

LEADERSHIP EFFECTIVENESS IN HYBRID AND VIRTUAL WORK ENVIRONMENTS: A SYSTEMATIC REVIEW

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Abstract

The permanent normalization of hybrid and remote work following the COVID-19 pandemic has fundamentally transformed organizational leadership practice. This systematic literature review (SLR), conducted following PRISMA 2020 guidelines (Page et al., 2021), synthesizes 30 peer-reviewed articles published between 2020 and 2026 to examine leadership effectiveness in hybrid and virtual work environments. Three research questions guide the review: (1) how distributed, shared, and adaptive leadership models influence team cohesion and organizational commitment; (2) what digital communication practices and HR mechanisms sustain psychological safety and engagement in non-colocated teams; and (3) how leader emotional expressivity and relational practices shape employee well-being and performance in digitally mediated contexts. An original Integrative Input–Mediator–Output–Input (IMOI) Conceptual Framework is proposed, grounded in Ilgen et al. (2005). Findings demonstrate that adaptive, transformational, and shared leadership outperform hierarchical models; communication cadence and psychological safety sustain cultural cohesion at distance; and leader emotional expressivity is a measurable lever of team performance in video-mediated environments.

Keywords: *adaptive leadership; distributed leadership; hybrid work; IMOI framework; psychological safety*



By Authors

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1. Introduction

The COVID-19 pandemic produced an irreversible structural transformation of work. What began as an emergency response in early 2020 has since crystallized into a normalized, institutionalized operating model: the hybrid and virtual workplace. McKinsey Global Institute (Lund et al., 2021) estimates that 20 to 25 percent of workers in advanced economies could work from home three to five days per week on a sustained basis (four to five times the pre-pandemic level). In emerging economies, including Indonesia and the broader Southeast Asian region, the International Labor Organization estimates that approximately 260 million workers were already home-based prior to the pandemic, with Asia and the Pacific accounting for nearly 65 percent of all home-based workers globally (ILO, 2021).

Despite the urgent practical stakes, significant scholarly gaps persist. The post-pandemic leadership literature has expanded rapidly but remains fragmented, with studies tending to examine isolated constructs (transformational leadership, psychological safety, digital communication tools) rather than synthesizing these into a coherent account of how leaders operate effectively across the full spectrum of hybrid work challenges. No existing review integrates the four leadership traditions most evidenced in post-pandemic research (transformational, distributed/shared, adaptive, and e-leadership) within a single theoretically grounded framework that maps inputs through process mechanisms to outcomes while accounting for cultural moderation.

This systematic literature review directly addresses that gap by consolidating evidence from 30 peer-reviewed studies published between 2020 and 2026, following PRISMA 2020 guidelines (Page et al., 2021). Three research questions guide the review:

RQ1: How do distributed, shared, and adaptive leadership models influence team cohesion, engagement, and organizational commitment in hybrid and virtual work environments?

RQ2: What digital communication practices, structured leadership behaviors, and HR mechanisms are most effective in sustaining psychological safety and employee engagement in non-collocated teams?

RQ3: How do leader emotional expressivity, trust-building behaviors, and relational practices shape employee well-being and performance outcomes in digitally mediated work contexts?

Beyond synthesizing evidence across these questions, the review makes an original theoretical contribution through a proposed Integrative IMOI Conceptual Framework — grounded in Ilgen et al. (2005) Input–Mediator–Output–Input model — that maps leadership style inputs through relational and digital process mechanisms to employee and organizational outcomes, within the moderating influence of cultural

2. Literature Review

The pandemic dramatically accelerated this shift, extending distributed work arrangements far beyond their pre-crisis boundaries.

Yet the organizational consequences of this transformation are deeply troubling. Gallup (2026) State of the Global Workplace report reveals that global employee engagement has declined for two consecutive years to just 20% (the lowest level since 2020) with low engagement costing the world economy approximately \$10 trillion in lost productivity, or 9% of global GDP. Critically, the report identifies manager and leader engagement as the primary driver of this decline: manager engagement has dropped nine points since 2022, and organizations that actively develop their managers achieve engagement rates nearly four times the global average. Microsoft (2026) Work Trend Index reinforces this picture, finding that organizational factors (culture, manager support, and talent practices) account for twice the reported AI and productivity impact of individual effort alone, yet only 19% of workers operate in environments where both individual capability and organizational readiness are high.

Deloitte (2026) Global Human Capital Trends survey adds a further dimension: seven in ten business leaders identify speed and adaptability as their primary competitive strategy, yet only 6% of organizations are making meaningful progress on intentional human-machine and human-human interaction design. Organizations taking a technology-focused rather than human-centered approach are 1.6 times more likely to fail to realize returns on their transformation investments. The implication is clear: the constraint on organizational performance in the post-pandemic era is not technological but human (specifically, the quality of leadership in distributed, digitally mediated environments).

