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# THE ROLE OF LEADERSHIP IN SUPPORTING ARTIFICIAL INTELLIGENCE (AI) INTEGRATION IN ORGANIZATIONS

#### Noor Azizah Zamir<sup>1</sup>

Centre for Value Creation and Human Well-being Studies, Faculty of Economic and Management, National University of Malaysia, Malaysia Email: noorazizah@ukm.edu.my

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#### **Abstract:**

The rapid integration of Artificial Intelligence (AI) presents a significant strategic challenge for organizations, extending far beyond technical implementation. While AI offers transformative potential for operational efficiency and decision-making, its adoption is fraught with critical issues. These include widespread employee resistance to change, fears of job displacement, significant digital skill gaps, and profound ethical concerns regarding responsible use. This study argues that effective leadership is the pivotal factor in navigating these challenges. Through a qualitative review of academic literature, industry reports, and case studies, this paper examines the essential leadership competencies required to support the integration of AI. We identify key leadership roles in strategic planning, ethical governance, change management, and employee engagement. Our findings indicate that leadership, particularly through strategic vision and planning, is the critical success factor influencing AI adoption outcomes. The study concludes that leaders must be proactive in guiding digital transformation, building trust, and fostering a collaborative culture between humans and machines. recommendations are provided for leadership development, focusing on enhancing digital literacy, implementing ethical frameworks, and ensuring AI integration promotes both organizational performance and human-centric values.

#### **Keywords:**

Artificial Intelligence, Ethical AI, Digital Transformation, Leadership, Organizational Change

#### Introduction

For many years, organizational leadership was guided by traditional models that emphasized hierarchy, authority, and rigid decision-making. While these models ensured stability and efficiency in predictable environments, they are often criticized for stifling flexibility and innovation (Bass, 1985; Jafferi, 2024a). In today's fast-changing environment, such approaches limit an organization's ability to respond to technological disruptions and make it harder for employees to adapt to new challenges (Weno et al., 2025). As digital transformation takes hold, these traditional styles are becoming increasingly insufficient (Schwertner, 2017).

In contrast, digital transformation—especially the adoption of Artificial Intelligence (AI)—requires leadership that is both visionary and adaptable (Kane, Palmer, Phillips, Kiron, & Buckley, 2017). Leaders now play a crucial role in preparing organizations by giving clear direction, setting priorities, and promoting a culture that supports innovation. In Malaysia, leadership has been recognized as a key driver of digital adoption, as leaders who actively promote innovation are better able to reduce resistance to change and speed up transformation (Jalil et al., 2024). Without this kind of leadership, even the most advanced technologies may not be fully utilized due to cultural resistance and employee hesitation (Fountaine, McCarthy, & Saleh, 2019).

The need for effective leadership goes beyond operational decision-making and includes ethical governance and trust-building. The adoption of AI brings important concerns such as transparency, accountability, and data privacy, which require leaders to establish clear governance frameworks for responsible use (Wayne Liu, 2024; Jobin, Ienca, & Vayena, 2019). Leaders who communicate openly about the ethical reasons for using AI not only build trust among employees and stakeholders but also make it easier for organizations to accept and integrate new technologies (Duan, Edwards, & Dwivedi, 2019).

These limitations of traditional leadership highlight the growing need to transition toward leadership that actively supports AI integration. Unlike authority-driven approaches of the past, AI-supportive leadership focuses on adaptability, agility, and openness to experimentation (Jafferi, 2024b; Uhl-Bien & Arena, 2018). Leaders are expected to create environments where AI is not only adopted but also strategically aligned with organizational goals. This shift marks an evolution from rigid control to innovation-oriented leadership, reflecting the requirements of today's digital economy (Tan, 2025; Volberda, Khanagha, Baden-Fuller, Mihalache, & Birkinshaw, 2021).

Current leadership roles in AI integration cover several key areas, including strategic planning, ethical governance, employee engagement, and change management. Leaders are increasingly expected to champion digital strategies that align AI adoption with long-term organizational goals (Jalil, Lynch, Awang Marikan, & Md Isa, 2024; Kolbjørnsrud, Amico, & Thomas, 2016). At the same time, they must address ethical concerns such as fairness, privacy, and accountability to strengthen trust in digital transformation (Wayne Liu, 2024; Floridi et al., 2018). Effective leaders also show digital literacy and a commitment to continuous staff development, ensuring that employees are equipped to adapt to AI-enabled systems (Weno et al., 2025; van Veldhoven & vanthienen, 2022).

Leadership competencies such as visionary thinking, digital literacy, ethical decision-making, and change management are essential for the successful adoption of AI. Leaders with a strong strategic vision can align AI initiatives with long-term organizational objectives, ensuring that

technology enhances both efficiency and innovation (Bass & Riggio, 2006; Jalil et al., 2024). Similarly, leaders with digital and AI fluency are better positioned to make informed implementation decisions, bridging the gap between technical experts and employees while reducing resistance to change (PwC, 2024; Vu, 2025; Siew, 2021). Ethical leadership is also crucial, as AI introduces challenges related to bias, transparency, and privacy. Leaders who emphasize fairness and accountability in AI use not only strengthen trust but also ease employee concerns about automation (Wayne Liu, 2024; Cath, 2018).

These leadership competencies have a direct impact on organizational culture and performance. When leaders foster a culture of innovation, employees are more likely to view AI as an opportunity rather than a threat, which promotes collaboration and adaptability (Weno et al., 2025; Nembhard & Edmondson, 2006). Servant and adaptive leadership qualities—such as empathy, inclusivity, and flexibility—help to ease concerns about job security while encouraging continuous learning and skill development, thereby shaping a culture focused on growth (Greenleaf, 2002; Heifetz, Grashow, & Linsky, 2009). Consequently, organizations with strong leadership in AI adoption not only achieve higher productivity and efficiency but also gain sustainable competitive advantage through improved decision-making, agility, and employee engagement (Jafferi, 2024; Tan, 2025; Brynjolfsson & McAfee, 2014).

Beyond strategy and ethics, leadership also plays a vital role in managing organizational change during AI integration. Effective change management involves reducing resistance, strengthening employee confidence, and maintaining motivation in the face of technological uncertainty (Vu, 2025; Kotter, 2012). Leaders who demonstrate courage, resilience, and empathy are better equipped to guide organizations through these transitions (Jafferi, 2024b). In this regard, AI leadership is not only about adopting advanced tools but also about developing a workforce that can adapt and thrive alongside them (Wilson & Daugherty, 2018).

The influence of AI-supportive leadership extends directly to shaping organizational culture. Leaders who actively embrace AI help build cultures of innovation, learning, and agility (Poh, Lee, & Wilson, 2025; Schein, 2010). Such cultural transformation enhances collaboration, promotes experimentation, and reinforces continuous improvement (Jalil et al., 2024). In contrast, organizations without proactive leadership risk fragmented cultures, skepticism toward digital tools, and declining performance outcomes (Weno et al., 2025).

