling adaptive challenges, balancing action with perspective-taking is crucial—moving between the dance floor and the balcony enables leaders to reframe issues, fostering inquiry and collaborative problem solving rather than assigning blame.

Identify Adaptive Challenges

Beyond getting on the balcony and observing complex dynamics, leaders must also analyze and accurately diagnose these challenges. A crucial aspect of this process is accurately distinguishing between technical and adaptive challenges. Leadership failures often stem from leaders misinterpreting the type of challenge they face. The adaptive leadership model highlights that leaders are most effective when they apply adaptive strategies to adaptive challenges and reserve technical solutions for technical challenges (Arthur-Mensah & Zimmerman, 2017). Arthur-Mensah and Zimmerman (2017) further underscored the importance of identifying technical versus nontechnical problems to uncover adaptive challenges. Once an adaptive challenge is recognized, it is up to the leader to determine the most effective approach for addressing it.

Regulate Distress

A third essential behavior for adaptive leaders is the ability to regulate distress. Leaders achieve this by creating an environment in which all team members feel empowered to act as agents of change without fear of criticism or retaliation, thereby managing group anxiety effectively (Doyle, 2017). Doyle (2017) further noted that the success of team performance and organizational outcomes depends on active participation from both leaders and followers. To cultivate a culture of open expression,

leaders should manage interpersonal dynamics by fostering positive social interactions, clearly defining roles, and addressing any conflicts that may arise (Aga et al., 2016).

Maintain Disciplined Attention

Leaders play a vital role in encouraging their teams to concentrate on the challenging work at hand. By demonstrating disciplined attention, leaders help team members stay focused on their tasks and provide structure to the organization's operations (Lee et al., 2017). Organizational success hinges on a leader's ability to maintain followers' focus on their responsibilities and align them with the organization's goals. However, as Aga et al. (2016) emphasized, team members may have varying objectives because of their diverse social backgrounds (Hoch & Dulebohn, 2017). It falls to the leader to sustain the team's focus by fostering positive interpersonal relationships. Consequently, organizational success is closely linked to the leader's focused direction and the strength of relational dynamics within the team.

Give the Work Back to the People

Giving work back to the people highlights a leader's responsibility to empower employees by involving them in problem solving and decision making (Arthur-Mensah & Zimmerman, 2017). Arthur-Mensah and Zimmerman (2017) argued that empowering employees encourages them to devise innovative and creative solutions to challenges. Ceri-Booms et al. (2017) and Hoch and Dulebohn (2017) suggested that effective leadership, combined with empowered employees, fosters greater effort and helps achieve ambitious organizational goals. Hoch and Dulebohn further emphasized that effective leadership involves motivating team members, increasing their autonomy, and nurturing their skills and talents. This empowerment approach focuses on building

intellectual capacity, sharing autonomy and responsibility, and enhancing employees' awareness of their potential (Ceri-Booms et al., 2017). Therefore, leaders must be attentive to and continually assess their impact on others.

Protect Leadership Voices From Below

Protecting leadership voices from below ensures that the voices of organizational members who might feel marginalized are heard, allowing them to offer valuable insights that can support the change process (Epitropaki et al., 2017). Epitropaki et al. (2017) further noted a shift in leadership from a role-based approach to one focused on interpersonal influence, by which leaders actively encourage team members to share their perspectives. Cullen-Lester et al. (2017) described this style as relational and multilevel, highlighting not only individual skills and knowledge but also the significance of social connections and networking to enhance collaboration. This relational approach fosters interaction between leaders and team members, creating an environment where freedom of expression is encouraged.

Leadership Behavior in VUCA Environments

The U.S. Army War College introduced the acronym VUCA to capture the volatility, uncertainty, complexity, and ambiguity characterizing the multilateral world after the Cold War (U.S. Army Heritage and Education Center, 2019). In 1992, Barber from the War College argued that strategic leadership must be understood within this VUCA environment. Barber noted that the VUCA framework drew influence from Bennis and Nanus (1985).

Following the September 11, 2001, attacks in the United States, VUCA saw increased use and discussion, particularly concerning external organizational

environments (Stiehm, 2002). The term gained further relevance in strategic leadership discussions after the 2007–2008 financial crisis (Horney & O’Shea, 2015). Interest and research in the VUCA concept have expanded, and contemporary leadership environments increasingly have been defined by these characteristics over the past 2 decades (Abidi & Joshi, 2015; Kail, 2010a, 2010b, 2010c, 2011).

Volatility

Volatility, representing the “V” in VUCA (Barber, 1992), describes the nature, speed, scale, and intensity of change. This volatility impacts leadership by necessitating that leaders organize efforts regarding constantly shifting dynamics. Heifetz et al. (2009) identified three types of change relevant to leadership. The first type occurs when a system encounters a familiar problem, allowing leaders to restore stability using established knowledge.

The second form of change appears when a problem emerges without an established response, compelling leaders to pursue temporary stability with their current skill set, though potentially compromising a long-term solution. The third form involves adaptive work, necessary for responding to novel challenges. Studies on adaptive work have examined its role for decades. T. Burns and Stalker (1961) suggested that in stable environments, successful organizations prioritize routine operations with well-defined authority structures and responsibilities. However, they argued that in rapidly changing environments, organizations need to embrace flexibility, allowing employees to adapt and use their skills to meet shifting demands. These early studies underscored that in volatile conditions, planning becomes obsolete, making swift adaptation vital for organizational resilience and a central leadership challenge (Horney & O’Shea, 2015).

Although volatility in business may not entail life-or-death stakes as in military contexts, it still holds psychological weight because livelihoods are at risk (Kail, 2010a, 2010b, 2010c, 2011). Kail (2010a, 2010b, 2010c, 2011) recommended several strategies to address volatility. First, he advocated converting raw data into actionable information, cautioning that an excess of irrelevant data can obstruct decision making. Second, Kail highlighted the importance of concise communication, drawing inspiration from Winston Churchill's advice that it is best to use short words. Finally, Kail stressed that leaders in volatile settings should ensure that subordinates clearly understand their intent. When subordinate leaders thoroughly understand their leader's objectives, they are better equipped to manage unforeseen changes in the environment.

Uncertainty

In the VUCA framework, uncertainty refers to situations in which information availability or predictability is unclear (Barber, 1992; Kail, 2010a, 2010b, 2010c). This includes situations characterized by limited information, information overload, conflicting beliefs, and contradictory evidence. Kail (2010a, 2010b, 2010c) contended that this lack of clarity hinders an organization's ability to accurately assess threats and challenges, making situational evaluation more complex.

In management and complexity literature, uncertainty has often been seen as an environmental attribute, frequently arising from high complexity and rapid change (Durkin, 1972). It typically occurs in volatile, complex situations with unexpected interactions that disrupt existing mental models (Nadkarni & Narayanan, 2007). However, some scholars take an information-centered view, suggesting that uncertainty is not solely an environmental factor but also lies within individuals who interpret it in the

context of organizational decision making (Galbraith, 1973; Hatch, 2018). Consequently, individuals can adapt their behaviors to lead more effectively in uncertain environments.

Kail (2010a, 2010b, 2010c) underscored the importance of regularly reassessing the relevance of mental models, both individually and collectively, in uncertain settings. He advocated for flexibility, noting that abandoning a personally developed plan can be challenging. However, rigidly adhering to a preconceived plan instead of responding to new information often leads to failure, resource depletion, and inefficacy in uncertain environments. Thus, Kail suggested that plans should be flexible and include multiple options from the outset. He also recommended implementing continuous feedback loops to support realistic improvements and adaptations in uncertain environments.

Complexity

Complexity, representing the “C” in VUCA, denotes the interconnectedness and interdependence of numerous elements within a system (Barber, 1992; Kail, 2010a, 2010b, 2010c). Kail (2010a, 2010b, 2010c) proposed that complexity arises from the simultaneous interactions of various factors, including language, social and cultural systems, and market dynamics. Therefore, understanding complexity involves viewing threats and opportunities as interconnected and mutually influential components.

Hatch (2018) pointed out that references to complexity in relation to organizations or systems often actually describe something perceived as complicated. Hatch further noted that true complexity, however, implies specific assumptions about complex systems, focusing on how patterns emerge from randomness to form intricate, dynamic systems.

In complex systems, both individual and group behaviors often need to adapt and self-organize in response to events that drive change (Grobman, 2005). Ladyman et al. (2013) observed that although practical aspects may vary across systems, complex systems are inherently adaptable. Kail (2010a, 2010b, 2010c) recommended the following three key leadership behaviors for managing complexity: (a) develop collaborative leaders capable of seeing the big picture and guiding teams toward collective achievements; (b) avoid searching for permanent solutions, as complexity introduces ongoing challenges and opportunities; and (c) maintain a steady focus on developing the skills of others.

Ambiguity

Ambiguity, the “A” in VUCA, refers to situations in which information is unclear, and cause-and-effect relationships are uncertain (Barber, 1992; Kail, 2011). Seow et al. (2019) characterized ambiguity within the VUCA framework as a condition that lies between ignorance and risk, increasing the likelihood of misinterpretation and errors in judgment. This occurs when the overall meaning of a situation remains unclear, even if sufficient information is available. Unlike uncertainty—which involves a lack of information—ambiguity arises when information is present, but its significance is not readily understood.

Kail (2011) argued that although volatility, uncertainty, and complexity may lead to frustration and exhaustion, ambiguity tends to cause inefficiency and missed opportunities. Prolonged ambiguity can leave individuals merely surviving rather than thriving, a far cry from the ideal state for organizational success. Kail also suggested that ambiguity often leads to internal conflicts within business units, which are hard to

diagnose from a single perspective and can destabilize an organization through cascading effects.

Kail (2011) also explained that two common signs of ambiguity are the difficulty in recognizing threats and opportunities before they escalate and the frustration that occurs when isolated successes do not yield lasting impact. In such settings, leaders need to offer clarity to help direct tasks and objectives. Ambiguity can undermine a sense of security, often causing capable employees to revert to familiar tasks to feel productive. It is essential for leaders to offer clear guidance, align efforts, and regularly communicate adjustments.

To lead effectively in ambiguous environments, Kail (2011) proposed three key behaviors. The first is active listening, which Henderson (2020) found to be crucial because followers often doubt that leaders genuinely listen to them. Kail suggested that incorporating diverse perspectives broadens decision making by considering a wider range of options. Second, Kail emphasized the importance of divergent thinking in ambiguous contexts, and Henderson supported the idea that openness to new ideas correlates with effective leadership. Finally, Kail recommended acknowledging incremental progress and celebrating achievements. He argued that visible progress is essential for maintaining motivation, and setting intermediate goals enables leaders to assess the environment from a relatively stable position.

Business Agility

The greatest challenge business leaders face today is how to stay competitive amid constant turbulence and disruptions (Highsmith, 2013). Highsmith (2013) argued that in a volatile and uncertain environment, it is no longer sufficient for organizations to

merely deliver value; instead, they must ensure a continual flow of value in ever-shortening cycles. This continual value delivery must be paired with a keen awareness of evolving customer requirements, shifting competitive dynamics, and broader fluctuations in the business landscape (McCurry & McIvor, 2002).

The concept of business agility was first popularized in 1991 by the Iaccoca Institute at Lehigh University (Kidd, 1994). It built upon the foundational elements of earlier manufacturing paradigms, from Taylorism to supply chain management and lean manufacturing (Voss, 1995). The core principles of business agility include delivering value to customers, readiness for change, valuing human knowledge and skills, and forming virtual partnerships. Notably, the first three principles are also central to lean manufacturing (Goldman et al., 1995).

The term agile gained prominence in 2001 with the publication of the *Agile Manifesto*, which set forth key values and principles for software development, emphasizing customer collaboration, responsiveness to change, and iterative processes (Beck et al., 2001). Crafted by 17 leading software developers and consultants, the *Agile Manifesto* prioritizes (a) individuals and interactions over processes and tools, (b) working software over comprehensive documentation, (c) customer collaboration over contract negotiation, and (d) responding to change over following a plan (Larman, 2004).

As agile methodologies gained traction in software development, businesses began to recognize the broader applicability of these principles beyond IT. Rigby et al. (2016) explored how agile approaches could extend to management practices and strategic decision making across entire organizations. This marked a renewed conceptualization of business agility outside its manufacturing roots. Denning (2018)

further defined business agility as a set of organizational capabilities, behaviors, and working methods that enable firms to be more adaptive, innovative, and resilient. The rise of digital transformation has made business agility even more crucial because organizations increasingly leverage digital technologies to enhance their agility. Bharadwaj et al. (2013) discussed the interconnection between digital strategy and agility, urging firms to cultivate digital capabilities that enable rapid adaptation and responsiveness.

In recent years, the concept of business agility has continued to evolve with increasing focus on leadership, culture, and organizational design as essential components. The Business Agility Institute (2020) outlined current trends and benchmarks, emphasizing the importance of leadership agility, organizational learning, and the ability to pivot in response to customer needs and market changes.

The Business Agility Institute (2020) asserted that achieving business agility requires organizations to concentrate on five key domains, 18 capabilities, and over 80 leadership behaviors. The Business Agility Institute's framework emphasizes that the integration of these domains and capabilities is critical to determining an organization's present and future effectiveness, which is ultimately reflected in the behaviors exhibited by its leaders.

Domains

The Business Agility Institute (2020) identified the following five primary domains as the highest level of grouping essential for achieving business agility: responsive customer-centricity, engaged culture, people-first leadership, value-based delivery, and flexible operations. These domains collectively form the foundation of a

business agility framework, guiding organizations toward greater adaptability and effectiveness.

Responsive Customer-Centricity

Organizations must stay responsive to remain relevant and effective as customers' needs and expectations constantly shift and evolve, according to Kotter (2019). By centering their purpose on something beyond the organization itself—specifically, the customers they serve daily—organizations can not only adapt to changing customer needs but also anticipate them before customers are even aware. Customer-centricity is the cornerstone of business agility (Kihlstrom, 2017).

Engaged Culture

Engaged employees feel a strong connection and commitment to the organization's purpose and work (Lencioni, 2012). Lencioni (2012) argued that when engagement is deeply embedded, it is a core aspect of an organization's culture, with strong connection and commitment embedded in its values, norms, and behaviors. Cultivating and sustaining this level of engagement is challenging but thrives when leaders and employees demonstrate mutual care, offer constructive feedback, and actively work to support it (Bridger, 2022).

People-First Leadership

A company's greatest competitive advantage lies in its people and the culture they build together (Schein, 2010). Schein (2010) argued that people-first leadership acknowledges that the leader's role is to ensure the success and well-being of their people, empowering them to excel and delight customers. This leadership approach starts with fostering trust and respect throughout the organization. It emphasizes transparent

communication, sharing information, and distributing power and responsibility, creating an environment where everyone can thrive (Freedman, 2023).

Value-Based Delivery

Drucker (2008) stated that to create value for customers, organizations must provide the right work, in the right manner, and at the right time to keep up with evolving customer needs. Drucker highlighted that as customer expectations change, organizations need to make strategic decisions about where to concentrate their resources. However, even well-focused efforts fall short if value delivery systems are ineffective. To maximize effectiveness, organizations must identify and eliminate constraints and bottlenecks (Lander & Liker, 2004). Lander and Liker (2004) stated that when these systems are optimized, they can better focus on consistently fulfilling customer needs and interests.

Flexible Operations

Organizations operate as complex, adaptive systems, necessitating investments in building flexible business operations, including strategic planning, funding models, operational governance, and organizational structure (Senge, 2006). Senge (2006) explained that organizations with such flexibility are better positioned to meet evolving demands, seize emerging opportunities, and adapt swiftly within a dynamic environment. Figure 4 illustrates the five domains and the interconnection between them.

Business Agility Capabilities and Behaviors

Each domain comprises a series of interconnected capabilities (Business Agility Institute, 2020). A capability represents an organization's ability to perform specific actions effectively and is demonstrated through particular sets of behaviors. In other

words, as individuals begin to adopt certain behaviors, the organization develops corresponding capabilities. Behavior is defined as a distinct, observable, and consistent action performed by individuals or groups within the organization. Behaviors are the ultimate expression of business agility; over 80 behaviors contribute to various capabilities. Enhancing organizational capabilities requires improving these underlying behaviors.

Figure 4

The Five Domains of Business Agility



Note. From *Domains of Business Agility*, by The Business Agility Institute, n.d., The Domains of Business Agility section (<https://businessagility.institute/domains/overview>).

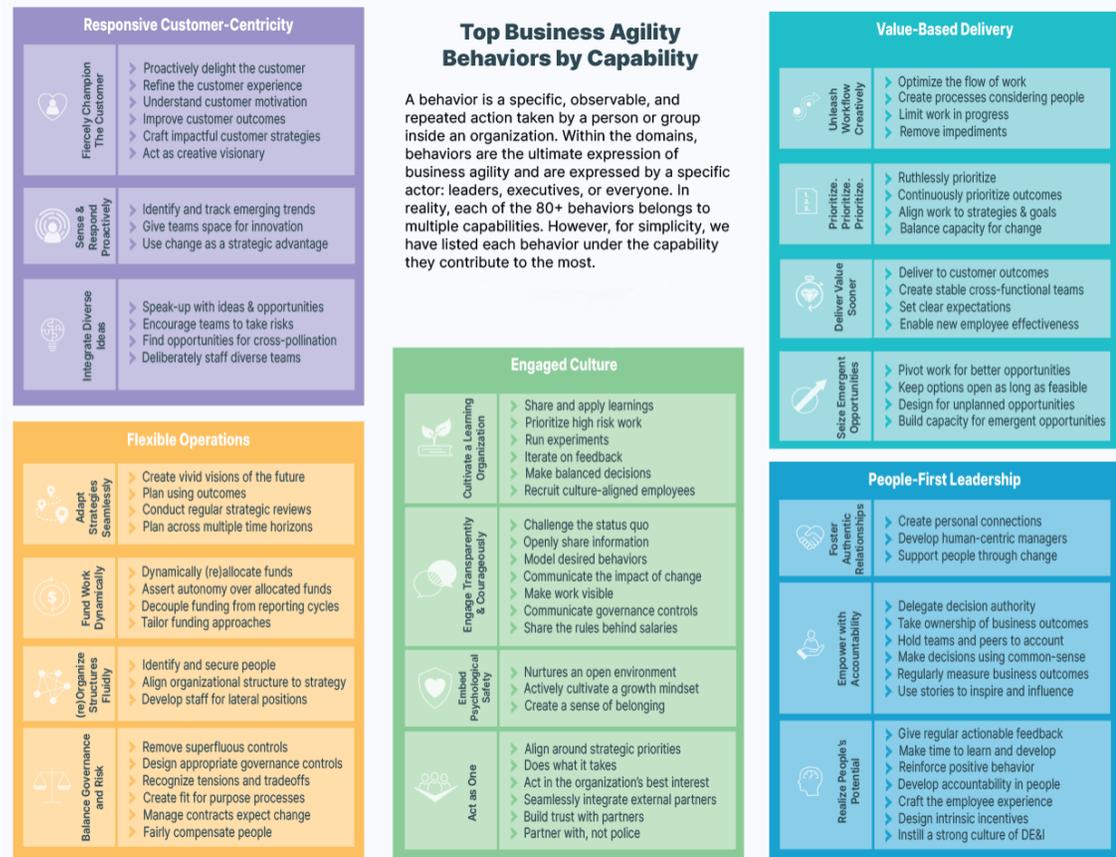
Figure 5 illustrates how behaviors and their related capabilities support organizational development across different domains. Although not exhaustive, these behaviors are recognized for their significant impact on business agility.

Summary

Adaptive leadership requires everyone involved in the change process to view themselves as stakeholders, motivating them to work collectively toward positive change, a process known as adaptive work (Heifetz & Laurie, 1997). Northouse (2021) described

Figure 5

The Five Domains, 18 Effective Capabilities, and 80 Reflecting Observable Behaviors of Business Agility.



Note. From *Domains of Business Agility*, by The Business Agility Institute, n.d., Behaviors section (<https://businessagility.institute/domains/overview>).

adaptive work as the focal process of adaptive leaders, which emerges from the interaction between leaders and followers although the primary responsibility lies with the followers. Adaptive work involves leaders defining challenges that are often unclear and supporting the team as they work through a zone of tension to address these challenges (Campbell-Evans et al., 2014).

A critical skill in adaptive leadership is the ability to distinguish between technical and adaptive challenges because these often appear simultaneously rather than

separately (Drago-Severson et al., 2012). Exceptional leaders are set apart by their capacity to make this distinction and respond appropriately to both opportunities and challenges (Raney, 2014). An organization's ability to adapt, driven by intentional leadership, is what enables it to adjust and endure (Eichholz, 2017). Adaptive leadership, which centers on mobilizing adaptive work, encourages leaders to share responsibility while fostering change through independent judgment, leadership development, institutionalized reflection, and ongoing learning (Heifetz et al., 2009).

Rather than exercising control through authority, adaptive leaders work collaboratively with others to support adaptive efforts. The main objective of adaptive leadership is to engage employees in addressing adaptive challenges, distinguishing it from traditional leadership models that focus on specific traits, skills, behaviors, or authenticity (Heifetz et al., 2009). Research on adaptive leadership has focused on the adjustments individuals must make to navigate changing environments and the ways leaders can support these transitions. The pressures and external changes inherent in VUCA environments underscore the need for organizations to adapt (Seah et al., 2014; Uhl-Bien et al., 2007). Seah et al. (2014) and Uhl-Bien et al. (2007) argued that organizational adaptation results in improved efficiency, learning orientation, and increased output.

