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Hybrid leadership and organizational performance: A literature review approach

Abstract

In the post-COVID-19 era marked by digital transformation and increased work flexibility, hybrid leadership has emerged as a critical approach for managing teams distributed across remote and in-person work settings. This study employs a qualitative methodology through an extensive literature review to examine the role of digital technologies, leadership strategies in virtual teams, and their impact on employee productivity and well-being. Findings highlight that the integration of digital tools is essential in enhancing team communication and coordination within hybrid leadership frameworks. Moreover, results-oriented leadership strategies and adaptive leadership styles have been shown to be effective in sustaining team engagement and motivation. However, significant challenges persist, including disparities in digital competencies and the integration of diverse work cultures. The originality of this study lies in its comprehensive synthesis of current literature that bridges the technological and human dimensions of hybrid leadership—a perspective that remains underexplored. By adopting a balanced and holistic approach, hybrid leadership holds substantial promise as a strategic driver of organizational success in the evolving world of work.

Keywords: Hybrid leadership, employee wellbeing, technology.

Abstrak

Pada era pasca-pandemi COVID-19 yang ditandai dengan transformasi digital dan meningkatnya fleksibilitas kerja, kepemimpinan hybrid muncul sebagai pendekatan yang krusial dalam mengelola tim yang tersebar antara lingkungan kerja jarak jauh dan tatap muka. Penelitian ini menggunakan metodologi kualitatif melalui kajian literatur yang komprehensif untuk mengkaji peran teknologi digital, strategi kepemimpinan dalam tim virtual, serta dampaknya terhadap produktivitas dan kesejahteraan karyawan. Temuan penelitian menunjukkan bahwa integrasi perangkat digital sangat penting dalam meningkatkan komunikasi dan koordinasi tim dalam kerangka kepemimpinan hybrid. Selain itu, strategi kepemimpinan yang berorientasi pada hasil dan gaya kepemimpinan yang adaptif terbukti efektif dalam mempertahankan keterlibatan dan motivasi tim. Namun demikian, tantangan yang signifikan masih tetap ada, termasuk kesenjangan kompetensi digital serta integrasi budaya kerja yang beragam. Orisinalitas studi ini terletak pada sintesis literatur terkini yang secara komprehensif menjembatani dimensi teknologi dan aspek manusiawi dalam kepemimpinan hybrid sebuah perspektif yang masih jarang dieksplorasi. Dengan mengadopsi pendekatan yang seimbang dan holistik, kepemimpinan hybrid memiliki potensi besar sebagai penggerak strategis bagi keberhasilan organisasi dalam lanskap dunia kerja yang terus berkembang.

Keywords: Kepemimpinan hybrid, kesejahteraan karwayan, teknologi.

1. Introduction

In the rapidly evolving digital landscape, the integration of artificial intelligence (AI) into decision-making processes within human resource management (HRM) has garnered increasing scholarly and practical interest (Chuang et al., 2025). The application of AI in critical HRM functions—such as recruitment, placement, promotion, and termination—

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presents both significant opportunities and formidable challenges for organizations (Bankins et al., 2022). One major concern is how employees perceive interactional justice in AI-mediated decisions compared to those made by human agents (Golgeci et al., 2025). Employees often form expectations about how they should be treated during decision-making processes, and these expectations are shaped, in part, by whether decisions are made by humans or AI systems. Interactional justice refers to the extent to which individuals perceive fairness and respectful treatment in interpersonal interactions during decision-making (Agbabiaka et al., 2025).

Human-made decisions are frequently viewed as more just due to the perceived presence of empathy and nuanced understanding offered by human decision-makers (van Leersum & Maathuis, 2025). Employees tend to feel more valued when interacting with human supervisors who can offer explanations and demonstrate consideration for their specific circumstances. In contrast, while AI-driven decisions may be more data-driven and efficient, they are often perceived as impersonal, potentially leading to feelings of dehumanization among employees, who may feel reduced to mere data points or statistics (Carter & Liu, 2025). To address these concerns, organizations must integrate AI into decision-making processes in ways that uphold employee dignity (Fischer-Abaigar et al., 2023). A crucial step in this direction is ensuring that AI decisions are accompanied by transparent explanations regarding the data and algorithms used, fostering a sense of inclusion and trust among employees.

