

The Interplay Between Leadership Styles, Knowledge Management Practices, and Employee Performance: A PRISMA-Based Systematic Literature Review and Thematic Synthesis

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Abstract. Leadership and knowledge management (KM) are widely recognized as key drivers of organizational effectiveness in knowledge-intensive and digitally enabled environments. While many empirical studies examine leadership–performance and KM–performance relationships independently, limited systematic integration clarifies how specific leadership styles influence employee performance through distinct KM processes and under what contextual conditions these pathways operate. This study addresses this gap through a PRISMA-based systematic literature review of empirical research published between 2012 and 2024. After systematic screening and quality appraisal, 54 studies were included and synthesized using thematic analysis to identify dominant leadership styles, KM dimensions, mediating mechanisms, and contextual moderators. Findings indicate that transformational leadership is most consistently associated with performance outcomes, primarily through knowledge sharing and knowledge creation pathways. Transactional leadership is more frequently linked to structured KM processes such as knowledge transfer and knowledge application. Trust emerges as a recurring mechanism explaining leadership–KM–performance relationships, while culture and training condition the strength of KM – performance linkages across contexts. The study advances an integrative framework mapping leadership → KM practices → employee performance and proposes a practitioner-oriented decision matrix to support leadership – KM alignment for targeted outcomes. The findings contribute to theoretical integration and provide actionable implications for organizations operating in logistics, informatics, and service-oriented systems.

Keywords: Transformational leadership; transactional leadership; knowledge management; knowledge sharing; employee performance; PRISMA; thematic synthesis; systematic literature review

1. Introduction

Leadership is widely understood as a core organizational capability that shapes employee motivation, satisfaction, and performance by influencing how people interpret goals, coordinate work, and respond to change (Afshari et al., 2024; Le and Do, 2024). The leadership literature has extensively examined transformational and transactional approaches, which differ in their behavioral mechanisms and expected performance consequences (Nguyen et al., 2024; Udin, 2021). Transformational leadership emphasizes vision, inspiration, and intellectual stimulation, and is frequently linked to trust-building, engagement, and discretionary performance behaviors (Al-Hajj et al., 2026; Gui et al., 2024; Cao and Le, 2022; Buil et al., 2019). Transactional leadership, in contrast, relies on structured exchanges such as contingent rewards and corrective actions to achieve performance targets, often producing compliance-oriented outcomes (Udin, 2021; Crews et al., 2019).

In parallel, organizations increasingly emphasize knowledge management (KM) as a strategic capability that enhances learning, innovation, and competitiveness by enabling systematic creation, sharing, and utilization of knowledge assets (Masa'deh et al., 2017; Giampaoli et al., 2017). Empirical studies show that KM capabilities and processes influence performance through improved problem solving, organizational learning, and innovation outcomes (Wu and Chen, 2014; Tseng and Lee, 2014; Sahibzada et al., 2023). As knowledge becomes more central than physical assets, KM is frequently positioned as a critical mechanism through which organizations improve employee-level and firm-level outcomes (Son et al., 2020; Shaikh et al., 2023).

Despite the richness of research on leadership and KM, the evidence remains conceptually fragmented in how it explains the combined leadership–KM–performance relationship. Many studies demonstrate that leadership affects performance and that KM affects performance, yet fewer studies systematically clarify which KM dimensions (e.g., sharing, creation, application) represent the primary pathways through which leadership behaviors translate into performance outcomes and when such pathways hold across different contexts (Le and Lei, 2018b; Park and Kim, 2018; Alaarj et al., 2016). This fragmentation limits theoretical integration and reduces practical clarity for organizations seeking to align leadership behaviors with KM investments to achieve specific performance goals.

A systematic literature review (SLR) offers a transparent approach for consolidating evidence, identifying patterns, and clarifying gaps across a dispersed literature base (Beller et al., 2013; Sohrabi et al., 2021; Baharin & Kang, 2026.). To enhance methodological transparency and replicability, this review follows PRISMA reporting principles and applies a structured thematic synthesis to integrate findings across diverse empirical contexts (Beller et al., 2013; Page et al., 2021; Sohrabi et al., 2021). The review focuses on studies published between 2012 and 2024 to capture contemporary leadership and KM practices under accelerated digitalization and evolving organizational contexts, including technology-enabled knowledge sharing and innovation-based competition (Nguyen et al., 2023; Shaikh et al., 2023; Gui et al., 2024).

Accordingly, this review addresses the following research questions:

RQ1: Which leadership styles (e.g., transformational, transactional) are most consistently linked to employee performance outcomes across empirical studies?

RQ2: Which KM practices (e.g., knowledge sharing, creation, transfer, application) most frequently function as the pathway through which leadership influences employee performance?

RQ3: What mechanisms (mediators) most often explain leadership → KM → performance relationships (e.g., trust, engagement, psychological safety, learning climate)?