Northouse (2021) asserted that although the research theories of adaptive leadership (Heifetz et al., 2009) and business agility (van Oosterhout, 2010) are robust, there have been challenges to whether this abstract research can be identified as being successfully measured by observing and analyzing the adaptive behaviors of leaders such as CXOs and whether these behaviors lead to business agility in an organization. Leaders

who foster adaptive cultures enable their organizations to demonstrate business agility and gain competitive advantages, as evidenced by the research discussed in this literature. The leadership behaviors identified by Heifetz et al. (2009) and other adaptive leaders who encountered VUCA environments are the focus of this research to understand how their behaviors influenced business agility in their organizations.

CHAPTER III: METHODOLOGY

Overview

This Delphi study aimed to identify which strategic behaviors in Heifetz et al.'s (2009) adaptive leadership framework effective CXOs of organizations use to develop agile and adaptive organizations that succeed in VUCA environments. Additionally, this study aimed to identify the recommended actions that CXOs who use the behaviors from Heifetz et al.'s adaptive leadership framework to develop agile and adaptive organizations in VUCA change environments. Pill (1971) and Green et al. (1990) supported the Delphi method's rationale, affirming its cognitive value as a rapid and effective process for collecting and distilling expert opinions and possibly gaining consensus from a group of knowledgeable individuals.

The Delphi method was particularly appropriate for this study because major decisions on how organizations should address disrupting VUCA situations are typically made by senior executives and CXOs (Wiggins, 2024). This technique was well-suited for capturing the lived experiences of these leaders (Patton, 2015). Additionally, the anonymity of individual responses removes the effects of prejudice, peer pressure, and the desire to conform, thereby enhancing the candor of the respondents and simultaneously exposing both agreement and disagreement (Ament, 1970; Wissema, 1982).

Chapter III provides a comprehensive overview of the study's methods and procedures, starting with a restatement of the purpose and research questions. It details the research design, defines the population and sampling frame, describes the sample used, and outlines the study's instrumentation. Additionally, this chapter explains the

steps taken to ensure validity and reliability. It also elaborates on the processes for data collection and analysis, concluding with a discussion of the study's limitations and an overall summary of the chapter.

Purpose Statement

The purpose of this Delphi Study was to identify the strategic leadership behaviors, as outlined in Heifetz et al.'s (2009) adaptive leadership framework, that CXOs use to develop agile and adaptive organizations that succeed in VUCA change environments. The second purpose of this Delphi study was to rate the degree of effectiveness of strategic leadership behaviors, as outlined in Heifetz et al.'s adaptive leadership framework, that CXOs use to develop agile and adaptive organizations that succeed in VUCA change environments. Finally, the third purpose of this study was to identify actions CXOs who use the behaviors from Heifetz et al.'s adaptive leadership framework recommend to develop agile and adaptive organizations in VUCA change environments.

Research Questions

1. What strategic leadership behaviors from Heifetz et al.'s (2009) adaptive leadership framework do CXOs use to develop agile and adaptive organizations that succeed in VUCA change environments?
2. How do CXOs rate the effectiveness of strategic leadership behaviors from Heifetz et al.'s (2009) adaptive leadership framework in developing agile and adaptive organizations that succeed in VUCA change environments?

3. What actions do CXOs who use the behaviors from Heifetz et al.'s (2009) adaptive leadership framework recommend to develop agile and adaptive organizations in VUCA change environments?

Research Design

The research design for this study employed a combination of survey and interview methodologies, using the Delphi technique to aggregate and summarize expert knowledge. The design focused on identifying and rating adaptive behaviors that effective CXOs of organizations use to develop agile and adaptive organizations capable of thriving in VUCA environments. Additionally, the design was focused on identifying actions CXOs who use the behaviors from Heifetz et al.'s (2009) adaptive leadership framework recommend to develop agile organizations in VUCA change environments.

A panel of experts participated in a three-round Delphi process to provide opinions and seek consensus on the topic. The researcher used a screening checklist to select these experts. Criteria included holding a top executive role in tech for over 5 years, navigating recent VUCA challenges, publishing articles or presenting at tech conferences, and receiving peer recognition through company websites, tech magazines, or conferences.

Originally developed by the RAND Corporation in the 1950s, the Delphi technique systematically collects and synthesizes expert judgments (Brewer, 2011). This method enables the methodical solicitation of expert insights (Udinsky et al., 1981) and is instrumental in reaching a consensus on specific topics (Brewer, 2011; Hsu & Sandford, 2012; Pandza, 2011). The iterative nature of the Delphi technique, characterized by several rounds of questioning, refines and deepens the understanding of the subject

matter (Hsu & Sandford, 2012). This process ensures that the development of instruments, data gathering, and questionnaire administration evolve through each round, progressively refining the information.

As outlined by Hsu and Sandford (2012), the initial round begins with an open-ended question to extract detailed insights from participants. The qualitative data collected are then transformed into a quantifiable survey instrument for the subsequent round (Salkind, 2017). In the second round, panel members evaluate the compiled data from the first session, providing ratings or rankings to the newly formulated statements (Hsu & Sandford, 2012). The third round for this research study involves qualitative interviews, by which panel members offer deeper insights and clarify the rationale behind their ratings, elucidating how these strategic behaviors translate into actionable strategies that can develop agile and adaptive organizations in VUCA environments, leading to a more comprehensive understanding of the significant statements addressed by the Delphi panel in the first two rounds.

Standard Delphi studies typically consist of three rounds of data collection, beginning with a questionnaire developed by the researcher (Creswell, 2015). The expertise of participants on the topic of inquiry is a critical requirement in the Delphi method. Although interviews are not always included in Delphi studies, the researcher in this study implemented a modified Delphi method for the third round (Larson, 2022). To obtain more detailed insights into the lived experiences and recommendations of the Delphi panelists, interviews were selected as the qualitative data collection method for the third round.

Population

McMillan and Schumacher (2010) defined a population as a set of elements or cases—such as individuals, objects, or events—that meet specified criteria and to which the study’s findings can be generalized. A population is a collective group with characteristics relevant to research, allowing results to be applied more broadly (Roberts & Hyatt, 2019). It consists of subjects who meet certain criteria, from which a sample is drawn to extend the study’s conclusions (McMillan & Schumacher, 2010).

For this study, the population was identified as approximately 24,544 tech top executives in California (CompTIA, 2024; U.S. Bureau of Labor Statistics, 2023), all of whom can be categorized as top executives in their organizations, such as presidents and SVP, with extensive experience leading tech companies based in California. Although specific statistics on the exact number of top executives in the tech industry in California are unavailable, an approximate number was derived by the researcher by combining data from the U.S. Bureau of Labor Statistics (2023) and CompTIA (2024). Using data from these sources, this analysis provided the researcher with estimates of a population of approximately 24,544 tech top executives in California. California was the state chosen to select the population for this study because, according to the California Governor’s Office of Business and Economic Development (n.d.), the state is a global leader in technological innovation, boasting a tech workforce of 1.88 million.

Target Population

The target population is defined by specific criteria that refine the pool of potential participants for a study (Creswell, 2015). Creswell (2015) noted that selecting a target population lacks strict guidelines, and qualitative research provides limited

direction on determining sample size. By applying additional criteria, the target population narrows down the broader group and maintains enough diversity to allow for generalizable research findings.

The researcher selected the target population from four major cities in California: Los Angeles, San Diego, San Francisco, and San Jose. This target population consisted of approximately 19,718 top tech executives, such as presidents and SVPs with extensive experience leading tech companies. These cities were chosen because, according to the U.S. Bureau of Labor Statistics (2023) and CompTIA (2024), they collectively account for 80 to 85% of tech companies in California.

The estimated distribution of the target population is as follows: Los Angeles with approximately 6,151 top tech executives; San Diego with around 1,956 top tech executives; San Francisco with some 5,424 top tech executives; and San Jose with roughly 6,187 top tech executives. Figure 6 shows where the target population is geographically located.

Although specific statistics on the exact number of top executives in these California cities for tech companies are unavailable, an approximate number was again derived by combining data from the U.S. Bureau of Labor Statistics (2023) and CompTIA (2024). Table 3 shows the cities' proportions of tech top executives.

Sample

Graham (2006), supported by Salkind (2017), defined a sample as a subset of the population. Creswell (2015) further explained that the sample represents a subgroup of the target population that the researcher intends to study to make generalizations about the larger group. In a Delphi study, it is recommended to carefully select 15 to 20

Figure 6

Map of California and the Cities of the Target Population



Note. From California Map Vector, by VectorStock, n.d., p. 1 (<https://www.vectorstock.com/royalty-free-vector/california-map-vector-2670138>).

Table 3

Calculation of Tech Top Executives in California and Cities in This Study

Metro area	(%) Employee in tech *	Top executive **	Tech top executives ***
California	7.8%	314,670	24,544
Los Angeles	5.5%	111,830	6,151
San Diego	7.3%	26,790	1,956
San Francisco	13.9%	39,020	5,424
San Jose	30.3%	20,420	6,187

Note. ^a Adapted from [format source like other notes]. ^b Adapted from [format source like other notes]. ^c Calculated formula: tech top executives = % of employee in tech * top executives.

participants by identifying the desired characteristics and qualifications of respondents (Ludwig, 1997).

In this study, the sample included 20 top tech executives equitably recruited from the following four cities: Los Angeles, San Diego, San Francisco, and San Jose. The goal for this researcher was to have equitably well-distributed participants from each city.

For this Delphi study, the sample consisted of voluntary participants who were selected as a result of possessing at least three of these four criteria:

- Held a top executive role in tech companies for 5 years or more.
- Led their organization through recent VUCA challenges, such as those presented by globalization, COVID-19 advancements in emerging technologies such as AI, or cyber security threats such as ransomware.
- Authored articles that have been published or presented at tech conferences.
- Received acknowledgment and appreciation of their contribution to their company from their peers and colleagues through company websites, well-known tech magazines, or conferences.

Figure 7 illustrates the funneling process used in this study.

Purposive Sampling

For this Delphi study, the sample was determined using purposive, convenience, snowball, and expert nomination sampling methods. According to Patten (2017), purposive sampling involves thoughtfully selecting individuals who are rich sources of information. The Delphi technique requires experts in the relevant field who can effectively evaluate whether the items accurately represent the measured construct (Brownlee-Turgeon, 2016). Shariff (2015) noted that studies using the Delphi

methodology typically employ non-random, purposive samples, referring to the selected group as the “panel of experts” (p. 3).

Figure 7

The Funnel Process of Population, Target Population, and Sample Used for This Study



This study focused on top tech executives who have demonstrated the phenomena of adaptive leadership as a core aspect of their work. These executives likely experienced organizational change, disruption, VUCA environments. To select the 20 Delphi panel experts, a screening checklist (see Appendix B) was used based on four criteria: holding a top executive role in tech companies for 5 or more years, leading their organization through recent VUCA challenges, authoring articles published or presented at tech conferences, and/or receiving recognition from peers through company websites, tech magazines, or conferences.

Convenience Sampling

Convenience sampling techniques are often used in scholarly research (Creswell, 2015). Patton (2015) described a convenience sample as a method by which participants are selected based on their easy accessibility, making them readily available for participation in the study. This study's primary sources of Delphi panelists were top technology executives from the tech industry who met the sample criteria. The researcher lives in Los Angeles, and the four cities selected were convenient because the researcher is familiar with the work of tech companies in these areas because he resides in and near this area. Therefore, the researcher is familiar with the geographic region where the tech executives were recruited, and this made the sample participants recruited accessible to the researcher for collecting data.

Snowball Sampling

According to Patton (2015), snowball sampling allows researchers to build on their sample by asking participants for leads from others who have similar qualifications. The second source was the South California System Information Management (SCSIM) forum, of which the researcher is an active member. SCSIM is the largest IT leadership association in California, with over 320 members and several well-known tech company sponsors. Each year, during the annual September SCSIM summit, over 300 IT and technology experts come together to share their experiences and the latest insights through keynote speeches, panel discussions, and interactive sessions. This summit provided an excellent opportunity for the researcher to engage with attendees and ask for referrals of suitable candidates who were willing to participate and met the study's sampling criteria.

Expert Nomination Sampling

Ludwig (1997) emphasized that random selection is inappropriate for a Delphi study; instead, participants should be chosen through a nomination process. Following this approach, the present study also employed a nomination process, using expert choice—a type of purposeful sampling in which an expert with knowledge of the population makes informed decisions about which individuals to include (McMillan & Schumacher, 2010).

In this study, the researcher scheduled appointments with various experts in the tech industry and asked them to nominate individuals (see Appendices C and D) they knew who possessed the criteria studied by this researcher, especially candidates who demonstrated adaptive leadership and business agility during VUCA scenarios. The nominated candidates were then screened to ensure they met the sampling criteria.

Instrumentation

According to Creswell (2015), all studies should align research design and instrumentation to obtain the highest quality data. In line with the Delphi method, this study employed two rounds for qualitative data collection, using a qualitative survey in Round 1, a quantitative survey in Round 2, and an interview process in Round 3. The researcher developed the survey questions for Rounds 1 and 2 and the interview questions for Round 3 by aligning them with the research questions and the theoretical framework of the study. Appendices E, F, and G include the surveys and interview questions used in this study. An alignment table is available in Appendix H that demonstrates survey and interview question alignment with the theoretical framework and the research questions for this study.

Delphi studies generally include a minimum of three rounds of questionnaires; the first round presents one or two open-ended questions on the topic, the second round asks participants to review and rate or rank the responses gathered, and the third round provides an opportunity for further elaboration (Ludwig, 1997).

The researcher asked participants for Rounds 1 and 2 to take 3 weeks to submit their survey responses back to the researcher. The Round 1 research question, which was an open-ended question, asked experts to identify the strategic leadership behaviors from Heifetz et al.'s (2009) adaptive leadership framework that CXOs use to develop agile and adaptive organizations capable of succeeding in VUCA environments. The Round 2 research question, which was a Likert scale question, asked experts to rate the effectiveness of these strategic leadership behaviors.

In Round 3, each interview took approximately 1 hr and was recorded and transcribed; the participants received the transcript and could return the transcript with any edits of their responses to the researcher. Top tech CXOs on the panel were asked to recommend actions that CXOs who demonstrate behaviors from Heifetz et al.'s (2009) adaptive leadership framework should take to develop agile and adaptive organizations in VUCA environments.

Researcher as an Instrument

As the primary instrument of this study, the researcher's extensive 25-year experience in tech industry organizations could have introduced bias. Direct engagement in qualitative research can sometimes lead to biases and assumptions stemming from the researcher's background and perspectives (Patton, 2015). The researcher's role in crafting study definitions, designing interview questions, and selecting the expert panel may have

unintentionally shaped the data structure and interpretation. To mitigate potential biases, the researcher adhered to strict standards of practice throughout both rounds of qualitative data collection and the overall research process.

Given the researcher's prior interactions with some of the executives, there was a risk of bias. Acknowledging this, the researcher remained vigilant in applying consistent protocols and methodologies, including conducting field tests and employing an external coder to mitigate bias further. Additionally, any organizations in which the researcher had been employed in the past were excluded from recruiting participants to participate on the Delphi panel for this study.

Validity

Patten (2017) emphasized that validity is contingent on the research purpose, noting that an instrument may lack validity if it fails to measure its intended construct. McMillan and Schumacher (2010) defined validity as the extent to which explanations of phenomena align with real-world conditions. The Delphi method strengthens validity by involving expert panel members in the study area, who offer informed insights that can guide practical decision making (Cantrill et al., 1996).

In this study, the expert panel independently submitted their responses during Rounds 1 and 2 of the survey. The interview round was conducted through one-on-one conversations. After Rounds 1 and 2, all panel members were able to view summary responses, which served as the foundation for further instrument development. This approach facilitated member checking, allowing participants to informally verify the accuracy of the data (McMillan & Schumacher, 2010). Prior to distributing the survey and conducting interviews, the researcher consulted with a colleague with a doctorate

degree who was experienced in developing research surveys to provide recommendations on survey and interview questions for this study. The researcher then adjusted the questions based on this feedback.

Reliability

Reliability, defined as the consistency of research outcomes, is crucial in qualitative studies (Cypress, 2017; Patten, 2017). Brink (1993) emphasized the significance of reliability, warning that researcher subjectivity may impact data interpretation and potentially weaken the credibility of the findings.

To ensure reliability in this study, several standard procedures were implemented. All participants received identical emails (see Appendix I), instructions, and information. In each round of the Delphi study, participants completed the same survey questionnaires and interviews, featuring identical open-ended and Likert scale questions, and equal response was time allocated. Strict protocols were followed throughout the interview phase for each round of data collection. Additionally, participants received a Bill of Rights (see Appendix J) and the Informed Consent and Confidentiality form (see Appendix K), which informed them of their right to withdraw from the Delphi Panel at any point. Field tests were also conducted to further enhance reliability.

Field Test

To strengthen the study's validity and reliability, the researcher conducted field tests on the surveys before distributing them to the Delphi panel of tech executives. A field test involves administering the survey to a small group who then provide feedback on its clarity and effectiveness (Creswell, 2015). Conducting a Delphi field test helps

refine the questionnaires for each round, improving understanding and identifying any procedural issues (Skulmoski et al., 2007).

In this study, the researcher conducted a field test with three tech executives who participated in all three rounds to further refine the survey process. These participants provided valuable feedback on the question flow, progression, and language choice. They received the same emails, instructions, and study materials as the Delphi panel participants and were asked to evaluate these for clarity and ease of understanding. In Rounds 1 and 2 of this Delphi study, field-test participants received questionnaires containing survey questions and were given 1 week to respond. Following their responses, they assessed the questionnaires for ease of use. Additionally, a colleague with a doctoral degree received the interview questions for Round 3, observed the interview process with field-test participants, and provided feedback. Data from the field-test participants were excluded from the study's data analysis and were used solely to evaluate and improve the response process for validity.

After completing the interview field test, the researcher asked the field-test panelists whether protocols had been followed. The researcher then transcribed the interviews and shared them with the panelists for their review. Based on the feedback provided, the researcher adjusted the protocols and interview questions.

Data Collection

In this study, data were gathered from a panel of expert leaders through two rounds of questionnaires followed by one round of interviews, and each round built on the findings of the previous one. Before engaging participants and collecting data, the researcher obtained approval from the University of Massachusetts Global's Institutional

Review Board (IRB), which reviews and authorizes studies involving human subjects to ensure adherence to federal regulations and ethical standards (McMillan & Schumacher, 2010). Upon receiving IRB approval, initial data collection procedures commenced (see Appendix L).

To confirm eligibility, panel members first completed a screening form (see Appendix B). The researcher then emailed participants a welcome letter, the Participant's Bill of Rights (see Appendix J), and the Informed Consent form (see Appendix K) for their review, signature, and return. McMillan and Schumacher (2010) described informed consent as ensuring participants receive a clear explanation of the study, the right to withdraw at any time without penalty, and full disclosure of any risks involved. The email also provided the researcher's background, an overview of the Delphi study, information about Heifetz et al.'s (2009) research, an estimate of the time commitment, a description of the research design and rounds, and contact information.

This Delphi study employed both qualitative and quantitative data to offer a well-rounded understanding of the research topic. This mixed-method approach enables a nuanced exploration of expert perspectives alongside measurable data suitable for statistical analysis (McMillan & Schumacher, 2010). Qualitative data from open-ended questions capture the depth of expert insights, and quantitative data from structured questions assess consensus levels and reveal any persisting disagreements. Specific data for each Delphi round were collected as detailed in the following sections, and all survey and interview questions were aligned with the research questions and theoretical framework (see Appendix H).

Delphi Round 1

The process began with Round 1, in which experts were asked to respond to a set of open-ended questions. The expectation was to have the survey returned in 3 weeks. The aim of this initial round was to gather a broad range of opinions and insights on the topic under investigation. These responses were then collated and analyzed to identify common themes and significant points of agreement. An open-ended survey question, designed to align with the study's first purpose statement and research question, was distributed to participants via Google Forms. The research question connected to the Round 1 survey question was "What strategic leadership behaviors from Heifetz et al.'s (2009) adaptive leadership framework do CXOs use to develop agile and adaptive organizations that succeed in VUCA change environments?"

To promote clarity and ensure data reliability, definitions and examples of adaptive behaviors from Heifetz et al. (2009) were provided to panelists. The full set of survey questions and descriptors given to participants can be found in Appendices E, F, and G.

Delphi Round 2

In Round 2, following the data collection from Round 1, the researcher analyzed responses to identify response frequency and key themes. This summarized data were used to develop a more targeted questionnaire. Participants were subsequently asked to evaluate the effectiveness of the most frequently mentioned strategic behaviors identified by panelists in Round 1 using a 6-point Likert scale; options ranged from 1 (*extremely ineffective*) to 6 (*extremely effective*; see Appendix F). Because Round 1 results showed that the top six behavioral themes—psychological safety, innovation, collaboration,

building leadership, continuous learning, and transparency—appeared in more than 50% of participant responses and they aligned with Heifetz et al.'s (2009) adaptive leadership behaviors, the researcher chose to include only these behaviors in the rating process for Round 2. This survey question aligned with the study's second purpose statement and second research question, which asked, "How do CXOs rate the effectiveness of strategic leadership behaviors from Heifetz et al.'s (2009) adaptive leadership framework in developing agile and adaptive organizations that succeed in VUCA change environments?"

