

Futural Leadership Theory: Synthesizing a Dynamic Avant-Garde Change Model, in the Age of Artificial General Intelligence (AGI)

Dr Paul A. Markham, MBA
pmarkham@nu.edu
National University, San Diego, USA

<https://doi.org/10.51137/wrp.ijarbm.2024.pmfa.45623>

Abstract – As quantum computing fuels the journey toward artificial general intelligence, there is unambiguous evidence that we need to investigate, review, analyze, and adjust previous leadership and change management constructs. For one hundred years, leadership scholars have skillfully documented and debated numerous types of leadership. This paper presents a controversial, timely, and necessary review of the basis of leadership and change management research, recommending a new paradigm. This new era and leadership theory postulates new methods of training leaders to think metacognitively, delivering a more intelligent road forward, in this age of artificial intelligence. Furthermore, the well-worn idiom of “change is the only constant” is now a reality in the 21st Century, driving the author to reexamine the intersection of leadership and change management research. The author presents the landmark futural leadership theory with a uniquely integrated and dynamic avant-garde change model. This seminal leadership and change management research is poised to transform scholarly leadership theory, and impact applied work with leadership practitioners in organizations worldwide, as we move towards artificial general intelligence.

Keywords: Leadership, Futural Leadership, Change Leadership, Change Management, Avant- Garde, Artificial Intelligence (AI), Artificial General Intelligence (AGI), Human Metacognitive Intelligence, Metacognitive Thinking, Mindfulness

Submitted: 2024-10-29. Revised: 2024-11-26. Accepted: 2024-11-27.

1 Introduction

"I cannot teach anybody anything. I can only make them think."

(Socrates, as cited in Guthrie, 1971)

In the beginning, ancient philosophers and historians contributed significantly to the study of leadership. Plato, (Plato, ca. 399 BCE/1997) one of Socrates' most illustrious students, authored work focusing on ethical leadership and virtue, with a clear focus on the mindfulness of guiding one's actions, which is in lockstep with the underlying principles of metacognitive thinking, and at the core fundamental aspects of futural leadership theory.

Analogous to the Socratic ethos of teaching how to think, this seminal research article aims to demonstrate the efficiency of a novel metacognitive thinking leadership decision-making approach, in futural leadership. A secondary research goal was the impact of the intersection of leadership and change management, by dynamically applying futural leadership attributes to an avant-garde change management model.

Prior leadership research focused on post-decision-making, creating and reviewing leadership style, and associated characteristics. However, there is limited research on the effectiveness of leadership decision-making as a precursor to leadership style.

Using metacognitive thinking in the futural leadership decision-making process prepares all leadership styles for the encroaching age of artificial general intelligence. Given the advent of intelligent machines and thinking systems, leaders must strive to think at a tertiary level In the upcoming post-artificial general intelligence era.

Although leadership's primary function is change, leadership and change management research bodies are principally independent. The article concludes with a unique integrated leadership avant-garde model approach to change management. The model differs from earlier change management processes which are sporadic, reactive, and devoid of leadership synthesis.

Throughout the ages, from a modern scholarly research perspective, Niccolò Machiavelli (1469-1527) and his work "The Prince" (1513) is one of the earliest treatises on political leadership and power dynamics, followed by Thomas Carlyle (1795-1881): A Scottish historian and essayist, Carlyle is known for his "Great Man Theory," which suggests that history is shaped by the impact of "great men" or heroes (Carlyle, 1841). Then, Max Weber a German socialist followed (1864-1920): Weber's work on authority and charisma laid the foundation for later studies on leadership (Weber, 1947). Kurt Lewin (1890-1947): A psychologist, who conducted pioneering research on leadership styles in the 1930s, including democratic, autocratic, and laissez-faire leadership concepts (Burnes, 2021).

Einstein rethought Newton's laws of gravity (Newton, 1687). He evidenced this by publishing the theory of relativity, whereby he incorporated the cosmic speed limit of the speed of light, as evidenced by a gravitational lens known as the Einstein Ring (Einstein, 1915). From a problem-solving perspective,

(Einstein, 1955) stated “We cannot solve our problems with the same thinking we used to create them”.

In lockstep with Einstein and others, this seminal study presents leadership theory through a different lens, whereby change is integrated into the leadership theory and process. Retroactively, this article reignites the essence of the Socratic method, bringing it into the 21st Century.

Socrates is credited with laying the groundwork for Western philosophy and the study of leadership. He demonstrated this through his teaching methodology, emphasizing critical thinking and dialogue. This approach is known as the Socratic Method. This futural leadership article seeks to regain the essence of Socratic thinking, by focusing on leadership, critical thinking, and the impact on decision-making, effectiveness, credibility, and tenure.

These early contributions were pivotal in establishing the foundation for the systematic study of leadership, which later evolved with more empirical research and theoretical developments in the 20th and 21st centuries (Northouse, 2018).

Due to socialization and human cognitive biases, practitioners became accustomed to accepting and deploying the next leadership style as illustrated and depicted in various scholarly articles and industry publications. However, there were examples of transformative emerging leadership and change management scholarly articles, such as Holacracy with Decentralized Leadership and Management, as noted in Next Generation Leadership (Kukreja, 2019). These examples highlighted scholarly works that are dynamic, adaptable, and able to respond to change.

Futural leadership theory postulates a notion to rethink, contradict, and redirect core tenets of modern leadership research, training, and application. Using the fundamental underpinnings of the Socratic method, training to think, and mindfulness-driven metacognitive leadership thinking. This immediately impacts decision-making, effectiveness and tenure. This provides objective multiple perspectives and interpretations and drives objective excellence in decision-making (Kudesia, & Lau. 2020).

The Futural leadership theory proposes a forward-thinking framework tailored for leadership in an era increasingly defined by Artificial General Intelligence (AGI). The theory and model aim to prepare organizations and individuals for the profound changes AGI seeks to bring, focusing on rapid adaptability, proactive ethical stewardship, and co-evolution with intelligent systems. The theory integrates principles from futurism, and avant-garde innovation, with its foundations in traditional leadership models to synthesize a progressive approach to change. Futural leaders use mindfulness to encourage metacognitive leadership thinking, elevating awareness of instantaneous self-observation.