RQ4: What boundary conditions (moderators) shape the strength or direction of these relationships (e.g., culture, sector context, digital maturity)?

2. Material and Methods

2.1 Research Design

This study adopts a systematic literature review (SLR) design guided by the Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA) framework to enhance transparency, procedural accountability, and replicability (Beller et al., 2013; Page et al., 2021). PRISMA provides a structured basis for documenting the identification, screening, eligibility assessment, and inclusion stages, strengthening interpretability and methodological credibility (Sohrabi et al., 2021). To move beyond descriptive aggregation, the review applies thematic synthesis to identify recurring relational patterns and to develop an integrative pathway model linking leadership styles, KM practices, and performance outcomes.

2.2 Data Sources and Search Strategy

A comprehensive search was conducted across Scopus, Web of Science (WoS), and Google Scholar. The search window covered 2012–2024 to capture contemporary leadership and KM dynamics in increasingly digitalized organizational environments (Nguyen et al., 2023; Shaikh et al., 2023). Database-specific Boolean strings were constructed using leadership, KM, and performance keyword clusters with wildcard logic (e.g., leadership style*, knowledge shar*, perform*). The final search was executed on 31 December 2024. Full database-specific search strings, filters, and field restrictions are reported in Appendix A to ensure reproducibility (Page et al., 2021).

2.3 Inclusion and Exclusion Criteria

Studies were included if they: (i) reported empirical findings, (ii) examined leadership styles and/or KM practices with performance outcomes, (iii) were published in peer-reviewed English-language journals between 2012 and 2024, and (iv) provided sufficient methodological information for appraisal. Excluded were conceptual papers without empirical evidence, conference papers, book chapters, non-English publications, and studies unrelated to leadership, KM, and performance integration.

The initial search yielded 619 records. After removing 201 duplicates, 418 records remained for screening. Title/abstract screening excluded 211 records, leaving 207 for full-text assessment. Full-text eligibility assessment excluded 120 studies. Quality appraisal excluded an additional 35 studies, resulting in 54 studies included in the final synthesis. Full-text exclusion reasons are summarized in Appendix B.

2.4 Quality Appraisal and Inter-Rater Reliability

All eligible full-text studies were independently appraised by two reviewers using a structured rubric assessing: research design appropriateness, sampling adequacy, measurement validity, analytical rigor, and transparency of reporting. Ratings were assigned on a five-point scale (1 = very low; 5 = very high). Inter-rater reliability was evaluated prior to consensus discussions, with percentage agreement ranging between 75% and 90%, indicating substantial agreement. Discrepancies were resolved through structured discussion and re-evaluation against rubric criteria.

2.5 Data Extraction and Thematic Synthesis

Data extraction followed a standardized protocol to ensure comparability across studies, capturing bibliographic information, country/sector context, leadership constructs, KM dimensions, performance outcomes, theory usage, measurement instruments, and key findings. The extracted evidence was synthesized using thematic analysis to identify recurring constructs and relational patterns, then integrated into a structured pathway model linking leadership styles → KM practices → performance outcomes, with mediators and moderators classified to enhance explanatory clarity (Sohrabi et al., 2021; Page et al., 2021). Figure 1 shows the criteria selection process.