The results generated quantitative data that were then collected and analyzed. Similar to Round 1, a detailed survey was provided to each panel member in Round 2. The Likert scale used for ratings included the following options: 1 = *extremely ineffective*, 2 = *moderately ineffective*, 3 = *slightly ineffective*, 4 = *slightly effective*, 5 = *moderately effective*, and 6 = *extremely effective*

Participants were also invited to suggest any additional strategic behaviors they felt should be included on the list but were not initially represented. The expectation was to have the survey returned in 3 weeks.

Delphi Round 3

The process continued into Round 3, in which the data collected from Round 2 were summarized and used to develop the next round. The third round, the interview, posed open-ended interview questions about the actions that CXOs can use to develop agile and adaptive organizations in VUCA change environments (see Appendix G). The interviews, which lasted under 1 hr, were conducted either in person or virtually, and were structured regarding the study's third purpose and Research Question 3, which was

“What actions do CXOs who use the behaviors from Heifetz et al.’s (2009) adaptive leadership framework recommend to develop agile and adaptive organizations in VUCA change environments?” During the interview, the expert panel was asked to specify up to three actions for each of the top three strategic behaviors.

Ethical Considerations

Researchers must uphold ethical standards throughout a study, particularly during data collection, analysis, and reporting (Creswell, 2015). McMillan and Schumacher (2010) emphasized that researchers bear an ethical responsibility to protect the rights and welfare of study participants. In this study, participant safety was ensured by providing everyone with an electronic copy of the Bill of Rights, which outlined their rights (see Appendix J).

Data collection commenced only after obtaining approval from the UMass Institutional Review Board (IRB), with the IRB approval documentation included in Appendices L and M. Participant anonymity and confidentiality were strictly upheld; identifying information, including names and company affiliations, was excluded from both data collection and analysis. Responses were anonymized to ensure they remained unidentifiable by others involved in the study. All records, such as demographic data and participant responses, were stored securely in a password-protected Dropbox folder for 3 years, with additional password protection on the researcher’s computer.

Data Analysis

This Delphi study included two rounds of survey data collection and one round of interviews. Data analysis began following the completion of Round 1 and continued after each subsequent survey or interview round. Responses were reviewed and analyzed as

outlined in the following paragraphs, and each round's analysis was completed before moving on to the next.

Qualitative and Quantitative Data Analysis

Patton (2015) stated that qualitative data analysis transforms data into findings. In this study, qualitative methods were applied in Rounds 1 and 3, in which participant responses were analyzed to identify and synthesize recurring themes. In contrast, Round 2 employed a quantitative approach, using descriptive statistics to interpret the data (McMillan & Schumacher, 2010).

Delphi Round 1

In this round, an open-ended question was used to gather qualitative data, inviting participants to specify strategic leadership behaviors from Heifetz et al.'s (2009) adaptive leadership framework that CXOs use to build agile, adaptive organizations capable of thriving in VUCA environments. Responses were analyzed with NVivo and various AI tools such as ChatGPT to uncover key themes and their frequencies. The researcher reviewed and coded the data, recording the frequency of each theme. There were 19 strategic behaviors that were identified in Round 1, and only the six behavioral themes that appeared in more than 50% of participants' responses, which participants rated based on their perceived effectiveness in enabling successful business agility within VUCA environments, were used later in the development of the Round 2 questionnaire.

Delphi Round 2

In Round 2, data were collected using a 6-point Likert scale, with ratings from 1 (*extremely ineffective*) to 6 (*extremely effective*). The responses were analyzed using the interquartile range (IQR) method, which assesses data spread and distribution by

concentrating on the middle 50%, calculated as the difference between the upper quartile (Q3, 75th percentile) and the lower quartile (Q1, 25th percentile). This statistical approach helps to identify variability, detect outliers, and compare data sets (Patten, 2017). The same six top-rated responses, each receiving over 50% of the frequency responses from the panel in Round 1, were used to support and develop the Round 3 questionnaire.

In Delphi studies, participant responses are frequently subjective and may not follow a standard bell curve, often resulting in a skewed distribution. Therefore, IQR is commonly used in Delphi analysis instead of the mean. This IQR analysis is particularly useful when the aim is to evaluate opinion and/or consensus because it effectively handles nonnormal distributions and outliers (Hasson & Keeney, 2011). IQR values falling below 1.5 are considered to indicate consensus, and lower values reflect stronger levels of consensus.

Delphi Round 3

Prior to the interview, the results from Round 2, in which the most effective strategic behaviors were identified using the interquartile analysis method, were shared with the panel experts. Because the IQR indicated strong consensus for the five behaviors, each aligning with Heifetz et al.'s (2009) adaptive leadership framework, all five were included in Round 3 of the study. These behaviors and IQR scores are shared in Table 6 of Chapter IV.

In Round 3, experts participated in interviews and were asked to identify up to three actions that CXOs employ, based on the behaviors that received over 50% frequency and were highly rated in Round 2. This open-ended question produced

qualitative data as in Round 1. The researcher used NVivo and various AI tools, such as ChatGPT, to code and analyze these responses, identifying themes and their frequencies.

Intercoder Reliability

The flexible and evolving nature of naturalistic inquiry, such as interviews and artifact analysis, makes it difficult to establish a clear boundary between data collection and analysis (Patton, 2015). To strengthen reliability, data triangulation was employed, and an impartial third researcher validated the data.

Intercoder reliability requires two or more individuals to independently observe or code data to ensure measurement consistency (McMillan & Schumacher, 2010), which helps reduce potential bias from relying on a single coder (Creswell, 2015). Following data collection in Rounds 1 and 3, an external coder with a doctoral degree, familiar with the study's purpose and experienced in data coding, reviewed 10% of responses from each round to verify coding accuracy. The external coder and researcher reached 80% agreement on themes, meeting the minimum acceptable standard for reliability (Lacy & Riffe, 1996). Additionally, a colleague with expertise in statistical analysis reviewed the Round 2 data to confirm that the behaviors rated for Round 2 fell within the 80% accuracy rate between their calculations and the researcher's computations

Limitations

Limitations in a study are defined as “methodological weaknesses ... that may impact interpretations of the results” (Patten, 2017, p. 303). In the context of a Delphi study, such limitations can include lower response rates, the lengthy time commitment required, potential influence on participants' opinions, and a tendency to produce general statements over detailed, topic-specific insights (Hsu & Sanford, 2012). For this study,

limitations included geographic constraints, sample size, and potential bias because of the researcher's involvement as an instrument in the study.

Geography

Regarding geography, participants were limited to tech top executives from the cities of Los Angeles, San Diego, San Francisco, and San Jose. This selection may not be representative of all tech's top executives in California, the United States, or other countries.

Sample Size

Another limitation of the study was its small sample size. Although it is important to have enough participants to achieve data saturation, Patton (2015) explained that there is no specific number required; the emphasis should instead be on the quality and depth of insights obtained. This study's generalizability was constrained because the panel included only 20 top tech executives.

Summary

Chapter III explained the Delphi technique, detailing its methodology and specific application within this study. It provided a thorough overview of the population, target population, and sample along with a detailed description of the study's design and instrumentation. The chapter also covered the procedures for data collection and analysis and addressed validity, reliability, and limitations, including the steps taken for field testing and intercoder reliability.

Chapter IV presents the results of the data collected, highlighting the themes and patterns identified through inductive coding. Chapter V discusses the study's findings,

conclusions, and recommendations, offering contributions to theory development and suggesting directions for future research.

CHAPTER IV: RESEARCH, DATA COLLECTION, AND FINDINGS

Overview

This Delphi study explored the key strategic adaptive leadership behaviors outlined in Heifetz et al.'s (2009) adaptive leadership framework that CXOs employ to create agile, adaptive organizations capable of thriving in VUCA environments. In addition, it identified actions recommended by CXOs to implement these behaviors effectively. In Round 1, participants identified strategic adaptive leadership behaviors through a survey. In Round 2, they rated these behaviors using a 6-point Likert scale. In Round 3, interviews were conducted to gather recommended actions for implementing the top-rated behaviors. The researcher employed a mixed-method Delphi approach to analyze and present the findings.

Chapter IV provides an overview of the study, including purpose statements, research questions, methodology, data collection procedures, population, and sample. It also presents and analyzes the qualitative and quantitative data collected during each round, followed by a detailed report of the study's findings.

Purpose Statement

The purpose of this Delphi Study was to identify the strategic leadership behaviors, as outlined in Heifetz et al.'s (2009) adaptive leadership framework, that CXOs use to develop agile and adaptive organizations that succeed in VUCA change environments. The second purpose of this Delphi study was to rate the degree of effectiveness of strategic leadership behaviors, as outlined in Heifetz et al.'s adaptive leadership framework, that CXOs use to develop agile and adaptive organizations that succeed in VUCA change environments. Finally, the third purpose of this study was to

identify actions CXOs who use the behaviors from Heifetz et al.'s adaptive leadership framework recommend to develop agile and adaptive organizations in VUCA change environments.

Research Questions

1. What strategic leadership behaviors from Heifetz et al.'s (2009) adaptive leadership framework do CXOs use to develop agile and adaptive organizations that succeed in VUCA change environments?
2. How do CXOs rate the effectiveness of strategic leadership behaviors from Heifetz et al.'s (2009) adaptive leadership framework in developing agile and adaptive organizations that succeed in VUCA change environments?
3. What actions do CXOs who use the behaviors from Heifetz et al.'s (2009) adaptive leadership framework recommend to develop agile and adaptive organizations in VUCA change environments?

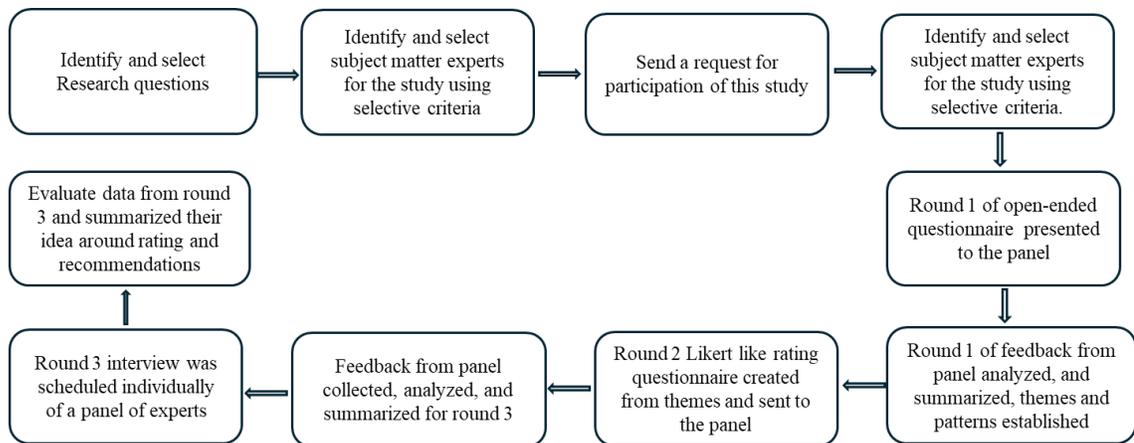
Research Methods and Data Collection Procedures

This study used the Delphi methodology to gather insights from top executives on the strategic behaviors associated with Adaptive Leadership that CXOs use to develop agile and adaptive organizations in VUCA environments. Originally developed by the RAND Corporation in the 1950s, the Delphi method is a widely recognized approach for achieving reliable consensus among experts with real-world knowledge (Dalkey & Helmer, 1963; Hsu & Sandford, 2007; Skulmoski et al., 2007; Yousuf, 2019). Initially used in defense research, the methodology has since been applied among various disciplines, including education, aerospace, technology, and healthcare (Dalkey & Helmer, 1963; Linstone & Turner, 1975).

The Delphi process involves a panel of experts who participate in multiple rounds of questionnaires to reach consensus. Experts are selected based on their specialized knowledge and remain anonymous to each other throughout the study, though their identities are known to the researcher (Hsu & Sandford, 2007; Okali & Pawlowski, 2004). The first round employed a qualitative approach, prompting participants to respond to an open-ended question to generate ideas for subsequent rounds (Cantrill et al., 1996). In the second round, a Likert scale was used to rank or prioritize the items identified in the initial phase (Hsu & Sandford, 2007; Ludwig, 1997). In the final phase of this study, individual expert interviews were conducted, providing participants with the opportunity to discuss their ratings, reflect on their assessments, and offer recommendations for refining the proposed concepts (Yousuf, 2019). Figure 8 illustrates the steps for this study.

Figure 8

The 11 Steps of the Research Method, Data Collection, and Data Analysis



Population

For this study, the population was identified as approximately 24,544 top tech executives in California, based on data from the U.S. Bureau of Labor Statistics (2023) and CompTIA (2024). These executives, including presidents and SVPs, possess extensive leadership experience in California-based tech companies. Because precise statistics on the total number of top executives in the state's tech industry were unavailable, this estimate was derived from combining data from the sources mentioned above.

California was selected as the study's geographic focus because it is a global leader in technological innovation with a tech workforce of approximately 1.88 million, according to the California Governor's Office of Business and Economic Development (n.d.). To refine the target population, the study focused on executives from four major tech hubs: Los Angeles, San Diego, San Francisco, and San Jose. These cities collectively account for 80–85% of tech companies in California (CompTIA, 2024; U.S. Bureau of Labor Statistics, 2023).

The estimated distribution of top tech executives across these cities is as follows:

- Los Angeles: approximately 6,151 executives,
- San Diego: approximately 1,956 executives,
- San Francisco: approximately 5,424 executives, and
- San Jose: approximately 6,187 executives

In total, these four cities represent a target population of approximately 19,718 top tech executives, all of whom hold senior leadership roles in the industry.

Sample

This study's sample comprised 20 top tech executives, equitably recruited from the following four major California tech hubs: Los Angeles, San Diego, San Francisco, and San Jose. The researcher aimed to ensure a balanced distribution of participants across these cities.

For this Delphi study, participants were voluntarily selected based on meeting at least three of the following four criteria:

- held a top executive position in a tech company for 5 or more years,
- led their organization through recent VUCA challenges, such as those posed by globalization, COVID-19, emerging technologies like AI, or cybersecurity threats such as ransomware,
- authored published articles or presented research at tech conferences, and
- received industry recognition, including acknowledgments from peers, company websites, renowned tech magazines, or major conferences.

Demographic Data

Demographic data were collected at the start of Round 1 of this study from participants to confirm that they met three of the four criteria, including participants' location and gender identity. The majority of participants were selected using purposive and convenience sampling, and a few were selected through snowball sampling. Among the 20 participants, 30% identified as female. Table 4 provides a summary of the participants' demographic information.

Table 4

Demographic Data of Participants

City	Female	Male	Total
Irvine	5	0	5
Los Angeles	0	5	5
San Diego	1	2	3
San Francisco	1	3	4
San Jose	0	3	3
Total	7	13	20

Presentation and Analysis of Data

This section presents the collected data and its analysis for each round of the Delphi study. The findings are organized sequentially, aligning with the Delphi methodology to ensure a structured presentation of participant responses.

Delphi Round 1

Based on your experience, what strategic leadership behaviors can CXOs employ to develop agile and adaptive organizations that thrive in VUCA change environments? You can consider examples from Ronald Heifetz’s adaptive leadership framework as reference if you like (Heifetz et al., 2009).

Round 1 of this Delphi study used a survey questionnaire featuring one open-ended question aligned with Research Question 1.

The researcher analyzed participant responses using NVivo and various AI tools, such as ChatGPT, identifying recurring themes and code frequencies. Through this qualitative data analysis, 19 key themes emerged. Table 5 presents these themes, ranked by frequency, from highest to lowest, based on the Round 1 survey questionnaire.

Table 5*Round 1 Themes and Frequencies*

Theme	Frequency
Psychological safety	19
Innovation	18
Collaboration	17
Building leadership	15
Continuous learning	13
Transparency	13
Building trust	9
Communication	8
Clear vision	8
Accountability	8
Empathy	7
Vulnerability	7
Self-awareness	4
Inclusivity	4
Risk taking	3
Strategic thinking	2
Customer centric	2
Resilience	1
Delegation	1

It is evident that the most frequently mentioned responses from the panel aligned and/or overlapped with the behaviors outlined by Heifetz et al. (2009), as referenced in the survey question. Those five behaviors are as follows:

- Naming elephants in the room: Create psychological safety, promote transparency, and foster an environment where innovation and honest dialogue can thrive.
- Shared responsibility: Empower employees, foster collaboration, and distribute decision making to effectively address complex challenges and drive innovation.

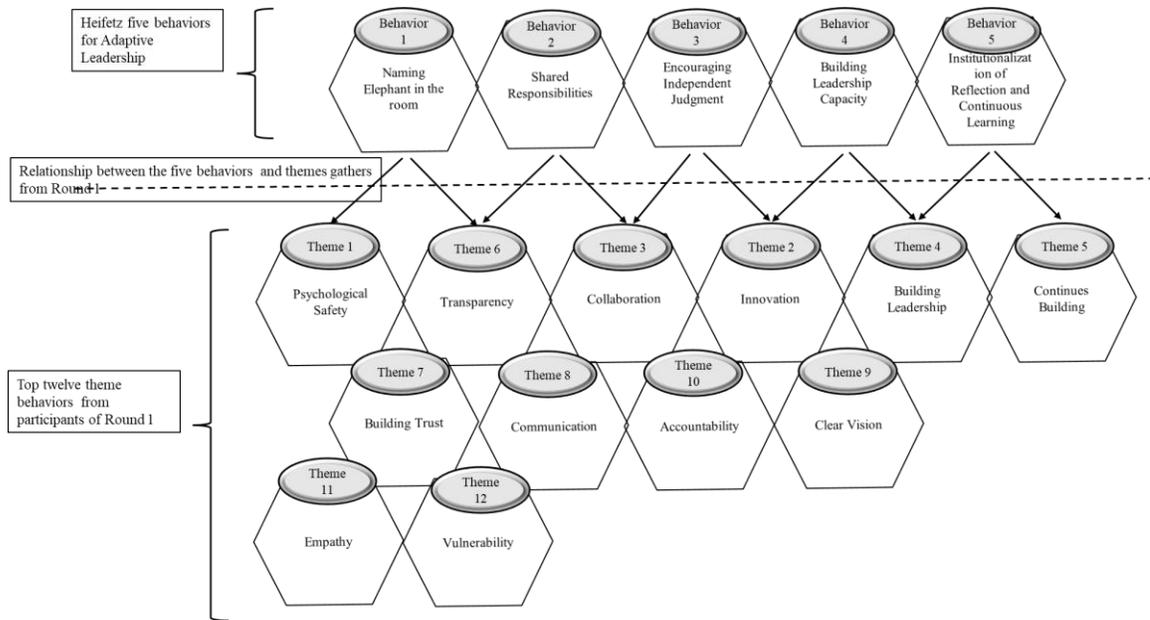
- Encouraging independent judgment: Foster critical thinking and empower employees to make informed decisions, leading to increased innovation and creative problem solving.
- Building leadership capacity: Intentionally motivate employees to enhance their leadership capacity and foster a culture of collective ownership and shared responsibility.
- Institutionalization of reflection and continuous learning: Introduce the concept of learning from failures and success to establish a sustainable learning environment grounded in reasoned conclusions and continuous improvement.

Figure 9 illustrates the relationship between the five behaviors identified by Heifetz et al. (2009) and the 12 themes gathered from participants during Round 1. This visual representation highlights how these behaviors align with the insights shared by the expert panel. In addition, there were seven themes that did not directly align with Heifetz's five strategic leadership behaviors.

Building trust was high and was the most frequently reoccurring word that was not explicitly mentioned in the Heifetz et al. (2009) behavior list, and it appeared nine times. Communication, clear vision, accountability, empathy, and vulnerability themes were not explicitly identified in Heifetz et al.'s behavioral list. However, these themes were not as frequent as building trust. Six of seven responses highlighting empathy and vulnerability as strategic behaviors came from female expert panelists, suggesting a potential gender-based perspective on leadership. Although self-awareness and inclusivity had lower response frequencies, they are noteworthy because they were absent from Heifetz et al.'s framework. Further exploration in Round 3 interviews with

Figure 9

The Five Behaviors From Heifetz Correlation With Themes



participants provided deeper insights into how these behaviors contribute to adaptive leadership. In the Round 1 responses, a few themes emerged that may not traditionally be classified as behaviors, such as customer centricity and strategic thinking. Although these were mentioned by only a small number of participants, it was valuable to explore them further during the Round 3 interviews to gain deeper insights into the rationale behind their inclusion.

Delphi Round 2

Based on the results of the Round 1 survey, the following are the most frequently used strategic leadership behaviors by CXOs in building agile and adaptive organizations that thrive in VUCA environments. Based on your experience, how would you rate these behaviors? Were there any strategic leadership behaviors you expected to be included on the list but were not? If you answered “Yes” to the question above, please

name the strategic leadership behaviors and use the scale above to rate the behaviors you include.

Round 2 of this Delphi study was designed to address Research Question 2 and used a survey questionnaire incorporating a 6-point Likert-type scale. Participants were asked to rank the themes identified in Round 1 based on their perceptions of the effectiveness of strategic behaviors in achieving organizational agility and adaptability in a VUCA environment. Because Round 1 results showed that the top six behavioral themes—psychological safety, innovation, collaboration, building leadership, continuous learning, and transparency—appeared in more than 50% of participant responses and they are aligned with Heifetz et al.’s (2009) adaptive leadership behaviors, the researcher chose to include only these behaviors in the rating process for Round 2. The 6-point Likert scale used for ranking included the following rating scale:

- 1 = *extremely ineffective*
- 2 = *moderately ineffective*
- 3 = *slightly ineffective*
- 4 = *slightly effective*
- 5 = *moderately effective*
- 6 = *extremely effective*

The researcher conducted a quantitative data analysis by calculating the IQR to evaluate the spread and concentration of the middle 50% of the data. The IQR is determined by computing the difference between the upper quartile (Q3, 75th percentile) and the lower quartile (Q1, 25th percentile). This statistical method aids in assessing data variability, identifying outliers, and facilitating comparisons across data sets. Table 6

presents the individual scores assigned by each participant. IQRs values below 1.5 are considered to indicate consensus, with lower values reflecting a stronger level of consensus.

