Using Technology to Remove Embedded Ideologies From Leadership and Culture

Chris Hamilton
Prairie View A&M University

LaKesha Leonard
Prairie View A&M University

Chigo Uzoigwe
Prairie View A&M University

Reginald L. Bell
Prairie View A&M University

This study reviewed the related literature and ascertained a range of factors that shape and improve cultural awareness, with the critical findings poised to impact the overall organizational culture and performance associated with technology. The research question was simple. “What technology tools aid leaders in facilitating the removal of embedded ideologies that plague cultures?” The result of the literature review was a flow chart developed to explicate a framework for the synergistic use of technology tools to improve leadership. The study found that effective leadership fosters positive interactions, enhances performance, and establishes fair, non-stereotypical expectations. Six recommendations are given to foster synergistic technology delivery in facilitating the removal of embedded ideologies that plague corporate cultures.

Keywords: AI, culture, leadership, performance, project management, robots, technology tools

INTRODUCTION

This study reviews the related literature to ascertain the pivotal role of technology in reshaping cultural paradigms. It aims to identify instrumental tools aiding leaders in challenging and eradicating entrenched ideologies. What strategies affect organizational performance, and how can technology tools eliminate the negative impact associated with embedded ideologies that surround them? The research seeks to clarify the diverse processes that influence organizational performance and explores the potential of technology tools in offsetting the detrimental impact of deeply embedded ideologies, thereby offering crucial insights into improving performance outcomes.

The Cambridge Dictionary’s definition of ideology delimits this study, as it is a standard word usage. According to the Cambridge Dictionary, ideology means “a theory or set of beliefs, esp. one on which a
political system, party, or organization is based.” Ideologies tend to plague the ethical decision-making framework for technological integration, which encompasses ethical principles, models, and strategies, which is crucial.

There are studies whose main focus has centered on ideology and technology. When doing a Google Scholar search with the descriptor terms “Ideology” and “Technology” in the article’s title, 12 results appeared from 2015 to the present. Slawotsky (2021) found correlations between ideology, technology, economics, and national security. Ideology affects the “global value chain” (Choi, 2020). One author reviewed ideology from 1931-1945 as it influenced Soviet Color Film (Cavendish, 2016). Ideology related to technology is seen to be correlated to the future of Islamic education (Zudhi, 2022); ideology influences architecture as it is the trends of technology that influence tastes (Motamedmanesh & Rückert, 2016); technology has been found to encroach on the “liveness” in entertainment genres (Kim, 2017). Technology is often used for ideologies that deviate from normal culture. When cultures and leadership ideologies clash, strategies and performance can benefit—or be burdened.

CEO Ideology and Performance

The intertwining of CEO ideology with corporate performance and inter-company relations emphasizes the widespread impact of leadership beliefs and actions in the continually developing tech landscape. CEO ideology profoundly shapes company performance, as evidenced by various incidents. Take, for example, the Goya Foods president’s endorsement of President Trump, leading to both boycotts and a successful “buy-cott,” resulting in increased sales (Behrmann, 2020). The buy-cott was so successful that Behrmann (2020) reported, “Goya Foods CEO Bob Unanue said Monday Rep. Alexandria Ocasio-Cortez, D-N.Y., was selected as the company’s “employee of the month” earlier this year after she drew attention to the boycott against the company, and a spike in sales followed” (para).

Similarly, examining Elon Musk’s acquisition of Twitter reveals the intertwining of CEO decisions and company outcomes. Although initially seen as erratic (Zahn, 2022), the purchase and the subsequent actions of the new CEO presented conflicting perspectives: Ott and Hoelscher (2023) suggested toxic leadership traits in Musk’s conduct, yet the surge in new accounts, primarily leaning towards the political “right” or “far-right” positions, occurred just before the deal’s closure (Frenkel & Thompson, 2022). However, more than a year later, Bloomberg disclosed Fidelity’s significant devaluation of Twitter’s worth by over 70% from Musk’s purchase price of $44 billion, causing numerous notable companies to reduce or cease their platform use, viewing Twitter as an extension of Musk’s established approach (Bloomberg, 2024).

The clash between Elon Musk and Disney’s CEO, Bob Iger, has led to speculation among Tesla drivers about the removal of Disney+ from Tesla vehicles. Musk’s public jabs at Iger and Disney’s advertising pause on Musk’s platform contributed to the strain between the two CEOs. Musk’s stance on free speech guaranteed by the United States Constitution Bill of Rights versus what media pundits call “hate speech” on his platform created further controversy, leading to public confrontations and strained company relations (Djan, 2023). Disney’s leadership refuses to admit the harm caused by its leadership and cultural ideology as its stock prices of “$17.4 billion in 2018 to $11.5 billion last year, has suffered from a broad decline in profitability in linear television” (Saul, 2023, para). Once renowned for its organizational culture, Disney emphasized technological innovation and customer-centric service. Its internal focus on employee satisfaction translated into high-quality customer experiences (Cheng, 2023). What happened to Disney? Moreover, recent tensions between Musk and Disney have led to speculations about their streaming service’s removal from Tesla vehicles, reflecting the fallout between these influential figures (Djan, 2023). Leadership and culture are like the chicken and the egg, which begets which?