2 Literature Research Methodology

The author conducted widespread research, gathering data from ProQuest, Sage Journals Online, DOA, Science Direct, eBooks Central, Wiley Online, Research Starters, and Springer Link, Search terms used included leadership

decision-making, leadership theory, change Leadership, change management, Artificial Intelligence (AI), Artificial General Intelligence (AGI), Human Metacognitive Intelligence, Metacognitive Thinking and Mindfulness. The researcher reviewed scholarly journal articles in English and restricted research to published scholarly, peer-reviewed articles.

General research was conducted in conjunction with highly ranked journals, such as; International Leadership Journal, Applied Research in Business and Management, Academy of Management Journal, Administrative Science Quarterly, Behavior Research Methods, California Management Review, E-Journal of Organizational Learning and Leadership, Gender, Work and Organization, Group & Organization Management, Harvard Business Review, International Journal of Management Reviews, Journal of Behavioral Decision Making (ProQuest), Journal of Behavioral Decision Making (Wiley), Journal of leadership & organizational studies, Journal of Occupational and Organizational Psychology, Journal of Organizational Behavior, Journal of Organizational Behavior Management, Leadership Quarterly, MIT Sloan Management Review, Research in Organizational Behavior, Strategic Management Journal, The Academy of Management Executive, The Academy of Management review. Following a broad review of the above journals, the researchers focused on the specific areas of interest in situational and change leadership as a precursor foundation for the futural leadership theory.

Although the research on leadership and change management was not time-bound, as noted by ancient philosopher quotations, modern literature presented a literature journey through evolution over the past one hundred years.

Both illustrate the evolution of leadership and change management research while revealing the gap in research focused on the leadership decision-making process and the absence of synthesized leadership change management process models.

3 Literature Review

In the modern scholarly era, leadership and change management scholars widely researched and argued from an evolutionary perspective. The traditional evolutionary research model creates a body of research, where scholars build upon previous work, and this model has served the research and practitioner community well until now. Leadership research scholars have well-documented; Trait-based research (Zaccaro, 2007), Transactional leadership research (Judge, & Piccolo, 2004), and transformational leadership (Jung, Chow, & Wu, 2003). In enhancing organizational innovation various authors began to view a more proactive form of leadership in change leadership (Higgs & Rowland, 2000).

However, the encroaching world of artificial intelligence, deep learning, large language models, natural language processing, and quantum computing, presents a new challenge for leadership scholars. Coupled with the overarching movement towards thinking machines, it provides an opportunity to reconsider the role of the leader in an age of artificial general intelligence.

The modern leader in the artificial general intelligence era must possess a higher level of metacognition prowess, to assist in tertiary-level leadership decision-making, amidst the crowded digital attention economy (Mark & Ulrich, 2008).

In earlier leadership research and leadership-focused theoretical frameworks, researchers deployed them in different geographies, settings, and organizational types. However, this leadership research was incremental, from an innovative perspective, rather than radically innovative by design.

Other scholarly research in nuclear energy, medicine, climate, and banking have presented contrarian perspectives, yet leadership and change management have been evolutionary and incremental in their research journey. This contrarian approach is synonymous with other prior contrarian authors, as evidenced by radical ideas of Heliocentrism & the Spherical world concepts, as posited by Copernicus, Galileo, and Eratosthenes, thereby challenging the commonly held belief of Geocentrism.

Of utmost importance, this article respects prior leadership and change management research knowledge, but through an entirely different lens of Human Metacognitive Thinking (HMI).

The intersection of leadership research and the advent of advanced technologies such as quantum computing, machine, deep learning, natural language processing, large language models, and numerous other emerging technologies, sets forth a research gap.

This gap should drive objective scholars to suppress all anchor, confirmation, framing, and sunk cost trap biases when evaluating this landmark, avant-garde article.

3.1 Leadership Realm

Throughout the modern years of leadership research, scholars sought out that elusive leadership style as stated (McGregor, 1957, 1978) "One of the most universal cravings of our time is a hunger for compelling and creative leadership". In lockstep with this hunger for unique and effective leadership, the author created the Futural leadership theory. This theory is a mindfulness-driven metacognitive thinking form of leadership decision-making. This leadership thinking has application to any historic leadership style and is at the core of all leadership decision-making. Leadership decision-making impacts leadership effectiveness, leadership credibility, and leadership tenure. Futural leadership thinking has immediate application to all previously researched leadership styles and associated outcomes.

Historically, leadership style scholars categorized, classified, and organized around various behavioral aspects, such as authoritarian, democratic, and laissez-faire approaches. Researchers and practitioners alike studied methodology, and styles of leaders as managers. As mentioned, leadership tenure is related to credibility, driven by effectiveness, as a result of excellence in decision-making. Even though proactive, predictive forms of leadership define the rate of change in a company and design a company's future, there remains a chasm between leadership and change management in theory and practice.

This paper postulates the need to approach and optimize the leadership decision-making process, preceding the use of leadership style or approach. It then immediately applies and builds this sequence into a dynamic leadership change management process.

Amidst a world of artificial intelligence, the modern leader must focus on strategic higher-level thinking, rather than administrative work, hence the mandatory requirement for radical innovation from a leadership theory perspective. These tertiary-level futural leaders will metacognitively assess the landscape, simultaneously managing change dynamically, rewriting all prior research on the matter.

Following is a brief overview of the modern scholarly journey from management to leadership until today. It highlights the necessity for radical innovation from a leadership research and application perspective, given the rapidly encroaching age of Artificial General Intelligence.



Figure 1: Previously Studied Leadership Styles

In the early days, Taylor's Scientific Management sought to provide maximum prosperity for the employer and the employee and depicted a system where humans are components of the greater system (Taylor, 1911, 2004). Later (Drucker, 1937, 2015) documented the emergence of leadership research under the banner of modern management (Cohen, 2010). Further

scholars such as (McGregor, 1957) set forth the theory of X and Y employees, whereby leaders needed to understand their motivation type. Other authors viewed the leaders based on how the leader style fits in a context, such as (Fiedler, 1964) who argued that contingency leadership effectiveness depends on two forces- the leader's managerial style and the favored situation. The situational leadership theory (Hersey & Blanchard, 1969) presented a logical and intelligent framework, stating leaders must adapt and evolve to a specific situational perspective, as required. This underlying situational concept has direct relevance in the rapidly emerging age of artificial general intelligence.

Servant leadership (Greenleaf, 1970) argued paradigmatic change in the role of the leader and has garnered immense interest and still has a contemporary impact. (House, 1971) approached leadership reviewing the path-goal approach, whereby the leader sets clear goals, contingent on employee satisfaction, motivation, and achievement.