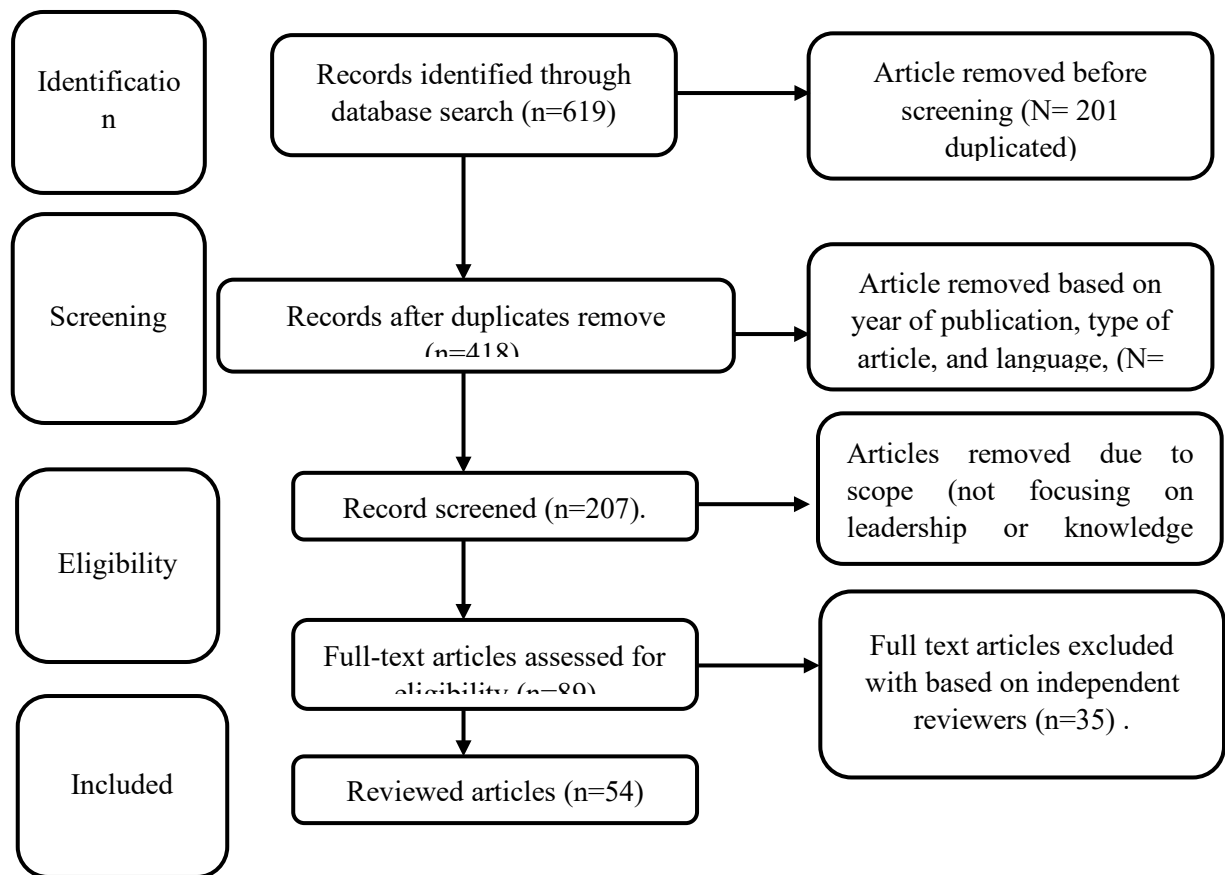


Fig.1: Process of selecting the articles

3. Theoretical Foundations

To address the fragmented treatment of leadership and knowledge management (KM) in prior empirical research, this section outlines the theoretical foundations that underpin the leadership–KM–performance relationship. Rather than repeating empirical findings, this section clarifies the conceptual logic connecting leadership behaviors to KM processes and subsequent performance outcomes.

3.1 Leadership Styles and Performance Logic

Transformational and transactional leadership represent two dominant paradigms in contemporary leadership research. Transformational leadership emphasizes vision articulation, intellectual stimulation, individualized consideration, and inspirational motivation. These behaviors foster intrinsic motivation, commitment, and discretionary effort, which are frequently associated with enhanced employee performance (Gui et al., 2024; Cao and Le, 2022; Buil et al., 2019). Transformational leaders encourage employees to transcend short-term exchanges and internalize organizational goals, creating environments conducive to knowledge exchange and innovation.

Transactional leadership, in contrast, is grounded in structured exchanges between leaders and followers. Through contingent rewards and corrective monitoring, transactional leaders clarify expectations and reinforce compliance with established procedures (Udin, 2021; Crews et al., 2019). While this style may be less oriented toward intrinsic motivation, it can strengthen performance in contexts requiring procedural consistency, efficiency, and goal alignment.

Although both leadership styles influence performance, they operate through distinct behavioral mechanisms. Transformational leadership tends to activate relational and motivational processes, whereas transactional leadership reinforces structure and accountability. These distinctions suggest that leadership styles may differentially influence KM processes, which in turn affect performance outcomes.

3.2 Knowledge Management as a Performance Pathway

KM encompasses structured processes through which organizations create, share, transfer, apply, integrate, and protect knowledge resources (Masa'deh et al., 2017; Giampaoli et al., 2017). Rather than functioning merely as a static organizational capability, KM represents a dynamic mechanism linking human behavior to performance outcomes.

Knowledge sharing and knowledge creation are frequently associated with innovation and adaptive performance, as they enable employees to exchange insights and generate new solutions (Son et al., 2020; Shaikh et al., 2023). Knowledge transfer and application, by contrast, often support efficiency and operational performance by ensuring that existing knowledge is effectively implemented (Chen and Fong, 2015; Tseng and Lee, 2014). These differentiated KM dimensions suggest that leadership styles may not uniformly influence all KM processes.

For example, transformational leadership behaviors that emphasize trust and empowerment may strengthen voluntary knowledge sharing, while transactional leadership may reinforce adherence to structured knowledge application routines. Consequently, KM functions as a mediating pathway through which leadership behaviors translate into performance outcomes.

3.3 Mediating and Moderating Mechanisms

Beyond direct leadership–performance relationships, empirical studies indicate that mediating mechanisms such as trust play a critical role in enabling knowledge exchange (Le and Lei, 2018b; Park and Kim, 2018). Trust enhances psychological safety and reduces perceived risks associated with sharing expertise, thereby strengthening the leadership–KM–performance pathway. Contextual moderators, including organizational culture and training systems, further shape these relationships (Alaarij et al., 2016; Nguyen et al., 2023). Cultural environments characterized by collaboration and learning orientation may amplify the impact of KM on performance, while formal training systems may enhance employees' capacity to apply knowledge effectively.