Managing Controversy: Navigating Brand Reputation Amidst Conflict and Progress

Chip Wilson, the founder of Lululemon, resigned from the board in 2015, yet his influence continues to affect the company’s reputation. Wilson’s recent public dismissal of diversity and inclusion efforts within Lululemon has sparked controversy and calls for boycotts. Despite being detached from the company’s operations, Wilson’s majority ownership position still wields significant power. His critique of diversity
initiatives and labeling particular consumers undesired have led to concerns about the brand’s direction and inclusivity (Bunn, 2024).

Prairie View A&M University’s president, Dr. Tomikia P. LeGrande, emphasizes the institution’s commitment to providing students with opportunities and programs. She highlights the university’s historical role in supporting African Americans’ access to education and affirms its ongoing dedication to tailored student-focused programs, ensuring inclusivity for all (Simon, 2023).

Lululemon’s collaboration with HBCU Connect signals a positive step toward offering career opportunities for students and graduates from historically black colleges and universities. The partnership aims to create connections within the HBCU community and foster career development by providing various employee benefits, well-being programs, and growth initiatives (Montiel, 2023).

In a separate move, Lululemon’s signing of a name, image, and likeness (NIL) deal with J.R. Smith, a former NBA champion now transitioning to collegiate golf, highlights the company’s efforts to expand its male consumer base and revenue streams. Smith’s endorsement by Lululemon as the first male golf athlete represents a strategic step in the brand’s goal to double its annual revenue by 2026, particularly within the men’s apparel sector (Carr, 2022). Smith is an African American student-athlete at North Carolina A&T, an HBCU.

Amidst these positive initiatives, controversies linked to Wilson’s comments underscore the ongoing challenges companies face in balancing their founders’ legacies with contemporary values of diversity, equity, and inclusion. Wilson’s viewpoints have sparked debates and boycott calls, revealing the tensions between a company’s historical figure and its present-day ethos (Bunn, 2024). Donna Martin, a Black female project manager in a telecommunications company, expressed disappointment at Lululemon founder Chip Wilson’s public rejection of diversity values within the brand, noting the paradox of a brand creator rejecting support from a diverse audience in today’s societal landscape (Bunn, 2024).

The contradiction between the progressive partnerships for inclusivity and the challenges posed by the founder’s divergent views exemplifies the complexities organizations strive to navigate in terms of legacy, sustainability, and present-day values in their leadership and operations.

Definitions of Leadership and Culture Within the IT Context

Burns (1978) argues that leadership is the “art of guiding followers toward shared values and motivations, transcending mere authority.” In the tech sphere, this entails inspiring a team of enthusiasts toward collective goals, aligning with organizational objectives while embracing common values and aspirations. It is a symbiotic relationship fostering innovation and collaboration (Burns, 1978). Burns’ leadership definition has recently seen a rejuvenation in its relevance to authority in communication commands and recipients’ compliance with that command, as Southwest Airlines learned with a $75 million weekend loss due to its mandatory Covid-19 employee vaccine, which proved to be a leadership ideology fiasco (Bell & Kennebrew, 2023). Southwest Airlines needs a better understanding of delegation of authority (Bell & Bodie, 2012a). Employee retention is a two-factor leadership issue, as employees leave or stay based on policy components of the organization (Bell & Rahman, 2023); training influential leaders means not assuming leaders are born (Brown et al. 2023); know that leadership of diversity, equity and inclusion (DEI) depends on leadership ideology to survive (Cooper et al., 2023); and gaslighting female leadership, particularly the styles of Black female leaders, stifles their productivity (Adams et al., 2023). Bell and Bodie (2012b, pp. 49-50), wrote a succinct summary of leadership’s role in values and vision:

Although there are many definitions of leadership, James MacGregor Burns (1978), in his classic b-book leadership, provides a definition that is still relevant: “Leadership is the reciprocal process of mobilizing, by persons with certain motives and values, various economic, political, and other resources, in a context of competition and conflict, in order to realize goals independently or mutually held by both leaders and followers.” Apparently Burns perceived the ideal leader as “transformational.” Appealing to the followers’ values and a higher vision, transformational leaders encourage the followers to exert themselves in the service of achieving that vision (p. 49–50).
Influential tech leaders do not just command; they emerge; they spark collective passion, ensuring the journey is as fulfilling as the destination. Artificial Intelligence (AI) is already replacing real human workers; replacing “Cam Girls” for subscription fees on internet chat rooms, such as “OnlyFans.” According to Wikipedia, it “is an internet content subscription service based in London, United Kingdom. The service is used primarily by sex workers who produce pornography.” The terrible ethics of the ideology allowed on the technology of OnlyFans is legal. Still, the morality of the sexual revolution and social deviance remains questionable, primarily when married men comprise the bulk of paying customers on these sites (Litam, Speciale, & Balkin, 2022). Sexual freedom, adultery, divorce, and fornication are an embedded ideology in American and Western cultures, propagated by the technology of the gig economy (Easterbrook-Smith, 2023). In 1964, it was a Supreme Court of the United States (SCOTUS) ruling when Justice Potter Stewart “tried to explain “hard-core” pornography, or what is obscene, by saying, “I shall not today attempt further to define the kinds of material I understand to be embraced... [b]ut I know it when I see it ...” (Findlaw, 2016, para); debauchery as “free speech” became embedded in American culture henceforward. Fake electronic AI girlfriends online are replacing human females in person, and the marriage rate is crashing (Erscoi, 2023; Fan, 2021; Hemmann, 2023; Locatelli, 2022); a staggering 63% of men under 30 claim to be single, while 34% of women are single who belong to the same age group (Mahdawi, 2023). The decline of fertility in married couples is correlated to robotic technology replacing workers, which is then correlated to the decline in economic stature of men (Anelli, Giuntella & Stella, 2024).