These early perspectives viewed humans as components of the greater system, until the emergence of transactional and transformational leadership theorists. Whereby "leaders and followers make each other advance to a higher level of morality and motivation." (Burns, 1978; Bass, 1985; Bass & Riggio, 2006).

Transformational leadership presented the four pillars framework.

- Intellectual stimulation,
- Individualized consideration,
- Inspirational motivation
- Idealized influence

The race to unearth the perfect leadership style created an immense body of research from supportive, democratic, coaching, charismatic, and myriads of other styles. (Avolio & Bass, 2004) developed and evaluated leadership measurement and the role of transformational leadership in enhancing organizational innovation. The resultant Leadership Questionnaire (MLQ) was launched into the practitioner community. (Judge, & Piccolo, 2004) viewed leadership as the key determinant of organizational performance and success. (Zaccaro, 2007) revisited great man theories of leadership, a topic of considerable debate and controversy for many years. Other scholars researched personality traits and similarities to great men (Carlyle, 1841; Zaccaro, 2007).

Leadership research evolved based on globalization settings, context, and the changing workforce (Avolio, & Hannah, 2008), using evolutionary incremental perspectives, rather than radical research innovation. Numerous scholars proffered effective leadership as the critical success factor for organizations, teams, and individuals (Day & Antonakis, 2012).

Scholarly leadership research continued by defining leaders by style or action, direction, and as reactive managers, rather than defining by change leadership-driven decision-making. (Northouse, 2018) researched and evaluated leadership as a complex multidimensional phenomenon, determined by internal and external factors. Other authors evaluated the continuum of leadership, the past, present, and future (Day, & Antonakis, 2012).

The application and training of leadership were distinctly different from the application and training of change management. A vast body of leadership research developed and continues, focused on; great men, and trait leadership styles; autocratic, bureaucratic, path-goal, servant, charismatic, visionary, democratic, and a plethora of others. However, the intersection of leadership and change management remains independently studied. Kotter (2008) defined the differences between management and leadership.

(Jung, Chow & Wu, 2003) argued effective leadership is the key component in fostering innovation and driving organizational change, in today's dynamic and competitive business environment. Of key significance in the work, is the inextricable linkage between leadership and change management, echoing (Kotter, 2012), whereby leadership is pivotal to change management. Earlier leadership research theories, and studies, evaluated leaders externally, rather than introspectively.

Futural leadership theory postulates a mandatory requirement for immediate, inward, mindful, and focus-driven metacognitive thinking. This tertiary dynamic approach simultaneously creates an avant-garde quintessential baluster change model.

The core focus of this article is rethinking the leadership paradigm as we move towards artificial general intelligence. Secondly but importantly, transformation and synthesizing leadership thinking, with dynamic change management (Kotter, 2008), arguing "Leadership produces change. That is its primary function".

3.2 Change Management

Change management is a research category and applied discipline, focusing on managing organizational change. The change management process involves implementing approaches to prepare and support individuals, teams, and leaders in making organizational changes. Early research in change management assessed the social climates (Lewin, Lippitt, & White, 1939).

Scholars and practitioners continue the long-held argument that 70 percent or more of change management fails and this percentage continues to be vehemently contested by scholars and practitioners alike over many decades.

Even though process-driven change management has been in existence for several decades, it is widely reported that 70% of change efforts fail (Dinwoodie et al., 2015, McKinsey & Company, 2019). No matter what the exact percentage is, but there is a clear indication that flaws exist in many change management efforts, due to the cultural environment readiness. (Burke, 2017) researched organization change from a theoretical and practical perspective.

These elevated change management process failure claims continue being challenged, due to a lack of valid and reliable empirical evidence (Hughes, 2011; Wilkinson, 2020). As with leadership research and application, change management sought new models to improve the change management process, adoption, and success rate, without specifically documenting the most suitable and effective leadership style.

As with leadership research, change management research has evolved, developed, and delivered several versions of the staged change management model.

Kotter's 8-Step Model, Lewin's Change Model, and the McKinsey 7S Framework are consistently cited as many of the most popular and widely used change management models in the global organizational landscape.

- Lewin's Change Management Model
 - Developed this 3-step model to implement change. The model consists of three steps: Unfreezing, Changing, and Refreezing (Lewin, 1936). This model is widely used in healthcare and is a foundational model in change management. With Lewin's three-phase process; Unfreeze-Change-Refreeze, various organizational types deploy due to its simplicity and effectiveness. This model is rooted in behavioral psychology and excels when a strong theoretical framework, simplicity, and clarity are tantamount.
- Kotter's 8-Step Theory
 - Developed the 8-Step Process for Leading Change. It consists of eight stages; Create a Sense of Urgency, build a Guiding Coalition, form a Strategic Vision and Initiatives, enlist a Volunteer Army, Enable Action by Removing Barriers, Generate Short-Term Wins, Sustain Acceleration, and Institute Change (Kotter, 1995). This model is frequently highlighted due to its structured approach thereby creating, driving, and sustaining organizational change. Kotter's work in change leadership presents evidence of the need to integrate leadership and change management, which is integral to this paper. Building upon the simplicity of Lewins, the Kotter model provides a granular roadmap, including steps such as creating urgency, building a guiding coalition, and generating short-term wins, making it more actionable for leaders and teams. Furthermore, Kotter emphasizes sustainability, unlike Lewins.
- McKinsey 7-S Model
 - This model is designed to help organizations analyze and improve their internal alignment to achieve better performance and provides a focus on how to manage organizational change by strategizing around the interactions of seven key elements: Structure, Strategy, System, Shared Values, Skill, Style, and Staff (Waterman & Peters, 1980). Although this model can be applied to any size or type of organization, it is usually applied to large-scale organizations. Key to the model is a comprehensive alignment of strategy, structure, and systems with softer elements like culture and skills. Due to the complexity and associated cost of change model implementations, this model is prohibitive to smaller organizations.

The models reviewed above are different versions of the same stage-driven change management process, which do not require nor seek any particular type of leadership for success.

Although leadership's primary purpose is to impact change, the two areas of leadership and change management research, in conjunction with application, remained mutually exclusive. Other authors evaluated emergent change and planned change (Burnes, 2004). The reality is they should be sequential and inextricably linked in the process and application in the organizational world. (Herold, Fedor, & Caldwell, 2007), moved beyond change management reviewing the contextual and personal influences on employees' commitment to change.