These theoretical foundations collectively suggest that leadership styles influence performance both directly and indirectly through KM processes, and that these relationships are conditioned by relational and contextual factors. Building upon this theoretical basis, the following section presents the results of the systematic review and thematic synthesis, culminating in the development of an integrative framework that clarifies leadership–KM–performance pathways.

4. Results and Thematic Synthesis

4.1 Descriptive Profile of Included Studies

The final sample comprised 54 empirical studies published between 2012 and 2024. The distribution of studies reflects increasing scholarly attention to leadership–KM integration in knowledge-intensive and digitally enabled environments, particularly in Asian contexts. A substantial proportion of studies were conducted in emerging and collectivist economies, including Vietnam, China, Indonesia, Malaysia, and other Asian countries (Le and Lei, 2018b; Phong et al., 2018; Son et al., 2020; Shaikh et al., 2023; Gui et al., 2024). Fewer studies originated from Western or European contexts (Radević et al., 2023; Hoxha, 2019), suggesting potential contextual concentration in the empirical base.

Most studies adopted quantitative survey designs, typically using cross-sectional data collected at the employee level. Structural equation modeling and regression-based techniques were commonly employed to test relationships among leadership styles, KM dimensions, and performance outcomes.

Only a limited number of studies used qualitative or mixed-method approaches, indicating a methodological emphasis on statistically testing relational models. This descriptive profile indicates both a strong empirical foundation and a contextual concentration that may influence the generalizability of synthesized findings.

4.2 Thematic Synthesis of Leadership–KM–Performance Relationships

The thematic synthesis identified three overarching analytical clusters aligned with the research questions: (1) leadership styles and direct performance effects, (2) KM dimensions as mediating pathways, and (3) contextual and relational mechanisms shaping relational strength.

4.2.1 Leadership Styles and Performance Outcomes (RQ1)

Across the reviewed studies, transformational leadership (TL) emerged as the most frequently examined leadership construct. Empirical findings consistently associated TL with improved employee performance, innovative performance, and organizational effectiveness (Gui et al., 2024; Cao and Le, 2022; Buil et al., 2019; Alsayyed et al., 2020). The mechanism underlying these effects is often attributed to enhanced employee motivation, vision alignment, and discretionary effort.

Transactional leadership (TSL), though less frequently examined, demonstrated positive but more context-dependent performance effects (Udin, 2021; Crews et al., 2019). TSL appears particularly effective in environments emphasizing compliance, procedural clarity, and structured performance targets. However, its influence on innovative or knowledge-intensive performance outcomes was less consistently reported.

Notably, some studies reported neutral or context-dependent findings. For example, Indrayanto et al. (2014) found that transformational leadership did not significantly influence performance within a para-police institutional context characterized by rigid hierarchy and formalized authority structures. This divergence suggests that leadership effects may be contingent upon institutional rigidity and cultural expectations regarding authority.

Overall, RQ1 findings indicate that transformational leadership demonstrates the strongest and most consistent empirical association with performance outcomes, while transactional leadership exerts influence primarily in structured and compliance-driven environments.

4.2.2 Knowledge Management Dimensions as Performance Pathways (RQ2)

The synthesis reveals that knowledge sharing (KS) and knowledge creation (KC) are the most frequently examined KM dimensions associated with positive performance outcomes. Studies consistently link KS to enhanced collaborative problem-solving, innovation, and employee productivity (Son et al., 2020; Park and Kim, 2018; Gui et al., 2024). Knowledge creation, similarly, supports adaptive and innovative performance by facilitating new idea generation (Wu and Chen, 2014; Le and Do, 2024).

Knowledge transfer (KT) and knowledge application (KA) are more frequently associated with operational and efficiency-oriented outcomes (Chen and Fong, 2015; Tseng and Lee, 2014). These dimensions strengthen performance by ensuring that existing knowledge is systematically implemented within workflows. Knowledge integration (KI) and knowledge protection (KP) were comparatively underrepresented in the empirical literature, suggesting potential gaps for future research. The findings collectively support the argument that KM dimensions do not uniformly influence performance. Instead, different KM processes align with different performance objectives, reinforcing the need for leadership styles that strategically activate appropriate KM pathways.

4.2.3 Mediating Mechanisms (RQ3)

The analysis indicates that KM practices frequently function as mediating mechanisms between leadership and performance. Transformational leadership, in particular, often exerts indirect effects

through enhanced knowledge sharing and knowledge creation behaviors (Son et al., 2020; Park and Kim, 2018; Le and Lei, 2018b).