Technology is helpful for the ideology of triggering fear in cultures: enemies of Western Culture use technology to shape ideology, intimidate, and showcase terror from “September 11 to the Assassination of Bin Laden” (Alajehi & Al-Shalabi, 2015). Edgar Schein, in his 1992 book Organizational Culture and Leadership, is famous for his discovery of the three layers of culture: artifacts (most visible), espoused values and underlying (embedded) assumptions (least visible). Schein (1992, p. 12) defined culture the following way:

“... culture is “a pattern of shared basic assumptions that the group learned as it solved its problems of external adaptation and internal integration, that has worked well enough to be considered valid; and therefore, to be taught to new members as the correct way to perceive, think, and feel in relation to those problems.”

The synergy between leadership and technology has become a central focus in contemporary organizational dynamics. Leadership practices now pivot on harnessing innovative tools and technological advancements to propel the success of organizations. Leaders navigate various tools, from project management software to task-tracking applications, all aimed at elevating efficiency and fostering seamless communication. The strategic deployment of these tools serves as a catalyst, inspiring transparent communication and nurturing ethical decision-making within leadership circles. Slack Practices and Resources (SPR) within this framework, as explored by Fireman et al. (2023), enhances risk management and aligns organizational choices with ethical standards and goals. Taboada et al. (2023) emphasized that the strategic integration of AI into project management is a significant consideration in ensuring transparent and informed decision-making. Another critical research area is exploring the long-term implications of integrating an ethical decision-making framework into technology adoption. Assessing the sustained impact of ethical considerations on technology implementation and organizational behavior over time can offer valuable insights into the durability and effectiveness of ethical frameworks in driving technological changes.

Research Purpose

This study aims to contribute to a more comprehensive understanding of the interplay between leadership, technology, and organizational culture, further aiding in driving organizational improvements and fostering innovation. Research is needed to dive into the psychological aspects influencing technology adoption within organizations. Investigating individual resistance, cognitive biases, or psychological
barriers could provide insights into the human-centric challenges of embracing new tools and frameworks. Exploring how organizations learn, adapt, and evolve in the context of technological adoption could be a valuable study area. Examining how adaptive strategies, learning mechanisms, and knowledge transfer within organizations impact technology tools’ successful implementation and sustainability would offer a deeper understanding of organizational dynamics. These areas of exploration could enhance the comprehension of the challenges surrounding technology integration, paving the way for more effective strategies to overcome barriers and drive innovation within organizational settings.

**Research Question**

The strategic incorporation of visionary leadership and innovative technological tools stands as a critical pivot for navigating the complexities of the digital age, fostering growth, innovation, and ethical organizational practices. Our research investigates the transformative potential of leadership strategies and cutting-edge technology to empower employee-driven leadership within the digital landscape. Thus, our research question is derived to tackle the abovementioned areas of concern.

**RQ1**: What technology tools aid leaders in facilitating the removal of embedded ideologies that plague cultures?

**LITERATURE REVIEW**

In exploring the multifaceted dynamics of modern organizations, this literature review investigates the intricate interplay between leadership styles, technology tools, and the complex fabric of organizational culture and performance. This review spotlights CEO Transformational Leadership, Project Management Best Practices, and Project Management Technology Quotient as key influencers shaping values and promoting efficient practices. This study examines the intricate interplay shaping the contemporary organizational landscape by exploring leadership styles, technology tools, and their impact on organizational culture and performance.

**Shaping Organizational Culture via Technology**

Leadership styles play a pivotal role in shaping the organizational culture. CEO Transformational Leadership, Project Management Best Practices, and Project Management Technology Quotient are recognized leadership styles known for their influence on establishing core values, fostering unified purposes, and promoting efficient leadership practices. Schein’s (1992: 2004) formal definition of organizational culture comprises shared basic assumptions, learned behaviors, and the problem-solving role within an organization. These elements shape the implicit beliefs, patterns of behavior, and the framework for addressing challenges within the organizational context. Additionally, culture facilitates survival and growth while fostering internal cohesion and integration among its members. Wang, Lin, and Sheng (2022) explore the relationship between digital leadership, strategic orientation, organizational culture, and exploratory innovation. Wang’s study also takes a dual perspective, examining how the strategic direction of corporate culture contributes to the impact of digital leadership on experimental innovation. Wang’s research aims to provide insights into the dynamics of leadership in the digital age and its influence on fostering innovative practices within organizations.

Exploring the impact of technology tools in organizational settings on performance, emphasizing project management software, communication platforms, and AI analytics. Further, the ethical decision-making framework examines principles and models fostering ethical behavior and accountability across organizational tiers. Table 1 is a cross-section of the main categories of leadership styles and technology tools used in culture. Table 1 highlights the relationship among leadership technology tools, leadership styles, and company outcomes, along with published peer-reviewed articles supporting the best practices for each category.

According to Aga et al. (2016), CTL can positively influence project success, particularly when combined with team building operating as a mediating variable. Aga’s research indicates that if CTL...
enhances team building, it will lead to overall project success. This theoretical framework is supported by Sarros’ model Sarros et al., (2008), where upon looking to identify which critical transformational leadership factors most impact organizational culture and improve the climate for organizational innovation, the components of Articulating Vision and Providing Individual Support were discovered to impact organizational innovation most positively.