3. Research Method

This study employs a Systematic Literature Review (SLR) methodology following PRISMA 2020 guidelines (Page et al., 2021). The PRISMA 2020 statement, which updates the original 2009 guidance to reflect advances in systematic review methodology, comprises a 27-item checklist and revised flow diagrams designed to ensure transparent, complete, and accurate reporting of why the review was conducted, what the authors did, and what they found. The SLR approach was selected because it provides a reproducible, bias-minimizing framework for synthesizing empirical evidence across heterogeneous study designs particularly appropriate for the rapidly expanding but fragmented post-pandemic hybrid leadership literature.

The search was conducted on Scopus academic database, supplemented by targeted searches of leading management and organizational behavior journals. The search was conducted between March and May 2026, restricted to publications from 2020 onward to capture the post-pandemic normalization period. The Scopus search string applied was:

Table 1. DATABASE SEARCH STRING

Details	Search String
Scopus Database	TITLE-ABS-KEY (("hybrid work" OR "remote work" OR "telework" OR "distributed work" OR "virtual work" OR "virtual team") AND ("distributed leadership" OR "shared leadership" OR "transformational leadership" OR "adaptive leadership" OR "authentic leadership") AND ("organizational culture" OR "psychological safety" OR "employee engagement" OR "organizational identity" OR "cultural cohesion")) AND PUBYEAR > 2019 AND DOCTYPE (ar OR re) AND LANGUAGE (english)

Source: Author work(s)

Inclusion and exclusion criteria were established prior to screening and are summarized in Table 2.

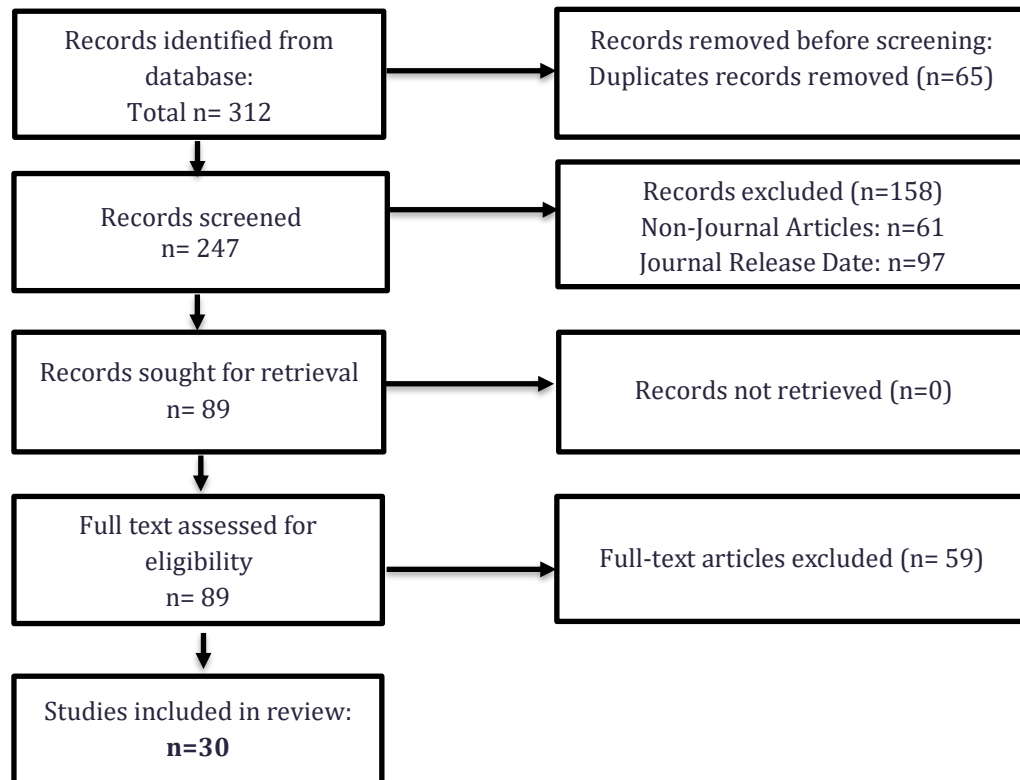
Table 2. INCLUSION AND EXCLUSION CRITERIA (PRISMA 2020)

Criterion	Inclusion	Exclusion
Language	English	Non-English publications
Year	2020-2026	Pre-2020 (except seminal foundational works)
Focus	Leadership in hybrid, remote, or distributed work; with culture, engagement, or psychological safety outcomes	Co-located teams only, no hybrid/remote component
Source	Peer-reviewed journal articles and systematic reviews	Books, dissertations, grey literature, editorials
Method	Empirical (quantitative, qualitative, mixed) and review studies	Pure conceptual papers without empirical grounding

Source: Author work(s)

The PRISMA 2020 selection process proceeded through four stages. An initial database search yielded 312 records (including manual input). Following deduplication, 247 unique records proceeded to title and abstract screening. After applying inclusion and exclusion criteria, 89 full-text articles were retrieved for eligibility assessment. A further 59 were excluded: 24 insufficiently focused on hybrid leadership dynamics, 18 non-empirical, and 17 providing duplicate coverage of perspectives already represented. The final corpus comprised 30 articles. Figure 1 presents the PRISMA 2020 flow diagram.