Trust emerges as a recurring relational mechanism facilitating these pathways. Leaders who demonstrate fairness, support, and credibility foster trust, which reduces perceived risks associated with knowledge sharing (Le and Lei, 2018b; Park and Kim, 2018). In such contexts, employees are more willing to exchange expertise, thereby strengthening the leadership–KM–performance relationship.

In contrast, where trust levels are constrained or hierarchical rigidity is high, leadership behaviors may not translate into active knowledge exchange, weakening indirect performance effects (Indrayanto et al., 2014). These findings suggest that relational climate plays a central role in determining whether leadership behaviors successfully activate KM processes.

4.2.4 Contextual Moderators and Cross-Context Patterns (RQ4)

Several studies identify contextual moderators that condition leadership–KM–performance relationships. Organizational culture, particularly collaborative and learning-oriented cultures, strengthens the relationship between KM practices and performance outcomes (Alaarj et al., 2016; Nguyen et al., 2023). Training systems also enhance employees’ capacity to effectively apply knowledge, amplifying KM-driven performance gains.

The geographical concentration of studies in Asian contexts has implications for interpretation. Many reviewed studies were conducted in collectivist, high power-distance environments (Le and Lei, 2018b; Phong et al., 2018; Son et al., 2020). In such settings, relational trust and leader credibility may exert stronger influence on knowledge-sharing behaviors. Conversely, the limited representation of low power-distance Western contexts suggests that findings should be interpreted cautiously when generalizing across institutional environments.

The divergence observed in hierarchical institutional settings (e.g., Indrayanto et al., 2014) further indicates that leadership effects are moderated by structural rigidity and formal authority norms. Thus, leadership–KM–performance relationships are context-sensitive rather than universally uniform.

Table 1 summarizes the thematic distribution of leadership styles, knowledge management dimensions, and contextual mechanisms across the 54 included studies, providing a consolidated empirical foundation for the integrative framework developed in the following section.

Table 1. Thematic Mapping of Leadership Styles, Knowledge Management Dimensions, and Contextual Mechanisms Across Included Studies (N = 54)

Author(s) / Year	Leadership Style(s) Examined	Knowledge Management Dimension(s)	Contextual / Mechanism Variables
Mohd Ali & Musah (2012)	–	KM as general process	–
Dardar et al. (2012)	–	KM as general process	–
Hussain et al. (2012)	Transactional leadership	–	–
Wu & Chen (2014)	Other leadership	Knowledge creation; Knowledge transfer; Knowledge sharing; Knowledge application	–

Tseng & Lee (2014)	Other leadership	Knowledge application	–
Indrayanto et al. (2014)	Transformational leadership	–	Trust
Liu & Deng (2015)	Other leadership	Knowledge creation; Knowledge sharing; Knowledge application	–
Chen & Fong (2015)	Other leadership	Knowledge transfer; Knowledge application	–
Alaarj et al. (2016)	Other leadership	Knowledge transfer; Knowledge application; KM infrastructure	Culture
Masa'deh et al. (2017)	Other leadership	Knowledge transfer; Knowledge application; Knowledge integration	–
Giampaoli et al. (2017)	–	Knowledge sharing; Knowledge application; Knowledge integration	–
Chen & Wu (2017)	Transformational leadership	–	–
Almahamid & Qasrawi (2017)	Transactional; Other leadership	Knowledge creation; Knowledge transfer	–
Abubakar & Ahmed (2021)	Transformational; Transactional	–	–
Naqshbandi & Jasimuddin (2018)	–	–	–
Le & Lei (2018b)	Transformational leadership	–	Trust
Lilin (2018)	Transactional leadership	–	–
Ghabban et al. (2018)	–	KM-related technology processes	–
Phong et al. (2018)	Transformational leadership	–	Trust
Park & Kim (2018)	Transformational leadership	Knowledge sharing	Trust
Le & Tran (2020)	Transformational leadership	–	Trust
Le & Lei (2018a)	Transactional leadership	–	Trust
Crews et al. (2019)	Transformational; Transactional	–	–
Lei et al. (2019)	Other leadership	–	Trust
Buil et al. (2019)	Transformational leadership	–	–

Aun et al. (2019)	Transformational; Transactional	–	–
Ndevu Zwelinzima (2019)	–	–	Trust
Altunoğlu et al. (2019)	Transformational leadership	–	–
Hoxha (2019)	Transformational; Transactional	–	–
Alsayed et al. (2020)	Transformational leadership	–	–
Bozdoğan & Aksoy (2020)	Transformational leadership	–	–
Yusuf et al. (2020)	Transformational leadership	–	–
Anshori et al. (2020)	Transformational leadership	–	–
Archanjo de Souza et al. (2020)	Transactional leadership	–	–
Son et al. (2020)	Transformational leadership	Knowledge sharing	–
Sahibzada et al. (2023)	–	Knowledge sharing; KM as general process	–
Ahmed et al. (2020)	Transformational leadership	–	–
Wahyuni & Syamsir (2020)	–	–	–
Ferozi & Chang (2021)	Transformational leadership	–	–
Mulyono (2021)	Transactional leadership	Knowledge application; KM as general process	Trust
Liu et al. (2021)	–	Knowledge sharing	–
Joshi & Chawla (2021)	Transactional; Other leadership	Knowledge creation; KM as general process	Training
Usman et al. (2021)	Other leadership	–	Trust
Udin (2021)	Transformational; Transactional	KM-related process	–
Radević et al. (2023)	Other leadership	–	Trust
Limsangpetch et al. (2022)	Other leadership	Knowledge creation; Knowledge sharing; KM as general process	–