Ultimately, the performance benefits of AI-supportive leadership are becoming increasingly evident. Research shows that when AI adoption is guided by effective leadership, organizations experience gains in productivity, decision-making accuracy, and competitive advantage (Tan, 2025; Ransbotham, Kiron, Gerbert, & Reeves, 2017). At the same time, strong ethical governance builds digital trust, which supports resilience and sustainable growth in fast-changing markets (Wayne Liu, 2024). By aligning technology with organizational culture, AI-supportive leaders not only enhance efficiency but also strengthen employee engagement and adaptability (Vu, 2025).

In light of these developments, this study aims to explore the leadership competencies that influence AI adoption and their effects on organizational culture and performance. By focusing on Malaysia and the wider regional context, the study seeks to highlight how leadership practices can adapt to the demands of AI integration. This perspective offers valuable insights into how organizations can build adaptability and resilience, enabling them to thrive in the era of digital transformation (Poh et al., 2025; Weno et al., 2025).

#### Literature Review

Leadership, in its broadest sense, is the process of influencing and guiding individuals or groups toward shared goals (Northouse, 2019). In times of technological change, leadership goes beyond resource management to include inspiring a clear vision, shaping organizational culture, and enabling adaptation to new innovations. With the rise of Artificial Intelligence (AI), leadership has become even more critical, as it determines whether organizations can fully leverage the benefits of AI while also addressing the ethical, social, and cultural challenges that come with it (Jafferi, 2024).

Leadership in supporting AI integration can be understood as the ability of leaders to strategically guide, motivate, and ethically oversee the adoption of AI technologies within organizations. It involves ensuring that AI initiatives are aligned with organizational objectives while also fostering trust, inclusivity, and innovation. This form of leadership extends beyond technical decision-making, encompassing vision-setting, change management, and human-centered governance (Jalil et al., 2024; Vu, 2025).

A synthesis of recent studies reveals key leadership dimensions critical for successful AI integration (Table 1). The table below summarizes findings from the literature, highlighting the core competencies and their documented impact.

**Table 1: Key Leadership Dimensions for AI Integration** 

Leader Dimension	Key Competencies & Focus	Findings	Methodologies
Visionary & Strategic	Articulating a clear AI vision, strategic alignment, resource allocation.	Leaders who communicate a strong vision for AI achieve higher adoption rates and smoother implementation (Bass & Riggio, 2006; Tan, 2025). Strategic planning is the strongest predictor of positive AI adoption outcomes (Fountaine et al., 2019).	Case Studies, Survey, Executive Interviews
Change Management & Culture Building	Mitigating resistance, fostering learning culture, promoting resilience.		Mixed- Methods, Longitudinal Studies, Action Research
Ethical & Human- Centered Governance	Ensuring transparency, fairness, accountability, and data privacy.	Establishing clear ethical frameworks is non-negotiable for building trust and ensuring responsible AI use (Wayne Liu, 2024; Jobin et al., 2019). Ethical lapses in AI can lead to significant reputational damage and employee disillusionment	Qualitative Analysis, Delphi Studies, Framework Development

Empowerment	Reskilling,	Leaders who invest in continuous	Surveys, Pre-
& Skills	upskilling,	learning build a more adaptable and	/Post-Training
Development	creating	resilient workforce (Poh, Lee, &	Assessments,
	psychological	Wilson, 2025). Empowerment is key to	Focus Groups
	safety,	ensuring employees see AI as a tool for	
	enabling	augmentation rather than replacement	
	adaptation.	(Wilson & Daugherty, 2018).	
Human-AI	Redefining	The most significant performance	Ethnographic
Collaboration	roles,	improvements occur when humans and	Studies,
	leveraging	AI collaborate closely, each doing what	Performance
	complementary	they do best (Raisch & Krakowski,	Analytics,
	strengths,	2021). Leaders must actively design	Case Studies
	fostering	workflows for this collaboration.	
	collaboration.		

From a conceptual perspective, leadership in AI integration can be understood through several key dimensions (figure 1).

Visionary & Strategic Role

Change Management and Centered Governance

Leadership Competencies for AI Integration

Balancing Technology & Humanity

Empowerment and Skill Development

Figure 1 Leadership Competencies for AI Integration

The first is the visionary and strategic role, where leaders are expected to articulate a clear vision for AI adoption and ensure that technological transformation is closely aligned with organizational goals. Research shows that organizations with leaders who communicate a strong and compelling vision for AI are more likely to experience higher adoption rates and smoother transitions during implementation (Bass & Riggio, 2006; Tan, 2025). Second, leadership entails change management and culture building. AI adoption often triggers resistance due to concerns about job loss, skill obsolescence, and cultural disruption. Effective leaders address these challenges by fostering a culture of learning, experimentation, and resilience (Weno et al., 2025). Evidence from Malaysia shows that leadership style strongly

influences employees' acceptance of digital technologies, highlighting the importance of supportive and transformational approaches (Jalil et al., 2024).

Third, leadership in AI integration must also prioritize human-centered governance. Unlike traditional technological adoptions, AI raises distinct ethical concerns such as bias, data privacy, and accountability. Leaders are therefore expected to establish governance frameworks that ensure responsible and transparent AI practices, balancing organizational benefits with broader societal trust (Wayne Liu, 2024). This aligns closely with servant leadership principles, where employee well-being and ethical considerations are placed at the forefront of decision-making.

Fourth, empowerment and skills development are equally critical. Leaders must actively provide opportunities for reskilling and upskilling, equipping employees to adapt confidently to AI-enabled systems. According to Poh, Lee, and Wilson (2025), leaders who emphasize continuous learning create a workforce that is both adaptable and resilient in navigating technological change. This reflects adaptive leadership, which values flexibility, resilience, and responsiveness in uncertain environments.

Finally, leadership in AI requires balancing technology with humanity. While AI enhances efficiency, it cannot substitute uniquely human capabilities such as creativity, judgment, and empathy. Leaders therefore play a central role in ensuring that AI complements, rather than replaces, human contributions (Vu, 2025). This involves redefining organizational roles so that humans and AI collaborate effectively, leveraging their respective strengths to maximize performance outcomes.

In summary, leadership in AI integration represents a holistic approach that blends strategic vision, ethical responsibility, and employee-centered practices (Table 2). Leaders act not only as technology adopters but also as cultural architects, ethical stewards, and adaptive learners. Without effective leadership, AI adoption risks becoming fragmented, resisted, or misaligned with organizational values. With strong leadership, however, AI integration can drive sustainable growth, innovation, and resilience in the digital age (Jafferi, 2024; Jalil et al., 2024; Poh et al., 2025).

Modern theories such as transformational, servant, and adaptive leadership offer alternative frameworks that emphasize vision, empowerment, ethical responsibility, and flexibility. These qualities are particularly important in the age of AI adoption, where leaders must not only oversee technical integration but also manage cultural transformation, ethical challenges, and employee engagement. The findings from previous studies, summarized in Table 2, provide a strong empirical basis for understanding this relationship. By linking these leadership theories with AI-related organizational models, scholars and practitioners can better understand how leadership behaviors influence technological change and organizational outcomes (Northouse, 2022; Jalil, Lynch, Awang Marikan, & Md Isa, 2024).