Organizational culture also contains attributes that coordinate with CTL and resonate with team building. In Karlsen’s research, Karlsen et al. (2022) on knowledge transfer suggest that the following key factors are critical to successful knowledge transfer within an organization: organizational values, relationships and communication, leadership, project characteristics, and individual factors, such as personality types and age distribution. These factors coincide with Sarro’s and Aga’s constructs, stating the importance of articulating vision, establishing and building relationships through effective communication, and providing the necessary support to the group’s values and the values of the individual members within the team. Fulk, Mancuso, and Bell (2013, pp. 6-7) comment on the three guidelines to improve the communication process between IT managers and their clients:

“We recommend that the manager call upon the human resources department in your company develop training program for once a month, to keep all involved current on various topics dealing with commonness. The three guidelines address different facets of this training program. First, IT professionals must learn how to listen actively. Second, IT professionals must decrease large non-commonness gaps. And, third, IT professionals must apply psychological motivators to generate good communication results. Noise for the IT professional comes mostly from listening to too much psycho baggage from preconceived notions and not enough listening to the client’s true message.”

<table>
<thead>
<tr>
<th>LEADERSHIP STYLES AND TECHNOLOGY TOOLS</th>
<th>KEY CHARACTERISTICS</th>
<th>IMPACT ON COMPANY PERFORMANCE</th>
<th>IMPACT ON ORGANIZATIONAL CULTURE</th>
<th>SUPPORTING</th>
</tr>
</thead>
<tbody>
<tr>
<td>CEO Transformational Leadership</td>
<td>Visionary, Inspirational, and Motivational Technology use.</td>
<td>Enhanced innovation and creativity</td>
<td>Fosters a culture of collaboration</td>
<td>(Sarros et al., 2008), (Wang, Lin, and Sheng, 2022)</td>
</tr>
<tr>
<td>Project Management Best Practices</td>
<td>Precise, Strategic Alignment, and Resource Optimization Technology.</td>
<td>Improved project delivery</td>
<td>Emphasizes efficiency and quality.</td>
<td>(Richard et al., 2009), (Zaman et al., 2020)</td>
</tr>
<tr>
<td>Project Management Technology Quotient</td>
<td>Tech Integration, Automation, Analytics, and Communication Tools.</td>
<td>Streamlined processes</td>
<td>Cultivates a tech-savvy environment</td>
<td>(Taboada et al., 2023), (Garcia &amp; Russo, 2019)</td>
</tr>
<tr>
<td>Communication Platforms</td>
<td>Facilitates real-time communication and collaboration.</td>
<td>Enhances connectivity and teamwork</td>
<td>Positive: Fosters open dialogue and interaction</td>
<td>(Matsunaga, 2021), (Chen et al., 2019)</td>
</tr>
</tbody>
</table>
Elswick (2018) explores the relationship between design thinking and organizational culture, where design thinking is an innovative problem-solving approach that focuses on understanding user needs and developing creative solutions. Design thinking focuses on creativity, empathy, and iterative problem-solving, which are commonly used in product and service innovation. The article explores how integrating design thinking principles into organizational culture impacts performance, highlighting its potential contributions to improvement.

**Engaging Technology for Performance**

Integrating technology tools in modern organizational environments has become imperative for driving efficiency, communication, and decision-making processes. Various tools, such as project management software, communication platforms, and AI-driven analytics, significantly impact operational dynamics and employee interactions. Asghar Afshar Jahanshahi’s (2012) examination of organizational performance in small and medium-sized enterprises echoed the multifaceted nature of assessment. Aligning with Dyer and Reeves (1995), Jahanshahi explored the four key measurement categories encompassing human resource outcomes, organizational outcomes, financial accounting outcomes, and capital market outcomes. Richard et al.’s (2009) emphasis on financial performance, product market performance, and shareholder return echoed the varied perspectives Jahanshahi considered. Moreover, Shaker and Basem (2010) provided a lens through relationship marketing, resonating with the concept of driving profit and ROI through indicators like market share and customer loyalty. Similarly, Venkatrman and Ramanujam (1986) identified dimensions mirroring Jahanshahi’s exploration, highlighting financial, operational, and stakeholder performance as crucial for evaluating organizational success.

Slack Practices and Resources (SPR) encompass intentional or inherent mechanisms within organizational processes that allow for flexibility, adaptation, and buffer against variability or uncertainties. Within an ethical decision-making framework, understanding SPR involves assessing their design origin and deliberate integration to enhance risk management, ensuring transparent and informed choices aligning with organizational goals and ethical standards. Fireman et al. (2023) explore Slack Practices and Resources (SPR) within construction production planning and control to understand their utilization. Through two case studies, they identified 57 slack practices and eight types of slack resources diverging from conventional buffer concepts. The analytical framework focused on five key themes: instantiation, type, tackled variability, resources, and unintended consequences of slack practices. The study underscores the need to explicitly acknowledge SPR’s prevalence across production planning levels and its impact on managerial processes, highlighting its potential benefits for risk management in construction projects. Notably, the paper emphasizes the ethical decision-making framework by advocating for a deeper comprehension of SPR’s design origin, whether self-organized or intentional, promoting integration into planning and risk management processes for enhanced project control and effectiveness. Understanding the
origin of Slack Practices and Resources’ design within an ethical framework enhances informed decision-making that is aligned with organizational goals and ethical standards.