Cao & Le (2022)	Transformational leadership	–	Trust
Gui et al. (2024)	Transformational leadership	Knowledge sharing	–
Nguyen et al. (2023)	Transformational leadership	–	Training
Shaikh et al. (2023)	Transactional; Other leadership	Knowledge sharing	–
Nguyen et al. (2024)	Transformational; Transactional; Other leadership	–	–
Le & Do (2024)	Other leadership	Knowledge creation; Knowledge sharing	–
Almuayad & Chen (2024)	Other leadership	Knowledge creation; Knowledge transfer; Knowledge sharing	–
Hamid et al. (2024)	–	Knowledge sharing	–

4.3 Integrated Relational Patterns

Synthesizing findings across RQ1–RQ4 reveals a coherent relational architecture linking leadership styles, knowledge management practices, and employee performance outcomes. The evidence indicates that transformational leadership most frequently exerts its influence on performance indirectly through relationally oriented KM dimensions, particularly knowledge sharing and knowledge creation. Leaders who emphasize vision, empowerment, and intellectual stimulation appear more likely to cultivate environments that encourage voluntary knowledge exchange and collaborative idea generation, which subsequently enhance innovative and adaptive performance outcomes.

In contrast, transactional leadership demonstrates stronger alignment with structured KM processes such as knowledge transfer and knowledge application. By reinforcing procedural clarity, contingent rewards, and performance monitoring, transactional leaders appear to facilitate the systematic implementation of existing knowledge, thereby strengthening efficiency- and compliance-oriented performance outcomes. This distinction suggests that leadership styles may differentially activate KM dimensions depending on organizational objectives and task structures.

Across both leadership styles, trust emerges as a central enabling mechanism within the leadership–KM–performance pathway. The synthesis indicates that relational trust enhances employees’ willingness to share expertise, reduces perceived risks associated with knowledge exchange, and strengthens the effectiveness of KM practices in translating into performance gains. In environments where trust is constrained or relational climates are weak, leadership behaviors appear less likely to generate sustained KM engagement.

The analysis further demonstrates that contextual factors such as organizational culture and training systems shape the strength and stability of KM–performance relationships. Collaborative and learning-oriented cultures amplify the impact of knowledge sharing and creation on performance, while structured training initiatives enhance employees’ ability to apply transferred knowledge effectively. Conversely, contextual rigidity, hierarchical institutional structures, and high formalization may weaken indirect leadership effects by limiting discretionary knowledge behaviors.

Taken together, these patterns support an integrative pathway in which leadership behaviors shape the activation and quality of KM processes, which in turn influence employee performance under

context-specific conditions. Rather than functioning as isolated variables, leadership styles, KM dimensions, mediating mechanisms, and contextual moderators operate as an interconnected system. The following section formalizes this synthesis into an integrative conceptual framework that clarifies these relational pathways.

4.4 Integrative Conceptual Framework

Building upon the thematic synthesis and integrated relational patterns, this study advances an integrative conceptual framework that formalizes the leadership–knowledge management–performance pathway identified across the reviewed studies. The framework consolidates direct, mediated, and moderated relationships into a structured explanatory model that clarifies how leadership styles translate into performance outcomes through specific KM processes under contextual conditions.

The framework posits that leadership styles constitute the primary activating force within organizational systems. Transformational leadership, characterized by inspirational motivation, intellectual stimulation, and individualized consideration, primarily influences relational KM dimensions such as knowledge sharing and knowledge creation. These KM processes foster collaborative learning, innovation, and adaptive problem-solving behaviors, which subsequently enhance employee and organizational performance outcomes.

Transactional leadership, in contrast, operates more strongly through structured KM mechanisms, particularly knowledge transfer and knowledge application. By reinforcing performance standards, monitoring compliance, and clarifying task expectations, transactional leadership supports systematic implementation of knowledge within operational processes. This pathway is especially salient in efficiency-oriented and compliance-driven organizational environments.

Crucially, the framework recognizes that leadership does not directly and uniformly influence performance. Instead, knowledge management processes function as mediating mechanisms translating leadership behaviors into measurable performance outcomes. This indirect pathway reflects the empirical dominance of KM as a central explanatory variable within the reviewed studies.