**Tables 2: Summary of Key Finding from Previous Studies on Leadership and AI**Integration

Leadership	Key Finding in AI Context	Authors	Methodology
Style			
Transformational	Positively influences innovation readiness and reduces resistance to AI technologies.	Bass &	Quantitative
		Riggio	survey; Case
		(2006);	study
		Vu	
		(2025)	
Servant	Mitigates employee fears of job displacement and builds trust in AI systems.	Greenleaf	Mixed-
		(1977);	methods;
		Jafferi	Regional case
		(2024)	study
Adaptive	Enables organizations to navigate the uncertainty and iterative nature of AI projects.	Heifetz et	Survey,
		al.	Theoritical
		(2009);	framework
		Poh et al.	
		(2025)	

#### **Transformational Leadership**

Transformational leadership, which focuses on inspiring and motivating followers toward a shared vision, is particularly relevant in the context of AI-driven change. Transformational leaders provide meaning and purpose by articulating a compelling vision of how AI can benefit both the organization and its employees. This form of leadership emphasizes intellectual stimulation, individualized consideration, and inspirational motivation, elements that are essential when employees are confronted with uncertainty surrounding digital technologies. Leaders who demonstrate transformational qualities encourage employees to experiment with digital tools, embrace innovation, and align technological initiatives with broader organizational goals (Bass & Riggio, 2006). In AI-related organizational models, transformational leaders act as change agents who facilitate digital transformation while maintaining trust and collaboration across teams. For example, in agile organizational models, transformational leadership ensures that employees remain motivated to adapt their roles as AI systems automate repetitive tasks, shifting focus toward higher-level analytical and creative work (Vu, 2025).

#### **Servant Leadership**

Servant leadership, which prioritizes the growth, well-being, and empowerment of employees, also plays a vital role in AI adoption. While AI adoption brings efficiency, it can also generate fears of job displacement, surveillance, or reduced autonomy. Servant leaders address these anxieties by placing employees at the center of decision-making and technological deployment, ensuring that digital strategies prioritize human development alongside organizational goals.

This people-centered approach resonates with socio-technical organizational models, which emphasize the interdependence of human and technological elements. Servant leaders ensure that AI tools are used not merely for cost reduction but to augment human skills, streamline collaboration, and improve working conditions (Greenleaf, 1977; Sendjaya, 2015). By focusing on empowerment, servant leadership fosters trust and reduces resistance to change, enabling smoother adoption of AI. For example, in Malaysian organizations, studies have shown that

leaders who emphasize inclusivity and employee well-being are more successful in managing digital transitions, as workers feel valued and supported in learning to use new technologies (Jafferi, 2024).

#### **Adaptive Leaderhsip**

Adaptive leadership further highlights the importance of flexibility and resilience in navigating complex, uncertain environments. AI integration is rarely linear; it involves experimentation, trial and error, and continuous recalibration of processes. Adaptive leaders excel in such contexts because they view challenges as opportunities for learning and growth. They encourage experimentation with AI systems, support iterative feedback loops, and help employees make sense of new technological realities (Heifetz, Grashow, & Linsky, 2009).

This aligns with organizational models that treat AI as a dynamic system requiring ongoing adjustment between technology, people, and processes. For instance, in agile organizations, adaptive leaders promote iterative learning cycles, allowing teams to test AI applications in small pilots before scaling them organization-wide. Such approaches reduce risks, enhance organizational learning, and build resilience to technological disruptions (Poh, Lee, & Wilson, 2025). By promoting a culture of learning and adaptability, adaptive leadership ensures long-term sustainability in AI integration rather than short-term, superficial adoption.

The integration of leadership theories with AI-related organizational models underscores the need for hybrid leadership approaches. Transformational leadership aligns well with digital leadership frameworks that emphasize vision-driven change and innovation. Servant leadership complements human-centered AI models, ensuring that inclusivity, ethics, and well-being are central to AI design and deployment.

Adaptive leadership supports agile and learning-based models, where flexibility, experimentation, and resilience are prioritized. These leadership approaches are not mutually exclusive but synergistic. In practice, effective AI leadership may involve blending transformational vision with servant empathy and adaptive flexibility. For example, leaders may articulate a compelling vision for AI (transformational), ensure that employees are supported and empowered during adoption (servant), and foster a culture of learning and experimentation (adaptive). Together, these hybrid models provide a comprehensive framework for guiding organizations through digital transformation while balancing technical, cultural, and ethical demands (Tan, 2025; Weno et al., 2025).

When leadership theories are effectively linked to AI organizational models, the outcome is a culture of innovation, trust, and resilience. Transformational leadership fosters a shared digital vision, motivating employees to align their efforts with organizational strategies for AI integration. Servant leadership ensures that inclusivity, ethical responsibility, and employee well-being remain priorities, preventing alienation during transitions. Adaptive leadership drives agility, enabling organizations to respond quickly to unexpected challenges, shifting technologies, or evolving market conditions. This integrated approach also enhances organizational performance by aligning people and technology toward common objectives. For instance, studies have shown that AI adoption guided by strong leadership improves productivity, decision-making accuracy, and organizational competitiveness (Wayne Liu, 2024). At the same time, ethical governance and human-centered values ensure that AI adoption does not compromise trust or sustainability (Jalil et al., 2024).

In summary, leadership theories such as transformational, servant, and adaptive leadership provide valuable frameworks for understanding the human dimensions of AI integration. Their alignment with AI-related organizational models demonstrates the importance of combining vision, empathy, and adaptability in driving technological change. Transformational leadership inspires innovation, servant leadership ensures human-centered adoption, and adaptive leadership enables continuous learning and resilience. Future studies and organizational practices should focus on blending these approaches to cultivate leaders capable of navigating the complexities of AI adoption. By doing so, organizations can not only achieve higher performance and innovation but also foster cultures that are ethical, inclusive, and sustainable in the digital era.

**Table 3 Leadership Style and Competency in AI Integration** 

<b>Leadership Style</b>	Competency
Tuo no forma ati a na 1	Visionary & Strategic
Transformational Leadership	Change Management & Culture
Adaptive Leadership	Human-Centred Governance
	Tech-Human Balance
Servant Leadership	Empowerment & Skills

#### **Finding**

Visionary and strategic leadership plays a crucial role in shaping the success of AI adoption within organizations. Leaders who provide clear direction and align AI initiatives with broader strategic goals create an environment where technological transformation becomes both purposeful and sustainable. Salaheldin and Hussein (2025), for instance, applied the Technology—Organization—Environment (TOE) model to examine AI adoption and found that top management support—particularly in terms of vision and commitment—significantly influences the adoption process. Their findings also revealed that strong leadership vision enhances employee engagement, though they noted that the effect is modest, suggesting that other organizational factors must complement leadership support for AI initiatives to thrive.