**Engaging Technology for Marketing**

Tech tools improve collaboration without overloading team members, help remote teams stay connected, and predict analytics that anticipate challenges to mitigate risks. Authors Dyer and Reeves (1995) emphasize how real competitive action swirls around customization, service, speed, and innovation. Effectively utilizing project management software, communication platforms, and AI-driven analytics can maximize organizational performance by improving collaboration, communication, decision-making, and overall efficiency in project management and other business processes.

When supported by technology tools, relationship marketing aligns with driving profit and ROI through indicators like market share and customer loyalty; leveraging CRM systems, digital communication platforms, and AI-driven analytics allows organizations to build meaningful connections with customers, tailor marketing efforts, and optimize strategies for long-term profitability and sustainable growth. Authors Shaker and Basem (2010) attest that relationship marketing emphasizes understanding the needs and preferences of customers while enhancing customer satisfaction and retention loyalty.

**FIRM OUTCOMES AND FINDINGS**

The evolution of transformational leadership demands adept utilization of contemporary digital tools, as Schrage et al. (2021) emphasized. The leader’s technological proficiency mediates knowledge transfer and communication, impacting top-down directives and peer-to-peer collaborations. Enhancing firm outcomes in the digital era involves leveraging technological solutions across various operational facets, as Jahanshahi’s study suggests. This encompasses automation, data analytics, and financial planning, culminating in improvements in financial, operational, and market-based performance measures. Alsaqqa’s insights further underline the influence of incentive tools, organizational rules, leader decisions, technology, and communication methods on individual and company performance.

Figure 1 details a complete integrated flow-chart of Leadership Technology Tools, CEO Transformational Leadership (CTL), Project Management Best Practices (PMBP), Project Management Technology Quotient (PMTQ), Company Performance, and Organizational Culture. Technology tools drive comprehensive organizational transformation. However, transformational leadership today requires that leaders be able to effectively utilize the current digital tools (Schrage et al., 2021) of collaboration and knowledge management to be effective in transferring vision, ideas, and encouragement to the team (Al-Mahseneh & Harb, 2022). Technological competency within leadership performs within a mediating capacity upon knowledge transfer (Ghasabeh, 2020): thus, the leader’s utility level of technology plays an essential role in team communication, not only from a top-down dynamic but also within the horizontal medium of peer-to-peer collaboration (Gerards et al., 2020). Each tool in the flow of leadership is explored.

**FIGURE 1**

FRAMEWORK OF LEADERSHIP TECHNOLOGY TOOLS AND IMPACT
Leadership Technology Tools

Leadership technology tools are essential in project management (PM) and business operations. Garcia and Russo (2019) suggest that some tools are used to delegate and track Tasks. PM software and apps assign tasks, set deadlines, and track progress. Abreu (2022) talks about virtual leadership tools and managing remotely. Cloud computing allows immediate data app access, and virtual private networks (VPNs) ensure secure remote entry to corporate networks. Multilingual teams use language tools for communication. Business process automation (BPA) streamlines tasks, reporting tools automate analysis, and Artificial Intelligence (AI) enhances decision-making. Communication platforms empower leaders with video, messaging, and email.

Building upon the intricate relationship between leadership and technology, a comprehensive exploration of how these tools shape organizational performance emerges through recent studies. Chen et al. (2019) explored the profound impact of leadership technology tools on organizational dynamics, showcasing the transformative influence of contemporary technologies like Slack or Microsoft Teams. These platforms enhance employee productivity, whether independently or collaboratively, and serve as pivotal methods for customer and stakeholder interactions. The resulting impact resonates deeply within the company, shaping values, morale, and internal culture, consequently influencing sales outcomes. This presents a compelling avenue for further investigation: how transformative leadership utilizes technology to acknowledge and incentivize employees and customers, thereby fortifying the company’s success in meaningful and cost-effective ways.

CEO Transformational Leadership (CTL)

Zaman et al. (2020) study proves that CEO Transformational Leadership (CTL) significantly boosts innovation success by empowering teams and encouraging creative thinking, which is vital for smaller businesses and growing economies. It also shows how Project Management Best Practices (PMBP) and PMTQ enhance CTL’s impact, driving focused innovation in technology sectors. These findings validate the use of PMTQ and transformational leadership in project management, guiding future research and highlighting their crucial role in creating sustainable and ethically integrated technological advancements.

The importance of organizational culture is emphasized in Bagga’s research (Bagga et al., 2022), where organizational culture is identified as a strong mediating influence on change management and team productivity related to leadership objectives. Additional support is provided through Al-Shabimi’s research on CTL’s impact on organizational Culture (Al-Shibami et al., 2019), where their paper illustrates factors that intersect with Aga and Karlsen’s papers, such as idealized influence, inspirational motivation, intellectual stimulation, and individual consideration. These concepts provide further insight as to how organizational culture and CTL work in tandem to influence company performance.

Project Management Best Practices

Strategic Integration of Leadership Styles and Technology in Organizations (SILSTO) is used strategically to combine leadership styles like CEO Transformational Leadership (CTL), Project Management Best Practices, and Project Management Technology Quotient with technology tools to promote values, unify purposes, and foster efficient practices within their cultures. Schein’s (2004) definition of organizational culture, emphasizing shared basic assumptions and learned behaviors, remains pivotal in understanding how these elements shape an organization’s framework for addressing challenges.

