Journal of Scientometric Research, 2026; 15(3):923-934.
https://www.jscires.org

Research Article

Unpacking the Power of Difference: Mapping the Nexus between Team Diversity and Strategic Performance

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ABSTRACT

Research on team diversity and strategic performance has grown substantially yet remains intellectually fragmented across disciplinary silos. This study aims to systematically map the intellectual structure and emerging conceptual directions of this research domain through a comprehensive bibliometric analysis. A dataset of 940 peer-reviewed articles retrieved from the Scopus database was analyzed using two complementary bibliometric techniques bibliographic coupling and co-word analysis conducted via VOSviewer (version 1.6.20). The search was performed on June 21, 2025, and filtered to include English-language journal articles only. Bibliographic coupling identified three thematic clusters: (1) knowledge-based HR practices and innovation, (2) demographic diversity and organizational performance outcomes, and (3) leadership, motivation, and cognitive diversity in team dynamics. Co-word analysis revealed three emerging conceptual themes: diversity as a catalyst for innovation, human-centric approaches to creativity, and corporate governance and diversity for sustainable firm performance. The findings provide researchers with a structured roadmap for future interdisciplinary inquiry and offer practitioners actionable guidance on leveraging diversity through HRM systems, leadership development, and inclusive governance structures. This study reframes diversity not merely as a demographic variable, but as a dynamic organizational capability. To the best of the authors' knowledge, this study is among the first to apply integrated bibliometric mapping to the diversity strategic performance nexus, bridging fragmented discourse across management, governance, and innovation streams.

Keywords: Bibliometric Analysis, Bibliographic Coupling, Co-word Analysis, Strategic Performance, Team Diversity.

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Received: 09-05-2026;
Revised: 31-07-2026;
Accepted: 13-10-2026.

INTRODUCTION

Team diversity refers to the degree of heterogeneity among members of a work group across a range of attributes, encompassing surface-level characteristics such as gender, age, and ethnicity, as well as deep-level attributes including cognitive styles, functional expertise, and knowledge backgrounds (Joshi and Roh, 2009; Van Dijk *et al.*, 2012). The concept has evolved considerably in organizational scholarship, shifting from an early focus on demographic composition toward a broader recognition of diversity as a dynamic, multi-dimensional organizational property that shapes how teams process information, generate ideas, and execute strategy (Guillaume, 2017). In parallel, the notion of strategic performance has expanded beyond narrow financial metrics to encompass innovation output, organizational resilience, and long-term adaptive capacity outcomes increasingly attributed to the quality of human capital and team configuration within firms (Hülsheger *et al.*, 2009; Richard, 2007). Together, these constructs form a compelling yet contested nexus: while some large-scale studies of US companies demonstrate that gender and demographic diversity at the workforce level correlates positively with financial performance (Smith and De Leon, 2023), others find no consistent evidence of stock return outperformance for more demographically diverse firms (Frijns *et al.*, 2025). This empirical complexity underscores that the diversity–performance relationship is inherently nuanced, context-dependent, and in need of integrative synthesis. As global business environments grow more complex and competitive, organisations are under mounting pressure to harness workforce heterogeneity not merely as a compliance imperative, but as a genuine driver of innovation and sustained performance (Singh *et al.*, 2021).

Research on team diversity and strategic performance has benefited from several disciplinary perspectives, enriching the