Furthermore, it is essential for organizations to foster a culture grounded in fairness and transparency. Employees should feel that their voices are acknowledged in decision-making processes, regardless of whether the decisions are made by humans or AI systems (Hao et al., 2024). Open communication channels and mechanisms for feedback are vital for enhancing perceptions of fairness and for building organizational trust. While AI offers benefits such as enhanced efficiency and the reduction of human bias (Sharma, 2024), its implementation must be balanced with human-centric approaches. By combining AI's analytical capabilities with the empathetic and contextual judgment of human leaders, organizations can establish work environments that honor individual dignity and promote organizational justice ultimately contributing to employee satisfaction and organizational commitment.

In parallel, the growing adoption of remote work has transformed traditional models of HRM and organizational operations. Remote work, now recognized as a critical non-financial incentive, plays a significant role in enhancing employee motivation and job satisfaction (Paavola et al., 2025; Sirati et al., 2025). Although some major firms, such as Yahoo!, have rescinded remote work policies, a substantial number of organizations continue to embrace flexible work arrangements. A notable development in this domain is the "work from anywhere" (WFA) model, which grants employees geographic autonomy in choosing their residence. Unlike "work from home" (WFH), which often requires proximity to the workplace, WFA removes these spatial constraints, offering benefits such as reduced living costs and improved psychological well-being. However, WFA also poses challenges, particularly in maintaining coordination and communication among geographically dispersed teams, and may lead to increased social and professional isolation.

Understanding these dynamics is essential for organizations aiming to enhance both productivity and employee well-being. While geographic flexibility is a powerful tool for talent attraction and retention, it must be carefully managed to avoid unintended negative consequences (Choudhury et al., 2020). This literature review also highlights the

structural shift toward hybrid work models catalyzed by the COVID-19 pandemic. Many organizations transitioned abruptly to telework without adequate preparation. Carillo et al. (2021) proposed a pandemic-adjusted telework adaptation model grounded in Work Adjustment Theory and the Interactional Model of Individual Adjustment. Key stressors identified include professional isolation, remote work conditions, increased workload, and psychological strain (Schroeck et al., 2023). Information and communication technologies (ICT) have played a pivotal role in enabling operational continuity, further underscoring the strategic importance of digital tools in hybrid work arrangements.

Practical recommendations include equipping employees to adapt to telework environments, both during crises and as part of long-term organizational strategy. Moreover, these developments underscore the need for continued research into work adjustment mechanisms and the evolving organizational boundaries shaped by ICT. The Direction-Alignment-Commitment (DAC) framework, developed by the Center for Creative Leadership (CCL), offers an innovative approach to organizational leadership. In contrast to traditional leader-centric models, DAC views leadership as a collective process rooted in group interaction and collaboration. The framework emphasizes alignment on goals (Direction), coordinated efforts (Alignment), and shared accountability (Commitment), fostering a more synergistic and agile organizational culture (McCauley & Palus, 2021).

Hybrid leadership models also offer new avenues for digital competency development among nurse leaders. As healthcare becomes increasingly digitized, nursing leaders must possess strong technological capabilities, including familiarity with communication platforms, data management, and digital tools that enhance patient care. Integrating technology into leadership practice not only enhances team management but also improves service delivery. To harness the full potential of hybrid leadership, hospitals must provide continuous education and support for nurse leaders, particularly in crisis management and digital literacy (Vuorivirta-Vuoti et al., 2023). With adequate institutional support, hybrid leadership can significantly enhance operational efficiency, staff well-being, and overall healthcare quality in a post-pandemic context.

The ability to work from home varies by job type and is influenced by job characteristics. For instance, roles requiring intense physical interaction such as those in construction or personal services—are generally unsuitable for remote execution. In contrast, managerial, educational, and IT roles are more adaptable to remote settings. Geographic variation also plays a role, with cities like San Francisco and Washington, D.C., exhibiting higher proportions of remote-compatible jobs. These differences are linked to educational attainment and median household income (Dingel & Neiman, 2020). Developing economies face additional hurdles in implementing remote work strategies, highlighting the need for nuanced policy responses to support vulnerable workers during periods of social restriction.