Zaman et al. (2020) examine CTL, Project management best practices (PMBP), and project management technology quotient (PMTQ) leadership styles. Transformational leadership, CTL by a CEO, significantly influences an organization’s culture, performance, and overall success. Guidelines, principles, and methods (PMBP) are applied to improve project efficiency across various industries; some refer to Project Quality Management as PQM and go as far back as TQM with the works of Juran, Deming, Crosby, and Feigenbaum and the entire PMBOK—Project Management Body of Knowledge (Baker, 2018; Baker, 2020). These best practices continue to adapt to changing project management trends and technologies. When individual leaders adjust, manage, and incorporate technology based on organizational or project requirements, it is called PMTQ.
Project Management Technology Quotient (PMTQ)

The relationship between leadership and technology tools is critical for organizational success in today’s digital era. The constructive collaboration between transformative leadership and innovative technology is pivotal in shaping an organization’s culture, performance, and long-term success. Effective leadership fosters positive interactions, enhances performance, and establishes fair expectations when coupled with strategic technology utilization. Research in this domain explores CTL, PMBP, and PMTQ as crucial leadership styles. Leadership is pivotal in navigating challenges posed by disruptive technologies like AI, with scholars emphasizing its role in addressing concerns regarding job restructuring and technological upheavals (Matsunaga, 2022). By coupling their vision with digital literacy, transformational leaders empower teams to manage uncertainty caused by AI, maintaining high performance (Chen et al., 2019). However, the effectiveness of visionary messages in driving change hinges on their alignment with digital competence in today’s organizations. These styles leverage project management software, task-tracking apps, virtual leadership tools, and communication platforms, enhancing employee motivation, transparent communication, ethical decision-making, and overall organizational performance.

Ethical decision-making within organizational settings is a critical aspect that requires a comprehensive framework. This framework encompasses ethical principles, decision-making models, and strategies to promote ethical behavior, integrity, and accountability at all levels of the organization. Taboada et al. (2023) examine the integration of artificial intelligence (AI) into project management practices during the 5.0 era of the industry. The focus is improving project performance and achieving sustainable success through AI applications, particularly in construction and IT projects. The PMTQ is highlighted as a critical topic, denoting an individual’s ability to adapt, manage, and integrate technology based on organizational or project needs. The relevance of PMTQ is underscored by its growing importance in the digital sustainability landscape, with 85 percent of CEOs expecting significant changes in business operations due to AI in the next five years.

The anticipation of AI techniques being incorporated into project management methods is acknowledged, emphasizing the need for PM professionals to adapt to the evolving technological landscape. Additionally, the paper introduces 12 principles for delivering value in projects and an innovative approach to defining project performance systems with eight Project Domains (PDs). The evolving nature of project management, coupled with demands for integrating AI and PMTQ, suggests a need for further research to understand and effectively implement AI-enabled project management. Doz’s (2010) exploration of strategic agility, crucial in fostering organizational adaptability, resonates with an ethical decision-making framework, emphasizing leadership’s proactive adaptability in navigating uncertainties. Business model renewal signifies adapting fundamental structures to evolving market conditions. The article delineates leadership’s role in driving strategic agility, providing insights to accelerate this renewal process, enhancing the organization’s adaptability to uncertainties and opportunities, and improving organizational performance.

Company Performance

Enhancing organizational performance through technology tools involves leveraging digital solutions to improve various aspects of a firm’s operations. Jahanshahi (2012) infers that financial or accounting performance, operational performance, and market-based performance measures contribute to enhancing firm outcomes via automation and efficiency, data analytics, and financial planning and forecasting. It measures standard or prescribed indicators of effectiveness, efficiency, and environmental responsibility, which allow researchers and managers to evaluate organizations over time and compare them with their rivals. (Richard et al., 2009). According to Alsaqqa (2020), incentive tools drive individual and company performance, while organizational rules influence morality and control, leader decisions impact employee productivity and profitability, technology aids digital analysis in decision-making, and leaders’ communication tools shape company dialogue methods.

Technological adoption for organizational performance embracing technology tools such as project management software, communication platforms, and AI-driven analytics is imperative for enhancing operational dynamics, employee interactions, and overall organizational performance. Diverse facets of
evaluation encompassing human resource outcomes, financial performance, and market-based indicators, as highlighted by Jahanshahi (2012) and Richard et al. (2009), provide insights into the multifaceted nature of assessing organizational success.

Organizational Culture

Leadership technology tools influence organizational culture in many ways (Ly, 2023). Incentive tools drive individual and company performance. Organizational rules impact morality and control. Leader decisions affect employee productivity and profitability. Technology aids digital analysis in decision-making. Leaders’ communication tools shape company dialogue methods. When an organizational culture promotes openness, the collaborative environment fosters better solutions to complex problems when the leader has a higher digital literacy, which enhances individual job performance within the organization. (Matsunaga 2021).

The importance of organizational culture is emphasized in Bagga’s research by Bagga et al. (2022), where organizational culture is identified as a strong mediating influence on change management and team productivity related to leadership objectives. Additional support is provided through Al-Shabimi et al. (2019) research on CTL’s impact on organizational culture, where their paper illustrates factors that intersect with Aga and Karlsen’s papers, such as idealized influence, inspirational motivation, intellectual inspiration, and individual consideration. Driving cultural evolution, midlife organizational leaders wield profound influence by orchestrating technological seduction, shaping norms, and reshaping assumptions (Alsaqqa, 2020). These concepts provide further insight as to how organizational culture and CTL work in tandem to influence company performance.