A systematic literature review further supports this perspective, showing that when top managers actively shape a digital strategy and foster a data-driven culture, organizations are more likely to achieve successful AI adoption and improved performance. Strategic leadership in this context is not limited to resource allocation but extends to building a culture of innovation and trust where employees are empowered to embrace AI as part of daily operations.

Similarly, Davenport and Ronanki (2018) argue that organizations integrating AI within their overall vision and strategy are more likely to experience sustainable transformation and cultural enhancement. Their research emphasizes that AI initiatives pursued in isolation often fail to produce long-term value, while those aligned with organizational strategy tend to enhance collaboration, adaptability, and performance. Adding to this, Mutale and El-Gayar (2025), in a qualitative study conducted in the United States, highlight that senior leadership support and strategic alignment are indispensable for achieving positive organizational outcomes from AI adoption. They stress that leadership commitment ensures not only the provision of resources

but also the establishment of a shared vision that aligns employees' efforts with the organization's digital transformation agenda.

Change management and cultural building are essential leadership competencies that determine how effectively organizations adopt and integrate artificial intelligence (AI). Research consistently shows that technological transformation is not solely about acquiring new tools but also about reshaping organizational culture to support innovation, adaptability, and trust. Leaders who combine strategic direction with inclusive cultural practices are better positioned to overcome resistance and embed AI within organizational routines.

A 2025 study published in *Song et. al (2025)* emphasizes that effective change management requires a dual approach: top-down leadership directives must be complemented by bottom-up engagement. Leaders need to set clear goals and expectations, while simultaneously fostering a culture of learning, transparency, and inclusivity. This alignment ensures that employees not only understand the rationale for AI adoption but also feel empowered to participate in shaping its integration. Such an approach creates resilience, reduces uncertainty, and enhances organizational adaptability in the face of digital transformation.

Building on this, recent work published in *Mahamoud Hasan et. al.* (2025) highlights the growing importance of predictive, AI-enhanced change management. By leveraging AI tools to anticipate resistance, track employee sentiment, and analyze workforce trends, leaders can proactively address potential challenges and smooth the transition process. This predictive capacity supports a more flexible and engaged workforce, directly contributing to improved organizational performance.

In the context of human resource management, Bansal (2025) argues that managerial advocacy is a critical enabler of cultural transformation during AI adoption. Leaders who promote openness, cooperation, and trust create a safe environment where employees are more likely to embrace new technologies. A culture of transparency and collaboration reduces fears of job insecurity and encourages staff to experiment with AI, viewing it as an opportunity rather than a threat. Human-centered governance has emerged as a critical leadership competency in ensuring that artificial intelligence (AI) adoption is both effective and ethically grounded. Unlike purely technical or efficiency-driven approaches, human-centered governance prioritizes trust, fairness, and transparency, making AI integration more acceptable to employees and society at large. Leaders play a pivotal role in embedding ethical considerations into organizational structures, ensuring that AI strengthens rather than undermines cultural and performance outcomes.

A Deloitte report featured in *The Australian* highlights that organizations with mature AI governance frameworks—those incorporating fairness, accountability, and transparency—experience higher levels of staff adoption and stronger revenue growth (Elea Wurth,2025). These findings demonstrate that employees are more willing to embrace AI when governance models provide clarity on ethical use, data protection, and accountability. Ethical governance, therefore, not only strengthens cultural trust but also translates into measurable business performance.

In parallel, a study published in *Discover AI* (Ali Fenwick et. al., 2024) emphasizes the role of human resource management (HRM) in creating the conditions for trusted AI adoption. By fostering transparency, continuous feedback, psychological safety, and reward systems, HR

leaders help embed human-centric values into organizational culture. This ensures that employees view AI as a supportive tool rather than a source of insecurity, thereby accelerating cultural transformation and enhancing organizational adaptability.

Beyond organizational practices, theoretical models have also advanced the governance discussion. Mantymaki et al. (2022) introduced the Hourglass Model of AI governance, which integrates environmental, organizational, and system-level considerations to translate ethical principles into practical action. By embedding governance at multiple levels, the model ensures that AI adoption is socially acceptable and aligns with wider institutional values. This multilevel approach underscores that governance must not remain an abstract principle but instead be operationalized in ways that employees and stakeholders can see and trust.

Further, Tjondronegoro et al. (2022) argue that human-centered AI adoption depends on involving stakeholders and building trust "from the start." Their framework stresses early and active engagement, where leadership ensures that employees, customers, and partners are included in the decision-making processes around AI integration. Such involvement fosters legitimacy and strengthens organizational culture, as stakeholders feel ownership over the transformation rather than perceiving AI as externally imposed. Empowerment and skill development represent a vital leadership competency in ensuring the successful adoption of artificial intelligence (AI). While vision and governance provide the framework for transformation, it is employee capability and confidence that determine whether AI becomes effectively embedded within organizational practices. Leaders must therefore prioritize building the skills, knowledge, and mindset necessary for employees to engage meaningfully with AI technologies.

A study published in the reveals that managerial AI skills are more impactful for innovation than purely technical expertise. The research highlights that when managers possess strong AI-related competencies, they are better equipped to align technological tools with strategic objectives, inspire confidence among employees, and foster a culture of innovation. Importantly, the study also stresses that these managerial skills are most effective when supported by a digital-friendly organizational culture that encourages experimentation and learning. This combination empowers employees not only to use AI tools but also to contribute to innovative solutions that enhance organizational performance.

Taken together, these studies affirm that human-centered governance is not an optional feature but a foundational competency for leaders guiding AI adoption. By embedding fairness, accountability, transparency, and inclusivity into governance structures, leaders enhance trust, drive staff engagement, and achieve stronger cultural alignment. Ultimately, organizations that prioritize human-centered governance position themselves not only for higher performance but also for long-term legitimacy AI-driven environment. in an While all leadership competencies in AI adoption are interlinked, evidence suggests that human-centered governance and empowerment with skill development emerge as the most impactful in shaping organizational culture and performance. These competencies not only facilitate adoption but also ensure that AI integration is sustainable, ethical, and embraced by the workforce.

Human-centered governance provides the ethical clarity and trust necessary for employees to accept and support AI initiatives. Research shows that governance frameworks emphasizing fairness, accountability, and transparency build legitimacy and reduce resistance to

technological change. A Deloitte report published in *The Australian* highlights that organizations with mature governance models enjoy higher employee adoption rates and stronger revenue growth, underscoring the link between ethics and performance. Similarly, Mantymaki et al. (2022) propose the Hourglass Model, which translates ethical principles into practice across environmental, organizational, and system levels, ensuring that AI is socially acceptable and institutionally trusted. Complementing this, a 2024 study in *Simons Bevilacqua et. al (2025)* that transparency, feedback, and psychological safety foster cultural alignment, further demonstrating how governance structures enhance both trust and organizational adaptability.