OPEN ACCESS

Manuscript TECHNOMEDIA

DOI: 10.5530/jscires.20260060

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field with complementary theoretical lenses and methodological approaches. From the organizational behaviour tradition, studies have examined how diversity affects group processes such as communication, trust-building, and conflict resolution, which in turn moderate performance outcomes (Hülsheger *et al.*, 2009). Human resource management scholarship has explored how strategic HRM practices, including inclusive recruitment, knowledge-sharing incentives, and team-based training can activate the innovation potential latent in diverse team configurations (Singh *et al.*, 2021; Ardito and Messeni, 2017). The innovation management literature has further demonstrated that demographic and cognitive diversity within R&D teams and top management groups can enhance innovation efficiency and knowledge recombination (Xie *et al.*, 2020; Enkel *et al.*, 2017). Meanwhile, corporate governance researchers have connected board-level diversity to sustainability performance and long-term firm value, extending the diversity–performance argument to the apex of organizational hierarchies (Collevecchio *et al.*, 2025; Yang *et al.*, 2024). Collectively, these contributions have transformed our understanding of team diversity from a social equity concern into a strategic organizational capability that interacts with leadership, governance, and institutional context to shape the trajectory of firm performance.

The current study is motivated by two main reasons. Firstly, the growing strategic importance of team diversity in the context of contemporary organizational challenges makes a structured overview of this research domain both timely and necessary. Rapid technological disruption, demographic shifts in the global workforce, and the increasing prevalence of cross-functional and geographically dispersed teams have intensified organizational reliance on diversity as a lever for innovation and resilience (Sheikh *et al.*, 2024; Shvetsova, 2025). The COVID-19 pandemic further accelerated these dynamics, prompting organisations to rethink team composition, remote collaboration, and inclusive leadership as essential components of strategic agility. Empirical evidence illustrates both the promise and the complexity of this relationship: analyses of Fortune 200 companies confirm that women and racial minorities account for approximately 40% of the workforce on average, yet their representation declines substantially at managerial levels, where women hold only 34% and racial minorities 29% of positions gaps that carry measurable consequences for firm performance (Smith and De Leon, 2023). At the same time, broader workforce-level demographic diversity does not automatically translate into superior financial returns, as evidenced by large-sample studies showing no consistent outperformance associated with greater employee diversity when measured through stock returns (Frijns *et al.*, 2025). These findings collectively underscore that diversity's strategic value is not automatic but contingent on how it is managed through HR systems, leadership practices, and governance structures, making an integrative mapping of the field both practically urgent and theoretically essential.

Second, a review of the existing literature reveals several significant gaps in how the scholarly community has examined the diversity–performance nexus. While meta-analyses have made important contributions, Joshi and Roh (2009) synthesised contextual moderators of team diversity effects; Hülsheger *et al.* (2009) mapped team-level predictors of innovation across three decades; and Van Dijk *et al.* (2012) examined the differential performance effects of demographic versus job-related diversity. These works are primarily quantitative syntheses focused on effect sizes rather than the intellectual structure of the field. Narrative reviews such as Guillaume (2017) have advanced conceptual understanding but are limited by subjectivity and the inability to systematically map thematic evolution across disciplines. More recently, Liu *et al.* (2024) employed decision tree algorithms to investigate diversity and innovation in research teams, and Sarooghi *et al.* (2015) conducted a meta-analysis on creativity and innovation; however, these studies address specific sub-dimensions of the topic rather than providing a holistic mapping of the research landscape. Financial studies such as Frijns *et al.* (2025) and Smith and De Leon (2023) have enriched the field with large-sample empirical evidence but focus on isolated performance indicators and do not engage with the broader intellectual structure connecting HRM, leadership, governance, and innovation streams. Studies examining governance-level diversity, such as Collevecchio *et al.* (2025) and Yang *et al.* (2024), similarly operate in isolation from team-level scholarship, reflecting the disciplinary fragmentation that characterises the field as a whole.