3.3 Change Leadership

Unlike change management, focusing on the operationalization of the change process, change leadership is the proactive process of leading organizations through various transitions, disruptions, and organizational changes (Burnes, Hughes, & By, 2018). Then (Higgs & Rowland, 2000) evaluated building change leadership competencies.

The advent of change leadership began to bridge the chasm between these two vast bodies of research. This landmark controversial article sets forth a radical paradigm, denoting the direct application of futural leadership into a dynamic avant-garde change model (Kotter, 1947). Change leadership concerns the driving forces, visions, and processes that fuel large-scale transformation. Change leadership is not an episodic technique. It is a way to handle ongoing change at the institutional level. (Higgs & Rowland, 2000). With the advent of machine learning, deep learning, and large language models, in the future, machines will efficiently memorize and optimize traditional administrative management tasks. (Anderson & 2010) argued that breakthrough results are possible through change leadership.

In the age of artificial general intelligence, leaders must be aware of the attractive and addictive nature of leisure-driven procrastination and seek a higher level of leadership thinking in the form of futural leadership. Considering the emerging fourth industrial revolution and the artificial intelligence-led attention economy, where machines drive addictive convenience and leisure, the business leader of the future must increase the level of Metacognitive thinking.

4 The Futural Leadership Model

Beyond the dateline of artificial general intelligence adoption, humanity must decide whether they will lead, or be led by the machines they trained, curated, and nurtured to the historical level of human intelligence. Succumb and be subservient to the machines or lead the machines using tertiary-level Human Metacognitive Intelligence (HMI).

The age of futural leaders with tertiary-level Human Metacognitive Intelligence (HMI) could usher in the second Renaissance period. Futural leaders

seek to futureproof their organizations by being predictive, proactive, and precise in decision-making, constantly seeking continual innovation.

Futural leaders will seek an unconventional direction from early philosophers, such as Socrates, or living and thinking within the moment as evaluated by (Chadha, 2015), with the Buddhist Epistemological Framework for Mindfulness Meditation, rather than conventional scholars and practitioners' direction.

Historically, our learning and formal education have a foundational base in memorizing and analyzing data. These tasks are easily, and efficiently managed, by artificial intelligence machines. This memorization and synthesis educational process is the bedrock of civilization and extends to industry testing and certifications. The legal domain has the LSAT and BAR exams, Accounting has the CPA, and the medical realm has medical licensing in the USMLE.

There are other formal industry-specific licensures with the need to memorize, synthesize, and analyze data. Factually, memorizing, synthesizing, and analyzing data are the domain of the machines of today and the future.

At this time in history, narrow artificial intelligence is rapidly and efficiently replacing and optimizing these content-rich data warehouses, memorizing, and analyzing vast amounts of data, using natural language processing and large language models.

In time, the agent-driven narrow nodes will connect and create the artificial general intelligence of the future, removing the requirement for human memorizing and synthesizing. With the emergence of machines managing vast amounts of data and the rapid adoption of digital twin technology, the leaders of today and tomorrow need to adapt quickly.

The evolution towards artificial general intelligence is fueled by a society willingly and addictively adopting technology, relinquishing menial tasks to the machine world.

This era will mark a societal-level form of disruptive innovation as evaluated by (Christensen, McDonald, Altman, & Palmer, 2018). The act of relinquishing menial tasks is synonymous with the comprehensive industrial transformation of the past due to disruptive innovation.

However, this need not be a fait accompli and presents an opportunity for futural leaders to become artificial intelligence stewards, beyond artificial general intelligence.

As stated earlier, the futural leader sets forth a tertiary level of mindfulness-optimized, metacognitive thinking and decision-making, immediately applicable to any leadership style. The futural leader is inherently in a situation and change-embracing by design. Futural leadership thinking applies to all styles, such as, but not limited to; Servant, Transactional, Transformational, Democratic, and Holacratic leadership styles.

For modern leaders, the overabundance of information and associated distractions immediately impacts decision-making. Most leaders resume interrupted work on the same day; however, it takes 23 minutes to get back to the original topic, as researched (Marks & Ulrich, 2008). Mindfulness is mandatory for futural leaders. (Shapiro et al, 2006) argued leadership mindfulness, linked to metacognition, leads to openness and nonjudgementalness, resulting in re-perceiving.

A controversial fiction writer (Huxley, 1932) argued that humans “will adore technologies, undoing their capability to think” and “man’s almost infinite appetite for distractions”. Later, (Simon, 1955) argued a wealth of information creates a poverty of attention, then later (Simon, 1957) espoused the concept of decision-making under bounded rationality, or limited information.

This background and coincidence of human behavior and the rise of artificial intelligence depict a factual necessity for new thinking in leadership and associated decision-making. This paper argues the allowance of the rapid onslaught of machines as beneficial to society, by providing increased leisure time and requiring innovative approaches to leadership decision-making. The futural leader becomes an artificial intelligence steward, setting a foundational concept for futural leadership theory.

At this time in history, the intersection between human behavior and the attention economy requires leaders to embrace a tertiary level of thinking in leadership decision-making. This leadership thinking must be based on tertiary-level metacognitive thinking. (Flavell, 1979) espoused four components in metacognition: knowledge, experience, goals, and actions.

Futural leadership is a timely and controversial approach to leadership. Futural leadership focuses on the dynamic application of metacognitive critical thinking, using change-driven situational leadership.

Unlike earlier scholarly leadership research categorized.

- Leaders classified by style,
- Leaders as actors,
- Leaders as reactive,
- Leaders by directive
- Leaders as managers

Futural leadership commences with a mindfulness-optimized, metacognitive thinking foundation. Metacognitive thinkers “think about thinking” as reviewed (Fleur, Bredeweg, & Van Den Bos, 2021). They use metacognitive thinking by providing a proactive, predictive mindset in data gathering, the task at hand, and available “tools” or skills. A broader repertoire of “tools” also assists in goal attainment.

When “tools” are general, generic, and context-independent, they are more likely to be useful in diverse learning situations. This article debunks previous leadership concepts, whereby leaders are trained as actors, style adopters, or leaders are managers. This is before education, mindfulness, and metacognitive thinking techniques are implemented.

Futural Leadership, positions leadership using human metacognitive intelligence (HMI), beyond the artificial general intelligence world. This work provides a unique interconnection and synthesis of leaders and change management. The Futural leadership theoretical framework uniquely integrates and synthesizes Markham’s 5-baluster avant-garde dynamic change model.