Furthermore, the framework incorporates relational and contextual moderators that condition the strength and direction of these relationships. Trust functions as a relational enabler, strengthening the likelihood that employees will engage in discretionary knowledge-sharing behaviors. Organizational culture and training systems operate as structural moderators, shaping employees' capacity and willingness to participate in KM processes. In contrast, institutional rigidity and hierarchical formalization may attenuate leadership effects by constraining knowledge exchange.

Accordingly, the integrative framework conceptualizes the leadership–KM–performance relationship as a dynamic and context-sensitive system rather than a linear causal chain. Leadership styles activate distinct KM dimensions, which in turn generate performance outcomes, with mediating and moderating variables shaping relational strength.

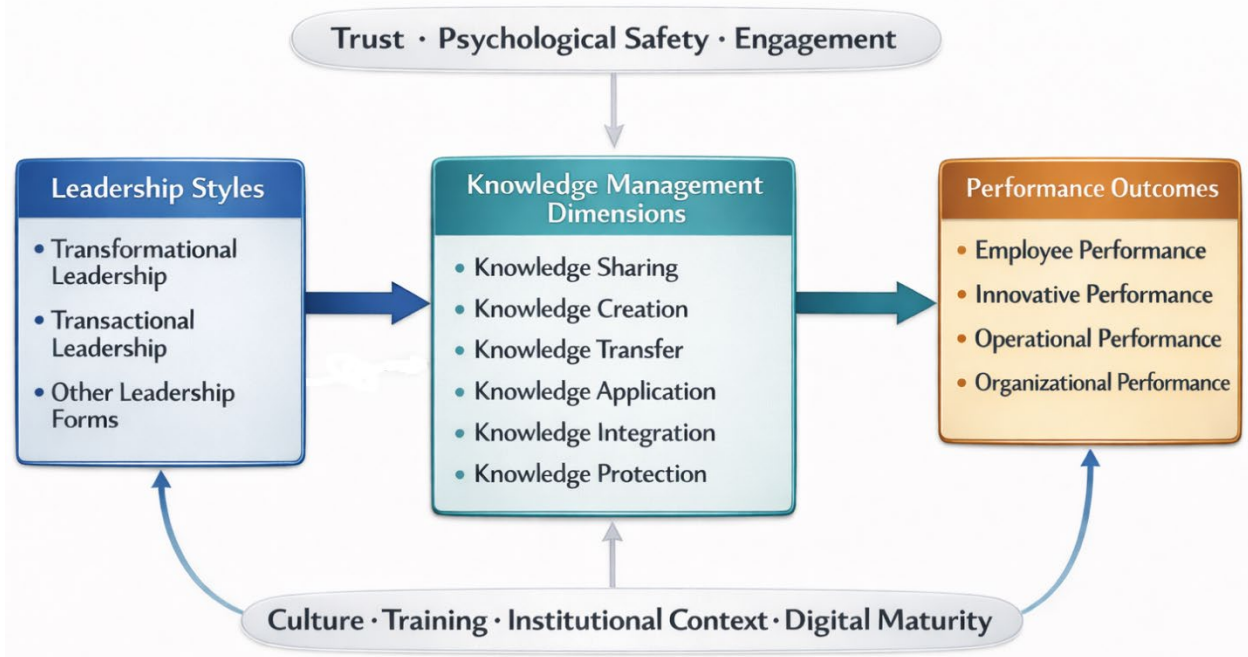


Fig.2: Integrative Conceptual Framework of Leadership–Knowledge Management–Performance Pathways

5. Discussion

5.1 Theoretical Contributions

This review advances theoretical integration in three principal ways. First, it consolidates fragmented empirical evidence into a coherent relational architecture linking leadership styles, knowledge management (KM) practices, and employee performance. While prior empirical studies demonstrate that leadership influences performance and that KM influences performance, this synthesis clarifies that leadership effects are frequently indirect and mediated through specific KM dimensions. The findings indicate that transformational leadership most consistently activates relational KM processes—particularly knowledge sharing and knowledge creation—whereas transactional leadership more strongly aligns with structured KM mechanisms such as knowledge transfer and knowledge application.

Second, the review refines understanding of mediating mechanisms. Trust emerges as a central relational enabler that strengthens the leadership–KM pathway. The synthesis suggests that leadership behaviors that cultivate relational credibility and psychological safety enhance employees’ willingness to share and create knowledge. Without such relational foundations, leadership behaviors may not translate into sustained KM engagement, thereby weakening indirect performance effects.

Third, the review highlights contextual contingency. Organizational culture and training systems amplify KM–performance linkages, while institutional rigidity and hierarchical structures may attenuate leadership effects. This finding contributes to theory by positioning leadership–KM–performance relationships as context-sensitive systems rather than universal causal chains. The integrative framework therefore extends prior work by embedding mediating and moderating mechanisms within a unified explanatory structure.