These gaps point to a critical need for a systematic, quantitative mapping of the field's knowledge structure. Bibliometric methods are uniquely suited to this purpose, as they minimise the subjectivity inherent in narrative reviews and enable large-scale analysis of scholarly patterns across disciplines and time periods (Donthu *et al.*, 2021; Zupic and Čater, 2015). Bibliographic coupling identifies thematic clusters among recently published works through shared reference structures, revealing the current intellectual organisation of a field, while co-word analysis captures the co-occurrence of keywords to project emerging and future conceptual directions (Donthu *et al.*, 2021). Despite their demonstrated value in adjacent management fields, these techniques have not been applied to the diversity–strategic performance nexus in a comprehensive and integrated manner. A pertinent gap therefore remains: the knowledge structure of this domain its dominant research streams, thematic interconnections, and evolving frontiers has yet to be systematically revealed. Hence, the following two objectives are proposed:

- To identify the intellectual structure and current research clusters related to team diversity and strategic performance through bibliographic coupling analysis.
- To uncover emerging and prospective conceptual trends within the field through co-word analysis.

The remainder of this paper is structured as follows. This section has introduced the research topic and established the study's motivation and objectives. Section 2 elaborates on the bibliometric methodology and data collection procedure. Section 3 presents the findings and discusses the research clusters identified through bibliographic coupling and co-word analyses. Section 4 outlines the theoretical and managerial implications drawn from the results. Section 5 acknowledges the study's limitations, while Section 6 proposes avenues for future research. Finally, Section 7 presents the conclusion.

METHODOLOGY

Bibliometric Approach

This study adopts a bibliometric methodology, a quantitative approach that systematically analyses large volumes of academic literature using science-mapping techniques to uncover the intellectual and conceptual structure of a research domain (Donthu *et al.*, 2021; Zupic and Čater, 2015). By aggregating citation-based relationships across publications, bibliometric analysis reduces individual researcher subjectivity and complements traditional narrative and systematic reviews by offering an objective and reproducible mapping of scholarly developments. Moreover, bibliometric techniques are particularly suitable for handling large datasets, as network stability and interpretability are strengthened when several hundred publications are included (Rogers *et al.*, 2020).

To achieve the objectives of this study, two complementary bibliometric techniques were employed. First, bibliographic coupling was used to identify thematic linkages among recent publications by analyzing shared reference patterns (Donthu *et al.*, 2021). The underlying premise of this technique is that documents citing common references are likely to address related research problems and belong to similar knowledge streams (Zupic and Čater, 2015). Bibliographic coupling is especially effective in mapping contemporary research trajectories and outlining the evolving intellectual architecture of a field, particularly in emerging or developing domains (Iqbal *et al.*, 2026). Second, co-word analysis, also known as keyword co-occurrence analysis, was applied to examine the frequency and relational patterns of author-supplied keywords (Van Eck and Waltman, 2014). By mapping keyword networks, this method reveals the cognitive and conceptual structure of a research domain, enabling the identification of dominant thematic clusters and emerging research directions (Donthu *et al.*, 2021; Ismail *et al.*, 2026). Together, these two techniques provide complementary insights into both the intellectual and conceptual evolution of the literature.

Research Design and Data Collection Procedure

The bibliographic dataset was retrieved exclusively from the Scopus database. Scopus was selected because it provides broad multidisciplinary coverage, standardised bibliographic metadata, comprehensive citation information, and data-export formats that are compatible with bibliometric software such as VOSviewer (Pranckutė, 2021). These characteristics are particularly important because research on team diversity and strategic performance spans multiple disciplines, including organizational behaviour, human resource management, innovation management, corporate governance, and sustainability. Compared with the Web of Science, Scopus generally offers broader journal coverage across management and organizational research domains, making it well suited to multidisciplinary bibliometric studies (Harzing and Alakangas, 2016; Pranckutė, 2021). Although Google Scholar indexes a larger volume of scholarly documents, its less-controlled indexing procedures, inconsistent metadata, duplicate records, and limited transparency in search retrieval may reduce the reproducibility of bibliometric analyses (Harzing and Alakangas, 2016). Therefore, Scopus was considered the most appropriate database for ensuring data consistency, analytical transparency, and replicability in the present study.