SUMMARY AND CONCLUSION

Earlier in the study, the strategic incorporation of visionary leadership and innovative technological tools was seen to stand as a critical pivot for navigating the complexities of the digital age, fostering growth, innovation, and ethical organizational practices. This view is confirmed. Our research investigated the transformative potential of leadership strategies and cutting-edge technology to empower employee-driven leadership within the digital landscape. Our research question addressed the aforementioned areas of concern.

Research Question Answered

**RQ1:** What technology tools aid leaders in facilitating the removal of embedded ideologies that plague cultures?

**RQ1 Answer:** There are six flows of technology in the hands of leadership that they can use to remove the embedded ideologies that plague cultures. Culture is defined by Edgar Schein in his 1992, repeated in 2004, book Organizational Culture and Leadership. Schein is famous for his discovery of the three layers of culture: artifacts, espoused values, and underlying (embedded) assumptions. Technology is largely synergistic to Burns’ view that leadership’s authority can be used to dislodge those assumptions (ideologies) embedded in the culture.

**Six Recommendations Determined**

The following six recommendations stem from Figure 1, and they are geared towards helping leaders at any level in the flow chart of technology within the organizational structure to facilitate the removal of embedded ideologies that plague cultures. Figure 2 shows a Hexagon Radial chart, which includes SIX acronyms AS the best way to REMEMBER the SIX recommendations.
Recommendation One: Leadership Technology Tools remove embedded ideologies by shaping organizational assumptions and influencing complex frameworks (Cortellazzo et al., 2019; Weiner et al., 2015). Integrating strategic planning with relevant technology offers significant operational benefits. This combination reshapes company culture and processes, fundamentally altering institutional operations and optimizing efficiency and efficacy within complex structures. Incorporating these tools, such as AI-driven analytics and communication platforms (Matsunaga, 2021), delivers invaluable insights into employee interactions, decision-making processes, and operational mechanisms. Addressing these challenges involves leveraging specific resources:

- **Continuous Improvement**: Integrating tech sustains performance innovation (Martínez-Caro et al., ‘20), driving value-centric growth.
- **Cultural Feedback**: Digital mechanisms gauge perceptions, which is crucial during cultural shifts (Gorton et al., ‘22).
- **Collaboration Platforms**: Virtual tools foster diverse dialogues, drive value creation, and reshape engagement (Benitez et al., ‘22).
- **Problem-solving**: AI-driven analytics uncover biases, aid opinion analysis, and bolster decision-making (Smith & Johnson, ‘23).

- **Training Initiatives**: Tech-based learning addresses biases, aids employee development, and fosters positive culture (Kaur Bagga et al., ‘22).

**Recommendation Two: CEO Transformational Leadership (CTL)** technology is crucial in dismantling embedded organizational assumptions by driving innovation success, shaping corporate culture, and influencing change management strategies. These leaders focus on establishing a shared vision to gain support from their followers, a key aspect in building organizational culture and aligning employees with strategic objectives. CTL enhances employee commitment and stimulates their contributions to organizational innovation efforts.

Zaman et al. (2020) highlight CTL’s impact on driving innovation success, particularly in smaller businesses and growing economies. Their research highlights the collaborative effects of Project Management Best Practices (PMBP) and Project Management Technology Quotient (PMTQ), amplifying CTL’s influence and removing barriers to innovation within organizational processes.

Bagga et al. (2022) emphasizes the profound influence of organizational culture on change management and team productivity, illustrating its mediating role in achieving leadership objectives. Al-Shibami et al. (2019) find that CTL’s impact on organizational culture, idealized influence, inspirational motivation, intellectual stimulation, and individual consideration offers a comprehensive understanding of how CTL and corporate culture collaborate to shape company performance.

**Implementation Strategies:**

- **Cultural collaboration**: Cultivate a collaborative culture by aligning CTL practices that foster openness and collaboration within the organization.
- **Technology integration**: To bolster innovation and creativity, foster technology integration per CTL principles.
- **Visionary and Inspirational Leadership**: Implement CTL strategies centered on visionary, inspirational, and motivational leadership styles.

**Recommendation Three: Project Management Best Practices (PMBP)** are best used to provide clearly defined, actionable procedures that directly and positively help achieve the established initial project goals or objectives. Project Management Best Practices (PMBP) is a crucial blueprint that aligns precision, strategic methodologies, and resource optimization technology. These practices significantly enhance project delivery, directly impacting company performance by emphasizing efficiency and quality. They establish norms that not only influence excellence but also solidify organizational culture. As highlighted by Richard et al. (2009) and Zaman et al. (2020), PMBPs are pivotal in steering projects toward success, fostering a culture of continuous improvement, and ensuring strategic alignment with organizational goals. Kerzner (2003) defines successful project management as a constant succession of successfully managed projects. PMBPs help project actors focus talent and energy on the real drivers that help meet the organization’s goals while limiting the biases that may occur from peoples’ previous project management experiences, which may be detrimental to the current conditions. PMBPs establish normative procedures that influence standards of excellence and help solidify organizational culture.

- **Clear Communication**: Establish transparent communication to foster unity and clarity among team members and stakeholders, ensuring everyone’s on the same page.
- **Continuous Improvement**: Foster a culture of reflection and refinement.
- **Proactive Risk Mitigation**: Implementing technology to foresee and address potential risks helps avoid setbacks and keeps projects on track.
- **Leadership Development**: Investing in leadership development equips managers to navigate challenges and inspire high-performance teams.
- **Technology Integration**: Utilize tools for streamlined workflows and collaboration.
- **Agile Methodologies**: Embracing flexibility enables swift responses to changing project demands, ensuring adaptability and success.
- **Resource Optimization**: Allocate resources efficiently based on project priorities.