Table 6

Individual Scores From Survey Round 2 for Each Strategic Behavior

Participant	Psychological safety/transparency	Innovation	Collaboration	Building leadership	Continues learning
1	4	6	6	6	5
2	6	5	6	5	5
3	6	5	6	6	5
4	6	5	5	5	5
5	6	5	6	5	5
6	6	5	5	5	4
7	5	6	6	5	6
8	6	5	6	5	5
9	6	4	5	5	5
10	5	6	6	5	5
11	6	5	5	5	4
12	6	5	5	5	6
13	6	6	5	5	5
14	5	5	6	6	5
15	6	5	6	5	6
16	5	5	5	6	5
17	6	5	6	5	5
18	5	6	5	6	6
19	6	6	6	5	5
20	5	6	5	5	6

For this study, the researcher used quartile analysis which is a statistical method used to divide a dataset into parts, known as quartiles. These quartiles help in understanding the distribution of data by identifying central tendencies and variability. The Q1 (first quartile or 25th percentile) represents the median of the lower half of the dataset, meaning 25% of the data falls below Q1. Q2 (second quartile or 50th

percentile/median) represents the median of the dataset, meaning 50% of the data fell in Q2. Last, Q3 (third quartile or 75th percentile) represents the highest 25% of the remaining value in the dataset. Furthermore, to measure the dispersion or how spread out the middle 50% of a dataset is, the researcher calculated the IQR. IQR helps detect outliers. Values that fall 1.5 times the IQR below Q1 or above Q3 are considered potential outliers. Table 7 presents the calculated IQR for each strategic behavior outlined by Heifetz et al. (2009) based on the participants' rating in Table 6. The quartile analysis data in Table 7 reveal that in all behaviors, 75% of the data were at or below 5, or moderately efficient, except for psychological safety/transparency, collaboration, and innovation. For these identified items, the data were at or below 6, that is, extremely efficient. The data suggest a relatively uniform consensus among responses and not many outliers.

Table 7

Calculated IQR for Each Strategic Behavior

Strategic behavior	Quartile 1	Quartile 2	Quartile 3	IQR
Psychological safety/transparency	5.00	6.00	6.00	1.00
Collaboration	5.00	6.00	6.00	1.00
Innovation	5.00	5.00	6.00	1.00
Building leadership	5.00	5.00	5.25	0.25
Continues learning	5.00	5.00	5.25	0.25

Delphi Round 3

Based on the strategic leadership behaviors rated as most effective in Round 2, what are the actions you recommend for CXO to use to develop agile and adaptive

organization in VUCA environment? Please recommend and discuss no more than three actions.

Round 3 of this Delphi study corresponded to Research Question 3; expert Delphi panelists participated in interviews to identify up to three actions that CXOs recommend to develop agile and adaptive organizations in VUCA change environments. The researcher used NVivo and various AI tools, such as ChatGPT-driven analysis, to code, categorize, and examine responses, ultimately identifying key themes and their frequencies. Individual participant responses are analyzed next, followed by the consensus of Round 3.

Analysis of Interview Participant 1

Participant 1 highlighted several critical leadership behaviors essential for success in dynamic organizational environments. The participant emphasized the importance of fostering a safe organizational environment and an empowering culture where individuals feel comfortable expressing diverse perspectives and questioning the status quo. According to the interviewee, leaders must embrace vulnerability, which paradoxically strengthens their authority by encouraging collaboration and support. The participant further stressed the need for prioritizing imagination and innovation, reigniting creative problem solving to stay ahead in technological and business intersections. The interviewee suggested that leaders should shift from “inside-out thinking” (focusing inwardly on organizational capabilities) to “outside-in thinking” (understanding external factors like customer needs and industry trends). Finally, the participant emphasized transparent communication, empathy, and the ability to adapt leadership styles,

advocating a shift from traditional command-and-control models to more collaborative and integrated approaches as essential for modern leadership.

Participant 1 emphasized that to adopt these behaviors, leaders should begin by deeply understanding their business, including how it generates and spends money, and aligning their actions with this knowledge. According to the participant, building strong relationships with peers and stakeholders among functions such as marketing, legal, and finance is crucial for ensuring collaborative decision making. The interviewee suggested that leaders can implement changes gradually, starting with low-impact, high-value solutions that build trust and credibility, as demonstrated by introducing incremental cybersecurity measures. The participant also stressed the importance of practicing strategic communication, aligning individual roles with organizational goals, and enabling independent judgment and proactive decision making. Finally, the interviewee highlighted that fostering an “outside-in” perspective requires constant feedback from external stakeholders and adaptability to evolving market demands, ensuring that leadership remains strategic and responsive.

Analysis of Interview Participant 2

Participant 2 emphasized self-awareness as a fundamental leadership principle, stating that leaders must be conscious of their impact and how they are perceived by others. The interviewee also highlighted shared accountability, by which responsibility is distributed among teams rather than resting solely on individuals. In addition, transparency was underscored as essential for fostering trust, particularly when addressing difficult topics in open discussions. The interviewee suggested that respect builds trust and makes it an inseparable leadership trait. Last, the interviewee stressed the

importance of independent judgment, leadership capacity-building, and continuous learning, whereby leaders must actively seek feedback to refine their approach and ensure they are not operating in isolation.

To implement these leadership behaviors, Participant 2 advocated for a collaborative leadership approach, in which decisions are made with team input rather than unilaterally. The participant emphasized the importance of open dialogue, encouraging team members to freely share their perspectives and make independent decisions when appropriate. According to the interviewee, transparency is crucial, and they practice it by ensuring that critical issues are openly discussed even when the conversations may be difficult or uncomfortable. Additionally, the participant highlighted their belief in removing obstacles for their teams, rather than enforcing hierarchy, creating an environment where individuals can thrive and contribute effectively. The interviewee also stressed the importance of seeking regular feedback from both peers and subordinates, using it as a key strategy to stay grounded and continually improve their leadership effectiveness.

Analysis of Interview Participant 3

Participant 3 emphasized that adaptive leadership varies depending on the stage of an organization, particularly in startups and growth companies, in which flexibility and responsiveness are crucial. The interviewee highlighted clarity in communication as a fundamental leadership behavior, stressing that leaders must clearly define challenges before discussing solutions to ensure alignment. Additionally, the interviewee pointed out the importance of weighted engagement, by which decisions are not dominated by the loudest or most authoritative voices but are informed by collective input. Other key

behaviors include creating psychological safety, in which failure is not feared but recognized as a learning opportunity, and shared accountability, ensuring responsibility is tied to achievements rather than blame. The interviewee also underscored removing hierarchy in problem solving, advocating for leaders to sit shoulder to shoulder with their teams rather than issuing directives from the position of authority. The interviewee suggested that they adamantly disagree with how many times the participant heard a leader say, “Don’t bring me a problem, bring me a solution.” He just does not agree with that philosophy. He added, “An adaptive leader has to make it okay to bring problems and sit shoulder to shoulder to solve them together.”

To put these behaviors into practice, Participant 3 emphasized the need for actively promoting transparency, ensuring that open discussions take place and that leaders are willing to name the elephant in the room when addressing difficult topics. According to the participant, encouraging independent judgment and building leadership capacity requires allowing team members to take ownership of decisions rather than relying on a top-down authority approach. The interviewee further stressed that fostering a culture of psychological safety demands consistent reinforcement of an open and trust-based environment over time rather than attempting to instill safety in a single moment. Finally, the interviewee emphasized the importance of humility, urging leaders to set aside ego, listen to their teams, and create an inclusive decision-making process.

Analysis of Interview Participant 4

Participant 4 emphasized the importance of modeling leadership behaviors, stressing that leaders must exemplify the values the interviewee expects from others. The interviewee highlighted comfort with ambiguity, whereby effective leaders embrace

uncertainty and use clarity and simplification to navigate complex situations. The ability to break down problems logically and communicate them in a structured manner was identified as a crucial leadership trait. In addition, the interviewee pointed out that strong leaders run toward ambiguity, seeing it as an opportunity rather than a challenge. The interviewee suggested that if leaders are not running toward ambiguity, they are always pushing forward into the unknown. Hence, it becomes easy to get stuck in a defined world—one that becomes static and resistant to change.

Another key behavior mentioned was delegation with true empowerment, in which leaders assign decision-making responsibility and support the outcome without interference—unless critical, unseen information justifies intervention. Finally, fostering collaboration through shared accountability was underscored as essential, particularly in cross-functional teams in which multiple perspectives must align to produce effective solutions.

To model these leadership behaviors, Participant 4 emphasized the importance of aligning actions with expectations, ensuring that leaders set a strong example through their own behavior. According to the participant, encouraging logical problem solving requires breaking down complex challenges into manageable steps while maintaining a calm, deliberate, and measured approach. The interviewee highlighted the need for embracing ambiguity, fostering a culture in which teams feel safe navigating uncertainty and adapting to change. In terms of delegation, the participant stressed that leaders must empower decision makers fully, ensuring that once a task is assigned, the decision is respected unless an overriding factor such as confidential knowledge necessitates adjustment. To strengthen collaboration, the interviewee suggested structuring decision-

making responsibilities among business, product, and technical teams, ensuring that outcomes are jointly developed and agreed upon. By implementing these strategies, the participant asserted that leaders can create an environment that fosters adaptability, accountability, and strategic clarity.

Analysis of Interview Participant 5

Participant 5 emphasized the importance of cross-functional teams, arguing that involving diverse expertise from the start—such as legal, marketing, and operations—leads to faster problem solving and stronger execution. The interviewee also highlighted the need for clarity in communication, ensuring that teams fully understand the mission, problem, and expected outcomes before making decisions. Another key behavior discussed was continual communication and feedback loops, by which insights and concerns are actively surfaced at all levels to prevent delays in high-paced environments. In addition, empowered decision making with structured accountability was emphasized, allowing teams to make independent choices within a predefined framework that minimizes bureaucracy. Finally, the interviewee stressed anticipation and staying ahead of emerging technologies, ensuring leaders proactively monitor industry trends to avoid disruption and seize innovation opportunities.

The interviewee suggested that if leaders do not stay ahead of what is happening, someone else will do it 10 times cheaper. They added, “Anticipation is everything.”

To foster cross-functional collaboration, Participant 5 emphasized the importance of including all relevant stakeholders from the outset of any initiative, which helps reduce silos and increase efficiency. According to the participant, clear and structured communication should be used to define the problem, objectives, and decision-making

framework upfront, ensuring that teams are aligned from the beginning. The interviewee highlighted the value of implementing formalized feedback loops, such as lessons-learned sessions, to identify hidden challenges and continually refine processes. In decision making, the participant suggested using structured proof-of-concept pilots to test multiple solutions in parallel, thereby reducing risk and accelerating progress. The interviewee also emphasized the need for prioritizing market awareness and technological foresight, advising leaders to stay informed about emerging trends and disruptive technologies to maintain a competitive edge and adapt quickly to industry shifts.

Analysis of Interview Participant 6

Participant 6 emphasized power with rather than power over, highlighting the shift in leadership from hierarchical authority to shared decision making. Leaders should push decisions down to the lowest responsible level, ensuring that those closest to the issue are empowered to act. The interviewee also underscored empathy as a critical leadership trait, emphasizing that understanding and actively listening to team members and business partners fosters stronger relationships and decision making. In addition, the interviewee stressed the importance of vulnerability, explaining that leaders who admit mistakes and express openness create an environment of psychological safety.

Transparent and honest dialogue was also highlighted as a key behavior with the caveat that it should be professional and respectful, allowing teams to address difficult issues quickly and constructively. The interviewee suggested that the bad news does not get better with age. They added, “If you have something difficult to share, do it quickly and honestly.” Last, the interviewee pointed out the importance of aligning leadership values

with organizational priorities, ensuring that decision making is in harmony with the institution's mission and goals.

To cultivate shared decision making, Participant 6 emphasized the need for establishing clear strategic goals and values that guide distributed leadership while maintaining alignment with broader organizational objectives. According to the participant, fostering empathy requires active listening, allowing employees space to share concerns while recognizing the importance of self-care to better support others. The interviewee highlighted that leaders can create psychological safety by modeling vulnerability, openly admitting mistakes, and demonstrating that constructive feedback is encouraged and valued. The participant stressed that transparent communication should include the timely sharing of both good and bad news because delaying difficult conversations can erode trust. In addition, the interviewee advocated for embracing honest dialogue in a manner that is both respectful and solution-oriented, reinforcing a workplace culture in which feedback is direct yet considerate.

Analysis of Interview Participant 7

Participant 7 emphasized first-principles leadership, advocating for a decision-making approach based on analyzing each unique situation rather than relying solely on frameworks. They highlighted trust and the transfer of ownership, by which leaders must distribute decision-making power throughout the organization rather than centralize it at the top. In addition, the interviewee stressed overcommunication, particularly during crises, to reduce uncertainty, maintain alignment, and reinforce trust. The interviewee suggested that there is always uncertainty, and the bigger the business gets, the more complicated it can become, but ambiguity is different. They added, "Ambiguity kills

speed.” Another critical behavior identified was psychological safety through structured conflict, by which leaders create a culture where task-based disagreements are encouraged, but personal conflicts are avoided. The interviewee also discussed focusing on the mission to align employees regarding a shared purpose, reducing ambiguity and internal politics. Last, the importance of agility beyond IT, in which adaptive leadership should permeate all business functions, was underscored as key to thriving in fast-changing environments.

To cultivate first-principles leadership, Participant 7 emphasized the importance of diagnosing problems uniquely rather than relying on rigid frameworks. According to the participant, trust building and ownership transfer require pushing decision-making authority to those closest to the issue while maintaining clear guidelines and accountability mechanisms. The interviewee highlighted the need for overcommunication during times of uncertainty using multiple channels such as all-hands meetings, anonymous surveys, and question and answer sessions to effectively address employee concerns. The participant stressed that creating psychological safety involves establishing clear ground rules for conflict, ensuring that disagreements remain task-focused rather than personal. In addition, the interviewee underscored the importance of reinforcing mission alignment and leadership consistently articulating strategic priorities to clarify what the organization will and will not pursue, thereby minimizing ambiguity. Finally, the participant emphasized embedding agility throughout the organization, beyond just IT, to ensure that teams at all levels embrace an adaptive, iterative approach to decision making and execution.

Analysis of Interview Participant 8

Participant 8 emphasized empathy and compassion as essential leadership traits, arguing that leaders must genuinely care for their teams and support them through personal and organizational challenges. The interviewee suggested that smart leaders know that their team matters most. They added, “When people feel valued, they step up—not because they have to, but because they want to.”

The interviewee highlighted inclusivity as a key element of leadership, ensuring that diverse perspectives are welcomed, valued, and actively incorporated into decision making. Another critical behavior discussed was authenticity and vulnerability, whereby leaders should openly acknowledge personal struggles and challenges to create an environment where employees feel safe to do the same. The interviewee also stressed the importance of psychological safety, tying it to transparent communication and shared responsibility, so that employees feel empowered to speak up without fear of judgment or repercussions. In addition, the interviewee highlighted leading by example, explaining that leaders must not only set expectations but actively model the behaviors the interviewee wants to see in their teams.

To foster empathy and compassion, Participant 8 emphasized the importance of creating intentional spaces for open dialogue, in which employees feel supported in sharing their thoughts and challenges. According to the participant, encouraging authenticity and vulnerability requires leaders to openly share personal experiences when appropriate, demonstrating that seeking help and acknowledging difficulties is a sign of strength. The interviewee highlighted that psychological safety can be reinforced through regular check-ins, feedback loops, and transparent discussions, ensuring that employees

feel seen and heard. The participant stressed that inclusivity should be embedded in decision-making processes, allowing diverse voices to contribute meaningfully. In addition, the interviewee underscored the importance of leading by example, stating that leaders must practice what they preach—whether by modeling work–life balance, pursuing professional development, or demonstrating resilience in difficult situations. By adopting these practices, the participant asserted that leaders can cultivate a highly engaged, high-performing workforce that thrives in uncertainty and change.

Analysis of Interview Participant 9

Participant 9 emphasized strategic relationship-building, drawing from Keith Ferrazzi's (2014) principles in *Never Eat Alone* and Joel DeLuca's (1999) *Political Savvy: Systematic Approaches to Leadership Behind the Scenes*. They stressed that leaders must actively cultivate networks before they need them, fostering trust and influence through intentional interactions. The interviewee suggested that the leaders should not build influence when they need it. They should build it beforehand through trust and meaningful relationships.

Another key behavior highlighted was navigating organizational dynamics, in which leaders should understand how decisions are made and leverage indirect influence to drive their agendas effectively. Clarity over transparency was also discussed, noting that although many leaders claim transparency, what truly matters is clear, actionable communication that removes ambiguity. In addition, the interviewee emphasized adaptive leadership, by which leaders adjust their style based on the environment, team culture, and organizational hierarchy to ensure their message is effectively received. Finally, the importance of psychological safety was reaffirmed, particularly in the need to

create spaces for open dialogue without fear of repercussion, ensuring that employees feel comfortable expressing their ideas.

To cultivate strategic relationships Participant 9 emphasized the importance of investing time in genuine networking, focusing on offering value before making requests. According to the participant, navigating organizational influence requires identifying key stakeholders and leveraging allies to communicate ideas effectively. The interviewee highlighted that reinforcing clarity in leadership involves ensuring that every communication—whether about decisions, expectations, or feedback—is specific, consistent, and actionable. The participant stressed that implementing adaptive leadership necessitates reading the room and adjusting communication styles to match the audience, ensuring that messages resonate among different organizational levels. In addition, the interviewee underscored that fostering psychological safety requires leaders to lead by example, modeling vulnerability, actively seeking feedback, and acting on it to demonstrate that employee voices are valued and impactful.

Analysis of Interview Participant 10

Participant 10 highlighted encouraging independent judgment as the most critical leadership behavior, emphasizing that adaptability requires diverse perspectives and critical thinking to reach the best solutions. The interviewee also stressed shared responsibility, explaining that empowerment and ownership must be embedded into leadership practices to allow employees the freedom to make decisions and ensure accountability. Active listening was another key behavior because leaders must ensure they truly hear and consider the ideas of their teams rather than dismissing perspectives based on preconceived notions. The interviewee also emphasized the importance of

recognizing small wins, which build trust, reinforce progress, and ensure that employees feel valued. Vision alignment was another crucial behavior; leaders must establish a clear, relatable vision and hold individuals accountable for their roles in achieving it. Last, the interviewee condemned command-and-control leadership, noting that fear-based management is demotivating and drives high attrition, underscoring the need for respectful, empowering leadership styles. The interviewee suggested that if a leader starts building leadership capacity when they need to adapt, they are already too late.

To promote independent judgment Participant 10 emphasized the importance of creating collaborative spaces for problem solving, in which team members can analyze different perspectives before making decisions. According to the participant, shared responsibility can be reinforced by empowering employees through delegation, ensuring that they have the necessary resources to succeed. The interviewee highlighted that active listening should be embedded into leadership practices, achieved by conducting regular check-ins and creating safe spaces for open discussions. The participant stressed that recognizing small wins involves celebrating incremental progress, whether through public acknowledgments, performance reviews, or informal recognition platforms like kudos channels. In addition, the interviewee underscored the importance of aligning the vision, stating that clear communication and accountability are essential, and strategic goals should be revisited and reinforced rather than abandoned. Finally, the participant emphasized the need to prevent toxic leadership, advocating for zero tolerance for abusive management styles, enforcing leadership coaching, and taking corrective action against destructive behaviors.

Analysis of Interview Participant 11

Participant 11 highlighted proactive communication and trust-building as critical leadership behaviors, emphasizing that leaders should communicate even when they have no updates to alleviate uncertainty and build credibility with their teams. The interviewee also reinforced the importance of naming the elephant in the room; leaders must ensure that concerns are surfaced early rather than allowing anxiety and speculation to take over. Participant 11 also emphasized group problem solving and collaborative decision making, with the belief that employees are more likely to embrace change when they have contributed to the solution rather than having it dictated to them. The interviewee suggested that people accept change more when they have input. They added, "Collaboration makes solutions stronger and increases team buy-in."

The interviewee also pointed out the need for agility in leadership transitions, noting that when changes are poorly communicated, they erode trust and create unnecessary stress within the organization. Last, the interviewee emphasized the value of recognizing small wins, stating that celebrating progress fosters engagement and accountability.

To enhance proactive communication, Participant 11 emphasized the importance of informing employees of changes, even when details are unknown, to prevent misinformation and reduce unnecessary stress. According to the participant, encouraging open discussions about difficult topics ensures that concerns are addressed before they escalate, fostering a culture of transparency. The interviewee highlighted that empowering employees involves including them in decision-making processes, allowing teams to brainstorm solutions rather than passively receiving directives. The participant

stressed that aligning employees with organizational changes requires leaders to clearly communicate the rationale behind decisions and give employees space to express their perspectives. In addition, the interviewee underscored the importance of fostering accountability and engagement, stating that publicly acknowledging contributions, small victories, and incremental progress helps maintain motivation and trust within the organization.