Figure 1. PRISMA 2020 FLOW DIAGRAM



Source: Author work(s)

Data synthesis employed thematic analysis organized around the three research questions, consistent with PRISMA 2020 guidance for narrative synthesis. Each article was coded along eight dimensions: leadership model type, organizational sector and geography, digital tools examined, cultural dimensions addressed, process mechanisms identified, outcomes measured, methodological approach, and key findings.

4. Results and Discussion

The 30 included studies span 15 countries across Asia (Thailand, Saudi Arabia, Indonesia, India, China), Europe (Germany, Belgium, Portugal, Italy), and North America, reflecting the global normalization of hybrid work documented by the ILO (2021) and McKinsey (Lund et al., 2021). Methodological distribution includes quantitative studies (n = 13), qualitative studies (n = 11), and mixed-methods or reviews (n = 6). Publication years range from 2021 to 2026, with a concentration in 2024–2026 reflecting the maturation of post-pandemic hybrid work research. Table 3 summarizes included studies.

Table 3. SUMMARY OF INCLUDED STUDIES (n = 30)

Author(s) & Year	Country / Context	Method	Key Focus
Suengkamolpisut and Singhatong (2025)	Thailand	Qualitative	Adaptive leadership, well-being, hybrid work
Asfahani (2026)	Saudi Arabia	Qualitative	Cultural intelligence, psychological safety, HRM
Dong and Xing (2026)	23 countries	Quantitative (SEM)	Relationship behavior, voice-silence, psychological safety
Gaur and Vallabh (2026)	India	Mixed-methods	Leader expressivity, emotional contagion, team output
Jasmine and Utomo (2024)	Indonesia	Quantitative	Transformational leadership, Gen Z, commitment
Budiadi (2026)	Indonesia	Literature review	Transformational leadership, EI, engagement
Abu Orabi et al. (2024)	Multi-country	Bibliometric	Leadership and organizational commitment trends
Masili et al. (2024)	Europe (4 firms)	Case study	Distributed agile teams, sociotechnical, digital tools
Mayer et al. (2023)	Germany	Quantitative (SEM)	Shared leadership behaviors — task vs. relations-oriented
Ali and Yushi (2024)	China (IT sector)	Quantitative (SEM)	Shared leadership, teamwork quality, project success
Li and Yazid (2024)	Multi-country	SLR	Virtual leadership, conflict resolution, communication
Koh and Law (2025)	Asia (SMEs)	Quantitative	E-leadership, team dynamics, WFH performance
Mutha and Srivastava (2023)	India	Mixed-methods (PLS-SEM)	Transformational leadership, engagement, virtual teams
Kinnear and Kinnear (2026)	UK (PRCI sector)	Qualitative review	LMX, in/out-groups, gender equity, hybrid work
Pudles et al. (2026)	Belgium	Quantitative	Telework, LMX, affective commitment, POS

Author(s) & Year	Country / Context	Method	Key Focus
Boccoli et al. (2024)	Italy	Quantitative	Transformational leadership, digital comm. skills, engagement
Almazrouei et al. (2025)	UAE/Mexico/Italy	Quantitative (PLS-SEM)	Work-life balance, remote work, creativity in digital orgs
Li et al. (2024)	Multi-country	Conceptual review	Digital leadership, cultural diversity, remote work
Wagan and Sidra (2025)	China (SCU)	Quantitative	Remote work management, productivity, well-being
Liebermann et al. (2021)	Europe	Qualitative	Abrupt telework, public sector implementation
Rozen et al. (2025)	Israel	Qualitative (grounded theory)	Intra-team conflict, shared leadership, communication mode
Luan et al. (2025)	Multi-country	Meta-analysis	Family-supportive supervisor behavior, employee outcomes
Kauffeld et al. (2022)	Germany	Delphi study	Future mobile/virtual work scenarios, 460 experts
Dahal et al. (2025)	Nepal	Quantitative	EI, trust, training, core beliefs, virtual leadership
Normi et al. (2025)	Indonesia	Literature review	Transformational leadership, job satisfaction, tech sector
Gong et al. (2025)	China (online)	Quantitative	EI, transformational leadership, team effectiveness (MMOGs)
Kim and Kim (2024)	South Korea	Quantitative	Remote work, millennials, shared leadership, commitment
Abu Orabi et al. (2024)	Multi-country	Bibliometric	Leadership-commitment research clusters, future directions
Kaur Bagga et al. (2023)	India (IT)	Quantitative (PLS-SEM)	Transformational leadership, org. culture, change management
Figueiredo Belchior and Chagas (2026)	Multi-country	Quantitative (PLS-SEM)	Transformational leadership, diversity, creativity, IMOI