**Recommendation Four: Project Management Technology Quotient (PMTQ)** aims to eliminate various common ideologies or underlying assumptions in project management and leadership contexts,
fostering a more tech-savvy, adaptive, and collaborative work environment while instilling principles beneficial for influential leaders. (Zaman et al., 2020). These ideologies also incorporate the effectiveness of how well the approach aligns with the organizational context and overall goals. PMTQ strives to eliminate rigid structures and foster an agile work culture that embraces innovation and technological integration for sustainable project performance. PMTQ strives to eliminate rigid structures and foster an agile work culture that embraces innovation and technological integration for sustainable project success.

- **Resistance to Change**: Embracing and leveraging technological advancements to facilitate change, challenging any resistance to implementing new project management technologies.
- **Innovation-integration**: Embrace tech for innovative project management, fostering efficiency and effectiveness.
- **Fear of Technology**: removing or minimizing any fear or hesitation toward adopting new technologies in project management, promoting a tech-savvy mindset among leaders and teams.
- **Stagnant Work Environment**: encouraging leaders to challenge the idea that work environments should remain static, emphasizing the need for continuous improvement and adaptation.

**Recommendation Five: Company Performance** is best used to remove the ideology of individual or isolated project successes automatically reflecting the overall company’s standards. The reliance on project teams, often the sole face of an organization to stakeholders, tends to blur the line between project success and overall company performance. Especially in high-value projects, success or failure significantly impacts the company’s financial health. Measuring company performance normalizes project management practices against economic well-being. Notably, leadership styles and technology tools play pivotal roles. Martínez-Caro et al. (2020) highlight the benefits of a digital organizational culture, enhancing value generation performance and time-saving benefits through custom data input software. Mikalef & Gupta (2021) emphasize AI’s influence on sustainable organizational capabilities, simplifying objectives and significantly improving performance:

- **Project Management Best Practices**: Precise alignment and resource optimization through technology ensure improved project delivery.
- **Project Management Technology Quotient**: Integration, automation, analytics, and communication tools streamline processes.
- **CEO Transformational Leadership**: Visionary and motivational use of technology fosters innovation.
- **Communication Platforms**: Real-time collaboration enhances connectivity and teamwork.
- **Ethical Decision-making Framework**: Embedding ethical principles ensures accountability and upholds standards.
- **AI-driven Analytics**: Data-driven insights enable informed decision-making.
- **Virtual Leadership Tools**: Facilitates remote collaboration and management.

**Recommendation Six: Organizational culture** plays a crucial role in shaping a workplace’s values, beliefs, and behaviors, where gauging and addressing embedded ideologies in culture can be leveraged via patterns in communication, decision-making processes, and employee interactions. (Fulk, Mancuso, and Bell., 2013) As per Zhang et al. (2020), the genesis of an AI-driven culture stems from the aspiration to create autonomous machines with human-like cognitive capabilities, enriching technological advancements. Cultivating an organizational culture conducive to AI innovation enriches technological advancements and fosters an environment attuned to ecological concerns, thus bolstering organizational readiness. Responsible AI implementation should strengthen human productivity by enhancing quality output without replacing the workforce or causing ethical violations.

- **Leadership Alignment**: Assessment of leadership alignment of leadership behaviors with the desired cultural values. Leaders play a significant role in shaping and reinforcing culture. If misalignment occurs, leaders may need to adjust their behaviors to model the desired cultural traits. (Fulk, Mancuso, and Bell., 2013)
• **Training & Development:** Implementation of training programs that promote the desired cultural values, including workshops on diversity and inclusion, communication skills, or leadership development, to align with the desired cultural shift. (Kaur Bagga et al., 2022)

• **Recognition & Rewards:** Align recognition and reward systems with the desired cultural values. Reinforce positive behaviors and contributions supporting the cultural shift while addressing practices contradicting the desired ideologies. (Schein’s, 2004)

• **Embracing AI-Driven Cultural Evolution:** Advance an AI-embracing culture integrating tech advancements and environmental sustainability for a progressive organizational principle.

*In summary,* leadership’s influence on organizational culture is most pronounced in a thriving organization when the company possesses the necessary technology tools and deploys them strategically. This study thoroughly examined what technology tools aid leaders in facilitating the removal of embedded ideologies that plague cultures, impact their relevance, influence performance, and positively modify their long-term success plan. Effective leadership fosters positive interactions, enhances performance, and establishes fair, non-stereotypical expectations. Through qualitative research methodology, this study validated a range of factors that shape and improve cultural awareness, with the critical findings poised to impact the overall organizational culture and performance significantly.

*In conclusion,* the intersection of leadership, technology tools, and organizational culture and performance holds considerable significance within modern organizations. These tools influenced motivation, ethical behavior, communication methods, and digital literacy, enhancing individual job performance and problem-solving capabilities. Organizations can augment morale, internal culture, and sales by applying technology to recognize and reward employees and customers. The interconnectedness of leadership technology tools underscores their role in driving comprehensive organizational transformation, as illustrated in Table 1 and Figure 1. As the digital age continues to unfold, visionary leadership increasingly hinges on the strategic use of technology, marking a transformative shift in shaping the modern organizational landscape.

**REFERENCES**