Analysis of Interview Participant 12

Participant 12 emphasized autonomy and independent judgment, noting that in times of crisis, empowering employees to think creatively and solve problems leads to breakthrough innovations. The interviewee also highlighted psychological safety, explaining that leaders must create an environment in which employees feel safe to take calculated risks and try new approaches. The interviewee suggested that when crisis hits, the best ideas come from those closest to the work. They added, "Leaders must empower them to think independently and solve problems without fear."

Trust building was another critical behavior, particularly in leadership transitions and crisis management, by which transparency and proactive communication are key to maintaining stability. The interviewee also stressed the importance of shared ownership and collaboration, where teams work as cohesive units rather than waiting for top-down directives. Last, the interviewee emphasized feedback loops and continuous learning, ensuring that organizations gather insights, analyze sentiment, and take action based on employee feedback, rather than just collecting data without follow through.

To foster autonomy, Participant 12 emphasized the need for removing unnecessary bureaucratic constraints, allowing employees to solve problems

independently, particularly in high-pressure situations. According to the participant, creating psychological safety requires leaders to model vulnerability, openly admitting when they do not have all the answers and encouraging employees to experiment and learn from failure. The interviewee highlighted that building trust during times of change necessitates proactively communicating decisions before employees hear them from external sources, thereby reducing uncertainty and speculation. The participant stressed that structuring collaboration involves ensuring that key stakeholders including security, engineering, and business teams are included in problem-solving discussions. In addition, the interviewee underscored the importance of institutionalizing feedback loops, recommending the use of surveys, retrospectives, telemetry data, and executive listening sessions to track sentiment, identify obstacles, and translate feedback into actionable improvements.

Analysis of Interview Participant 13

Participant 13 highlighted encouraging independent judgment as critical leadership behavior, acknowledging that although it is difficult to implement in practice, it fosters an environment in which employees feel empowered to make decisions, take responsibility, and learn from mistakes. The interviewee suggested that leaders can't create decision-making empowerment by simply saying it. They added, "You build it through consistent actions that show employees their choices matter."

The interviewee also emphasized the importance of clear vision and commitment, explaining that leaders must define a specific, measurable objective that rallies the team and creates alignment across the organization. Psychological safety was another key factor; leaders build trust not by reassuring employees with vague optimism but by being

transparent about both successes and challenges. In addition, the interviewee reinforced continuous learning and decision-making autonomy, stating that leaders must encourage employees to take risks, learn from their experiences, and reinforce a culture of accountability rather than blame.

To cultivate independent judgment, Participant 13 emphasized the importance of delegating decision-making authority, allowing employees to refine their choices with constructive feedback rather than having their decisions overridden. According to the participant, establishing a clear vision requires leaders to define quantifiable goals, enabling employees to see how their contributions impact the organization. The interviewee highlighted that promoting psychological safety involves consistently communicating both positive and difficult realities, ensuring employees feel informed and secure. The participant stressed that regular and transparent communication through quarterly all-hands meetings, periodic email updates, and direct conversations creates alignment and prevents employees from feeling disconnected. In addition, the interviewee underscored the importance of building a culture of decision-making empowerment, stating that leaders must trust their teams' judgment, support their choices, and ensure that responsibility is distributed rather than concentrated at the top. Finally, the participant emphasized fostering continuous learning, recommending structured opportunities for employees to develop their skills, take risks, and adapt to changing business needs.

Analysis of Interview Participant 14

Participant 14 emphasized the role of culture in leadership, particularly in startups and high-growth companies, in which culture must be curated rather than dictated. They

added, “Leaders must create environments where employees feel ownership over values, not just follow them.”. Unlike established global organizations with ingrained cultures, smaller companies require intentional culture-building efforts to create alignment and engagement. The interviewee also highlighted the importance of decision-making transparency, noting that leaders must clearly differentiate between informing, involving, and empowering employees in decision making. Another critical behavior discussed was crisis leadership through structured communication, whereby leaders must frame challenges, provide context, and guide teams toward solutions without dictating decisions. The interviewee also stressed stakeholder alignment, explaining that leaders must manage board expectations, navigate external pressures (such as activist investors), and maintain internal team cohesion through transparent and structured engagement. Finally, the interviewee emphasized vision refinement, asserting that leadership is not just about defining a vision once but continually refining it as the business evolves.

To cultivate a strong company culture, Participant 14 emphasized the importance of engaging employees in defining values and norms rather than imposing them through a top-down approach. According to the participant, decision-making transparency requires a structured approach, by which leaders clarify which decisions employees can influence versus those that are predetermined, ensuring clear expectations. The interviewee highlighted that crisis leadership should involve early communication of challenges, structured discussions on possible solutions, and a transparent decision-making framework that prevents confusion and builds trust. The participant stressed that stakeholder alignment necessitates consistent updates and proactive engagement with both internal teams and external investors, ensuring that leadership actions reflect broader

business priorities. In addition, the interviewee underscored the importance of vision refinement, stating that leaders should regularly revisit and adapt strategic goals to align with evolving market conditions while maintaining organizational clarity and momentum.

Analysis of Interview Participant 15

Participant 15 emphasized continuous learning as a foundational principle, particularly in a nonprofit environment in which adaptability is crucial for serving first-generation college students from diverse backgrounds. They added, “Talent is equally distributed, but opportunity is not. Our job is to bridge that gap by continuously learning and evolving to better serve our students.” The interviewee stressed the need for ongoing reflection and adaptation, noting that strategies that worked in the past may no longer be effective because of changing student needs, economic conditions, and societal shifts. Another critical behavior discussed was shared responsibility and empowerment, by which hiring A+ players ensures that the organization continually evolves by learning from leading practices in the field. The interviewee also highlighted the importance of creating an environment in which employees feel safe expressing ideas, explaining that some employees, particularly those from hierarchical organizations, may struggle to speak up and take initiative without intentional encouragement. Finally, the interviewee underscored the importance of psychological safety, whereby leaders must create trust through transparency and authentic engagement, ensuring that employees feel comfortable discussing challenges without fear of negative consequences.

To foster continuous learning, Participant 15 emphasized the need for organizations to actively listen to students, partners, and mentors, integrating their feedback into program improvements. According to the participant, leaders should hire

high-caliber employees who bring expertise and fresh perspectives, then empower them to apply best practices from their prior experience. The interviewee highlighted that encouraging independent judgment and decision making requires leaders to create a culture in which employees feel valued and encouraged to contribute ideas. This, the participant noted, involves one-on-one discussions, transparent communication, and structured opportunities for employees to take ownership of initiatives. The interviewee stressed that building psychological safety involves leaders modeling vulnerability, ensuring that failures are viewed as learning opportunities rather than punitive moments. In addition, the participant underscored the importance of leading by example, stating that leaders must embody transparency, adaptability, and a commitment to improvement if they expect the same from their teams.

Analysis of Interview Participant 16

Participant 16 emphasized the importance of culture and climate in leadership, explaining that culture must be curated and nurtured, not dictated especially in large, highly structured organizations such as higher education institutions. The interviewee differentiated between culture (the organization's values and norms) and climate (the environment leaders create for people to do their best work), underscoring that leaders must create psychological safety where employees feel trusted, valued, and empowered to contribute ideas without fear of backlash.

Another key behavior discussed was navigating ambiguity and institutional resistance, particularly in legacy-driven environments in which status quo thinking dominates. The interviewee suggested that leadership is not about maintaining the status quo. They added, "Leadership is about curating culture, managing ambiguity, and

empowering people to embrace change.” The interviewee also highlighted the burden of leadership, emphasizing that leaders must balance transparency with discretion, often carrying the weight of difficult decisions while maintaining clarity and composure for their teams. Last, the interviewee reinforced strategic agility, by which leaders must anticipate future challenges, develop innovation pathways, and adapt their leadership style to different organizational contexts, including cultural and global considerations.

To curate culture and climate effectively, Participant 16 emphasized the importance of engaging employees in shaping values and expectations, ensuring that norms are collaboratively defined and continuously refined. According to the participant, psychological safety should be cultivated by creating spaces for open dialogue, in which employees feel safe to share innovative ideas without fear of criticism or political repercussions. The interviewee highlighted that navigating institutional resistance requires leaders to frame change initiatives as shared challenges, using strategic questioning to engage diverse perspectives rather than imposing directives. The participant stressed that balancing the leadership burden necessitates measured transparency, by which leaders communicate enough to maintain trust but also protect employees from undue stress. In addition, the interviewee underscored the importance of building strategic agility, stating that leaders should empower small, fast-moving teams to experiment with new ideas while creating scalable models for successful innovations that can be adopted widely.

Analysis of Interview Participant 17

Participant 17 highlighted psychological safety as critical leadership behavior, explaining that leaders must create spaces in which employees feel empowered to share

their honest opinions without fear of repercussions. The interviewee illustrated how structured elephant-in-the-room discussions provided a platform for employees, especially those from different cultural backgrounds, to openly discuss challenges and contribute to innovation. Another key behavior discussed was strategic clarity, whereby leaders must clearly communicate organizational goals and direction to ensure that employees understand their purpose and role within the broader mission. The interviewee also emphasized fostering collaboration and global teamwork, particularly in multinational and highly distributed teams, in which success relies on breaking down silos and ensuring alignment across different regions. Last, the interviewee introduced the concept of proudly frugal leadership, which encourages employees to treat company resources as their own, exercising financial discipline while maintaining a focus on strategic growth.

The interviewee suggested that if the employee would not spend their own money on it, then they should not spend the company's. They added, "True leadership is about responsible decision-making, not just authority."

To establish psychological safety, Participant 17 emphasized the need for leaders to create structured, open forums in which employees can surface concerns in a nonthreatening environment. According to the participant, encouraging proactive transparency requires leaders to ensure that employees are informed about major decisions in real time rather than learning about them through external sources. The interviewee highlighted that setting a clear strategic vision involves outlining tangible objectives and a shared purpose, ensuring that employees understand how their work contributes to broader organizational goals. The participant stressed that fostering

collaboration among global teams necessitates recognizing cultural differences in communication styles and decision making, adapting leadership approaches to ensure inclusiveness. Additionally, the interviewee underscored the importance of embedding a proudly frugal mindset, stating that leaders should create guidelines for responsible decision making, encouraging employees to prioritize long-term business sustainability over short-term convenience.

Analysis of Interview Participant 18

Participant 18 highlighted psychological safety as a cornerstone of effective leadership, emphasizing that employees must feel safe to express ideas, challenge assumptions, and engage in difficult conversations without fear of negative consequences. The interviewee suggested that leaders must be intentional about creating psychological safety. They added, “When employees feel safe, they engage, innovate, and grow.”

The interviewee described using inspirational messaging, structured discussions, and leadership book clubs to empower employees to overcome limiting beliefs and develop confidence in their contributions. Another key behavior discussed was promoting self-awareness and reflection, by which leaders must understand their own blind spots and adjust their leadership style based on feedback, particularly regarding perceptions of control and influence. The interviewee also emphasized building leadership capacity through mentorship and executive coaching, stressing that even top-performing leaders benefit from continuous learning and external perspectives. Last, the interviewee reinforced the importance of cross-cultural leadership, explaining that understanding

regional, organizational, and industry-specific cultural dynamics is critical for fostering collaboration and alignment in global teams.

To enhance psychological safety, Participant 18 emphasized the importance of actively encouraging open discussions, facilitating structured forums for candid conversations, and modeling vulnerability as a leader. According to the participant, self-awareness and leadership adaptability can be strengthened through 360-degree assessments, enabling leaders to recognize how their actions are perceived and refine their leadership approach. The interviewee highlighted that building leadership capacity requires organizations to invest in coaching and structured leadership development programs, ensuring employees at all levels have opportunities to develop decision-making and strategic thinking skills. The participant stressed that encouraging cross-cultural collaboration necessitates leaders adapting their communication styles, decision-making approaches, and engagement strategies based on regional and organizational norms. In addition, the interviewee underscored the importance of institutionalizing continuous learning, stating that leaders should implement book clubs, industry workshops, and dedicated time for professional development, reinforcing a culture of growth and adaptability.

Analysis of Interview Participant 19

Participant 19 emphasized the importance of innovation in leadership, noting that adaptive leaders must be open to experimenting with new ideas, methods, and approaches rather than strictly adhering to established frameworks. The interviewee stressed that leaders must allow flexibility for their teams to think outside constraints, creating a balance between structure and creative problem solving. Another key behavior discussed

was situational leadership, whereby different contexts require different leadership approaches what works in a startup setting may not work in a highly structured corporate environment. The interviewee also highlighted the need to create dedicated space for innovation, explaining that if leaders don't explicitly make time for exploration, teams will remain locked in operational tasks and fail to generate breakthrough ideas. In addition, the interviewee reinforced the role of empathy in leadership, stating that leaders must recognize the external and internal factors influencing their teams, especially during times of uncertainty, restructuring, or major organizational change. Last, the interviewee emphasized self-awareness in leadership, explaining that leaders must be emotionally whole and self-reflective to effectively support their teams. If a leader is personally unsettled, that uncertainty will ripple through their organization.

The interviewee suggested that a leader cannot be a great leader if they are not whole with themselves. They added, "How leaders handle uncertainty will define how their team responds to change."

To promote innovation, Participant 19 emphasized the need for leaders to establish structured forums such as think tanks or innovation showcases, in which employees can present new concepts and creative solutions. The participant highlighted the importance of explicitly creating time for innovation, ensuring that employees feel safe and encouraged to explore new possibilities without the constant pressure of deliverables. According to the interviewee, situational leadership is crucial because leaders must assess organizational needs and adjust their leadership style accordingly rather than relying on a one-size-fits-all approach. The participant stressed that building an empathetic culture requires leaders to understand employee concerns, acknowledge

the emotional toll of uncertainty, and proactively address the external and internal factors that impact engagement and performance. Last, the interviewee underscored the importance of cultivating self-awareness, ensuring that leaders process their own professional uncertainties in a way that does not negatively affect their teams. By modeling resilience, transparency, and a growth mindset, leaders can create a culture that embraces adaptability and sustains innovation.

Analysis of Interview Participant 20

Participant 20 emphasized stability as a core leadership trait, explaining that adaptive leaders must maintain composure during change and uncertainty to ensure that their teams remain focused and resilient. They noted that leaders set an emotional tone for their organizations, meaning that a leader's ability to remain calm, steady, and measured in response to challenges directly impacts team morale and effectiveness. They added, "If leaders exude calm and stability, their team will reflect it. If they are reactive, so will their team."

Another key behavior discussed was emotional maturity, by which leaders must demonstrate strong self-awareness, active listening, and thoughtful engagement rather than reacting impulsively to situations. The interviewee highlighted the importance of body language and energy, noting that the way leaders communicate through tone, presence, and demeanor can be as impactful as what they say. In addition, they reinforced perspective-taking and empathy, in which effective leaders put themselves in others' shoes to understand different viewpoints, fostering trust, collaboration, and meaningful dialogue.

To enhance stability, Participant 20 emphasized the importance of leaders practicing measured communication, maintaining composure in high-pressure situations, and exuding confidence even when navigating uncertainty. According to the participant, building emotional maturity requires leaders to actively listen before speaking, ensuring they fully absorb different perspectives before offering insights or making decisions. The interviewee stressed the need for encouraging deep listening, particularly paying attention to individuals who are more reserved because they often provide the most thoughtful and valuable contributions to discussions. The participant highlighted the significance of intentional body language, ensuring that nonverbal cues reinforce a sense of calm, assurance, and openness. In addition, the interviewee underscored the importance of fostering perspective-taking and empathy, which involves acknowledging the experiences and challenges of others, validating their concerns, and conducting conversations on equal footing to build trust and alignment. By practicing these leadership behaviors, leaders can create a stable, emotionally intelligent environment that supports collaboration, resilience, and trust.

Data Analysis Round 3: The Consensus

Chapter III outlined the rationale for selecting the Delphi method as the most suitable approach for this study. This method was chosen because major organizational decisions in response to disruptive VUCA situations are typically made by senior executives and CXOs, making their insights critical. The Delphi technique (Dalkey & Helmer, 1963; Hsu & Sandford, 2007; Skulmoski et al., 2007; Yousuf, 2019) is particularly effective in capturing the lived experiences and strategic perspectives of these leaders. Numerous scholars have supported the cognitive value of this method,

recognizing it as a structured, efficient process for gathering and refining expert opinions and serving to achieve consensus among a group of experienced professionals.

The interviews revealed a strong consensus on the key strategic behaviors necessary for effective adaptive leadership. Psychological safety and transparency emerged as foundational behaviors, and leaders emphasized the need for open communication and environments in which employees feel safe to share concerns and challenge ideas. Many interviewees reinforced the importance of naming the elephant in the room to ensure that critical but often unspoken issues are addressed proactively.

In addition, shared responsibility and empowering employees were consistently highlighted as essential leadership behavior, and experts advocated distributed decision making, fostering collaboration across teams, and ensuring accountability at all levels. Encouraging independent judgment and critical thinking was also emphasized, and leaders acknowledged the value of empowering employees to make informed decisions rather than relying on top-down directives.

Regarding the recommended actions that successful CXOs can take to implement adaptive leadership behaviors, by using NVivo and ChatGPT, the researcher identified the key actions along with their frequency of occurrence from the participants as shown in Table 8.

Summary

Chapter IV summarized the research design, data collection methods, and data analysis of this study. The purpose of this Delphi study was to identify the strategic leadership behaviors, as outlined in Heifetz et al.'s (2009) adaptive leadership framework, that CXOs use to develop agile and adaptive organizations that succeed in

VUCA change environments. The second purpose of this Delphi study was to rate the degree of effectiveness of strategic leadership behaviors, as outlined in Heifetz’s et al. adaptive leadership framework, that CXOs use to develop agile and adaptive organizations that succeed in VUCA change environments. Finally, the third purpose of this study was to identify actions CXOs who use the behaviors from Heifetz et al.’s adaptive leadership framework recommend to develop agile and adaptive organizations in VUCA change environments.

Table 8

Themes for Recommended Actions and Their Frequencies

Recommended actions	Frequencies
Hold regular 1-on-1 meetings and team check-ins to build trust and make space for honest conversations.	18
Conduct all-hands meetings and timely updates to ensure clarity and openness on key issues.	16
Clearly communicate company vision in meetings and revisit goals regularly to ensure alignment.	16
Delegate decision-making authority and encourage independent problem-solving within teams.	14
Implement continuous feedback loops such as retrospectives, surveys, and open question and answer sessions.	12
Facilitate cross-functional workshops and collaborative projects to strengthen teamwork.	11
Have informal lunches or listening sessions to understand team emotions and perspectives and sharing their own.	11
Share responsibility through rotating leadership roles and shared accountability on key projects.	11
Host innovation days or hackathons to promote experimentation and creativity.	7
Adjust leadership style based on context; practice empathy in different cultural or team settings.	7

For this study, 20 technology executives participated in two survey rounds followed by one interview round. The objective of Round 1 was to gather insights from

expert panel members on the strategic behaviors CXOs can adopt to build agile and adaptive organizations capable of thriving in VUCA environments. This qualitative phase used an open-ended survey format, allowing participants to freely share their perspectives. The responses led to the identification of 19 strategic behaviors, some of which align with Heifetz et al.'s (2009) adaptive leadership framework. These behaviors were outlined in Table 5 of this chapter.

After analyzing the behaviors and their frequency from Round 1, the researcher decided to include only the most frequently occurring themes for the effectiveness rating process in Round 2. These selected behaviors aligned with Heifetz et al.'s (2009) adaptive leadership framework. In Round 2, a Likert scale survey was used to rate the degree of effectiveness of strategic leadership behaviors, as outlined in Heifetz's adaptive leadership framework, that CXOs use to develop agile and adaptive organizations that succeed in VUCA change environments based on their experience.

A quartile analysis indicated that for five of the behaviors, 75% of responses fell at or below a rating of 5 (moderately efficient). However, psychological safety/transparency, collaboration, and innovation received higher ratings, with 75% of responses at or below 6 (extremely efficient). The data showed a relatively uniform consensus among participants with minimal outliers.

During Round 2, several expert panel members contacted the researcher, expressing difficulty in rating the behaviors because of their interconnected nature. To maintain objectivity, the researcher encouraged them to evaluate each behavior from a leadership assessment perspective. Participants were asked to consider a scenario in which they were interviewing a leader with adaptive leadership qualities and determine

which behaviors would be essential (“must-have”) versus beneficial (“good to have”) in that context.

In Round 3, the final phase of the study, participants took part in interviews during which they were asked to identify specific actions that CXOs should take when applying behaviors from Heifetz et al.’s (2009) adaptive leadership framework to develop agile and adaptive organizations in VUCA environments. To foster a more conversational, interactive, and educational discussion, the researcher also invited participants to share any additional comments or insights on adaptive leadership strategic behaviors, if they wished to do so.

The researcher found Round 3, the interview phase, to be the most insightful and rewarding part of the study. Each expert panel member leveraged over 20 years of experience, sharing valuable lessons on key behaviors that can help leaders master adaptive leadership and drive success in dynamic environments. Beyond identifying essential behaviors, they also provided actionable recommendations to ensure these leadership practices remain sustainable and impactful over time. Collectively, this represents over 400 years of leadership experience, offering a wealth of knowledge to be applied in real-world settings. A summary of each interview was compiled and presented in this chapter.

Chapter IV revisited the study’s purpose and research questions, providing a comprehensive review before detailing the research methodology and data collection procedures, including the interview process and protocols. The population, sampling frame, and sample selection were outlined, followed by a discussion of the data analysis methods. Findings for each research question were presented in both narrative and tabular

formats, supplemented with direct excerpts from participant interviews to provide deeper insights. The chapter concluded with a summary of the key strategic behaviors for adaptive leadership identified throughout the analysis. Chapter V presents findings, conclusions, implications for practice, and recommendations for future research.