As machine learning, deep learning, and large language models driven by quantum computing become commonplace, the prior requirement for memorizing knowledge and executing tasks will be redundant. (Hadi et al., 2023). Futural leaders set forth thinking at a tertiary level, in a predictive and proactive manner.

Furthermore, Futural leaders epitomize the core tenets of change, embracing leadership in harmony with business at the speed of light, amidst emerging artificial general intelligence. Futural leaders embrace artificial intelligence and become artificial general intelligence leaders and stewards of the future.

Futural leaders think differently, providing the ability to apply this metacognitive leadership thinking to any style of leadership, such as, but not limited to transformational, servant, democratic, and other forms of prior researched leadership.

The Futural Leadership Core Reasoning

- Thinking Harder Mindset
- Critical Forward Thinking
- Change Embracing Leaders
- Dynamic Situational Leaders
- Metacognitive Foundational Basis
- Artificial General Intelligence Stewardship

Leadership tenure is driven by leadership effectiveness and is related to leadership decision-making outcomes. The Futural leadership author built upon a robust framework of metacognitive foundational balusters.

The sequential and graduated baluster framework sets forth a powerful logical sequence applicable immediately in the change management arena (Armenakis, Harris, & Mossholder, 1993).

Other leadership models such as Transformational Leadership (Avolio, & Bass, 2004) and the Multifactor Leadership Questionnaire (MLQ) measured four guiding pillars, which equally impact the leader's style and its impact on organizational readiness (Avolio, & Hannah, 2008). However, futural leadership theory argues the sequential requirement of the five balusters.

Futural Leaders follow a logical and risk-mitigating sequence, before decision-making, their effectiveness, credibility, and tenure.

4.1 Futural Leadership Theory

This seminal quintessential Futural Leadership Theoretical Framework creates a landmark and controversial approach to leadership research.

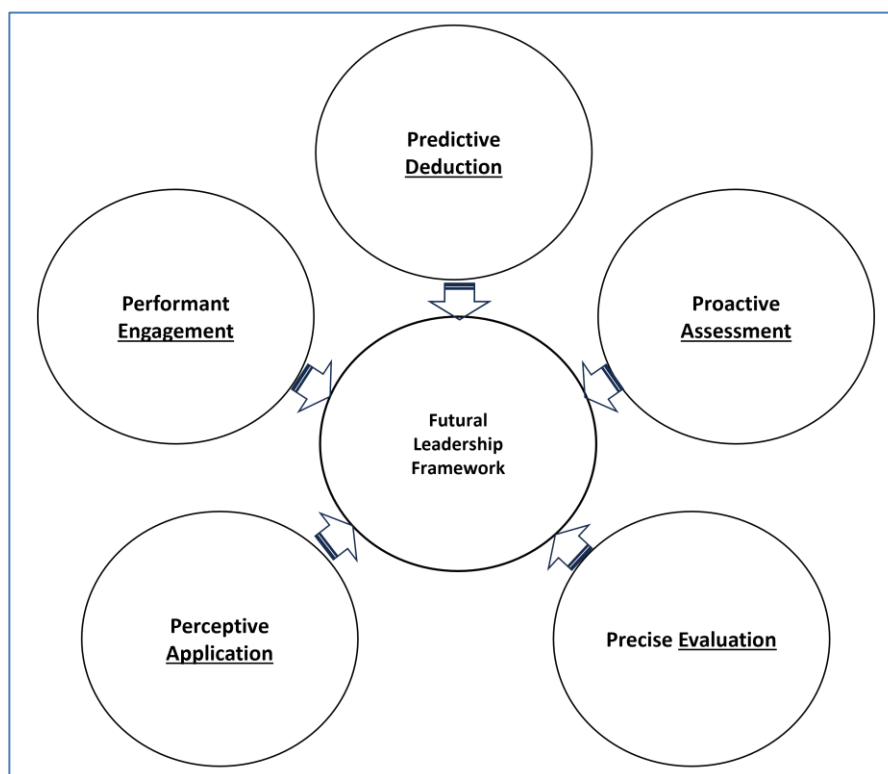


Figure 2: - Futural Leadership Metacognitive Framework

Futural leaders are dynamic thinkers and by design will be the artificial general intelligence stewards of the future. Rather than merely creating an incremental addition to the previous body of research, relative to leadership styles or directives, this quintessential framework tests and contradicts prior research, whereby the leaders are actors.

4.2 Futural Leadership – Five Baluster Framework

4.2.1 Predictive Deduction

Futural leaders serve as change-embracing (Doppelt, 2017) forward-thinking visionaries for their followers. They earn respect by displaying elevated levels of metacognitive knowledge and ensuring data-backed objectivity, setting forth a clear well-thought-out vision of the future. Futural Leaders exude strength through metacognitive knowledge, providing security for their team. Futural leaders can engender a sense of fearlessness (Edmondson, 2018).

With mindfulness-optimized metacognitive objective thinking, the futural leader suppresses bias, initially deploying critical thinking, using active predictive research to gather data, and reducing bounded rationality in the process of deduction (Beard, 2022).

4.2.2 Proactive Assessment

Futural leaders drive a culture of radical innovation and dynamically use simulation analysis in all scenarios. They drive, foster, and enrich the culture, based on proactive metacognitive-driven factors seeking effective leadership behavior (Yukl, 2012). Futural Leaders excite metacognitive awareness, driving transparency while reducing bounded rationality, groupthink, and social loafing. Following the predictive deduction, futural leaders apply rigorous proactive assessment, organization, and information classification (Olin, & Scruggs, 1999).

4.2.3 Precise Evaluation

Futural leaders are positive role models for their followers (Burnes, Hughes, & By, 2018). Due to metacognitive knowledge and awareness, futural leaders earn trust and respect by displaying extreme objectivity, high ethical standards, integrity, and a powerful sense of purpose. Futural Leaders employ metacognitive regulation constantly in ways that make them admired and emulated by their team, creating a sense of trust and loyalty. At this stage, the futural leader has actively sought information through predictive deduction, then applied proactive assessment, leading to precise evaluation, using the ethos of (Barnett, 1972). Futural leaders with mindfulness-optimized metacognitive thinking present an entirely new type of leadership thinking that has immediate application to any leadership style.