While hybrid work models offer flexibility and the potential for increased productivity, they also pose challenges, such as blurred work-life boundaries, which can lead to burnout and stress. Social support within the workplace emerges as a critical buffer. Empathetic leadership and a supportive organizational climate help employees feel valued and maintain performance (Mulyono, 2021; Sari & Panglipursari, 2022). Additionally, gender differences in remote work experiences must be acknowledged. Women, who often shoulder greater domestic responsibilities, may require more emotional support and flexible arrangements, while men may prioritize productivity-oriented support. Addressing these differences is essential for fostering equitable hybrid

work environments. In sum, hybrid leadership when underpinned by empathy and comprehensive support systems can drive both employee well-being and organizational performance (Contractor et al., 2012; Anisya et al., 2022).

2. Literature review

2.1 Open strategizing and digital transformation

In recent years, increasing attention has been paid to how information technology (IT) is reshaping strategic processes within organizations. Brünker et al. (2023) highlight four modes of "open strategizing" that reflect the digital work practices of strategists, particularly top managers engaged in the formulation and implementation of a five-year strategic plan in a major professional association, InfoLib. Through the adoption of open strategy approaches, senior managers involved the broader organizational community in shaping future directions. Despite the growing interest in strategy openness, relatively few studies have explored the specific digital practices of strategists and their linkage to consequential outcomes such as organizational transformation.

By leveraging digital tools, top managers at InfoLib enhanced inclusion and transparency throughout the strategizing process (Högberg & Willermark, 2023). These tools included web-based surveys and social media platforms, used to gather input from members, staff, and various stakeholder groups. The result was a more relevant and community-reflective strategic plan. Thus, the digital engagement of strategists not only facilitated open dialogue but also contributed significantly to organizational transformation, positioning InfoLib as a case of how IT can alter strategic practices and foster greater stakeholder involvement in decision-making (Morton et al., 2020).

2.2 Digitalization in agricultural entrepreneurship

The COVID-19 pandemic has accelerated the adoption of digital platforms, particularly among agricultural entrepreneurs in rural regions. A notable example is the ClickforVic platform, launched during Melbourne's lockdown, designed to connect rural farmers with urban consumers. This initiative emerged as a response to unprecedented mobility restrictions that hindered traditional urban-rural interactions and transactions. Studies on ClickforVic demonstrate how transformational entrepreneurship can be catalyzed through digital platforms, enabling farmers to adapt their business models amid crisis conditions. Traditionally reliant on direct interaction, these entrepreneurs rapidly transitioned to digital communication and online sales (Xanthopoulou et al., 2024). Interviews with fifteen agricultural entrepreneurs revealed that ClickforVic served not only as a sales medium but also as a community-building platform fostering collaboration among producers. Participants reported maintaining customer connections, forming new relationships, and gaining insights into market trends and consumer preferences (Johnston & Mass, 2024). The transformation had two main dimensions: an increased focus on digital innovation and a growing interest in artificial intelligence and automation to streamline operations and mitigate risks linked to labor shortages and health regulations (Ratten, 2023).

2.3 Shifts in work models due to COVID-19

The COVID-19 pandemic dramatically altered work modalities, compelling many organizations to adopt remote work models. While working from home offered flexibility, it often blurred the boundaries between professional and personal life, leading to unhealthy routines and diminished productivity due to household distractions (Nowrouzi-Kia et al., 2024). Conversely, some employees appreciated the autonomy to manage their schedules. Organizationally, the shift necessitated revisions in management policies and the cultivation of leadership capabilities suited to virtual teams. Clear and open communication became critical for sustaining employee engagement and motivation. Globally, sectors reliant on face-to-face interaction experienced significant decline, whereas technology and digital services thrived, highlighting both the challenges and opportunities posed by remote work adaptation (Aleem et al., 2023). Zhu et al. (2024) discuss AI integration through robo-advisors in financial services, illustrating how AI can replace traditional advisors, offering algorithm-driven analysis and investment guidance. While research on robo-advisors exists, it remains fragmented, underscoring the need for a more systematic framework. Key considerations include anthropomorphic design to enhance trust, transparency in algorithmic decisions, and an understanding of user demographics and financial literacy. These insights underscore the necessity for a user-centric, regulatory-compliant approach to AI-driven service delivery (Holtrop et al., 2022).