CHAPTER V: FINDINGS, CONCLUSIONS, AND RECOMMENDATIONS

This Delphi study aimed to identify the strategic leadership behaviors, as outlined in Heifetz et al.'s (2009) adaptive leadership framework that CXOs use to develop agile and adaptive organizations that succeed in VUCA change environments. Additionally, the study sought to assess the effectiveness of these strategic behaviors and finally attempted to identify actions that the CXOs use to implement these behaviors. Chapter V of this study begins with the researcher's major findings, unexpected findings, conclusions, implications for action, and recommendations for further research. The Chapter ends with the researcher's concluding remarks and reflections on this study.

Major Findings

Research Question 1

Research Question 1 asked, "What strategic leadership behaviors from Heifetz et al.'s (2009) adaptive leadership framework do CXOs use to develop agile and adaptive organizations that succeed in VUCA change environments?" Two major findings were identified from this research question.

Major Finding 1: 19 Strategic Behaviors From the Round 1 Open-Ended Survey

Question

The first survey question identified 19 strategic behaviors that an adaptive leader can use to build an agile organization capable of thriving in VUCA environments. Table 9 is a list of these behaviors, along with their frequency of mention. It is evident that Major Finding 1 is that the responses from the panel aligned and/or overlapped with the behaviors outlined by Heifetz et al. (2009). Table 9 shows the themes and the top six

behaviors that were most frequent but also overlapping with Heifetz five strategic behaviors.

Table 9

Overlap of Identified Themes From Round 1 Survey and Five Behaviors From Heifetz

Theme	Frequency	Explicitly mentioned by Heifetz et al. (2009)
Psychological safety	19	Yes
Innovation	18	Yes
Collaboration	17	Yes
Building leadership	15	Yes
Continuous learning	13	Yes
Transparency	13	Yes
Building trust	9	No
Communication	8	No
Clear vision	8	No
Accountability	8	No
Empathy	7	No
Vulnerability	7	No
Self-awareness	4	No
Inclusivity	4	No
Risk taking	3	No
Strategic thinking	2	No
Customer-centric	2	No
Resilience	1	No
Delegation	1	No

Major Finding 2: Additional Behaviors Beyond the Heifetz Adaptive Leadership

Framework

Table 9 presents behaviors identified by participants that are not explicitly included in Heifetz et al.'s (2009) five adaptive leadership behaviors. However, as Figure 9 of Chapter IV illustrated, these behaviors can indirectly connect to the Heifetz

framework. For instance, delegation can enhance accountability while also fostering leadership development. Similarly, a willingness to take risks can drive innovation and promote continuous learning.

Research Question 2

Research Question 2 asked, “How do CXOs rate the effectiveness of strategic leadership behaviors from Heifetz et al.’s (2009) adaptive leadership framework in developing agile and adaptive organizations that succeed in VUCA change environments?” Three major findings were identified from this research question.

Major Finding 3: Consensus on Psychological Safety, Collaboration, and Innovation From Round 2 Survey

The second survey identified the consensus of the most efficient strategic behaviors from Round 1 that an adaptive leader can use to build an agile organization capable of thriving in VUCA environments. The Round 2 survey revealed a strong consensus on three key strategic behaviors aligned with Heifetz et al.’s (2009) framework: Psychological safety, collaboration, and innovation. Notably, these behaviors rated highest (over 90%) above all the other behaviors assessed on the Heifetz scale. One participant emphasized the significance of psychological safety: “Leaders must be intentional about creating psychological safety—when employees feel safe, they engage, innovate, and grow.”

Major Finding 4: Foundation of Adaptive Leadership Behavior: Psychological Safety, Transparency, and Collaboration

The study revealed consensus on the strategic behaviors essential for effective adaptive leadership. During the interviews, psychological safety and transparency were

consistently identified by all of the participants (by over 95%) as cornerstone behaviors (Sott & Bender, 2025), with leaders stressing the importance of open communication and creating environments in which employees feel safe to voice concerns and challenge ideas. A frequently mentioned practice, 95%, was naming the elephant in the room, ensuring that critical yet often unspoken issues are acknowledged and addressed proactively.

Major Finding 5: Supporting Strategic Leadership Behaviors for Adaptive Leaders in a VUCA Environment: Innovation, Building Leadership, and Continuous Learning

Innovation, building leadership, and continuous learning emerged as key leadership behaviors essential for adaptive leaders in VUCA environments (approximately 90%). The expert panel emphasized that innovation drives organizational growth and agility, requiring leaders to create environments encouraging experimentation, risk-taking, and creative problem-solving (Edmondson, 2013). One of the panelists emphasized that fostering innovation requires removing obstacles, encouraging a culture of continual improvement, and creating a psychologically safe environment in which teams feel confident to suggest and test new ideas.

Building leadership was also identified as a strategic behavior for long-term organizational success. Experts advocate for mentorship, leadership development programs, and succession planning to cultivate future leaders who can confidently navigate complexity and uncertainty (Weiss et al., 2010). Developing strong leadership pipelines ensures that organizations remain resilient and adaptable in the face of change. Similarly, having continuous learning behavior is critical for both current and emerging leaders in today's rapidly evolving business landscape (Senge, 2006). Experts highlighted

the importance of intentional learning, not only in mastering existing technologies but also in staying ahead of emerging innovations.

Research Question 3

Research Question 3 asked, “What actions do CXOs who use the behaviors from Heifetz et al.’s (2009) adaptive leadership framework recommend to develop agile and adaptive organizations in VUCA change environments?” Three major findings were identified from this research question.

Major Finding 6: Innovative and Nontraditional Actions Recommended From Round 3 to Implement Adaptive Leadership Behaviors

Another key finding emphasized the role of continual development and a leader’s ability to learn from past experiences in fostering adaptability (Senge, 2006). Several panelists highlighted structured approaches, such as leadership academies, book clubs, and feedback loops, as ways to reinforce learning and growth. There were a few examples of nontraditional or innovative ways to implement these behaviors. For instance, one interviewee described placing a stuffed elephant in the room to symbolize difficult conversations and encourage team members to contribute. Another panelist mentioned sending a department-wide survey to allow employees to define their team values collaboratively.

Major Finding 7: The Interconnected Nature of Adaptive Leadership Behaviors

Major Finding 7 was that many panelists in Round 2 stated that strategic behaviors are highly interconnected. Even in Round 3, interview participants emphasized that these behaviors do not function in isolation but rather act as building blocks that support one another. Several interviewees who identified psychological safety and trust

as the foundational elements upon which all other behaviors rely also pointed out that without a secure and trusting environment, other strategic behaviors, such as shared responsibility, independent judgment, and open communication, would be significantly less effective. This perspective underscores the interdependent nature of adaptive leadership behaviors, by which each behavior enhances the impact of the others.

Furthermore, the specific behaviors a CXO recommended that organizations should employ in a VUCA environment depends on what the VUCA scenario the company is faced with or dealing with and the unique challenges and circumstances they encounter, reinforcing the need to have multiple adaptive strategic behaviors and tools. Neither is more important than the other, but rather, they contribute to a dynamic and context-driven leadership approach.

Major Finding 8: Leaders With Academic Experience Identified Empathy and Vulnerability as Efficient Strategic Adaptive Leadership Behaviors

Finally, a notable pattern emerged regarding empathy and vulnerability in leadership, which is evidence that leaders need to possess emotional intelligence (Bradberry & Greaves, 2009) in challenging organizational environments. These behaviors are not included in Heifetz et al.'s (2009) framework. Interviewees who emphasized these behaviors were those with previous or current collaborations with academic institutions. This could suggest that exposure to research-based leadership frameworks and diverse perspectives may shape leaders' ability to incorporate emotional intelligence into their approaches to VUCA challenges.

Unexpected Findings

As a result of this study, the researcher identified three unexpected findings.

Unexpected Finding 1

One of the unexpected findings from this study was that, despite strong consensus on the strategic behaviors of adaptive leadership, there was a notable lack of nontraditional or innovative approaches to implementing actionable organizational strategies. Although participants widely agreed on behaviors such as psychological safety, shared responsibility, and independent judgment, most described traditional implementation methods, such as open-door policies, all-hands meetings, and structured communication practices. Only a few interviewees provided unique or unconventional approaches, such as using a stuffed elephant as a conversation prompt or crowdsourcing department values through employee surveys. This suggests that although CXOs recognize the importance of adaptive leadership behaviors, there is room for professional development of these CXOs to develop and expand their leadership (Bradberry & Greaves, 2012) action tactics or strategies so the CXOs have advanced tools in their tool kit in VUCA scenarios in their organizations and more creative and dynamic ways to integrate them into organizational culture.

Unexpected Finding 2

Another unexpected finding was that few experts prioritized the emotional aspects of leadership, such as empathy, vulnerability, inclusiveness, and self-awareness. To avoid being biased, the researcher did not directly ask participants why these behaviors were absent from their responses except in two instances when the question was explicitly addressed. The feedback indicated that during VUCA situations, in which rapid decision-making is critical, these emotional intelligence-based behaviors were perceived as less efficient. Those participants expressed that in fast-moving crises, CXOs must act

decisively and with determination, often leaving less room for emotionally driven leadership approaches. This finding suggests a potential gap in how leaders perceive the role of emotional intelligence in high-pressure environments, highlighting an opportunity for further exploration into how these behaviors can be effectively integrated into adaptive leadership models without compromising agility and responsiveness (Bradberry & Greaves, 2009).

Unexpected Finding 3

The final unexpected finding in this study was that only a few participants identified customer-centricity and strategic thinking as adaptive leadership behaviors. When this was explored further in Round 3 interviews, participants reaffirmed the interconnected nature of these themes with other leadership behaviors. One interviewee noted that customer-centricity provides leaders with a stronger sense of purpose, fostering greater responsibility to deliver value. Another participant emphasized that strategic thinking ensures a clear vision, leading to improved communication and stronger team collaboration. These insights suggest that although customer-centricity and strategic thinking may not be traditionally categorized as leadership behaviors (Kihlstrom, 2017), they play a critical role in reinforcing key adaptive leadership traits.

Conclusions

The purpose of this Delphi study was to identify the strategic leadership behaviors, as outlined in Heifetz et al.'s (2009) adaptive leadership framework, that CXOs use to develop agile organizations that succeed in VUCA change environments as perceived by a panel of experts. The second purpose of this Delphi study was to rate the degree of effectiveness of strategic leadership behaviors, as outlined in Heifetz et al.'s

adaptive leadership framework, that CXOs use to develop agile and adaptive organizations that succeed in VUCA change environments. Finally, the third purpose of this study was to identify actions CXOs who use the behaviors from Heifetz et al.'s adaptive leadership framework recommend developing agile and adaptive organizations in VUCA change environments. The findings of this research study resulted in the following four conclusions.

Conclusion 1: Building Psychological Safety is the Foundational Behavior of an Adaptive Leader When VUCA Environments Impact Organizations

This study revealed a strong consensus on psychological safety, transparency, and open communication as foundational behaviors for adaptive leadership. The researcher concludes that leaders must create an environment in which employees feel safe (Lencioni, 2002) to voice concerns, challenge ideas, and engage in meaningful dialogue. Addressing unspoken challenges, symbolized by naming the elephant in the room, is essential for fostering trust, ensuring transparency, and promoting a culture of open discourse. Without these foundational elements, organizations may struggle to implement adaptive leadership strategies in VUCA environments effectively. If organizations do not foster psychological safety and empowerment in developing organizational cultures, when VUCA challenges arise, top-down leadership will not be as effective in resolving an organization's challenges (Lencioni, 2002).

Beyond establishing a psychologically safe and transparent culture, empowering employees through shared responsibility, independent judgment, and critical thinking emerged as equally vital. The study highlighted the importance of distributed decision-making, fostering collaboration, and ensuring accountability at all levels. Leaders who

equip employees with autonomy and encourage strategic thinking enable their organizations to navigate uncertainty with agility and confidence (Senge, 2006). Together, these behaviors form an interconnected leadership framework that promotes resilience, innovation, and long-term organizational success.

Conclusion 2: Training is Essential for CXOs to Apply Heifetz's Strategic Behaviors and Implement Action Plans Effectively

The researcher concludes that although CXOs have a strong understanding of adaptive leadership behaviors, they often lack the necessary training and expertise to translate these behaviors into actionable strategies. To strengthen adaptability, organizations should promote experimentation with innovative leadership approaches, incorporate dynamic engagement strategies, and cultivate a culture that balances traditional methods with creative leadership development. By fostering structured learning, inclusive decision making, and strategic adaptability, leaders can enhance their ability to manage complexity, drive resilience, and sustain long-term organizational growth in VUCA environments. One participant mentioned the leadership burden, the weight of leadership responsibilities, and the sense of isolation that often comes with it. They noted that not all leaders feel comfortable being vulnerable, and having a thinking partner, whether an internal or external consultant, would be valuable in supporting CXOs with developing curricula and training programs for adaptive leadership behaviors.

Conclusion 3: The Interdependent Nature of Adaptive Leadership Behaviors

The researcher concludes that organizations seeking to cultivate agility and resilience in VUCA environments must recognize that developing a single leadership trait in isolation is insufficient. Instead, adaptive leadership behaviors function as an

interconnected system, requiring a holistic approach to be truly effective. Participants emphasized that these behaviors act as building blocks, each reinforcing and enhancing the others, highlighting the necessity of integrating and balancing them for sustained organizational success.

Conclusion 4: The Influence of Academic Collaboration on Empathetic Behavior of Adaptive Leadership

The final conclusion of this study suggests that leaders who identified empathy and vulnerability as strategic adaptive leadership behaviors and rated them as highly effective had past or present collaborations with academic institutions. Based on this finding, it can be concluded that engagement with academia, whether formal or informal, fosters diverse perspectives and may contribute to shaping leaders' ability to incorporate emotional intelligence into their leadership approach. In an era in which adaptive leadership is critical for navigating uncertainty, the ability to connect with employees on an emotional level, foster trust, and demonstrate authenticity is increasingly recognized as essential leadership competencies. This trend may also be influenced by generational differences because academic environments tend to have a younger demographic, and research has suggested that newer generations place a higher value on empathy, authenticity, and vulnerability in leadership (Morgan, 2023).

Implications for Action

If CXOs in tech companies fail to equip themselves with the knowledge and tools required to navigate VUCA environments, their organization's success will be at risk. As emphasized in conclusion, the key takeaway is that leaders must cultivate strategic behaviors as adaptive leaders to build agile organizations that can thrive amid uncertainty

and complexity. Although some behaviors may be perceived as more effective than others, the findings clearly indicate that psychological safety, transparency, and collaboration serve as the foundational behaviors of adaptive leadership. However, possessing these strategic behaviors alone is not sufficient; leaders must also take deliberate actions to effectively implement them within their organizations. This section provides implications for actions organizations can take to embrace those behaviors and actions.

Implication 1: Apply a Well-Known Change Management Framework to Drive the Change Systematically

Given the conclusion that leaders must cultivate psychological safety, collaboration, and innovation within their organizations, achieving this will require effective change management and transformational efforts. Successful change and transformation go beyond project management; they require a holistic, systematic approach in which a well-defined framework provides essential guidance and structure (Anderson & Ackerman Anderson, 2010). Similarly, changing leaders' behaviors to adaptive leader behavior requires a well-defined framework to effectively navigate and implement change initiatives in VUCA environments. One widely recognized framework that could drive adaptive leadership behavior change in the leadership is the Prosci change management framework (Hiatt, 2006). According to the Prosci (n.d.) website, over 150,000 certified change agents use this framework, spanning 80% of Fortune 1000 companies across 80 countries worldwide (<https://www.prosci.com/about/global-coverage>). Prosci's structured approach provides a phased methodology to guide leaders

through complex organizational transitions, ensuring that both strategic behaviors and organizational adaptability are systematically developed.

At the core of Prosci is the ADKAR model, which consists of five key stages—awareness, desire, knowledge, ability, and reinforcement—designed to address the three essential dimensions of organizational change: people, process, and technology. This model enables leaders to create awareness of the need for change, foster intrinsic motivation (desire), equip individuals with the necessary knowledge, develop the ability to implement change effectively, and reinforce these changes for long-term sustainability. By leveraging this structured framework, adaptive leaders can drive organizational agility, minimize resistance, and ensure seamless transitions in an ever-evolving business landscape.

Implication 2: Apply Johari Window and DISC for Awareness Both on Individual as Well as Organizational Level

Another conclusion of this study highlights the importance of training for CXOs to effectively apply Heifetz et al.'s (2009) strategic behaviors and enhance their leadership effectiveness. Cognitive psychology tools such as the Johari window (Luft & Ingham, 1961) offer a structured approach for leaders to improve self-awareness and interpersonal relationships, an essential first step in recognizing the need for their own development and training. This framework divides awareness into four quadrants: the open area (known to self and others), the blind spot (unknown to self but known to others), the hidden area (known to self but not to others), and the unknown area (unknown to both self and others). By encouraging openness, feedback, and self-discovery, the Johari Window fosters personal growth and improved communication.

Similarly, personality assessments such as the DISC model, which categorizes individuals into dominance, influence, steadiness, and conscientiousness, help identify behavioral tendencies (Smith, 2009). These insights enhance communication, teamwork, and leadership effectiveness by allowing individuals and organizations to adapt interactions based on personality styles. Together, these tools provide valuable frameworks for developing self-awareness, strengthening collaboration, and optimizing leadership approaches.

Implication 3: Using Objective and Key Results to Foster Desire, Accountability, and Responsibility in an Organization

The conclusion regarding the interdependent nature of adaptive leadership behaviors highlights the critical role of other strategic behaviors such as responsibility and accountability in adaptive leadership. However, operationalizing these behaviors within a structured framework has been a long-standing challenge for organizations. This gap was addressed when John Doerr introduced objective and key results (OKRs) to Google, following its successful implementation at Intel (Doerr, 2018).

OKRs serve as a framework that aligns leadership vision with employee engagement, offering adaptive leaders a structured approach to managing change. OKRs cultivate a culture of accountability and responsibility by linking individual contributions to broader organizational goals. They establish clear expectations, reinforce alignment with strategic objectives, and enhance employee motivation by ensuring that daily tasks contribute meaningfully to the company's mission. When effectively implemented, OKRs drive intrinsic motivation by helping employees see the connection between their

roles and the organization's long-term vision, fostering commitment and sustained performance.

For organizations to cultivate a strong sense of desire and commitment among employees, leadership must strategically align vision, mission, and purpose with intrinsic motivations. Given the increasing preference of newer generations for meaningful work, this alignment is crucial to sustain employee engagement and productivity. Findings from this study highlight the importance of a clear vision and customer-centricity as key leadership components. When leadership decisions are directly linked to customer needs and long-term strategic objectives, organizations can enhance accountability, reinforce employee commitment, and improve overall effectiveness. This underscores the necessity for a more holistic leadership approach that embeds customer-centricity and a well-defined vision as fundamental principles of adaptive leadership in VUCA environments.

Implication 4: Develop a Curriculum to Enhance Adaptive Leadership

Competencies

The conclusion emphasizing the need for training to enhance CXOs' adaptive leadership behaviors highlights the importance of designing and implementing a comprehensive leadership curriculum. This curriculum should incorporate a variety of learning methods, including case studies, workshops, simulations, videos, articles, and interactive activities (see Appendix N). Universities or consulting firms offering certification courses in OKRs, Prosci, scaled agile framework enterprise (SAFe), and adaptive leadership can develop and deliver these curricula. Alternatively, companies can design and implement these programs internally as part of their employee development initiatives. These educational experiences can help leaders who often prioritize rational

systems focused on growth targets, profits and losses, and strategic planning develop a more agile and responsive mindset in the face of sudden disruptions and VUCA environments. By shaping behaviors, enhancing capabilities, and shifting mindsets, such a curriculum encourages leaders to embrace adaptive leadership principles, enabling them to navigate uncertainty, foster resilience, and drive organizational transformation effectively.

Implication 5: Adaptive Leaders Leveraging Empathy to Connect With Their Team Members

The conclusion is that engagement with academia could enhance empathetic behaviors and the study that newer generations place a high value on empathy, authenticity, and vulnerability; Morgan (2023) highlighted the importance of adaptive leaders intentionally to connect with employees on an emotional level to foster trust and demonstrate authenticity. Implementing a structured framework that embeds psychological safety, collaboration, innovation, transparency, and continuous learning at the team level can help ensure these behaviors become part of everyday practice. This approach equips organizations to navigate VUCA environments effectively while supporting long-term business success.

Over a thousand Fortune 500 companies have testified about frameworks such as SAFe (Leffingwell, 2016) and how these frameworks can empower employees to take ownership of their work, contribute innovative ideas, and engage in continuous learning. Furthermore, this framework ensures faster response times to market shifts, customer demands, and technological disruptions, allowing businesses to remain competitive, resilient, and agile in an ever-evolving landscape.

Recommendations for Further Research

Based on the findings of this Delphi study, several recommendations for further research are proposed to expand the existing body of knowledge on identifying adaptive leadership behaviors that drive successful organizational agility in VUCA environments. These recommendations focus on equipping leaders with effective strategic behaviors, decision-making frameworks, and actionable implementation strategies that promote resilience, adaptability, and sustained organizational success in continual change.