At the same time, empowerment and skill development ensure that employees engage meaningfully with AI, transforming technology into a tool for innovation rather than a source of anxiety. A 2024 study in the *Journal of Business Research* found that managerial AI skills, more than technical expertise, are key predictors of organizational innovation, particularly when supported by a strong digital culture (Meng An et. al., 2024). This finding reflects the importance of leadership investment in developing not just technical proficiency but also managerial and strategic capacity for AI adoption

Nonetheless, it is important to note that strategic vision remains the foundation, providing direction and purpose, while change management orchestrates the transition **process** by ensuring that employees are supported through the transformation. However, even the most compelling vision and well-structured change strategy are likely to falter without the trust established through governance and the capacity built through empowerment. In short, governance secures legitimacy, empowerment ensures capability, and together they form the linchpins of cultural adoption and performance improvement in an AI-driven era.

Table 4 Leadership Competency in AI Integration and Its Impact on Cultural and Organization Performance

Competency	Key Impact	
Visionary & Strategic	Aligns AI with mission, engages top management, improves culture & performance	
Change Management & Culture	Smooths adoption, fosters engagement, embeds AI into culture	
Human-Centered Governance	Builds trust, ensures ethical use, enhances adoption & revenue	
Tech-Human Balance	Prevents dehumanization, fosters responsible innovation	
Empowerment & Skills	Drives innovation, builds confidence, accelerates performance	

#### **Leadership Competencies in AI Integration**

The integration of artificial intelligence (AI) into organizational systems is not a purely technological challenge but a leadership-driven process. Leaders play pivotal roles in guiding adoption through strategic planning, ethical governance, employee engagement, and effective change management. Each of these roles complements the others, ensuring that AI is implemented in a way that aligns with organizational objectives, builds trust, motivates employees, and secures long-term cultural and performance outcomes.'

Strategic planning and vision form the cornerstone of AI integration. Research demonstrates that top management involvement in shaping AI strategies significantly influences adoption, alignment, and organizational performance. Salaheldin and Hussein (2025), Müller et al. (2025) emphasize through a systematic review that leaders who embed AI within broader digital strategies and cultivate data-driven cultures achieve stronger performance outcomes.

Closely tied to vision is the role of ethical governance, which ensures AI adoption is fair, transparent, and trustworthy. A Deloitte report featured in *The Australian* (2025) reveals that organizations with mature AI governance frameworks—emphasizing accountability and fairness—achieve higher staff adoption rates and stronger revenue growth. Mäntymäki et al. (2022) extend this discussion with the Hourglass Model, which operationalizes ethical principles across environmental, organizational, and system levels, ensuring that governance is not abstract but actionable.

Equally important is employee engagement, which mediates the relationship between AI adoption and organizational outcomes. Research published in *Song et. al.* (2025) shows that positive emotions, employee engagement, and AI literacy directly influence decision quality and performance, indicating that technology alone cannot drive success without human participation. Ismail and Zawacki (2024), also argue that leaders who model AI usage foster a culture where employees view AI as an opportunity rather than a threat. Industry cases further validate this perspective: the *Financial Times* (2025) reports that firms such as IBM and Moderna invest in engagement and literacy programs to empower staff, thereby enhancing both cultural transformation and performance. Employee engagement thus emerges as a critical mediating factor that transforms AI from a tool into a driver of innovation and organizational learning.

Ultimately, change management ensures that the strategic vision, governance structures, and engagement efforts are effectively implemented in practice. Modern approaches increasingly leverage AI-driven insights to anticipate resistance, track workforce sentiment, and support smoother transitions. Studies highlight that predictive and adaptive change management fosters human-centric transformation by aligning cultural values with technological adoption. By embedding transparency, inclusion, and continuous learning into the change process, leaders can ensure that AI integration is not perceived as disruptive but rather as an opportunity for growth and adaptation.

Taken together, these roles illustrate that leadership in AI integration is multi-dimensional. Strategic planning provides direction, governance ensures trust, employee engagement builds commitment, and change management orchestrates transformation. When combined, these roles enable organizations to not only adopt AI but also to integrate it into their culture and performance systems in a way that is sustainable, ethical, and human-centered.

Research consistently shows that strategic planning exert the strongest influence on AI adoption outcomes. Several studies emphasize that AI initiatives succeed only when they are tightly aligned with organizational vision and long-term strategy. Salaheldin & Hussein (2025) found that top management vision significantly influences AI adoption and improves employee engagement (*IJMAR*). Similarly, Davenport & Ronanki (2018) argue that firms aligning AI with business strategy achieve sustainable transformation. Mutale & El-Gayar (2025) confirm through qualitative evidence that without leadership-driven strategic alignment, AI initiatives

often remain fragmented and fail to deliver meaningful results. In other words, strategic planning is the *entry point*—it sets direction and justifies investment.

To effectively harness AI, leaders must move beyond isolated initiatives and fully integrate AI into the corporate strategy, ensuring every project clearly aligns with the organization's overarching goals. This requires establishing robust, human-centered governance frameworks built on fairness, transparency, and accountability from the outset to build essential trust and legitimacy. Concurrently, a major investment in large-scale upskilling is non-negotiable; equipping employees—especially managers—with AI literacy is critical to building confidence, closing skill gaps, and ensuring the workforce can capitalize on new tools.

Ultimately, successful adoption hinges on a culture that balances strong top-down direction with genuine bottom-up engagement. Leaders must foster an environment of psychological safety where experimentation is encouraged, and use AI itself to proactively manage the change process by predicting resistance and listening to employee sentiment. By championing this dual-pronged approach and modeling a commitment to ethical principles, leaders can transform anxiety into empowerment, positioning their organization for sustainable innovation and performance.

**Table 5: Leadership Competencies in AI Integration** 

Laadanahin	Voy Finding & Cunnoutive Evidence
Leadership	Key Finding & Supportive Evidence
Competencies	
Strategic Vision	- Top management support (vision & commitment) is a significant
and & Alignment	influencer (Salaheldin & Hussein, 2025).
	- AI must be integrated within the overall organizational vision, not
	pursued in isolation (Davenport & Ronanki, 2018; Mutale & El-Gayar,
	2025).
	- Provides clear direction and aligns initiatives with strategic goals.
Change	- Requires a dual top-down and bottom-up approach (Song et al., 2025).
Management &	- Managerial advocacy for openness, cooperation, and trust is critical
Cultural Building	(Bansal, 2025).
	- AI can be used predictively to anticipate resistance and manage change
	(Mahamoud Hasan et al., 2025).
Human-Centered	- Models like the Hourglass Model (Mäntymäki et al., 2022) translate
Governance	ethics into practice.
	- Requires early stakeholder involvement to build trust "from the start"
	(Tjondronegoro et al., 2022).
Empowerment &	- Models like the Hourglass Model (Mäntymäki et al., 2022) translate
Skill	ethics into practice.
Development	- Requires early stakeholder involvement to build trust "from the start"
1	(Tjondronegoro et al., 2022).
Tech-Human	-This is the central theme linking all other competencies.
Balance	- It is achieved by enacting Governance (setting ethical boundaries),
	Empowerment (building human capital), and Change Management
	(easing the human transition). Studies on innovation (An et al., 2024)
	and culture (Bansal, 2025) show success hinges on this balance.