5.2 Managerial and Practical Implications

The findings provide actionable guidance for organizations operating in knowledge-intensive, service-oriented, and logistics-driven environments. Rather than adopting leadership styles in isolation, managers should align leadership behaviors with targeted KM processes and desired performance

outcomes. Organizations seeking to enhance innovation and adaptive performance should prioritize transformational leadership behaviors that encourage intellectual stimulation and relational trust. Such environments facilitate knowledge sharing and knowledge creation, which in turn strengthen innovative output and problem-solving capabilities.

Conversely, organizations focused on operational efficiency, compliance, or service standardization may benefit from transactional leadership behaviors that reinforce structured knowledge transfer and systematic knowledge application. Clear performance expectations, procedural monitoring, and contingent rewards can strengthen execution-oriented KM pathways. Trust-building initiatives are critical regardless of leadership style. Without relational trust, employees may withhold tacit knowledge, undermining KM effectiveness. Similarly, investments in training systems enhance employees' capacity to apply transferred knowledge, amplifying KM-driven performance gains.

In logistics and informatics systems, where coordination and information accuracy are essential, leaders should combine relational leadership behaviors with structured KM processes. In service environments, where knowledge exchange and client responsiveness are central, leadership approaches that foster collaborative knowledge sharing may yield stronger performance benefits. To operationalize these implications, Table 2 presents a practitioner-oriented decision matrix aligning leadership styles, KM priorities, and performance objectives.

Table 2. Decision Matrix for Leadership–KM Alignment

Target Performance Objective	Recommended Leadership Emphasis	Priority KM Dimension	Key Enabling Conditions	Potential Risk if Misaligned
Innovation and adaptability	Transformational leadership	Knowledge sharing; Knowledge creation	Trust; collaborative culture	Weak trust limits voluntary knowledge exchange
Operational efficiency	Transactional leadership	Knowledge transfer; Knowledge application	Clear procedures; training	Over-structuring may suppress innovation
Service quality improvement	Transformational + relational leadership	Knowledge sharing; Knowledge application	Cross-functional collaboration	Siloed departments weaken KM effects
Compliance and standardization	Transactional leadership	Knowledge application	Monitoring systems; formal training	Excess rigidity reduces discretionary knowledge behaviors
Knowledge-worker productivity	Transformational leadership	Knowledge creation; Knowledge sharing	Psychological safety; digital tools	Technology adoption without trust reduces participation

Note: The matrix synthesizes empirical patterns observed across included studies and translates relational findings into managerial guidance.

5.3 Contextual Interpretation and Generalizability

The geographical distribution of studies indicates a concentration in Asian contexts characterized by collectivist cultural orientations and higher power-distance norms. In such environments, relational trust and leader credibility may exert stronger influence on knowledge-sharing behaviors. Consequently, the strength of transformational leadership's indirect effects through relational KM dimensions may be amplified in these settings. Conversely, in more individualistic or low power-distance contexts, knowledge-sharing behaviors may be less dependent on hierarchical leadership influence and more influenced by structural systems. Therefore, while the integrative framework identifies consistent relational pathways, the magnitude of effects may vary across institutional environments. Additionally, findings from highly hierarchical or rigid institutional contexts suggest that transformational leadership may not uniformly enhance performance if structural constraints limit knowledge exchange. These contextual insights underscore the importance of interpreting leadership–KM–performance relationships within institutional and cultural boundaries.

5.4 Limitations and Future Research Directions

Several limitations warrant consideration. First, the review is restricted to peer-reviewed English-language studies published between 2012 and 2024. Although this window captures contemporary leadership and KM dynamics, earlier foundational research is not included. Second, the predominance of cross-sectional quantitative designs limits causal inference. Future research may benefit from longitudinal or experimental approaches to clarify temporal sequencing within leadership–KM–performance pathways.

Third, knowledge integration and knowledge protection were comparatively underexamined in the empirical literature. Future studies should explore whether these dimensions play more prominent roles in knowledge-intensive sectors such as cybersecurity, high-technology manufacturing, or regulated industries. Finally, the contextual concentration of studies in Asian environments suggests that additional cross-cultural comparative research is needed to assess generalizability across institutional systems.

6. Conclusions

This systematic literature review synthesizes empirical evidence on the interplay between leadership styles, knowledge management practices, and employee performance. The findings demonstrate that leadership influences performance primarily through distinct KM pathways rather than through isolated direct effects. Transformational leadership most consistently activates relational KM dimensions such as knowledge sharing and knowledge creation, whereas transactional leadership more frequently supports structured KM processes such as knowledge transfer and application.

Trust functions as a central relational mechanism, and contextual factors—including culture and training—condition the strength of KM–performance relationships. By integrating leadership styles, KM dimensions, mediating mechanisms, and contextual moderators into a unified framework, this study advances theoretical clarity and provides actionable guidance for organizational leaders. The proposed integrative framework and decision matrix offer structured tools for aligning leadership behaviors with KM investments to achieve targeted performance outcomes in knowledge-intensive and service-oriented environments.

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