Recommendation 1: Replicating and Expanding the Study Outside the California Region

It is recommended that this Delphi study be replicated among tech companies in diverse geographic locations, including other states beyond California and international regions. Expanding the research to different locations will provide comparative insights and help determine whether regional or cultural factors influence the identification of strategic behaviors CXOs employ to develop agile organizations that thrive in VUCA environments. By broadening the dataset, this research can establish whether adaptive leadership behaviors vary by location or whether they remain universally applicable among different organizational and economic landscapes.

Recommendation 2: Establish an Empirical Study of the Outcome of This Study

It is recommended that an empirical study be conducted using the phenomenological method to assess the effectiveness of the strategic behaviors and implementation actions identified in this research. This can be achieved through a qualitative research approach to exploring individuals' lived experiences, capturing insights on how these leadership behaviors influence organizational agility, engagement,

and adaptability in practice. Such a study would provide a more comprehensive perspective by integrating both leader and employee experiences, offering deeper validation of the findings, and identifying potential gaps between leadership intent and employee perception.

Recommendation 3: Replicating and Expanding the Study to Different

Demographics

In terms of targeted demographics and additional perspectives such as gender, age, and race, a similar study could be developed to understand better whether the diversity of top executives could result in new strategic behaviors of adaptive leadership and findings. This would be extremely important because several organizations pledge to have more diversity in their leadership role.

Concluding Remarks and Reflections

The Ancient Greek philosopher Heraclitus (circa 535 B.C.E.) famously stated, “Everything flows and nothing abides; everything gives way and nothing stays fixed” (Haxton, 2001, p. 19). This timeless observation resonates profoundly in today’s rapidly evolving technological landscape, in which advancements in digitization, artificial intelligence, and automation are accelerating change at an unprecedented pace. Recent global disruptions, such as the COVID-19 pandemic, have further underscored the volatility within the tech industry and society at large. In the current VUCA environment, the question is not whether the next major disruption will occur but rather how leaders will respond when it does. These disruptions serve as a testament to the limitations of traditional leadership models, which often fail to provide the agility and responsiveness required to navigate constant turbulence.

The scholarly research and expert insights presented in this study reinforce the necessity of adopting strategic behaviors rooted in adaptive leadership. Effective leadership in VUCA environments requires agility, resilience, and a proactive mindset, attributes that cannot be achieved solely through traditional leadership frameworks. By cultivating behaviors aligned with Heifetz et al.'s (2009) five adaptive leadership principles, leaders can develop organizations that are both adaptable and sustainable, equipping themselves with the necessary strategic tools and actions to guide their teams through transformation and uncertainty. However, it is important to note that these behaviors are highly interconnected and are not as effective in isolation. This study highlights that adaptive leadership is not merely an advantage but a necessity, ensuring organizations can thrive amid disruption rather than merely surviving it.

As the researcher reflects on this study, the findings reaffirm the initial assumption that psychological safety and trust serve as foundational strategic behaviors for adaptive leaders in successfully implementing agility throughout their organizations in VUCA environments. These behaviors are not just enablers of adaptability but essential prerequisites for fostering a resilient and high-performing organization.

Looking ahead to the future of tech companies, the urgency to fully adopt adaptive leadership behaviors has never been greater. The researcher is committed to applying these findings in professional practice while further exploring the many recommendations derived from this study. The breadth of experience and insights contributed by participants underscored the importance of broadening this research's impact through courses, workshops, webinars, seminars, podcasts, and publications. By sharing these insights on larger platforms, the researcher aims to empower current and

future leaders, helping them unlock their greatest potential and develop adaptive leadership behaviors to truly build organizations that can navigate the challenges of an ever-evolving VUCA landscape.

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APPENDICES

APPENDIX A

Synthesis Matrix

Reference	Leadership	Adaptive Leadership	Agility	Business Agility	VUCA	Delphi Studies
Abidi, S., & Joshi, M. (2015)	✓				✓	
Ackerman, R., Mette, I., & Biddle, C. (2018)	✓	✓				
Aga, D. A., Noorderhaven, N., & Vallejo, B. (2016)	✓		✓			
Allio, R. J. (2013)	✓					
Ament, R. H. (1970)						✓
Anderson, D., & Ackerman Anderson, L. (2010)	✓	✓				
Apenko, S., & Chernobaeva, G. (2016)	✓	✓	✓	✓		
Argyris, C. (2006)	✓					
Arthur-Mensah, N., & Zimmerman, J. (2017)	✓	✓			✓	
Baker, A. C. (2004)	✓					
Barber, H. F. (1992)	✓					
Bass, B. M. (1990)	✓					
Bass, B. M. (2008)	✓					
Bass, B. M., & Riggio, R. E. (2006)	✓					
Beck, K., et al. (2001)			✓	✓		
Bennett, N., & Lemoine, G. J. (2014, January)					✓	
Bennis, W., & Nanus, B. (1985)	✓					
Bergman, J. Z., & Scully-Russ, E. (2018)	✓	✓				
Bharadwaj, A., et al. (2013)	✓		✓	✓		
Bhatti, W. A., & Zaheer, A. (2014)	✓					
Biloslavo, R., et al. (2024, July 15)	✓		✓	✓		
Blackmore, J., & Sachs, J. (2007)	✓	✓				
Bligh, M.C. (2017)	✓					
Boal, K. B., & Hooijberg, R. (2000)	✓	✓				
Bradberry, T., & Greaves, J. (2009)	✓					
Bradberry, T., & Greaves, J. (2012)	✓					
Brewer, E. W. (2011)	✓					✓
Bridger, E. (2022)	✓					
Brink, H. I. (1993)	✓					
Bronznick, S., Goldenhar, D., & Linsky, M. (2008)	✓	✓				
Brothers, J. T., & Schnurman-Crook, A. (2015)	✓	✓				

Brownlee-Turgeon, J. (2016)	✓					
Burns, J. M. (1978)	✓		✓			
Burns, T., & Stalker, G. M. (1961)	✓		✓			
Business Agility Institute. (n.d.)			✓	✓		
Business Agility Institute. (2020)			✓	✓		
Busu, M. (2024)	✓		✓	✓	✓	
California Governor's Office of Business and Economic Development. (n.d.)	✓					
Campbell-Evans, G., Gray, J., & Leggett, B. (2014)	✓	✓			✓	
Cantrill, J. A., Sibbald, B., & Buetow, S. (1996)						✓
Castillo, E. A., & Trinh, M. P. (2019)	✓			✓		
Ceri-Booms, M., CurÅÿeu, P. L., & Oerlemans, L. A. (2017)	✓					
Chen, G., TreviÃ±o, L. K., & Hambrick, D. C. (2009)	✓					
Choflet, A., Packardm T. & Stashower, L. (2021)	✓	✓				
Church, A. H., Del Giudice, M., & Margulies, A. (2017)	✓					
Cojocar, W. J. (2009)	✓	✓				
Collins, D. B., & Holton, E. F., III. (2004)	✓					
Cockcroft, A. (2015)			✓	✓		
CompTIA. (2024)			✓	✓		
Creswell, J. W. (2015)	✓					
Cullen-Lester, K. L., Maupin, C. K., & Carter, D. R. (2017)	✓	✓				
Cypress, B. S. (2017)						✓
Dalkey, N., & Helmer, O. (1963)		✓				✓
Daly, A. J., & Chrispeels, J. (2008)		✓			✓	
Darwin, C. (1981)		✓				
Day, D. V., & Lord, R. G. (1988)	✓					
DeLuca, J. (1999)	✓					
Denning, S. (2018)	✓					
DeRue, D. S., Nahrgang, J. D., Wellman, N. E., & Humphrey, S. E. (2011)			✓	✓		
De Smet, A., Lurie, M., & St. George, A. (2018)	✓	✓				
Dewey, J. (1997)		✓	✓			
Dilworth, R. L. (1996)	✓					
Dimmock, C. (2011)	✓					
Doorewaard, H., Van Hootegem, G., & Huys, R. (2002)		✓				
Doyle, A. (2017)		✓			✓	

Drago-Severson, E., Maslin-Ostrowski, P., & Hoffman, A. M. (2012)		✓				
Durkin, H. E. (1972)	✓					
Drucker, P. F. (2008)			✓	✓		
Dweck, C. S. (2006)	✓	✓				
Edmondson, A. C. (2013)	✓		✓			
Ehrlichman, D. (2021)	✓					
Eichholz, J. C. (2017)	✓	✓				
Elgoibar, P., Munduate, L., & Euwema, M. (Eds.)	✓				✓	
Elkington, R., Steege, M. V. D., Glick-Smith, J., & Breen, J. M. (Eds.)	✓	✓				
Epitropaki, O., Kark, R., Mainemelis, C., & Lord, R. G. (2017)	✓					
Ferrazzi, K. (2014)	✓	✓				
Ford, K. G. (2008)			✓	✓	✓	
Freedman, M. (2023, February 21)	✓					
Friedman, Y., Carmeli, A., & Tishler, A. (2016)	✓		✓			
Fullan, M., Rincon-Gallardo, S., & Hargreaves, A. (2015)	✓					✓
Galbraith, J. R. (1973)		✓				
Gilani, U. S., & Khan, U. A. (2019)			✓			
Gill, R. (2002)	✓		✓	✓	✓	
Goldman, S.L., Nagel, R.N. and Preiss, K., (1995)	✓					
Gothelf, J., & Seiden, J. (2017)		✓				
Graham, A. (2006)	✓		✓			
Green, H., Hunter, C., & Moore, B. (1990)						✓
Grissom, J. & Condon, L. (2021)	✓					
Grobman, G. M. (2005)					✓	
Harvey & De Meuse (2021)	✓					
Hatch (2018)	✓					
Hasson & Keeney (2011)	✓					
Ha√ton (2001)					✓	
Heifetz (1994)	✓				✓	
Heifetz (2008)	✓	✓				
Heifetz et al. (2009)	✓	✓				
Heifetz & Laurie (1997)	✓	✓				
Heifetz & Linsky (2002)	✓	✓				
Heifetz & Linsky (2017)	✓	✓				
Henderson (2020)	✓	✓				
Hersey (1985)	✓					

Hiatt (2006)	✓					
Highsmith (2013)		✓				
Hiller & Beauchesne (2014)	✓		✓			
Hoch & Dulebohn (2017)	✓					
Holcombe & Kezar (2017)	✓	✓				
Horney & Oâ€™Shea (2015)		✓				
Hsu & Sandford (2007)			✓	✓		
Hsu & Sandford (2012)	✓				✓	
Johansen (2017)	✓				✓	
Kail (2010a)	✓			✓		
Kail (2010b)	✓			✓		
Kail (2010c)	✓			✓		
Kail (2011)	✓				✓	
Kaminsky (2012)	✓			✓		
Kezar & Holcombe (2017)	✓	✓				
Kidd (1994)				✓		
Kihlstrom (2017)			✓			
King (1990)		✓				
Klonsky (2010)	✓					
Kotter (2007)	✓					
Kotter (2019)	✓					
Lacy, S., & Riffe, D. (1996)	✓	✓	✓	✓		
Ladyman, J., Lambert, J., & Wiesner, K. (2013)		✓	✓	✓		✓
Lamarck, J.-B. (1830/2011)			✓			✓
Lander, E., & Liker, J. K. (2007)	✓	✓	✓			✓
Larman, C. (2004)	✓	✓	✓			✓
Larson, J. E. (2022)	✓		✓	✓	✓	✓
Latham, J. R. (2014)	✓			✓		
Lee, C., Won, J. W., Jang, W., Jung, W., Han, S. H., & Kwak, Y. H. (2017)			✓		✓	✓
Leffingwell, D. (2016)		✓	✓			✓
Lencioni, P. M. (2012)		✓	✓	✓		✓
Levinthal, D., & March, J. G. (1981)	✓		✓		✓	
Linsky, M., & Lawrence, J. (2011)		✓		✓	✓	✓
Linstone, H. A., & Turner, M. (Eds.)		✓	✓	✓	✓	✓
Ludwig, B. (1997)	✓	✓		✓	✓	✓
Luft, J., & Ingham, H. (1961)	✓	✓		✓		
Ma√well, J. C. (2022)	✓		✓	✓		✓
McCurry, L., & McIvor, R. (2002)	✓	✓	✓	✓	✓	
McMillan, J. H., & Schumacher, S. (2010)	✓				✓	

Morgan, J. (2023)	✓	✓		✓	✓	✓
Nadkarni, S., & Narayanan, V. K. (2007)	✓	✓		✓	✓	
Nagel, R. N., & Dove, R. (1998)		✓			✓	✓
Nelson, T., & Squires, V. (2017)	✓	✓	✓	✓	✓	
Nicolaides, A., & McCallum, D. C. (2013)	✓		✓	✓		
Northouse, P. G. (2021)	✓		✓		✓	✓
Nurbantoro, E. (2021)	✓			✓	✓	✓
Okali, C., & Pawlowski, S. D. (2004)				✓		
Orvos, J. (2019)	✓	✓	✓	✓	✓	✓
Owens, R., & Valesky, T. C. (2014)	✓		✓	✓		✓
Pandza, K. (2011)	✓					
Patten, M. L. (2017)	✓					
Patton, M. Q. (2015)	✓					
Perkin, N., & Abraham, P. (2021)			✓	✓		
Petrie, N. (2011, December)	✓	✓				
Pill, J. (1971)						✓
Pink, D. H. (2011)	✓					
Prosci. (n.d.)	✓		✓			
Quansah, E. (2019)	✓	✓				
Questad, D. C. (2022)	✓	✓			✓	
Raney, A. F. (2014)		✓			✓	
Rapanta, C., Botturi, L., Goodyear, P., Guãrdia, L., & Koole, M. (2020)			✓			
Rigby, D. K., Sutherland, J., & Takeuchi, H. (2016)			✓	✓		
Roberts, C. M., & Hyatt, L. (2019)	✓					
Roth, O. D. (2022)	✓	✓				
Ryan, K. D., & Oestreich, D. K. (1998)	✓					
Salkind, N. J. (2017)	✓					
Sarkar, A. (2016)					✓	
Schein, E. H. (2010)	✓					
Schlaerth, A., Ensari, N., & Christian, J. (2013)	✓					
SchÄ¶n, D. A. (1982)	✓					
Seah, M., Hsieh, M.H. & Huang, H.Y. (2014)	✓					
Senge, P. M. (2006)	✓					
Senge, P. (2010)	✓				✓	
Seow, P. S., Pan, G., & Koh, G. (2019)					✓	
Sharratt, L., & Fullan, M. (Eds.)	✓					
Shariff, N. J. (2015)						✓
Skulmoski, G. J., Hartman, F. T., & Krahn, J. (2007)						✓

Å mite, D. et. Al (2023)			✓	✓		
Sott, M. K., & Bender, M. S. (2025)		✓			✓	
Stiehm, J. H. (2002)	✓					
Sullivan, J. (2012, January 16)					✓	
Taylor, A., Wagner, K., & Zabilt, H. (2012)			✓			
Taylor, P., & Gogate, P. (2021)				✓		
Tomblin Murphy, G., et. al (2022)	✓					
Torres, R., & Reeves, M. (2014)		✓				
Trivellas, P. & Santouridis, I. (2009)			✓			
Udinsky, B. F., Osterlind, S. J., & Lynch, S. W. (1981)	✓					
Uhl-Bien, M., Marion, R., & McKelvey, B. (2007)	✓	✓				
U.S. Bureau of Labor Statistics. (2023)					✓	
van Oosterhout, M. (2010)				✓		
VectorStock. (n.d.)	✓					
Voss, C.A. (1995)			✓			
Walker, R. M., & McGraw, K. J. (2017)		✓				
Weiss, D. S., & Molinaro, V. (2010)	✓					
Wiggins, T. (2024)	✓					
Wissema, J. G. (1982)	✓					
Yousuf, M. I. (2007)						✓
Yukl, G., & Mahsud, R. (2010)	✓	✓				
Zhang, ✓., Liu, Y., & Wang, Y. (2020)			✓			

APPENDIX B

Interest Google Form

Delphi Study

Form description

Image title



The purpose of this Delphi Study was to identify the strategic leadership behaviors, as outlined in Ronald Heifetz's Adaptive Leadership framework, that CXOs utilize (Heifetz, 2009) to develop agile and adaptive organizations that succeed in VUCA change environments. The second purpose of this study was to identify actions CXOs who utilize the behaviors from Ronald Heifetz's Adaptive Leadership Framework recommend to develop agile and adaptive organizations in VUCA change environments.

Description (optional)

The researcher will protect your confidentiality. Each round of questionnaires shall be structured in a way to ensure communication between the expert panelist is anonymous. Your name will not be shared with other members of the expert panel.

Name (First and Last) *

abc

Email Address *

@

Phone Number

Your answer

Please select your geographically closest city location *

- Los Angeles
- San Diego
- San Francisco
- San Jose

Participant Criteria



Description (optional)

Do you agree to participate in this study? *

- Yes
- No

Have you held a top executive role in tech companies for five years or more? *

- Yes
- No

Have you led your organization through recent VUCA (Volatility, Uncertainty, Complexity, and Ambiguity) challenges, such as those presented by Globalization, COVID-19 advancements in emerging technologies such as AI, or cyber security threats such as ransomware? *

- Yes
- No

Have you authored articles that have been published or presented at tech conferences? *

- Yes
- No

Have you received acknowledgment and appreciation of their contribution to their company from their peers and colleagues through company websites, well-known tech magazines, or conferences? *

- Yes
- No

i

Informed Consent Verification



Description (optional)

Electric Signature: By typing your name below, you verify you have read the Informed Consent and Confidentiality Form and give consent to participate in this study. *

Short answer text

Today's Date *

Month, day, year



APPENDIX C

Email From Researcher to Experts for Nomination

Date:

Dear [...]

My name is Sevak Markarian, and I am a doctoral candidate for UMass Global's Doctor of Organizational Leadership Program. I have been in tech companies for over 25 years and had several technical and leadership roles during these years. Currently, I serve as an organizational strategist and business agility transformation co-active coach for several tech companies.

Thank you for your interest in helping me identify participants for my study. The purpose of this Delphi study is to identify the strategic leadership behaviors, as outlined in Ronald Heifetz's Adaptive Leadership framework, that CXOs utilize (Heifetz, 2009) to develop agile and adaptive organizations that succeed in VUCA change environments.

The second purpose of this Delphi study was to rate the degree of effectiveness of strategic leadership behaviors, as outlined in Ronald Heifetz's Adaptive Leadership framework, that CXOs utilize (Heifetz, 2009) to develop agile and adaptive organizations that succeed in VUCA change environments.

Finally, the third purpose of this study was to identify actions CXOs who utilize the behaviors from Ronald Heifetz's Adaptive Leadership Framework recommend to develop agile and adaptive organizations in VUCA change environments. This study will consist of two rounds of surveys sent via email to the participants, followed by a final round of an interview to collect deeper thoughts of the second purpose.

Would you be able to provide the **names of one or two** top tech executives (Board Members, CXO, VP) who would be willing to participate and have the following characteristics:

- Held a top executive role in tech companies for five years or more.
- Led their organization through recent VUCA (Volatility, Uncertainty, Complexity, and Ambiguity) challenges, such as those presented by Globalization, COVID-19 advancements in emerging technologies such as AI, or cyber security threats such as ransomware.
- Authored articles that have been published or presented at tech conferences.
- Received acknowledgment and appreciation of their contribution to their company from their peers and colleagues through company websites, well-known tech magazines, or conferences.

Thank you,
Sevak Markarian
Doctoral Candidate

APPENDIX D
Email From Expert to Nominated Candidate

Date:

Dear [...]

I am emailing you on behalf of Sevak Markarian, a doctoral candidate for UMass Global's Doctor of Organizational Leadership Program who is looking for participants for his research study. Sevak has been in tech companies for over 25 years and had several technical and leadership roles during these years. Currently, he serves as an organizational strategist and business agility transformation co-active coach for several tech companies.

The purpose of his Delphi study is to identify the strategic leadership behaviors, as outlined in Ronald Heifetz's Adaptive Leadership framework, that CXOs utilize (Heifetz, 2009) to develop agile and adaptive organizations that succeed in VUCA change environments.

The second purpose of this Delphi study was to rate the degree of effectiveness of strategic leadership behaviors, as outlined in Ronald Heifetz's Adaptive Leadership framework, that CXOs utilize (Heifetz, 2009) to develop agile and adaptive organizations that succeed in VUCA change environments.

Finally, the third purpose of this study was to identify actions CXOs who utilize the behaviors from Ronald Heifetz's Adaptive Leadership Framework recommend to develop agile and adaptive organizations in VUCA change environments. This study will consist of two rounds of surveys sent via email to the participants, followed by a final round of an interview to collect deeper thoughts on the second purpose.

Sevak asked me to reach out to request your help in identifying participants for this study. If you are interested in helping him identify top tech executives (Board Members, CXO, VP) from your network, please email him at [redacted]. Below are the criteria Sevak has identified for voluntary participants. They should possess at least three of these four criteria.

- Held a top executive role in tech companies for five years or more.
- Led their organization through recent VUCA (Volatility, Uncertainty, Complexity, and Ambiguity) challenges, such as those presented by Globalization, COVID-19 advancements in emerging technologies such as AI, or cyber security threats such as ransomware.
- Authored articles that have been published or presented at tech conferences.
- Received acknowledgment and appreciation of their contribution to their company from their peers and colleagues through company websites, well-known tech magazines, or conferences.

Respectfully,
Sevak Markarian
Doctoral Candidate
UMASS Global

APPENDIX E

Delphi Round 1

Delphi Study: Round 1

Purpose: The purpose of this Delphi Study was to identify the strategic leadership behaviors, as outlined in Ronald Heifetz's Adaptive Leadership framework, that CXOs utilize (Heifetz, 2009) to develop agile and adaptive organizations that succeed in VUCA change environments.