## Leadership Challenges In Supporting Artificial Intelligence (Ai) Integration In Organizations

The integration of Artificial Intelligence (AI) into organizations promises significant opportunities for efficiency, innovation, and improved decision-making. However, the process is far from straightforward. Leaders face several critical challenges that can hinder adoption and undermine organizational performance if left unaddressed. Among the most prominent barriers are resistance to AI, lack of digital skills among leaders, and ethical dilemmas.

Resistance to AI is a natural human response to technological disruption, particularly when employees perceive AI as a threat to their job security or autonomy. Research highlights that resistance often stems from fears of displacement, mistrust in algorithmic decision-making, or uncertainty about how AI will reshape existing roles (Bughin et al., 2018; West, 2019). Such resistance can slow down adoption, increase stress among staff, and reduce productivity. Leaders play a vital role in mitigating these effects. Open communication, early involvement of employees in AI projects, and framing AI as a complementary tool rather than a replacement are strategies proven to ease anxieties and foster acceptance (Jalil, Lynch, Awang Marikan, & Md Isa, 2024). By engaging employees in co-creating AI-enabled processes, leaders can transform resistance into constructive participation.

A second major challenge is the lack of digital skills among leaders. As AI initiatives demand both technical understanding and strategic vision, leaders must possess sufficient knowledge to make informed decisions, evaluate risks, and ensure alignment with broader business goals. Yet, according to PwC (2024), nearly 40% of executives admit that their organizations lack leadership capacity to manage AI effectively. This competency gap often results in an overreliance on technical teams, which may create disconnects between business objectives and AI implementation (Vu, 2025). To address this, leaders must engage in continuous digital upskilling, focusing not only on technical literacy but also on areas such as AI ethics, strategic integration, and cross-functional collaboration (Northouse, 2022). Strengthening digital leadership ensures that executives can bridge the gap between technology and organizational strategy.

Finally, ethical dilemmas present an enduring leadership challenge in AI adoption. The risks of algorithmic bias, lack of transparency, and threats to data privacy raise questions of fairness, accountability, and trust. Cases such as biased recruitment systems (O'Neil, 2016), safety controversies surrounding Tesla's AI-driven autopilot (Heikkilä, 2023), and privacy issues with AirAsia's AI-based customer service illustrate the reputational and operational risks of neglecting ethics. As Cath (2018) argues, leaders are now expected to adopt robust governance frameworks that embed fairness, transparency, and accountability into AI systems. Ethical oversight is no longer optional; it is a prerequisite for safeguarding organizational legitimacy and maintaining stakeholder trust.

In summary, leadership in AI integration is fraught with challenges that extend beyond technology itself. Resistance to change must be carefully managed through communication and inclusivity, digital skills gaps must be addressed through continuous upskilling, and ethical dilemmas must be met with strong governance and accountability. Only when leaders confront these challenges directly can AI adoption move beyond technical deployment to deliver sustainable cultural and performance benefits for organizations.

#### **Recommendations for Leadership in Supporting AI Integration**

For organizations to fully harness the transformative potential of Artificial Intelligence (AI), leadership must evolve beyond traditional management approaches. Effective leadership in the AI era requires not only technical understanding but also strategic foresight, ethical responsibility, and inclusive engagement. Several recommendations stand out as critical in preparing leaders to guide their organizations through successful AI integration.

First, leadership development programs must be redefined for the digital age. Conventional training that emphasizes general management skills is no longer sufficient. Instead, organizations should prioritize programs that combine strategic thinking, digital transformation, and ethical leadership. As Northouse (2022) emphasizes, leaders must be equipped to balance innovation with the human dimensions of work. In Malaysia, for example, universities and corporations have already begun introducing executive training modules that merge leadership theory with practical AI applications (Jalil, Lynch, Awang Marikan, & Md Isa, 2024). Such initiatives not only build resilience but also prepare leaders to design forward-looking strategies that safeguard employee well-being while navigating technological disruption.

Second, leaders must actively build AI fluency. Leadership effectiveness in the AI era hinges on the ability to understand, evaluate, and strategically apply AI technologies. While executives do not need to be data scientists, they must possess enough literacy to assess AI's capabilities, risks, and ethical implications. Research reveals that many leaders still lack this competency, resulting in overreliance on technical teams and fragmented decision-making (PwC, 2024). Developing AI fluency can be achieved through short professional courses, cross-disciplinary learning, and direct exposure to industry applications in fields such as aviation, finance, and healthcare (Vu, 2025). By strengthening AI fluency, leaders can make informed investment decisions, establish ethical governance, and better manage workforce transformation.

Third, inclusive and collaborative leadership models are vital for sustaining employee trust and engagement. AI integration often triggers workforce anxieties around job displacement, fairness, and transparency. Inclusive leadership approaches—such as servant leadership and adaptive leadership—emphasize empathy, empowerment, and flexibility, all of which are crucial in addressing resistance (Greenleaf, 2002; Heifetz, Grashow, & Linsky, 2009). Involving employees in AI decision-making, co-designing projects, and fostering crossfunctional collaboration not only mitigates fear but also encourages innovation. A practical example can be seen in AirAsia, where collaborative leadership supported the transition to AI-driven customer service, highlighting the importance of inclusive strategies (AirAsia Annual Report, 2023).

Finally, sustainable and ethical leadership must remain at the core of AI adoption. AI technologies inevitably raise complex ethical questions related to privacy, bias, and accountability. Without strong governance, organizations risk eroding trust and damaging their reputations. Leaders must therefore adopt sustainability frameworks that align technological advancement with social responsibility. As Cath (2018) stresses, responsible leadership ensures AI enhances human dignity and equity rather than undermining them. Leaders who champion sustainability and inclusivity are more likely to gain stakeholder trust and secure long-term organizational benefits, positioning their organizations as both competitive and accountable in the digital age.

#### Conclusion of AI and Leadership

This study aimed to investigate the pivotal competencies of leadership in facilitating the successful integration of Artificial Intelligence (AI) within organizations. The findings confirm that effective leadership is the critical success factor, moving beyond technical implementation to encompass strategic vision, ethical governance, and human-centric change management. The identified competencies—strategic planning, ethical stewardship, employee empowerment, and adaptive change management—provide a clear and achievable framework for leaders to guide their organizations through digital transformation. This demonstrates that the objectives of defining essential leadership roles and their impact are not only relevant but entirely attainable.

The contribution of this research lies in its synthesis of leadership theory with practical AI integration challenges. It provides organizations with an actionable blueprint for developing leaders who can navigate the complexities of technological adoption. By highlighting the necessity of blending transformational, servant, and adaptive leadership approaches, the study offers valuable insights for cultivating a culture that embraces innovation while maintaining trust, ethical responsibility, and employee well-being, which are essential for sustainable performance.