2.4 Hybrid work and implications for Human Resource Management (HRM)

Hybrid work has become a defining feature of the modern workplace, involving transitions between traditional and non-traditional modes of work. Lauring and Jonasson (2024) propose a multidimensional framework for hybrid work comprising modality (analog vs. digital), location (office vs. remote), and temporality (synchronous vs. asynchronous). These dynamics can complicate HRM practices such as recruitment, training, and performance management. To address this, organizations require a well-structured framework that captures the complexity of hybrid work to enhance employee well-being and organizational effectiveness (Zhang et al., 2024). Moreover, the interactions among hybrid work dimensions influence work execution for example, increased reliance on digital tools when working remotely. A comprehensive understanding of these dynamics enables organizations to craft more effective hybrid work strategies (Wang et al., 2025). Davoust et al. (2025) integrate identity and communication theories to explore two forms of social distance in virtual environments: targeted social distance, stemming from perceived marginalization, and diffuse social distance, arising from general indifference. These insights reveal that while virtual work may attenuate some biases, it can also reinforce others. Virtual communication, often more formal and lacking in nonverbal cues, can hinder interpersonal closeness and group identification. Organizations must therefore implement transparent systems and promote explicit communication to foster inclusivity across diverse team members.

2.5 Leadership in the era of hybrid work

Hybrid work environments, while offering flexibility, also introduce complex leadership challenges. Leaders must balance job demands with available resources, often under conditions that hinder emotional and structural support. Compassionate leadership, characterized by empathy and concern, becomes crucial in enhancing employee well-being and productivity. Gender dynamics further complicate leadership approaches, as men and women often have differing needs regarding social support women may prioritize emotional support, while men may focus on productivity and career progression (Piwowar-Sulej & Bąk-Grabowska, 2024). Another key issue in hybrid settings is the erosion of work-life boundaries, leading to stress and burnout. Leaders are thus urged to establish policies that safeguard work-life balance (Tan et al., 2024). Collective leadership offers a promising model where leadership roles are fluid and adaptive. However, translating collective leadership theory into practice remains a challenge due to methodological limitations in evaluating distributed leadership structures. Effective communication and collaboration across physically and virtually distributed teams are vital for maintaining team cohesion and shared responsibility in leadership.

2.5 The future of digital work and sustainable HRM

As technology evolves, the future of digital work presents both challenges and opportunities. Digital platforms have revolutionized market engagement, enabling individuals to function as micro-entrepreneurs. Yet, such work is often precarious, lacking stability and social protection, thereby exacerbating inequality (Maley, 2024). Research indicates that digitalization polarizes the labor market, increasing high- and low-skilled jobs while reducing mid-level roles. To mitigate these effects, Sustainable Human Resource Management (HRM) has emerged as a critical approach. Sustainable HRM emphasizes capacity building and the provision of relevant training to help workers adapt to rapid changes in the labor market. Integrating sustainability principles into HRM can promote inclusive work environments and enhance employee well-being. This includes access to digital skills training and collaboration between educational institutions and organizations to align curricula with evolving job market demands. Ultimately, digital transformation holds promise not only for efficiency and innovation but also for fostering a fairer, more sustainable work environment (Dabić et al., 2023).

3. Research methods

3.1 Research design

This study employs a Systematic Literature Review (SLR) approach, selected for its ability to systematically, structurally, and transparently evaluate and synthesize relevant empirical findings. SLR provides a rigorous method for identifying trends, challenges, and potential solutions concerning hybrid leadership in the context of increasingly flexible and digital work environments. Through comprehensive data collection and critical analysis, this method facilitates an in-depth understanding of how hybrid leadership can support organizational adaptation amid ongoing workplace

transformations (Snyder, 2019). Furthermore, SLR ensures that the resulting insights are evidence-based and possess a high degree of academic validity.