4.2.4 Perceptive Application

Futural leaders are dynamic and thrive within the only constant being change (Cummings, & Worley, (2015). Futural leaders set forth this powerful metacognitive framework. Futural Leaders constantly drive task specificity, adjustable actionable goals, and problem-solving, with constant inward evaluation.

This landmark paper presents an integration between the leadership and immediate application to the change management situation in focus. By dynamically applying resultant information gleaned from predictive deduction and proactive assessment, this perceptive application as evaluated by (Grunwald, 2008) assists in reperceiving the present with an entirely new method of decision-making, leadership, and applied change management.

4.2.5 Performant Engagement

Futural leaders emulate constant change and continual innovation (Day, & Antonakis 2012). These leaders embrace change and objectivity in synchronicity with the transformation of the evolving marketplace (Bass, & Riggio, 2006). Unlike static change models, the avant-garde framework uses metacognitive monitoring. This constant engagement of metacognitive knowledge and regulation, incorporating metacognitive experience requires dynamic evaluation and adjustment. Finally, Futural leaders must apply and assess this method efficiently and performantly, echoing underlying concepts of (Gruman, & Saks, 2011).

The author is currently completing the Futural Leadership Questionnaire (FLQ). This is in conjunction with the Markham Futural Leaders (MFL) Scale

and futural leaders ranking system. These tools will allow organizations, teams, and individuals to dynamically measure futural leadership attributes in the current state, with a clear path using training for future growth.

5 Markham’s Dynamic Avant-Garde Change Model

As reviewed, Futural leadership theory proposes a forward-thinking framework uniquely tailored for leadership increasingly defined by artificial intelligence and eventually artificial general intelligence. Futural leadership encourages leaders to adopt a long-term vision, shaping the trajectory rather than reacting to it. Futural leadership emphasizes the need for “Human – AI” collaboration and solution co-creation, with Artificial General Intelligence. Futural leaders must adopt ethical avant-gardism prioritizing inclusive and sustainable decision-making and change leadership.

New Futural Leaders must exhibit proactive and adaptive agile leadership, fostering organizational cultures that are experimental and innovative. To deliver futural leadership success, a mandatory requirement is to integrate leadership with the avant-garde dynamic change management model, as explained in the following section.

Futural leadership theory decision-making allows for the integration of existing leadership paradigms (e.g., transformational, servant, and adaptive leadership) into a cohesive framework designed for the AGI age. It also highlights the role of cross-disciplinary collaboration in achieving avant-garde change.

5.1 The Avant-Garde Quintessential Change Model

This section merely outlines the change management model as an adjunct to the core focus of the article in futural leadership theory. Historical change models such as Lewins, Kotter, ADKAR, McKinsey, Kubler Ross, and others, are variants of the same episodic, sequential change process. Scholars and practitioners concur that the major hurdle to the success of all prior models is an environment or culture ready for change.

Furthermore, the models do not dictate a leadership style or method as integral to the model's success, nor specifically advise the type of leadership required. (Kotter, 1996, 2012) stated that the primary function of leadership is to produce change, yet scholars and practitioners remain divided in this quest.

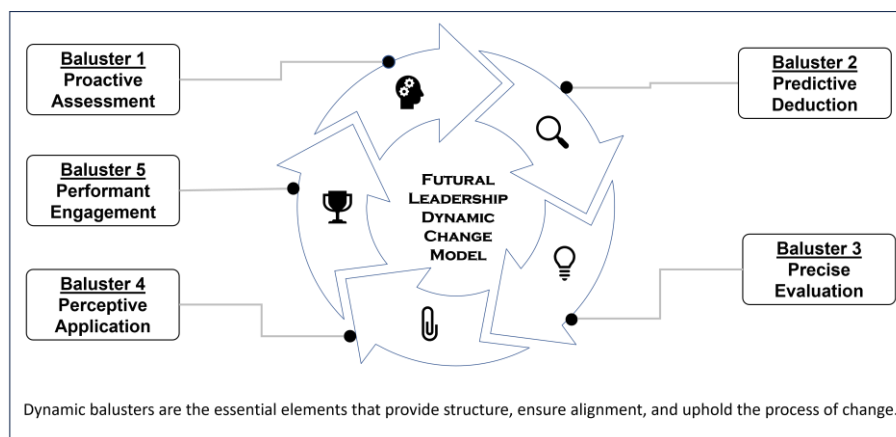


Figure 3: Futural Leadership's Dynamic Change Model

The uniqueness of the futural leadership model lies in its dynamic nature and integration of leadership. In this dynamic model, leaders will aspire to constantly rise to the unprecedented demands of artificial intelligence and the emerging AGI era.

This dynamic and continual change model ensures an equitable, innovative, and sustainable future. Prior models deployed a sporadic, reactive manner, and do not specify the most suitable leadership decision-making approach for success.

Unlike other models, which are reactive and sequentially launched, implemented, and processed, this dynamic model becomes a way of thinking for leaders. Each decision a leader makes in a day can deploy the new dynamic model, changing the entire performance and outcome of the futural leader, moving forward.

If the leader uses this model in each decision, technically the impact on the leader's effectiveness, performance, then credibility, and tenure may be substantial.

The avant-garde change management approach synthesizes the proactive leadership style into a real-time process, training the leader's mind to think in the model dynamically. Change is the only constant; therefore, we need a change model that will be a constant force.

This section briefly reviews a unique yet contrarian perspective on change management models in Markham's 5 Baluster Dynamic Change Model. This demonstrates the unique synthesis of leadership and change management, in a dynamic methodology.

The dynamic change model allows modern leaders to improve their change management success rates using integrated leadership and change management techniques in real-time. Futural Leadership theory, a uniquely applied change leadership model, revolutionizes previously failed change model implementations.

The author has planned future scholarly articles, built upon this seminal research. They will apply and delve more comprehensively into applying the model in diverse settings. This avant-garde approach sets forth an action-

oriented dynamic model, directly driven by leadership in a servo-controlled loop format.

Futural Leadership is where leadership drives continual change management. This landmark research paper lays the foundation for immense growth across the global scholarly and practitioner communities.

6 Implications

The overarching implications of this foundational theoretical research present a radical innovation, rather than an incremental innovation. This research illustrates theoretical, practical, policy, and methodological implications.

6.1 Future Research Implications

The implications of this foundational theoretical research present a radical innovation, rather than incremental innovation as witnessed in previously published scholarly research.

The integration of leadership and change management theory creates a new synthesis of these research bodies. Secondly, the study provides leadership and change management research as a future thinking platform in the journey toward and beyond artificial general intelligence.