Definition:
Five Behaviors of Adaptive Leadership (Heifetz 2009)

- **Naming Elephants in the Room:**
Create psychological safety, promote transparency, and foster an environment where innovation and honest dialogue can thrive.
- **Shared Responsibility:**
Empower employees, foster collaboration, and distribute decision-making to effectively address complex challenges and drive innovation.
- **Encouraging Independent Judgment:**
Foster critical thinking and empower employees to make informed decisions, leading to increased innovation and creative problem-solving.
- **Building Leadership Capacity:**
Intentionally motivate employees to enhance their leadership capacity and foster a culture of collective ownership and shared responsibility.
- **Institutionalization of Reflection and Continuous Learning:**
Introduce the concept of learning from failures and success to establish a sustainable learning environment grounded in reasoned conclusions and continuous improvement.

VUCA: VUCA stands for Volatility, Uncertainty, Complexity, and Ambiguity and describes the challenging conditions and dynamics organizations face in the contemporary business environment.

smarkar1@mail.umassglobal.edu [Switch account](#)



Not shared

* Indicates required question

Based on your experience, what strategic leadership behaviors can CXOs employ * to develop agile and adaptive organizations that thrive in VUCA environments? You can consider examples from Ronald Heifetz's Adaptive Leadership Framework as reference if you like.

Your answer

APPENDIX F

Delphi Round 2

Delphi Study: Round 2

Purpose: The second purpose of this Delphi study was to rate the degree of effectiveness of strategic leadership behaviors, as outlined in Ronald Heifetz's Adaptive Leadership framework, that CXOs utilize (Heifetz, 2009) to develop agile and adaptive organizations that succeed in VUCA change environments.

Definition:

Five Behaviors of Adaptive Leadership (Heifetz 2009)

- **Naming Elephants in the Room:** Create psychological safety, promote transparency, and foster an environment where innovation and honest dialogue can thrive.
- **Shared Responsibility:** Empower employees, foster collaboration, and distribute decision-making to effectively address complex challenges and drive innovation.
- **Encouraging Independent Judgment:** Foster critical thinking and empower employees to make informed decisions, leading to increased innovation and creative problem-solving.
- **Building Leadership Capacity:** Intentionally motivate employees to enhance their leadership capacity and foster a culture of collective ownership and shared responsibility.
- **Institutionalization of Reflection and Continuous Learning:** Introduce the concept of learning from failures and success to establish a sustainable learning environment grounded in reasoned conclusions and continuous improvement.

VUCA: VUCA stands for Volatility, Uncertainty, Complexity, and Ambiguity and describes the challenging conditions and dynamics organizations face in the contemporary business environment.

smarkar1@mail.umassglobal.edu [Switch account](#)



* Indicates required question

Email *

Record smarkar1@mail.umassglobal.edu as the email to be included with my response

Based on the results of the Round 1 survey, the following are the most frequently * utilized strategic leadership behaviors by CXOs in building agile and adaptive organizations that thrive in VUCA environments. Based on your experience, how would you rate these behaviors?

	1= Extremely Inefficient	2= Moderately Inefficient	3= Slightly Inefficient	4= Slightly Efficient	5= Moderately Efficient	6= Extremely Efficient
Strategic Leadership Behavior 1	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Strategic Leadership Behavior 2	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Strategic Leadership Behavior 3	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Strategic Leadership Behavior 4	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Strategic Leadership Behavior 5	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Were there any strategic leadership behaviors you expected to be included on the list but were not? *

- Yes
- No

If you answered "Yes" to the question above, please name the strategic leadership behaviors and use the scale above to rate the behaviors you include.

Your answer _____

APPENDIX G

Delphi Round 3

Delphi Study: Round 3

Purpose: The third purpose of this study was to identify actions CXOs who utilize the behaviors from Ronald Heifetz's Adaptive Leadership Framework recommend to develop agile and adaptive organizations in VUCA change environments

Example of Actions for "Encouraging Independent Judgment":

- Acknowledge and reward team members who demonstrated strong independent decision-making in the past quarter.
- Host quarterly workshops focused on enhancing critical thinking and effective problem-solving skills.
- Launch a "Lunch and Learn" series with innovation labs, where employees can brainstorm and address challenges collaboratively.
- Introduce temporary role exchanges to provide employees with fresh perspectives and varied responsibilities.

Definition:

Five Behaviors of Adaptive Leadership (Heifetz 2009)

- **Naming Elephants in the Room:** Create psychological safety, promote transparency, and foster an environment where innovation and honest dialogue can thrive.
- **Shared Responsibility:** Empower employees, foster collaboration, and distribute decision-making to effectively address complex challenges and drive innovation.
- **Encouraging Independent Judgment:** Foster critical thinking and empower employees to make informed decisions, leading to increased innovation and creative problem-solving.
- **Building Leadership Capacity:** Intentionally motivate employees to enhance their leadership capacity and foster a culture of collective ownership and shared responsibility.
- **Institutionalization of Reflection and Continuous Learning:** Introduce the concept of learning from failures and success to establish a sustainable learning environment grounded in reasoned conclusions and continuous improvement.

VUCA: VUCA stands for Volatility, Uncertainty, Complexity, and Ambiguity and describes the challenging conditions and dynamics organizations face in the contemporary business environment.

smarkar1@mail.umassglobal.edu [Switch account](#)



* Indicates required question

Email *

Record smarkar1@mail.umassglobal.edu as the email to be included with my response

Based on the strategic leadership behaviors rated as most important in Round 2, * what are the actions you recommend for CXO to utilize to develop agile and adaptive organization in VUCA environment?

Please recommend and discuss no more than three actions.

Your answer

APPENDIX H

Alignment of Research and Survey Questions and Framework by Round

Purpose Statement	Conceptual Framework	Research Question	Survey/Interview Question
The purpose of this Delphi Study was to identify the strategic leadership behaviors, as outlined in Ronald Heifetz's Adaptive Leadership framework, that CXOs utilize (Heifetz, 2009) to develop agile and adaptive organizations that succeed in VUCA change environments.	Heifetz's adaptive leadership framework emphasizes five key behaviors: naming the elephants in the room, promoting shared responsibility within teams, encouraging independent thinking, enhancing leadership capabilities, and integrating self-reflection and continuous learning into the organizational culture.	RQ1: What strategic leadership behaviors, from Ronald Heifetz's Adaptive Leadership Framework, do CXOs utilize to develop agile and adaptive organizations that succeed in VUCA change environments?	SQ1: Based on your experience, what strategic leadership behaviors can CXOs employ to develop agile and adaptive organizations that thrive in VUCA change environments? You can consider examples from Ronald Heifetz's Adaptive Leadership Framework as reference if you like.
The second purpose of this Delphi study was to rate the degree of effectiveness of strategic leadership behaviors, as outlined in Ronald Heifetz's Adaptive Leadership framework, that CXOs utilize (Heifetz, 2009) to develop agile and adaptive organizations that succeed in VUCA	Heifetz's adaptive leadership framework emphasizes five key behaviors: naming the elephants in the room, promoting shared responsibility within teams, encouraging independent thinking, enhancing leadership capabilities, and integrating self-reflection and continuous learning into the organizational culture.	RQ2: How do CXOs rate the effectiveness of strategic leadership behaviors, as outlined in Ronald Heifetz's Adaptive Leadership Framework in developing agile and adaptive organizations that succeed in VUCA change environments?	<p>SQ1: Based on the results of the Round 1 survey, the following are the most frequently utilized strategic leadership behaviors by CXOs in building agile and adaptive organizations that thrive in VUCA environments. Based on your experience, how would you rate these behaviors?</p> <p>SQ2: Were there any strategic leadership behaviors</p>

<p>change environments.</p> <p>.</p>			<p>you expected to be included on the list but were not? SQ3: If you answered “Yes” to the question above, please name the strategic leadership behaviors and use the scale above to rate the behaviors you include.</p>
<p>The third purpose of this study was to identify actions CXOs who utilize the behaviors from Ronald Heifetz’s Adaptive Leadership Framework recommend to develop agile and adaptive organizations in VUCA change environments.</p>	<p>Successful leaders must continuously adapt their approach to people, processes, technology, and structures, demonstrating flexibility and decisive action.</p>	<p>RQ3: What actions do CXOs who utilize the behaviors from Ronald Heifetz’s Adaptive Leadership Framework recommend to develop agile and adaptive organizations in VUCA change environments?</p>	<p>IQ1: Based on the strategic leadership behaviors rated as most effective in Round 2, what are the actions you recommend for CXO to utilize to develop agile and adaptive organization in VUCA environment? Please recommend and discuss no more than three actions.</p>

APPENDIX I

Invitation to Participate

Date:

Dear [Prospective Study Participant],

My name is Sevak Markarian, and I am a doctoral candidate for UMass Global's Doctor of Organizational Leadership Program. I have been in tech companies for over 25 years and had several technical and leadership roles during these years. Currently, I serve as an organizational strategist and business agility transformation co-active coach for several tech companies.

This is a formal invitation to participate in this study because of your expertise and experience as a district invitation to participate in a Delphi study aimed to identify and rate which strategic behaviors in Ronald Heifetz's Adaptive Leadership framework effective CXOs of organizations utilize to develop agile and adaptive organizations that succeed in VUCA (Volatility, Uncertainty, Complexity, and Ambiguity) environments. Additionally, this study aims to identify the recommended actions that CXOs who utilize the behaviors from Ronald Heifetz's Adaptive Leadership Framework to develop agile and adaptive organizations in VUCA change environments. You were chosen wide, administrative, instructional leader.

This study asks you to complete two rounds of survey questionnaires and one round of interview over the course of two months. Your participation is entirely voluntary, and you may withdraw from this study at any time without consequences.

PROCEDURES: If you decide to participate, then you will complete a short form to confirm:

- You held a top executive role in tech companies for five years or more
- Had experience in leading your organization through recent VUCA (Volatility, Uncertainty, Complexity, and Ambiguity) challenges, such as those presented by Globalization, COVID-19 advancements in emerging technologies such as AI, or cyber security threats such as ransomware.
- Authored articles that have been published or presented at tech conferences.

The researcher will then send two rounds of electronic surveys via Google Forms, with each survey taking approximately 10 to 15 minutes to complete, followed by a round of in-person or virtual interviews taking approximately 1 hour. The Round 1 survey will consist of an open-ended question. The Round 2 survey will utilize a Likert

scale for participants to highest rated strategic behaviors identified in the first survey. Finally, the Round 3 interview will contain open-ended questions about actions recommended based on the highest-rated behaviors identified from Round 2. That interview will take approximately less than an hour.

RISKS, INCONVENIENCES, AND DISCOMFORTS: There are minimal risks to your participation in this research study and no known harms or discomforts are associated with this study. There is no cost to you for participating, and you will not be compensated for your participation. The surveys will be completed anonymously, and the researcher will not know your identity.

POTENTIAL BENEFITS:

There are no major benefits to you for participation. However, analysis of the data generated from your participation in this study may contribute to supporting leaders and organizations in developing and embracing strategic behavior to be successful in their business agility journey during VUCA challenging environment. The information from this study is intended to inform researchers and organizational leaders. Additionally, the findings and recommendations from this study will be made available to all participants.

ANONYMITY:

Records of information that you provide for the research study and any personal information you provide will not be linked in any way. It will not be possible to identify you as the person who provided specific information for the study, particularly since the surveys will be completed anonymously.

If you have any questions, comments, or concerns regarding this study, you may contact me at [redacted] or by email at [redacted]. You can also contact Dr. Lisbeth Johnson by email at [redacted]. If you have any further questions or concerns about your rights as a research subject, please contact UMass Global's Office of Institutional Research, UMass Global, 16355 Laguna Canyon Road, Irvine, CA 92618, BUIRB@umassglobal.edu

Thank you,

Sevak Markarian
Doctoral Candidate
UMass Global

APPENDIX J

Bill of Rights



UMASS GLOBAL INSTITUTIONAL REVIEW BOARD

Research Participant's Bill of Rights

Any person who is requested to consent to participate as a subject in an experiment, or who is requested to consent on behalf of another, has the following rights:

1. To be told what the study is attempting to discover.
2. To be told what will happen in the study and whether any of the procedures, drugs or devices are different from what would be used in standard practice.
3. To be told about the risks, side effects or discomforts of the things that may happen to him/her.
4. To be told if he/she can expect any benefit from participating and, if so, what the benefits might be.
5. To be told what other choices he/she has and how they may be better or worse than being in the study.
6. To be allowed to ask any questions concerning the study both before agreeing to be involved and during the course of the study.
7. To be told what sort of medical treatment is available if any complications arise.
8. To refuse to participate at all before or after the study is started without any adverse effects.
9. To receive a copy of the signed and dated consent form.
10. To be free of pressures when considering whether he/she wishes to agree to be in the study.

If at any time you have questions regarding a research study, you should ask the researchers to answer them. You also may contact the UMASS GLOBAL Institutional Review Board, which is concerned with the protection of volunteers in research projects. The UMass Global Institutional Review Board may be contacted either by telephoning the Office of Academic Affairs at (949) 341-9937 or by writing to the Vice Chancellor of Academic Affairs, UMASS GLOBAL, 16355 Laguna Canyon Road, Irvine, CA, 92618.

APPENDIX K

Informed Consent and Confidentiality Form

RESEARCH STUDY TITLE: Strategic Behaviors from the Adaptive Leadership Framework Utilized by Successful CXOs for Business Agility in a VUCA Environment

– A Delphi Study

UMASS GLOBAL University

16355 Laguna Canyon Road

Irvine, CA 92618

RESPONSIBLE INVESTIGATOR: Sevak Markarian, Doctoral Candidate

TITLE OF CONSENT FORM: Research Participant's Informed Consent Form

PURPOSE OF THE STUDY: You are being asked to participate in a Delphi panel research study conducted by Sevak Markarian, a doctoral candidate from UMass Global's Doctor of Organizational Leadership Program. The purpose of his Delphi study is to identify the strategic leadership behaviors, as outlined in Ronald Heifetz's Adaptive Leadership framework, that CXOs utilize (Heifetz, 2009) to develop agile and adaptive organizations that succeed in VUCA change environments.

The second purpose of this Delphi study was to rate the degree of effectiveness of strategic leadership behaviors, as outlined in Ronald Heifetz's Adaptive Leadership framework, that CXOs utilize (Heifetz, 2009) to develop agile and adaptive organizations that succeed in VUCA change environments.

Finally, the third purpose of this study was to identify actions CXOs who utilize the behaviors from Ronald Heifetz's Adaptive Leadership Framework recommend to develop agile and adaptive organizations in VUCA change environments. This study will consist of two rounds of surveys sent via email to the participants, followed by a final round of an interview to collect deeper thoughts on the second purpose.

PROCEDURES: By participating in this Delphi study, I agree to participate in two rounds of electronic survey questionnaires through Google Forms and one round of in-

person or virtual interview as described below. Each round's survey will take approximately 10 to 15 minutes for you to complete, and the interview should take around 1 hour. Your survey responses for these rounds will be completely anonymous from the researcher.

Round 1: The expert panel will respond to an open-ended questionnaire to the strategic leadership behaviors from Ronald Heifetz's Adaptive Leadership Framework that CXOs utilize to develop agile and adaptive organizations that succeed in VUCA change environments.

Round 2: The expert panel will review the results of the Round 1 questionnaire as compiled by the researcher and rate the list of obstacles using a four-point Likert scale.

Round 3: The expert panel members were asked through interviews to identify actions that CXOs who utilize the behaviors from Ronald Heifetz's Adaptive Leadership Framework recommend to develop agile and adaptive organizations in VUCA change environments.

Delphi Study Requirements: To ensure the validity and reliability of this study, expert panelists are requested to review the following requirements of a Delphi study and confirm their willingness and ability to participate.

I understand that:

1. No known major risks or discomforts are associated with this research.
2. Participation in this study does not yield any direct benefit. However, analysis of the data generated from my participation in this study may contribute to supporting leaders and organizations in developing and embracing strategic behavior to be successful in their business agility journey during VUCA challenging environment. Therefore, the information from this study is intended to inform researchers and organizational leaders. Additionally, the findings from this study will be made available to all participants.
3. The study will use electronic surveys and in-person or virtual interviews. All surveys, interview responses, and research data collected will be stored securely and confidentially on a password-protected server.

4. Google Forms will be utilized to gather the panelist's survey responses. The response survey for each round will be sent to you as a link within the body of an email.
5. My participation in this research study is voluntary. I may decide to not participate in the study and I can withdraw at any time.
6. All questions or concerns should be directed to the researcher, Sevak Markarian at [redacted] or by phone at [redacted], who will make every effort to return your email within 24 hours.

Consent to Participate: Prior to the distribution of the questionnaires, the researcher must obtain your consent to participate in this research study. Please use the following link to provide your consent electronically:

LINK HERE

The UMASS GLOBAL University Bill of Rights document is also attached to this email for your review and information.

Finally, if you have questions or concerns regarding the information provided in this email or the research study, please contact Sevak Markarian at [redacted] or [redacted].

Thank you.

Sevak Markarian

Doctoral Candidate

UMass Global

APPENDIX L

IRB Approval

IRB Application Approved As Submitted: Sevak Markarian Inbox x



Institutional Review Board <my@umassglobal.edu>
to me, {johnso3, irb} ▾

Dec 6, 2024, 8:12AM ☆ ↶ ⋮

Dear Sevak Markarian,

Congratulations, your **IRB** application to conduct research has been approved by the UMass Global Institutional Review Board. This approval grants permission for you to proceed with data collection for your research. Please keep this email for your records, as it will need to be included in your research appendix.

If any issues should arise that are pertinent to your **IRB** approval, please contact the **IRB** immediately at IRB@umassglobal.edu. If you need to modify your **IRB** application for any reason, please fill out the "Application Modification Form" before proceeding with your research. The Modification form can be found at the following link: <https://IRB.umassglobal.edu/Applications/Modification.pdf>.

Best wishes for a successful completion of your study.

Thank you,

David Long, Ed.D.

Professor

Organizational Leadership

IRB Chair

dlong@umassglobal.edu

www.umassglobal.edu

APPENDIX M

NIH (CITI) Certificate



Completion Date 15-May-2023
Expiration Date N/A
Record ID 55876500

This is to certify that:

Sevak Markarian

Has completed the following CITI Program course:

Human Subjects Research
(Curriculum Group)
Social-Behavioral-Educational Researchers
(Course Learner Group)
1 - Basic
(Stage)

Under requirements set by:

University of Massachusetts Global

Not valid for renewal of certification through CME.



Collaborative Institutional Training Initiative
101 NE 3rd Avenue, Suite 320
Fort Lauderdale, FL 33301 US
www.citiprogram.org

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APPENDIX N

Consulting Proposal: Tailored Adaptive Leadership Development Curriculum

Introduction

Effective leadership is critical to an organization's success, particularly in an ever-evolving business environment. We have developed a customizable adaptive leadership curriculum designed to align with the unique culture and strategic needs of any organization. Our approach integrates Adaptive Leadership principles, ensuring future leaders develop the competencies necessary to thrive in dynamic conditions.

Objectives

Our leadership curriculum aims to:

- Identify key leadership competencies needed for future success.
 - Develop communication, decision-making, and strategic thinking skills.
 - Foster Adaptive Leadership characteristics, ensuring leaders can navigate change effectively.
 - Equip leaders with practical strategies to apply their learning in real-world scenarios.
-

Scope of Work

1. Identifying Learning Objectives

- Conduct interviews and surveys with current leadership to determine essential leadership skills.
- Assess future organizational needs in alignment with Adaptive Leadership principles.

- Customize objectives to align with the organization’s culture and strategic goals.

2. Developing a Competency Framework

- Define core leadership competencies required for success.
- Align competencies with learning objectives to ensure a structured development plan.
- Establish measurable benchmarks for leadership growth.

3. Content Selection and Curriculum Design

- Develop relevant learning materials, including case studies, simulations, videos, and interactive activities.
- Ensure content reflects real-world challenges specific to the organization’s industry and culture.
- Incorporate best practices from thought leaders in Adaptive Leadership and executive development.

4. Delivery Format Options

Our curriculum offers flexibility in delivery to best suit the organization’s needs:

- Workshops & Seminars: In-person or virtual interactive training sessions.
- Coaching & Mentorship: One-on-one executive coaching and peer mentoring.
- Blended Learning: A combination of virtual and in-person experiences for maximum impact.

5. Assessment & Measurement

- Design quizzes, case study analyses, and leadership projects to gauge comprehension and application.
- Provide pre- and post-program evaluations to measure growth and impact.
- Offer 360-degree feedback opportunities for participants.

6. Continuous Improvement & Feedback Integration

- Collect participant feedback at key stages to refine the curriculum.
 - Conduct regular reviews with organizational leadership to ensure alignment with business goals.
 - Adapt content and delivery methods based on evolving industry trends and leadership needs.
-

Implementation Timeline

Phase	Description	Duration
Needs Assessment	Gather input from leadership and identify key competencies	2-4 weeks
Curriculum Development	Design learning materials, frameworks, and assessments	4-6 weeks
Pilot Program	Test initial rollout with a select group and gather feedback	4 weeks
Full Implementation	Launch full program across the organization	Ongoing
Evaluation & Refinement	Collect feedback and refine content for continuous improvement	Ongoing

Next Steps:

- Schedule a consultation to discuss customization options.
- Define key stakeholders and implementation logistics.
- Confirm engagement terms and launch the pilot phase.