3.2 SLR technique

The review follows the PRISMA (Preferred Reporting Items for Systematic Reviews and Meta-Analyses) framework, as outlined by Moher et al. (2009). PRISMA was chosen for its systematic and transparent procedures in screening and reporting literature review outcomes, facilitating replicability for future researchers. The PRISMA process consists of four main phases: identification, screening, eligibility assessment, and inclusion. These steps are visually presented through a PRISMA flow diagram to clarify the article selection process.

3.3 Data sources and selection criteria

The literature search was conducted across multiple databases, including Google Scholar, Scopus, and SINTA (levels 1 and 2), to ensure the quality and relevance of selected studies. The search strategy employed Boolean operators ("AND", "OR", "NOT") in conjunction with keywords such as "hybrid leadership", "digital leadership", "remote team management", and "leadership in flexible work environment". Inclusion criteria were established to guarantee that only high-quality and thematically relevant literature was analyzed. The criteria are as follows:

1. Articles published between 2020 and 2025 to capture the latest developments in hybrid leadership research.
2. Only peer-reviewed journal articles were considered to ensure empirical rigor.
3. Articles published in English or Indonesian to facilitate accurate comprehension and analysis.
4. Articles must specifically address hybrid leadership within the digital and flexible work context, including topics such as remote team management, technological adaptation, and employee engagement.
5. Only open access articles were included to promote transparency and accessibility of sources.

3.4 Search and screening process

An initial search yielded 85 articles. The first screening phase involved evaluating the titles and abstracts, resulting in the exclusion of 42 articles deemed irrelevant. The second screening involved full-text assessment of the remaining 43 articles using the inclusion and exclusion criteria described above. Articles were excluded if they were not published between 2020–2025, were not peer-reviewed empirical studies, lacked open access, or did not directly address hybrid leadership in organizational settings. Editorials, opinion pieces, and conceptual essays were also excluded. Following this rigorous selection process, a total of 18 articles met all criteria and were included in the final analysis. The PRISMA Flow Diagram can be seen in Figure 1.
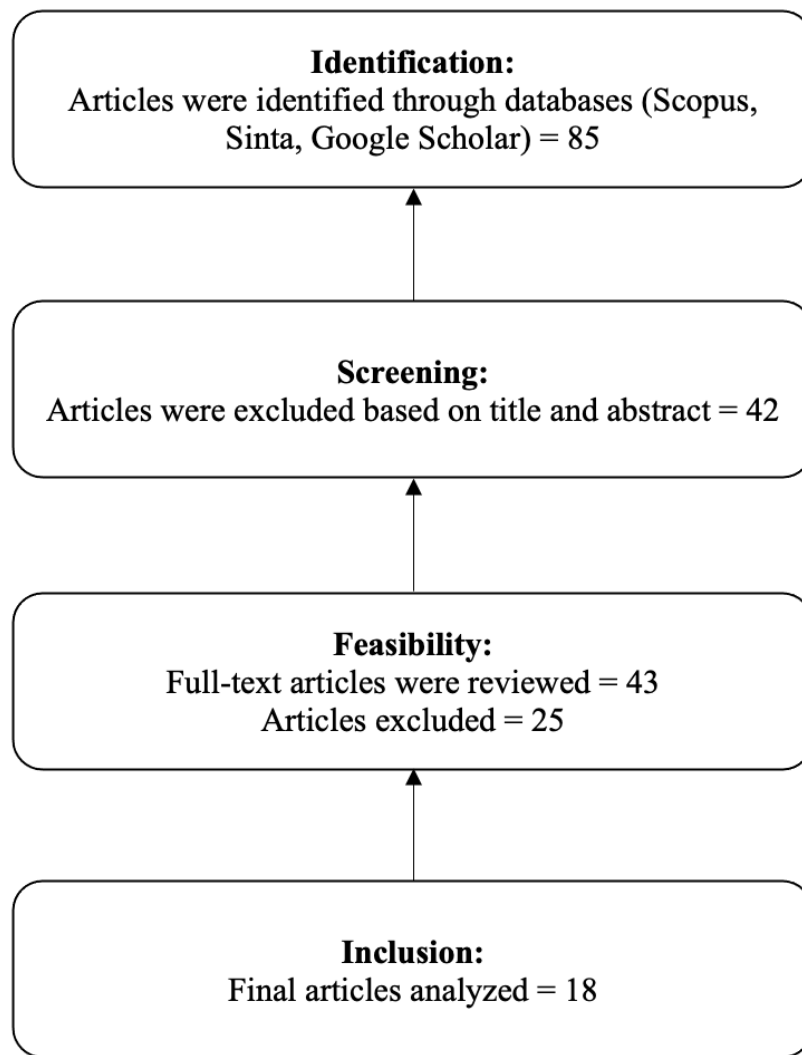
Figure 1. PRISMA Flow Diagram