Source: Author work(s)

4.1 RQ1: Distributed, Shared, and Adaptive Leadership in Hybrid Environments

The most consistent finding across the reviewed literature is that hierarchical, positional leadership models are structurally misaligned with the demands of hybrid and distributed work. Gallup (2026) data contextualize this at the macro-level: best-practice organizations (those that deliberately invest in manager development and distributed leadership capacity) achieve manager engagement rates of 79%, nearly four times the global average of 22%. This organizational-level evidence directly mirrors the individual-level findings from the academic corpus: distributed authority, intentional relational investment, and adaptive flexibility consistently outperform centralized command-and-control approaches.

Shared leadership defined as a dynamic, interactive influence process among team members to lead one another toward group goals is the most extensively evidenced leadership model in the corpus. Ali and Yushi (2024) demonstrate using PLS-SEM data from IT virtual project teams that shared leadership positively and significantly influences both teamwork quality and project success, with teamwork quality fully mediating the shared leadership–performance relationship. This mediation pattern is theoretically important: shared leadership operates not through direct authority but by improving relational coordination quality the IMOI mediator, which then drives outcomes. Project complexity further moderates this relationship, with stronger effects under higher complexity conditions.

However, Mayer et al. (2023) introduce a critical nuance that must not be overlooked in any synthesis of shared leadership research. Their SEM analysis of 411 virtual team members found that while sharing task-oriented leadership behaviors has a significant positive effect on productivity and satisfaction, sharing relations-oriented behaviors has a significant negative effect on satisfaction. The practical implication is direct: in virtual teams embedded within hierarchical organizational structures, task coordination and problem-solving can be productively distributed among team members, but relational behaviors — providing support, recognition, and emotional encouragement — should remain the responsibility of the designated leader. This finding importantly delimits the conditions under which shared leadership produces positive outcomes, preventing the overgeneralized recommendation that all leadership behaviors should be collectively distributed.

Research on distributed agile teams (DATs) provides rich structural evidence for how shared leadership emerges organically in practice. Masili et al. (2024) conducted a multiple case study across four European technology companies using grounded theory analysis, finding that digital shared leadership emerged not from deliberate design but as a natural consequence of flat organizational structures, self-organization cultures, and the impossibility of traditional monitoring across distributed teams. Successful DATs maintained agile rituals (daily stand-ups, sprint reviews, retrospectives, lean coffee sessions) as virtual cultural anchors and invested in facilitators and coaches to improve

virtual meeting quality — recognizing that technology enables but does not substitute for the human facilitation skills required to generate meaningful distributed interaction.

Adaptive leadership demonstrates strong empirical relevance across culturally diverse contexts. Suengkamolpisut and Singhatong (2025) find that adaptive leaders in Thai hybrid workplaces (characterized by flexibility, proactive communication, cultural sensitivity, emotional intelligence, and trust-building) significantly enhance employee well-being, professional identity, and organizational belonging. Asfahani (2026) contributes a significant cross-cultural refinement from Saudi Arabia: in high power-distance, collectivist contexts, effective hybrid leaders translate authority into predictable, rhythmic touchpoints rather than surveillance-based monitoring. This 'presence-by-cadence' model reveals the cultural plasticity of distributed leadership: the core principle of reliable, trust-building behavior is preserved while specific behavioral expressions adapt to cultural expectations.

Transformational leadership demonstrates consistent empirical support across all organizational contexts examined. Figueiredo Belchior and Chagas (2026) confirm using an IMOI framework that transformational leadership's effects on team creativity and innovation are fully mediated by team processes including knowledge sharing, trust, and cohesion. Jasmine and Utomo (2024) confirm from Indonesia that transformational leadership positively and significantly influences both employee engagement and affective organizational commitment among Generation Z hybrid workers, with engagement serving as a full mediator. Boccoli et al. (2024) add a critical moderating condition: supervisor digital communication skills significantly strengthen the transformational leadership–work engagement pathway in remote settings. Leaders who develop technical proficiency alongside relational competence produce substantially stronger engagement outcomes than those relying on charisma alone.

Kim and Kim (2024) extend the shared leadership picture by demonstrating from a South Korean sample of 154 millennial employees that remote work positively influences organizational commitment, and that both shared leadership and followership significantly moderate this relationship, strengthening the positive remote work–commitment association under higher levels of both variables. This finding highlights that effective distributed leadership in hybrid settings is not solely a leader competency but a dyadic quality — requiring both the leader to distribute authority and team members to actively assume distributed responsibility.