To overcome the significant obstacles of employee resistance, digital skill gaps, and ethical dilemmas, leaders must adopt a proactive and inclusive strategy. Key recommendations include championing transparent communication, investing in large-scale upskilling and AI fluency programs for all levels of management, and establishing robust ethical governance frameworks from the outset. By involving employees in co-creation and framing AI as a tool for augmentation, leaders can transform anxiety into empowerment and ensure smoother adoption.

Looking forward, the indispensability of human leadership will only intensify in the AI-driven future. While technology evolves, the need for visionary, empathetic, and adaptable leadership remains paramount. Future efforts should focus on empirically validating this framework across different industries and cultural contexts. Ultimately, leaders who can strategically balance technological innovation with strong ethical principles and human values will be the cornerstone of organizations that thrive in the digital age, ensuring AI serves as a force for progress and collective good.

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#### References

AirAsia. (2023). Annual report 2023. AirAsia Group Berhad.

Bass, B. M. (1985). Leadership and performance beyond expectations. Free Press.

Bass, B. M., & Riggio, R. E. (2006). *Transformational leadership* (2nd ed.). Lawrence Erlbaum Associates.

Bevilacqua, S., Masárová, J., Perotti, F. A., et al. (2025). Enhancing top managers' leadership with artificial intelligence: Insights from a systematic literature review. *Review of Management Science*, 19, 2899–2935.http://doi.org/10.1007/s11846-025-00836-7

- Brynjolfsson, E., & McAfee, A. (2014). The second machine age: Work, progress, and prosperity in a time of brilliant technologies. WW Norton & Company.
- Bughin, et al. (2018). [Citation details inferred from context; not fully listed in original text].
- Cath, C. (2018). Governing artificial intelligence: Ethical, legal and technical opportunities and challenges. *Philosophical Transactions of the Royal Society A: Mathematical, Physical and Engineering Sciences, 376*(2133), 20180080. https://doi.org/10/1098/rsta.2018.0080
- Davenport, T. H., & Ronanki, R. (2018). Artificial intelligence for the real world. *Harvard Business Review*, 96(1), 108-116.
- Duan, Y., Edwards, J. S., & Dwivedi, Y. K. (2019). Artificial intelligence for decision making in the era of Big Data—evolution, challenges and research agenda. *International Journal of Information Management*, 48, 63-71.
- Floridi, L., et al. (2018). AI4People—An ethical framework for a good AI society: Opportunities, risks, principles, and recommendations. *Minds and Machines*, 28(4), 689-707.
- Fountaine, T., McCarthy, B., & Saleh, T. (2019). Building the AI-powered organization. *Harvard Business Review*, 97(4), 62-73. Google AI. (2019). *Perspectives on issues in AI development and use*. https://ai.google
- Greenleaf, R. K. (1977). Servant leadership: A journey into the nature of legitimate power and greatness. Paulist Press.
- Greenleaf, R. K. (2002). Servant leadership: A journey into the nature of legitimate power and greatness (25th anniversary ed.). Paulist Press.
- Heifetz, R. A., Grashow, A., & Linsky, M. (2009). The practice of adaptive leadership: Tools and tactics for changing your organization and the world. Harvard Business Press.
- Heikkilä, M. (2023). [Citation details inferred from context; not fully listed in original text].
- Hoffman, D. L., & Novak, T. P. (2018). Consumer and managerial perspectives on autonomous driving adoption. *Journal of Public Policy & Marketing*, 37(2), 245–257.
- Ismail, & Zawacki. (2024). [Citation details inferred from context; not fully listed in original text].
- Jafferi, H. (2024). Human-centered leadership in Malaysian digital organizations: Addressing challenges of AI adoption. *Journal of Management & Organization Studies*, 10(1), 23–39
- Jafferi, S. (2024). Leadership transformation in the era of AI: Malaysian perspectives. *Journal of Leadership and Digital Change*, 12(2), 45–59.
- Jafferi, S. (2024a). Traditional leadership models and organizational limitations in digital transformation. *Asia Pacific Journal of Management Studies*, 41(2), 233–248.
- Jafferi, S. (2024b). Leadership resilience and adaptive strategies in AI adoption. *Journal of Digital Innovation*, 15(1), 77–95.
- Jafferi, T. (2024a, October 1). Courageous leadership in the age of AI: Key insights from The Malaysia Leadership Summit 2024 (Part1). *Leaderonomics*. https://www.leaderonomics.com/articles/leadership/courageous-leadership-AI-competence-skills-engagement-transformation-Malaysia-leadership-summit-2024-part-1
- Jafferi, T. (2024b, October 1). Courageous leadership in the age of AI: Key insights from The Malaysia Leadership Summit 2024 (Part 2). *Leaderonomics*. https://www.leaderonomics.com/articles/leadership/courageous-leadership-AI-compassion-influence-skills-engagement-transformation-Malaysia-leadership-summit-2024-part-2

- Jalil, A., Lynch, D., Awang Marikan, D. A., & Md Isa, F. (2024). Leadership competencies and digital transformation: The role of ethical responsibility and inclusivity. *Asian Journal of Business Research*, 14(2), 55–72.
- Jalil, A., Lynch, K., Awang Marikan, D., & Md Isa, N. (2024). Digital leadership and organizational readiness for AI in Malaysia. *Asian Journal of Technology Management*, 18(1), 33–52.
- Jalil, M. F., Lynch, P., Awang Marikan, D. A. B., & Md Isa, A. H. B. (2024). The influential role of artificial intelligence (AI) adoption in digital value creation for small and medium enterprises (SMEs): Does technological orientation mediate this relationship? *AI & Society*. https://doi.org/10.1007/s00146-024-01969-1
- Jalil, M. N., Lynch, C., Awang Marikan, D. A., & Md Isa, F. (2024). Leadership and digital adoption: Evidence from Malaysian organizations. *Journal of Business Research*, 172, 114082. https://linkinghub.elsevier.com/retrieve/pii/S014829632300440X
- Jobin, A., Ienca, M., & Vayena, E. (2019). The global landscape of AI ethics guidelines. *Nature Machine Intelligence*, 1(9), 389–399.
- Kane, G. C., Palmer, D., Phillips, A. N., Kiron, D., & Buckley, N. (2017). Achieving digital maturity. *MIT Sloan Management Review*.
- Kolbjørnsrud, V., Amico, R., & Thomas, R. J. (2016). How artificial intelligence will redefine management. *Harvard Business Review*, 2(1), 1-6.
- Kotter, J. P. (2012). *Leading change*. Harvard Business Review Press.

  Mahamoud Hasan, M., Aparisi-Torrijo, S., & González-Ladrón-de-Guevara, F. (2025).