3.5 Data analysis method

Thematic analysis was applied manually, without the use of software, to identify and categorize the dominant themes across the selected studies. This qualitative technique was chosen for its effectiveness in extracting detailed insights regarding hybrid leadership practices, associated challenges, and the strategies implemented in organizational contexts (Caputo et al., 2024). The analytical process began with manual coding of the articles, followed by the classification of findings into key thematic areas such as digital communication, employee engagement, technological adaptation, and digital leadership competencies.

4. Results and discussion

The role of technology in hybrid leadership is crucial in enhancing the effectiveness of communication and coordination among distributed teams. The use of digital

technologies such as video conferencing, online project management, and data analytics helps leaders make faster and more accurate decisions (Wahyudi et al., 2023). Technology also allows leaders to monitor team performance in real-time without the need for direct supervision. However, reliance on technology also presents new challenges, such as data security risks and the need for digital skill enhancement among employees. Therefore, hybrid leaders must possess strong digital competencies and be capable of facilitating technological adaptation within the organization.

Leadership strategies in virtual teams require an approach that differs from conventional teams. According to Rachmawati et al. (2023), adaptive leadership styles are effective in hybrid work environments because they can adjust approaches according to the situation and team needs (Rachmawati et al., 2023). Adaptive leaders are more successful in maintaining an inclusive and collaborative work culture, even when teams work remotely. Furthermore, outcome-based leadership is also crucial in avoiding micromanagement, which can reduce trust and productivity within the team. By focusing on achieving targets, leaders can provide greater autonomy to teams in managing their work.

The impact of hybrid leadership on employee productivity and well-being is significant. Adaptive leadership helps maintain a balance between achieving work targets and ensuring employee well-being through flexible working hours and support for mental health (Pramudya et al., 2023). Employees who feel supported by their leaders tend to be more loyal and productive as they experience a healthy work-life balance. Conversely, a lack of leadership adaptation can exacerbate stress and burnout among employees, especially in environments that combine remote and in-person work models.

The challenges and opportunities in implementing hybrid leadership include managing effective communication, integrating consistent work cultures, and developing digital skills at all organizational levels (Nursalim et al., 2023). These challenges become more complex with cultural differences among team members distributed across different geographic locations. However, on the other hand, hybrid leadership also presents great opportunities to boost innovation through team diversity and operational flexibility. Leaders who can strategically utilize technology can accelerate innovation and help organizations adapt to changes in the business environment.

Hybrid leadership in the digital era is now a highly relevant concept, especially with the significant shift in work patterns characterized by flexibility and technological advancements. This concept is not only related to changes in the workplace but also involves a transformation in how leaders manage and motivate their teams. The hybrid work model integrates in-office and remote work, requiring leaders to adjust to various communication, collaboration, and performance management needs. Despite increasingly sophisticated technologies, such as online collaboration tools and project management systems, supporting hybrid leadership, leaders must still maintain team integrity and ensure the well-being of each member, even if they are not physically in the same location (Suryani, 2023).

One of the main challenges in hybrid leadership is maintaining effective communication among team members spread across various locations. Communication in hybrid teams must be highly structured, utilizing appropriate technologies such as video conferencing and communication platforms like Slack or Microsoft Teams. Technology enables efficient remote collaboration, but without strong communication skills, the information conveyed may become unclear or disconnected. Research by Haryanto and Sugiharto (2022) shows that effective leaders in hybrid environments are

those who can select appropriate communication tools and manage differences in communication styles among team members working from different locations (Haryanto & Sugiharto, 2022).