4.2 RQ2: Digital Communication Practices and HR Mechanism for Psychological Safety

The second thematic cluster addresses how organizations sustain cultural cohesion, psychological safety, and employee engagement in non-collocated teams through deliberate digital HR mechanisms and technology-mediated communication practices. A central insight across the corpus is that effective hybrid culture is not produced by the availability of digital tools alone, but by the intentional, structured use of those tools to

recreate the relational and symbolic functions previously served by physical co-presence — what the ILO (2021) describes as the challenge of overcoming the 'invisibility' of distributed workers and ensuring their integration into organizational life and decision-making.

Communication cadence (the deliberate engineering of rhythmic, predictable communication routines) emerges as the single most consistently identified mechanism across the corpus. Asfahani (2026) describes 'cadence charters' as foundational to virtual leadership effectiveness in hierarchical contexts, noting that managers establishing short, reliable interaction rhythms produce higher trust and psychological safety than those relying on ad hoc communication. Suengkamolpisut and Singhatong (2025) document that adaptive Thai hybrid leaders employ regular check-ins, transparent communication, and flexible scheduling specifically to mitigate the social isolation and work-life boundary erosion that the ILO (2021) identifies as the primary working condition challenges of home-based work.

Masili et al. (2024) provides the most detailed operational account of virtual cultural binding practices across four European DAT companies. Successful distributed teams maintained several categories of ritual: agile iteration ceremonies (daily stand-ups, sprint reviews, retrospectives) creating operational rhythm; lean coffee and design thinking sessions generating innovation alignment; and periodic face-to-face events reinforcing interpersonal bonds. These companies also cultivated a 'culture of error' (where mistakes become learning opportunities rather than sources of blame) directly operationalizing the psychological safety construct that Edmondson (1999) identifies as foundational and that Gallup (2026) identifies as the primary mediator between manager engagement and team performance.

Psychological safety infrastructure represents the most important mediating process between leadership behavior and organizational outcomes in the corpus. Dong and Xing (2026) demonstrate using SEM data from 342 team members across 68 virtual teams in 23 countries that relationship-oriented leader behavior significantly promotes employee voice ($\beta = 0.34$, $p < 0.001$), with psychological safety as a critical mediator (indirect effect $\beta = 0.24$, $p < 0.001$). Digital tool usage frequency moderates this relationship positively ($\beta = 0.15$, $p < 0.05$), confirming that technology amplifies rather than substitutes for the relational leadership behaviors that sustain psychological safety. Gallup (2026) macro-level finding that employees whose managers actively champion their use of new tools are 98.7 times more likely to agree that those tools have transformed how work gets done provides powerful practitioner-level validation of this mechanism.

Table 3 maps the connections between inputs and mediators evidenced across the corpus, and Table 4 maps mediators to their associated outputs. These tables, taken together with the IMOI framework described in section 4.4, make explicit that the relationship between leadership and outcomes is always mediated (no leadership style directly produces outcomes in isolation) and that each mediator contributes to multiple outcomes simultaneously.

Table 3. INPUT → MEDIATOR CONNECTIONS IN THE IMOI FRAMEWORK

Leadership style (input)	Mediators activated	Key evidence
Transformational	Communication cadence; psychological safety; emotional expressivity; digital HR practices	Budiadi (2026); Jasmine & Utomo (2024); Boccoli et al. (2024); Gaur & Vallabh (2026)
Distributed/shared	Communication cadence; psychological safety; digital HR practices — Note: only task-oriented sharing recommended in hierarchical contexts (Mayer et al., 2023)	Masili et al. (2024); Ali & Yushi (2024); Mayer et al. (2023)
Adaptive	Communication cadence; psychological safety; emotional expressivity	Suengkamolpisut & Singhatong (2024); Asfahani (2026)
E-leadership	Psychological safety; emotional expressivity; digital HR practices	Dahal et al. (2025); Koh & Law (2025); Gaur & Vallabh (2026)

Source: Author work(s)

Table 4. MEDIATOR → OUTPUT CONNECTIONS IN THE IMOI FRAMEWORK

Mediator	Outputs produced	Key evidence
Communication cadence	Employee engagement; team cohesion; employee well-being	Asfahani (2026); Suengkamolpisut & Singhatong (2024); Masili et al. (2024)
Psychological safety	Employee engagement; team cohesion; employee well-being; team performance	Dong & Xing (2026); Gaur & Vallabh (2026); Edmondson (1999); Gallup (2026)
Emotional expressivity	Employee engagement; employee well-being; team performance — Note: indirect via emotional contagion chain (Gaur & Vallabh, 2026)	Gaur & Vallabh (2026)
Digital HR practices	Employee engagement; team cohesion; employee well-being; team performance	ILO (2021); Luan et al. (2025); Deloitte (2026); Masili et al. (2024)

Source: Author work(s)

Asynchronous equity protocols represent a critical but underappreciated mechanism. Masili et al. (2024) documents one company's systematic practice of recording synchronous meetings and sharing them with absent members, ensuring that temporal absence does not translate into informational and cultural marginalization. This

directly addresses the LMX dynamics documented by Kinnear and Kinnear (2026): remote work intensifies in-group/out-group dynamics along lines of perceived availability, with disproportionate impacts on women, caregivers, and employees in different time zones. The ILO (2021) frames these inequities as a global decent work challenge, noting that homeworkers — particularly in developing economies — face significant gaps in social protection, career visibility, and organizational integration.