Finally, this seminal research study sets a foundational landscape for expanded scope, testing new variables, longitudinal studies, methodological refinements, replications, comparative studies, and further theoretical explanations.

This Dynamic Metacognitive change model drives a constant innovation culture, and leaders are merely applying Markham's 5 P Framework in real-time. This Avant-Garde critical thinking model creates a more dynamic approach to the world. As noted earlier this seminal article lays a foundation for the Futural Leadership Questionnaire (FLQ).

This is in conjunction with the Markham Futural Leaders (MFL) Scale and futural leaders ranking system. Both these tools measure futural leadership attributes and can be applied to training and performance management in the future.

6.2 Practical Implications

From a practitioner's perspective, the applied implications have a wide-ranging impact on the organizational construct in general. (Beer, Eisenstat, & Spector, 1990) argued that change programs do not produce change, justifying the need for a real-time dynamic model.

Futural Leadership is imperative for applications in Healthcare, Financial Services, Insurance, Retail, e-commerce, Telecommunications, Real Estate, the Oil & Gas industry, the Food Industry, Manufacturing, Technology, the Clergy, and the Military. The practical application potential can improve all leadership decision-making, improving individual, company, and industry performance. The longer-term implications focus on future-proof organizations

and averting challenges in the future, as leaders are constantly forward-looking and visionary.

The tertiary-level implications for the practitioner world are transformative since improved leadership decision-making improves organizational performance, industry performance, and national gross domestic product.

7 Conclusion

Futural leadership theory presents tertiary-level metacognitive thinking, before any application or stylizing, and contradicts prior theories, methods, and leadership practices. Furthermore, planned research in mindfulness-driven metacognitive thinking is underway.

This seminal futural leadership theory and associated avant-garde change model article presents a foundation for future research in the following areas: Futural Leadership in Education, Healthcare, Financial Services, Insurance, Retail, Telecommunications, Real Estate, Oil & Gas Industry, Food Industry, Manufacturing, Technology, the Clergy, and Military.

Leaders of the future must always stretch beyond the norm and not accept good, rather than striving for great as espoused by (Collins, 2001).

8 Authors

Dr Paul A. Markham is Full Professor, Dissertation Chair, Academic Program Director, University Senator

- Business, Management, Marketing Leadership & Healthcare Domain
- Prior roles as Business School Chair and Director of Healthcare and Nursing Programs
- Extensive experience in course development in various global universities.
- Decades of industry leadership experience, holding titles from manager to Chief Operating Officer and Chief Executive Officer.

A global thinker and dual citizen, of Australia and the USA, coupled with my background in Global & US universities provides a deep understanding of diversity and the necessity for adaptable pedagogical methods of instruction and course design. My dissertation researched how Transformation Leadership impacted technology adoption, thereby driving the reduction of the untenable rate of iatrogenic or “medical death”. To that end, some years back, in 2013, I was invited to become an inaugural digital doctoral chair/supervisor and doctoral examiner, to prove that a global university, Newcastle University in Australia, could confer AACSB level doctoral degrees from the US, with Chinese nationals in their home country. In conclusion, my teaching style makes leadership and economics exciting, while elevating students in an undergraduate marketing class to the graduate level. The author is a futurist thinker and a member of Artificial Intelligence in Education, a global organization (AIED).

9 References

- Anderson, D., & Anderson, L. A. (2010). *Beyond change management: How to achieve breakthrough results through conscious change leadership* (Vol. 36). John Wiley & Sons.
- Armenakis, A. A., Harris, S. G., & Mossholder, K. W. (1993). Creating readiness for organizational change. *Human Relations*, 46(6), 681–703.
- Avolio, B. J., & Bass, B. M. (2004). *Multifactor Leadership Questionnaire (MLQ)*. Mind Garden.
- Avolio, B. J., & Hannah, S. T. (2008). Developmental readiness: Accelerating leader development. *Consulting Psychology Journal: Practice and Research*, 60(4), 331–347.
- Barnett, D. M. (1972). The precise evaluation of derivatives of the anisotropic elastic Green's functions. *Physica status solidi (b)*, 49(2), 741-748.
- Bass, B. M. (1985). Leadership: Good, better, best. *Organizational dynamics*, 13(3), 26-40.
- Bass, B. M., & Riggio, R. E. (2006). *Transformational leadership*. Psychology Press.
- Beard R, W. (2022) Discussion: Deduction, Prediction and Completeness Conditions. *Philosophy of Science*. 1966;33(2):165-167. doi:10.1086/288086
- Beer, M., Eisenstat, R. A., & Spector, B. (1990). Why don't change programs produce change? *Harvard Business Review*, 68(6), 158–166.
- Burke, W. W. (2017). *Organization change: Theory and practice* (5th ed.). Sage Publications.
- Burnes, B. (2004). Emergent change and planned change: Competitors or allies? The case of XYZ construction. *International Journal of Operations & Production Management*, 24(9), 886–902.
- Burnes, B., Hughes, M., & By, R. T. (2018). Reimagining organizational change leadership. *Leadership*, 14(2), 141-158. <https://doi.org/10.1177/1742715016662188>
- Burns, J. M. (1978). *Leadership*. Harper & Row.
- Burnes, B. (2021) Lewin, Kurt (1890–1947): The practical theorist. In *The Palgrave Handbook of Organizational Change Thinkers* (pp. 937-950). Cham: Springer International Publishing.
- Carlyle, T. (1841). *On Heroes, Hero-Worship, and The Heroic in History*. Chapman and Hall.
- Chadha, M. (2015) A Buddhist Epistemological Framework for Mindfulness Meditation, *Asian Philosophy*, 25:1, 65-80, DOI: 10.1080/09552367.2015.
- Christensen, C.M., McDonald, R., Altman, E.J. and Palmer, J.E. (2018), *Disruptive Innovation: An Intellectual History and Directions for Future Research*. *Jour. of Manage. Stud.*, 55: 1043-1078. <https://doi.org/10.1111/joms.12349>
- Cohen, W. (2010). *Drucker on Leadership: New Lessons from the Father of Modern Management*.
- Collins, J. (2001). *Good to Great: Why Some Companies Make the Leap... and Others Don't*. Harper Business.
- Cummings, T. G., & Worley, C. G. (2015). *Organization development and change*. Cengage Learning.