Additionally, hybrid leadership requires a deep understanding of individual differences in how team members work. Not all team members have the same preferences, particularly in a hybrid work setting that allows flexibility. Some may feel more comfortable working in the office, while others find themselves more productive when working from home. Leaders in hybrid environments must be flexible and able to adjust their leadership styles to meet individual needs. Alasoini et al. (2025) state that good leaders in hybrid work models are those who can understand the preferences of each team member, create a work environment that responds to those needs, while still maintaining the overall performance of the team.

Equally important, leaders must build a strong sense of trust and engagement among team members who are located in different places. Although they work separately, team members must still feel as part of a unified group with shared goals. In the context of hybrid leadership, leaders must be able to maintain the spirit and motivation of their teams. Research by Nugroho (2022) indicates that effective leaders in hybrid settings are those who can maintain open communication and build strong relationships with team members, even when interactions occur digitally. Motivating a physically separated team often depends on leaders who can create a sense of connection, both professionally and personally.

It is essential to recognize that the mental and emotional well-being of team members plays a crucial role in the hybrid leadership model. The lack of physical interaction can lead to feelings of isolation and a lack of social support, which can ultimately negatively impact productivity and work motivation. Therefore, leaders need to pay special attention to the psychological well-being of team members. According to Nugroho (2022), leaders should create opportunities for team members to interact outside of work contexts, such as through virtual social gatherings or personal development activities. A balance between work and personal life must be maintained to reduce stress and enhance job satisfaction.

In addition to maintaining well-being, leaders must also effectively manage team performance within the hybrid work context. One strategy is to set clear and measurable goals and provide constructive feedback regularly. A transparent, data-driven performance management system will help leaders monitor team progress without having to supervise them physically at the workplace. Research by Suryani (2023) shows that utilizing digital performance management tools can improve accountability and allow leaders to provide more targeted, data-driven feedback, ultimately contributing to improved team performance.

Moreover, the success of hybrid leadership also greatly depends on the leader's ability to foster an inclusive and open culture. In a flexible and digital work environment, team diversity becomes highly important. Leaders must be able to leverage this diversity to drive collaboration and innovation. Research by Prasetyo (2023) shows that leaders who successfully create an inclusive culture within hybrid teams can enhance active participation from all team members, improving decision-making and team performance. Diversity in backgrounds, experiences, and perspectives within teams can become a valuable asset if managed well by the leader.

A relevant case study can be observed in one of Indonesia's large technology companies, GoTo, which resulted from the merger of Gojek and Tokopedia. As a

company with a post-pandemic hybrid work model, GoTo allows employees to work from home while still holding regular meetings in the office as needed. In GoTo's hybrid leadership, flexibility is a key focus that enables employees to work in the way that is most productive for them. On the other hand, leaders at GoTo ensure that communication remains effective through tools such as Slack for daily communication and Zoom for regular meetings. They also utilize digital project management systems to monitor work progress and provide direct feedback (Tjahjana, 2023).

In implementing hybrid leadership, GoTo also leverages technology to maintain employee engagement. Through digital platforms, leaders can host virtual social events and training or personal development sessions to sustain team morale and employee mental well-being. This aligns with findings from Kurniawan (2023), who states that the success of leadership in hybrid settings heavily depends on the ability to leverage technology and build strong relationships between leaders and team members, even without direct physical interaction.

Overall, the implementation of hybrid leadership presents unique challenges for leaders in maintaining team performance, motivation, and well-being. Leaders must navigate various aspects, from effective communication to flexibility in leadership style, as well as creating an inclusive and supportive culture. By utilizing the right technology and paying attention to the well-being of team members, leaders can more efficiently manage distributed teams. Through the proper implementation of hybrid leadership strategies, organizations can continue to grow and adapt to the changing, increasingly digital, and flexible work environment.

5. Conclusion

Hybrid leadership emerged as an adaptive response to the significant changes in the post-COVID-19 work environment, characterized by increased work flexibility and digital transformation. This leadership model combines traditional elements with digital technologies to effectively manage distributed teams. The use of technologies such as video conferencing, online project management, and data analytics enables hybrid leaders to maintain team communication and collaboration without compromising productivity. Additionally, outcome-based leadership strategies and adaptive leadership styles have proven effective in enhancing team engagement and motivation, even when working remotely.