Family-supportive supervisor behavior, identified by Luan et al. (2025) through meta-analysis, provides the final important HR mechanism: supervisors who acknowledge and accommodate employees' family responsibilities produce significantly improved work-family balance, job satisfaction, and organizational commitment. In hybrid contexts where the structural porousness of work-home boundaries creates persistent challenges — especially acute in Southeast Asia where ILO (2021) data show high concentrations of home-based workers with concurrent domestic responsibilities — this supervisory behavior is an organizational infrastructure investment, not merely an interpersonal courtesy.

4.3 RQ3: Emotional Expressivity, Trust, and Relational Leadership in Digital Contexts

The third thematic cluster addresses how the shift from in-person to digitally mediated work alters the psychological mechanisms through which employees perceive and respond to leadership. The Gallup (2026) macro-data frames the urgency: manager engagement — the organizational expression of relational leadership quality — has declined sharply over the past three years, and this decline accounts for most of the global employee engagement slump. The question of how leaders maintain authentic, effective relational leadership in digital environments is therefore not merely academic but one of the most consequential organizational challenges of the current era.

The most empirically rigorous evidence on digital relational leadership comes from Gaur and Vallabh (2026), who combined a three-wave survey of 400 professionals with behavioral observation of 20 virtual team meetings across Indian IT, finance, and consulting sectors. The study demonstrates a robust affective-performance chain: leader expressivity → emotional contagion ($\beta = 0.49, p < .001$) → psychological safety ($\beta = 0.54, p < .001$) → team output ($\beta = 0.61, p < .001$). The indirect pathway — leader expressivity influencing team performance through emotional contagion and psychological safety — was also significant ($\beta = 0.16, p < .001$), confirming that expressivity operates by initiating cascading emotional processes that create climates of safety and openness. Using Random Forest Regression, psychological safety emerged as the strongest predictor of team output (importance score = 0.34).

Two critical moderators shape the expressivity chain, both with direct organizational design implications. First, leader emotional intelligence significantly strengthens expressivity's impact on emotional contagion ($\beta = 0.21, p < .001$): high-EI leaders are more adept at modulating emotional displays in ways that feel authentic and

timely, producing stronger affective alignment (high-EI: $\beta = 0.58$; low-EI: $\beta = 0.35$). Second — and arguably most practically important — camera-on culture significantly amplifies the impact of expressivity on psychological safety ($\beta = 0.18$, $p < .001$): teams with consistent video enabled show far greater responsiveness to leader expressivity ($\beta = 0.50$) than teams without ($\beta = 0.27$). Organizations that normalize camera-off defaults in virtual meetings structurally constrain leaders' capacity to build psychological safety through emotional signaling, creating a 'warmth gap' with measurable downstream consequences for team engagement and performance.

Dahal et al. (2025) provide complementary evidence from Nepal, finding that emotional intelligence ($\beta = 0.535$) is the strongest predictor of virtual leadership effectiveness, followed by training and development ($\beta = 0.196$), trust ($\beta = 0.143$), and core beliefs ($\beta = 0.075$). This hierarchy of predictors confirms that in virtual contexts, the relational-emotional dimension of leadership outweighs structural and ideological factors in determining effectiveness.

Dong and Xing (2026) multi-country study provides evidence at the voice-behavior level. Relationship-oriented behavior promotes voice ($\beta = 0.34$) with psychological safety as the central mediating mechanism, but cultural value differences negatively moderate this relationship ($\beta = -0.18$, $p < .05$) — confirming that leadership practices effective in low power-distance cultures may be less effective or counterproductive in high power-distance contexts. For organizations operating in Southeast Asia these findings are directly applicable: effective hybrid leadership requires culturally intelligent relational adaptation, not universal application of Western models.

Trust serves as the foundational relational infrastructure connecting leader behavior to outcomes. Pudles et al. (2026) confirm from Belgian data that telework characteristics, LMX quality, and perceived organizational support interact to predict affective organizational commitment with perceived organizational support serving as an important mediator extending beyond LMX alone. This finding advances previous LMX-only accounts by showing that in hybrid settings, employees draw commitment signals from both their specific leader relationship and broader organizational responsiveness.