Day, D. V., & Antonakis, J. (2012). Leadership: Past, present, and future. *The Leadership Quarterly*, 23(6), 1058–1074.

Doppelt, B. (2017). *Leading change toward sustainability: A change-management guide for business, government, and civil society* (3rd ed.). Routledge.

Drucker, P. F., Hesselbein, F., & Kuhl, J. S. (2015). *Peter Drucker's five most important questions: Enduring wisdom for today's leaders*. John Wiley & Sons.

Edmondson, A. (2018). *The Fearless Organization: Creating Psychological Safety in the Workplace for Learning, Innovation, and Growth*. Wiley.

Einstein, A. (1915) On the General Theory of Relativity. *Sitzungsber. Preuss. Akad. Wiss. Berlin (Math. Phys.)*, 1915, 778-786. Fiedler, F. E. (1967). *A Theory of Leadership Effectiveness*. McGraw-Hill.

Einstein, A & Russell, B. (1955) Statement: The Russell-Einstein Manifesto Pugwash Conferences on Science and World Affairs

Fleur, D.S., Bredeweg, B. & van den Bos, W. (2021) Metacognition: ideas and insights from neuro- and educational sciences. *npj Sci. Learn.* 6, 13 <https://doi.org/10.1038/s41539-021-00089-5>

Greenleaf, R. K. (1970). *The servant as leader*. The Robert K. Greenleaf Center.

Guthrie, W. K. C. (1971). *The philosophy of Socrates*. Cambridge University Press.

Grunwald, M. (Ed.). (2008). *Human haptic perception: Basics and applications*. Springer Science & Business Media.

Herold, D. M., Fedor, D. B., & Caldwell, S. (2007). Beyond change management: A multilevel investigation of contextual and personal influences on employees' commitment to change. *Journal of Applied Psychology*, 92(4), 942–951.

Hersey, P., & Blanchard, K. H. (1977). *Management of Organizational Behavior: Utilizing Human Resources* (3rd ed.). Prentice-Hall.

Higgs, M., & Rowland, D. (2000). Building change leadership capability: 'The quest for change competence'. *Journal of Change Management*, 1(2), 104–121.

House, R. J. (1971). A path goal theory of leader effectiveness. *Administrative science quarterly*, 321-339.

Judge, T. A., & Piccolo, R. F. (2004). Transformational and transactional leadership: A meta-analytic test of their relative validity. *Journal of Applied Psychology*, 89(5), 755–768.

Jung, D. I., Chow, C., & Wu, A. (2003). The role of transformational leadership in enhancing organizational innovation: Hypotheses and some preliminary findings. *The Leadership Quarterly*, 14(4–5), 525–544.

Kotter, J. P. (1996). *Leading Change*. Harvard Business School Press.

Kotter, J.P. (2008). "Force For Change: How Leadership Differs from Management", p.35, Simon and Schuster

Kotter, J. P. (2012). Leading change. *Harvard Business Review*, 90(1/2), 60–70.

Lewin, K., Lippitt, R., & White, R. K. (1939). Patterns of aggressive behavior in experimentally created social climates. *The Journal of Social Psychology*, 10(2), 271–299.

Kudesia, R., & Lau, J. (2020). Metacognitive Practice: Understanding Mindfulness as Repeated Attempts to Understand Mindfulness.

Kukreja, J. (2019). Holacracy: The next generation leadership in a VUCA world. *International Journal of Trend in Scientific Research and Development*, 3(6), 37-47.

Lewin, K., Lippitt, R., & White, R. K. (1939). Patterns of aggressive behavior in experimentally created social climates. *The Journal of Social Psychology*, 10(2), 271–299.

Likert, R. (1961). *New Patterns of Management*. McGraw-Hill.

Machiavelli, N. (1513). *The Prince*.

Mark, G., & Ulrich, D. (2008). The cost of interrupted work: More speed and stress. *Conference on Human Factors in Computing Systems - Proceedings*. 107-110. 10.1145/1357054.1357072.

McGregor, D., M. (1957) "The Human Side of Enterprise." In *Adventure in Thought and Action*. Proceedings of the Fifth Anniversary Convocation of the School of Industrial Management, Massachusetts Institute of Technology, Cambridge, MA, 9 April 1957. Cambridge, MA: MIT, 1957a. In this early paper McGregor presents his Theory X and Y and identifies organizational methods consistent with Theory Y. Also reprinted in the November 1957 issue of *Management Review* (Vol. 46, no. 11, pp. 22–28).

McGregor, D. (1978). *Leadership*. Harper & Row.

Muhammad Usman Hadi, Qasem Al Tashi, Rizwan Qureshi, (2023) Large Language Models: A Comprehensive Survey of its Applications, Challenges, Limitations, and Future Prospects. *TechRxiv*. November 16, 2023.

Newton, I. (1687) *Philosophiæ Naturalis Principia Mathematica* (Mathematical Principles of Natural Philosophy) Laws - Sir Isaac Newton's law of universal gravitation

Northouse, P. G. (2018). *Leadership: Theory and practice*. Sage Publications.

Olin, R., & Scruggs, L. (1999). A Comprehensive, Proactive Assessment Program. *MAA NOTES*, 224-228.

Plato. (1997). *Complete works* (J. M. Cooper & D. S. Hutchinson, Eds.). Hackett Publishing Company. (Original works published ca. 399 BCE)

Ravi S. Kudesia, 2019: Mindfulness as Metacognitive Practice. *AMR*, 44, 405–423, <https://doi.org/10.5465/amr.2015.0333>

Shapiro SL, Carlson LE, Astin JA, & Freedman B. (2006) Mechanisms of mindfulness. *Journal of Clinical Psychology*. 2006;62(3):373–386. doi: 10.1002/jclp.20237. [PubMed] [CrossRef] [Google Scholar]

Taylor, F. W. (1911). *The principles of scientific management*. NuVision Publications LLC.

Taylor, F. W. (2004). *Scientific management*. Routledge.

Thommessen, E. (2003). Niccolo Machiavelli, *The Prince* (1513). *The Classics of Western Philosophy: A Reader's Guide*, 190.

Weber, M. (1947). *The Theory of Social and Economic Organization* (T. Parsons, Trans.). Free Press. (Original work published 1922)

Yukl, G. (2012). Effective leadership behavior: What we know and what questions need more attention. *Academy of Management Perspectives*, 26(4), 66–85.

Zaccaro, S. J. (2007). Trait-based perspectives of leadership. *American Psychological Association*