Furthermore, hybrid leaders are expected to possess strong digital competencies and the ability to strategically leverage technology. The use of digital performance management tools allows leaders to provide more measurable and transparent feedback while monitoring team performance in real-time. However, the success of hybrid leadership implementation depends not only on technology but also on the leader's ability to understand the emotional and psychological needs of their team. Ensuring a balance between work and personal life is crucial in preventing burnout and enhancing employee well-being. Major challenges in implementing hybrid leadership include the digital skills gap, work culture integration, and data security risks. Leaders must overcome these barriers by providing adequate digital skills training and fostering an inclusive work culture that supports technology adoption. Additionally, robust data security strategies must be implemented to mitigate the risks associated with digital technology reliance. Successfully addressing these challenges will determine the long-term effectiveness of hybrid leadership.

Case studies from companies like GoTo in Indonesia demonstrate that effective hybrid leadership can enhance productivity, employee engagement, and well-being. This model has successfully created a flexible and inclusive work environment, leveraging technology to maintain communication and collaboration while supporting a healthy work-life balance. Therefore, hybrid leadership is a critical necessity in the increasingly dynamic and digital work environment, particularly in preparing organizations to face future challenges and opportunities.

6. Theoretical and practical implications

This study makes a significant contribution to the development of leadership theory, particularly in the context of hybrid leadership in the digital era. The findings indicate that hybrid leadership style has a positive correlation with employee work engagement, supporting the previous study by Contreras et al. (2020), which asserts that adaptive and flexible leadership can enhance motivation and performance in remote and hybrid work environments. Recent studies have reinforced that adaptive leadership positively influences work engagement and performance in hybrid settings (Lee et al., 2025; Nawaz et al., 2023). These findings reinforce the validity of situational leadership theory, which emphasizes the importance of adjusting leadership styles based on team conditions and needs (Garton & Mendy, 2023).

From a practical perspective, the results of this study provide insights for organizational leaders in managing hybrid teams. Managers and leaders can use hybrid leadership approaches to build effective communication, enhance team trust, and create an inclusive and adaptive work environment (Chaudhary & Saeed, 2024). This is especially crucial in the post-pandemic era, where flexible work systems have become the new norm. The implementation of effective hybrid leadership practices can help organizations maintain long-term productivity and employee engagement (MIT Sloan Management Review, 2023).

Moreover, the practical implications can also be applied in the development of leadership training programs. Organizations are advised to design leadership training that not only focuses on technical skills but also on mastering soft skills such as virtual communication, digital empathy, and remote work management (Garton & Mendy, 2023). In this way, current leaders can be better prepared to face the complexities of the increasingly dynamic hybrid work environment. This research also contributes to the literature on human resources and organizational behavior by highlighting the crucial role of work engagement as a mediator in the relationship between hybrid leadership and performance outcomes (Nawaz et al., 2023), thus opening avenues for further research on how psychological and social factors can strengthen the influence of leadership on various aspects within organizations.

7. Limitations and directions for future research

This study has several limitations that can serve as a foundation for future research. First, the sample used in this research is limited to a single industry sector. Therefore, future studies are recommended to broaden the respondent scope to include various sectors and geographic regions in order to obtain a more comprehensive view of the impact of hybrid leadership on work engagement. This would enrich the generalizability of the findings and provide broader insights into the phenomenon under study. Second, the quantitative approach used in this study offers a limited understanding of employees' subjective

experiences related to hybrid leadership. Future research could consider adopting a qualitative or mixed-methods approach to explore in greater depth how individual perceptions, emotions, and experiences influence work engagement in the context of hybrid leadership. In-depth interviews or case studies could provide richer, more contextualized insights.

Third, this study did not explore other moderating or mediating factors that may strengthen or weaken the relationship between hybrid leadership and work engagement. Therefore, future research could investigate the role of variables such as trust in leadership, organizational culture, or employees' digital literacy as influential factors. This would contribute to a more thorough understanding of the dynamics of this relationship. Lastly, with the ongoing development of technology and changes in the work landscape, longitudinal studies are needed to assess the long-term effects of hybrid leadership styles on employee engagement and performance. This is important to determine how sustainable the effectiveness of hybrid leadership is over time and how organizations can continue to adapt to changes in the work environment.

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