Cultural context substantially moderates how leadership authenticity is evaluated. Asfahani (2026) reveals that in Saudi Arabia's high power-distance context, authenticity is evaluated through reliability, dignity-preserving communication, and fair-process decision-making rather than Western transparent self-disclosure. Suengkamolpisut and Singhatong (2025) document that Thai employees perceive authentic leadership through culturally embedded relational values of *kreng jai* (deference) and *nam jai* (generosity of spirit) — values that cannot be approximated by generic leadership competency frameworks designed in individualist, low power-distance Western contexts.

4.4 Proposed Integrative IMOI Conceptual Framework

Based on the synthesis of evidence across the three research questions, this review proposes an original Integrative Input–Mediator–Output–Input (IMOI) Conceptual

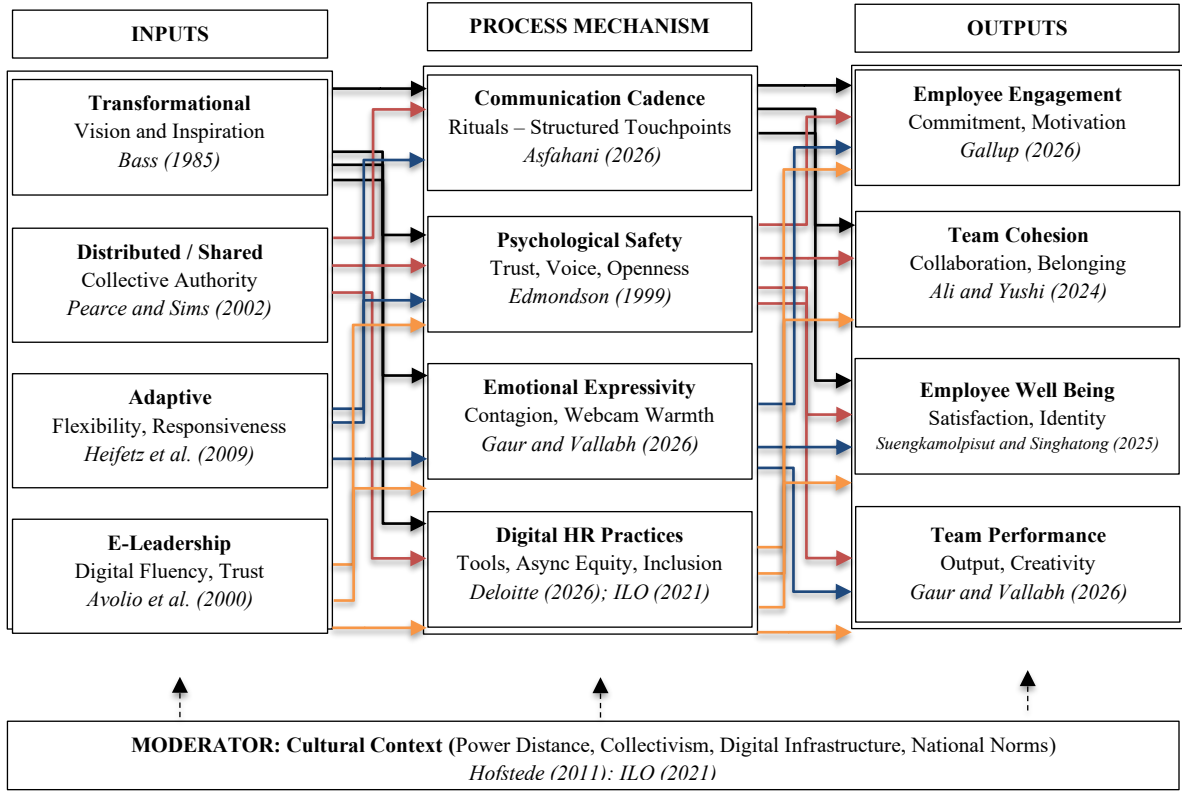
Framework for Leadership Effectiveness in Hybrid and Virtual Work Environments. The framework is directly grounded in Ilgen et al. (2005) IMOI model and reflects the empirical relationships established across the 30 included studies.

The framework positions four categories of leadership style as inputs: transformational leadership (Bass, 1985), distributed/shared leadership (Hoch & Kozlowski, 2014; Pearce & Sims, 2002), adaptive leadership (Heifetz et al., 2009), and e-leadership. These four styles are not mutually exclusive; effective hybrid leaders draw on combinations of all four. Critically, the framework does not imply one-to-one correspondence between inputs and mediators. As Tables 3 and 4 document, each leadership style activates multiple mediators simultaneously, and each mediator contributes to multiple outcomes. Transformational leadership, for instance, activates all four mediators (communication cadence, psychological safety, emotional expressivity, and digital HR practices) producing all four output categories. Distributed/shared leadership activates communication cadence, psychological safety, and digital HR practices, but with the important qualification that only task-oriented sharing is recommended in hierarchical virtual contexts (Mayer et al., 2023).