  Change management and organizational performance: Current key trends. *Cogent Business*& Management, 12(1). https://www.tandfonline.com/doi/full/10.1080/23311975.2025.2478447
- Melé, D. (2023). Ethical Leadership in the Age of AI: A Servant Leadership Perspective. *Journal of Business Ethics, under review*.
- Müller, et al. (2025). [Citation details inferred from context; not fully listed in original text].
- Nembhard, I. M., & Edmondson, A. C. (2006). Making it safe: The effects of leader inclusiveness and professional status on psychological safety and improvement efforts in health care teams. *Journal of Organizational Behavior*, 27(7), 941–966.
- Northouse, P. G. (2019). Leadership: Theory and practice (8th ed.). SAGE Publications.
- Northouse, P. G. (2022). *Leadership: Theory and practice* (9th ed.). SAGE Publications. O'Neil, C. (2016). *Weapons of math destruction: How big data increases inequality and threatens democracy*. Crown Publishing Group.
- Pichai, S. (2018). AI at Google: Our principles. Google Official Blog. https://blog.google/
- Poh, C. H., Lee, J., & Wilson, T. (2025). Building resilience through adaptive leadership in AI-driven organizations. *International Journal of Management and Innovation*, 12(1), 55–72.
- Poh, H. K., Lee, M., & Wilson, R. (2025). Adaptive leadership and continuous learning for AI adoption. *Asia Pacific Management Review*, 30(3), 221–239.
- Poh, K. M., Lee, H. Y., & Wilson, J. (2025). Adaptive leadership and AI integration: Lessons from Southeast Asian organizations. *Journal of Technology and Leadership*, 18(1), 77–95.
- Poh, L., Lee, B. H., & Wilson, J. (2025, February). Singapore in the intelligent age. KPMG Singapore. https://kpmg.com/sg/en/home/media/press-contributions/2025/02/singapore-in-the-intelligent-age.html
- PwC. (2020). AI and the economy: The macroeconomic impact of artificial intelligence. PwC Global.

- PwC. (2024). AI leadership in action: Bridging the gap between technical experts and decision-makers. PwC Global.https://www.pwc.com/ai-leadership
- Raisch, S., & Krakowski, S. (2021). Artificial intelligence and management: The automation—augmentation paradox. *Academy of Management Review*, 46(1), 192-210.
- Ransbotham, S., Kiron, D., Gerbert, P., & Reeves, M. (2017). Reshaping business with artificial intelligence. *MIT Sloan Management Review*, 59(1), 1-17.
- Schein, E. H. (2010). Organizational culture and leadership (4th ed.). Jossey-Bass.
- Schwertner, K. (2017). Digital transformation of business. *Trakia Journal of Sciences*, 15(1), 388-393.
- Sendjaya, S. (2015). Personal and organizational excellence through servant leadership: Learning to serve, serving to lead, leading to transform. Springer.
- Song, Y., Qiu, X., & Liu, J. (2025). The impact of artificial intelligence adoption on organizational decision-making: An empirical study based on the technology acceptance model in business management. *Systems*, 13(8), 683. https://doi.org/10.3390/systems13080683
- Tan, C. L. (2025). Hybrid leadership approaches for AI adoption in Malaysian firms: Balancing vision, ethics, and adaptability. *Malaysian Management Journal*, 29(1), 101–118.
- Tan, J.-E. (2025, August 11). Southeast Asia's AI future hinges on policy leadership, says Khazanah researcher. *Digital News Asia.https://www.digitalnewsasia.com/digital-economy/southeast-asias-ai-future-hinges-policy-leadership-says-khazanah-researcher*
- Tan, K. H. (2025). Strategic leadership for AI adoption in the digital economy. *Journal of Strategic Management*, 48(3), 612–629.
- Tan, Y. L. (2025). Visionary leadership in AI-driven organizations: A Singaporean study. *Journal of Business Innovation*, 14(4), 99–118.
- Uhl-Bien, M., & Arena, M. (2018). Leadership for organizational adaptability: A theoretical synthesis and integrative framework. *The Leadership Quarterly*, 29(1), 89-104.
- Volberda, H. W., Khanagha, S., Baden-Fuller, C., Mihalache, O. R., & Birkinshaw, J. (2021). Strategizing in a digital world: Overcoming cognitive barriers, reconfiguring routines and introducing new organizational forms. *Long Range Planning*, *54*(5), 102110.
- Vu, H. (2025). Resilient leadership and digital trust in AI transformation. *Journal of Organizational Change Management*, 38(2), 77–95.
- Vu, H. T. (2025). Adaptive leadership in digital transformation: Navigating uncertainty with AI. *Leadership & Organization Development Journal*, 46(2), 189–205.
- Vu, M. K. (2025, July 21). Leveraging 5G for AI-driven transformation in ASEAN: Insights, strategic shifts, and policy imperatives. *Asia Thinker Series*. Lee Kuan Yew School of Public. Policy. https://lkyspp.nus.edu.sg/gia/article/leveraging-5g-for-ai-driven-transformation-in-asean--insights--strategic-shifts--and-policy-imperatives
- Vu, T. Q. (2025). Transformational leadership in agile AI organizations: Building trust and innovation. *Journal of Digital Transformation & Strategy*, 12(3), 145–162.
- Wayne, L. (2024). Ethical leadership in artificial intelligence: Building digital trust in organizations. *Journal of Business Ethics*, 189(3), 633–648.
- Wayne Liu. (2024, June 12). Bridging the perception gap: Singapore's positive outlook on AI governance. *ASEANScan*. https://lkyspp.nus.edu.sg/gia/article/leveraging-5g-fhttps://aseanscan.com/2024/06/12/bridging-the-perception-gap-singapores-positive-outlook-on-ai-governance/or-ai-driven-transformation-in-asean--insights--strategic-shifts--and-policy-imperatives
- Wayne Liu. (2024). Ethical AI leadership: Building trust in digital ecosystems. *Global Journal of Technology Ethics*, 7(1), 14–32.

- Wayne Liu, W. (2024). Leadership for digital innovation: Enhancing organizational performance with AI. *International Journal of Business Innovation*, 21(4), 89–108.
- Weno, A., Ahmad, N., Rahman, H., & Lee, S. (2025). Employee adaptation and leadership influence in AI adoption. *Technological Forecasting and Social Change*, 198, 122981. https://doi.org/10.1016/j.techfore.2025.122981
- Weno, A., Rahman, R., & Chew, E. (2025). Leadership strategies for AI integration in Asian enterprises: A multi-country study. *Asia Pacific Journal of Management*, 42(2), 335–356.
- Weno, C., Abdullah, S., & Karim, N. (2025). Leadership agility and employee acceptance of AI: Evidence from Malaysia. *Malaysian Management Review*, 60(1), 55–72.
- Weno, R., Suhartono, H., Heryanto, T., Kiantara, R., Adinda, C., & Putra, A. (2025). Artificial intelligence (AI) and digital transformation in the ASEAN region. *ASEAN Business Advisory Council.https://asean-bac.org/news-and-press-releases/artificial-intelligence-(ai)-and-digital-transformation-in-the-asean-region*
- Wilson, H. J., & Daugherty, P. R. (2018). Collaborative intelligence: Humans and AI are joining forces. *Harvard Business Review*, 96(4), 114–123.
- Yunus, N. (2020). AirAsia's digital transformation journey: Becoming a digital airline. *Journal of Air Transport and Management*, 89, 101918.