Four process mechanisms function as the IMOI mediators: (1) communication cadence — the structured rhythmicity of leader-member interaction; (2) psychological safety — the shared team belief that interpersonal risk-taking is safe; (3) emotional expressivity — the leader's deployment of facial, vocal, and behavioral warmth through video-mediated communication; and (4) digital HR practices — the intentional design of virtual rituals, asynchronous equity protocols, and family-supportive supervision. Psychological safety and digital HR practices are the two most consequential mediators in the corpus — both connect to all four output categories — while communication cadence and emotional expressivity connect to three each.

Four output categories represent the organizational outcomes: employee engagement and organizational commitment; team cohesion and collaboration quality; employee well-being and professional identity; and team performance and creativity. Consistent with the IMOI structure, these outputs feedback as new inputs into subsequent leadership cycles, explicitly recognizing that leadership effectiveness is an iterative process rather than a one-shot input-output relationship.

The entire framework is moderated by cultural context, operationalized through power distance, collectivism, national digital infrastructure quality, and organizational norms. Cultural context shapes both how leadership inputs are enacted (presence-by-cadence in high power-distance Saudi Arabia versus autonomous empowerment in low power-distance Germany) and how process mechanisms are received by employees (relationship-oriented behavior received differently across power distance contexts, per Dong & Xing, 2026). Figure 2 presents the framework schematically.



Source: Author work(s)

Figure 2. INTEGRATIVE IMOI CONCEPTUAL FRAMEWORK (LEADERSHIP EFFECTIVENESS IN HYBRID AND VIRTUAL WORK ENVIRONMENTS)

This framework makes three original theoretical contributions. First, it integrates the four leadership style traditions most evidenced in post-pandemic research within a single theoretically grounded IMOI model. Second, it elevates emotional expressivity as a designable organizational process mechanism — not merely a leader trait — that can be deliberately cultivated through camera norms, meeting facilitation design, and leader development programs. Third, it applies the IMOI dynamic feedback loop to hybrid leadership, explicitly recognizing that leadership effectiveness is an adaptive, iterative organizational system that continuously reshapes itself through the outcomes it produces.

5. Conclusion and Suggestions

This systematic literature review synthesizes 30 peer-reviewed studies to advance a comprehensive, evidence-grounded account of leadership effectiveness in hybrid and virtual work environments. Three central conclusions emerge. First, distributed, adaptive, and transformational leadership models consistently outperform hierarchical approaches, but shared leadership must be applied with precision: task-oriented sharing is productive in hierarchical virtual contexts while relations-oriented sharing should remain with the designated leader (Mayer et al., 2023). Second, digital HR practices that sustain organizational cohesion are most effective when intentional, rhythmic, and inclusive —

engineering reliable patterns of connection regardless of employees' physical location. Third, leader emotional expressivity in video-mediated communication is a measurable, consequential mechanism of team psychological safety and performance, with camera-on organizational norms producing significantly stronger leadership effectiveness than camera-off defaults (Gaur & Vallabh, 2026).

The proposed Integrative IMOI Framework advances leadership theory by synthesizing these conclusions into a dynamic, cyclical model that reflects the iterative nature of effective hybrid leadership over time. Deloitte (2026) finding that only 6% of organizations are making meaningful progress on intentional human-interaction design — despite 66% recognizing its importance — confirms that the gap between organizational knowledge and organizational action remains substantial. Closing it requires deliberate structural intervention: leadership development programs, communication cadence design, camera norm policies, and culturally calibrated relational practices.

For scholars in Southeast Asia and emerging economies these findings carry salience. Asia and the Pacific account for 65% of global home-based workers (ILO, 2021), yet hybrid leadership research remains dominated by Western and high-income country samples. The cultural moderation evidence documented here calls for substantially more empirical research on hybrid leadership dynamics in Indonesian, ASEAN, and broader developing economy contexts, particularly on how collectivist cultural values interact with digital communication practices to shape psychological safety and organizational commitment.

This review is subject to several limitations. The corpus is restricted to English-language publications, likely underrepresenting non-Anglophone scholarship. The IMOI framework is a synthesis product rather than an empirically tested model; future research should develop measurement instruments and test its structural paths using longitudinal, multi-level designs across diverse cultural contexts. Several included studies rely on self-reported survey data collected during the COVID-19 pandemic crisis period, which may introduce self-selection bias and crisis-context effects that do not generalize to normalized hybrid work. The rapid pace of change in hybrid work practices means that some earlier findings may already be superseded by more recent organizational adaptations. Finally, industry reports (Deloitte, 2026; Gallup, 2026; ILO, 2021; Lund et al., 2021; Microsoft, 2026) provide important macro-level context but are not peer-reviewed; readers should interpret these data as complementary practitioner-level corroboration rather than primary scholarly evidence.

6. References

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