The detailed Boolean search strategy, including all keywords and their justification, is presented in Table 1. The search was conducted on June 21, 2025, and initially yielded 1,113 documents. To ensure scholarly quality and methodological consistency, the dataset was refined through systematic filtering procedures following established bibliometric practices (Donthu *et al.*, 2021). First, the document type was restricted to peer-reviewed journal articles, reducing the dataset to 949 records. Second, publications were limited to the English language to maintain linguistic consistency, resulting in a final dataset of 940 articles.

Although the retrieved documents span multiple disciplinary areas, they converge on the shared thematic nexus between team diversity configurations and strategic performance. The final dataset falls within the recommended range for stable bibliometric network construction, thereby ensuring reliable clustering and mapping results (Rogers *et al.*, 2020). Bibliometric mapping was conducted using VOSviewer (version 1.6.20), a widely adopted software tool for constructing and visualising bibliometric networks (Van Eck and Waltman, 2014). In line with the analytical design, bibliographic coupling was employed to uncover the intellectual structure and thematic relationships among recent publications (Donthu *et al.*, 2021; Iqbal *et al.*, 2026), while co-word analysis was used to identify conceptual patterns and evolving research directions through author keyword co-occurrence (Donthu *et al.*, 2021; Ismail *et al.*, 2026).

RESULTS AND DISCUSSION

As shown in Figure 1, scholarly output on team diversity and strategic performance has increased markedly over the past decade. Publication activity remained relatively limited and stable between 2001 and 2015, followed by a substantial upward trend beginning around 2018. The number of publications

reached its highest level in 2024, with more than 150 articles published. This growth indicates increasing scholarly attention to team diversity as a potential source of innovation, organizational adaptability, and long-term strategic performance. It also reflects the expansion of diversity research beyond traditional demographic perspectives toward broader discussions involving cognitive diversity, knowledge integration, leadership, corporate governance, and organizational sustainability.

Bibliographic coupling

To establish a reliable network structure, multiple citation thresholds were evaluated. The most suitable threshold was determined to be 121 citations, resulting in a well-structured bibliographic coupling network comprising 48 documents organised into three distinct clusters. This threshold was selected to achieve an optimal balance between analytical detail and structural clarity, thereby reducing the risk of over-filtering highly relevant publications or introducing excessive analytical noise (Iqbal *et al.*, 2026). In bibliographic coupling, the strength of linkage between documents is measured by Total Link Strength (TLS), which indicates the degree of thematic alignment and shared intellectual foundations among connected publications (Table 2) (Van Eck and Waltman, 2014).

Figure 2 presents the bibliographic coupling network visualisation for the 48 most-cited documents, revealing three distinct and well-defined clusters. Each cluster represents a thematic concentration within the literature, indicating relatively independent but interlinked streams of research. The clusters were identified based on citation linkages and labelled through an inductive review of key publications in each group, focusing on their conceptual themes and scholarly contributions to the field of team diversity and strategic performance.

Cluster 1 (red)

From 18 publications, this cluster is labelled "Enhancing Innovation Through Knowledge Integration and Strategic HR Practices." The cluster highlights the synergistic role of knowledge based strategies, absorptive capacities, and human resource practices in driving innovation performance within diverse team settings. Singh *et al.* (2021) provide a foundational perspective by examining how knowledge-based HRM practices enhance innovation performance through the mediating mechanisms of

Table 1: Search string in Scopus database.

No	Keywords	Justification
1	("team diversity" OR "diverse team*" OR "heterogeneous team*" OR "cognitive diversity" OR "demographic diversity")	To capture literature related to various dimensions of team-level diversity, including surface-level attributes (e.g., demographic and structural diversity) and deep-level attributes (e.g., cognitive diversity), which are relevant for understanding the composition and dynamics of diverse teams in organizational contexts.
2	("innovative performance" OR "strategic outcome*" OR "long-term performance")	To identify studies that explore the performance implications of team diversity in innovation, strategy, and sustained organizational outcomes.

Source: Primary data, 2025.

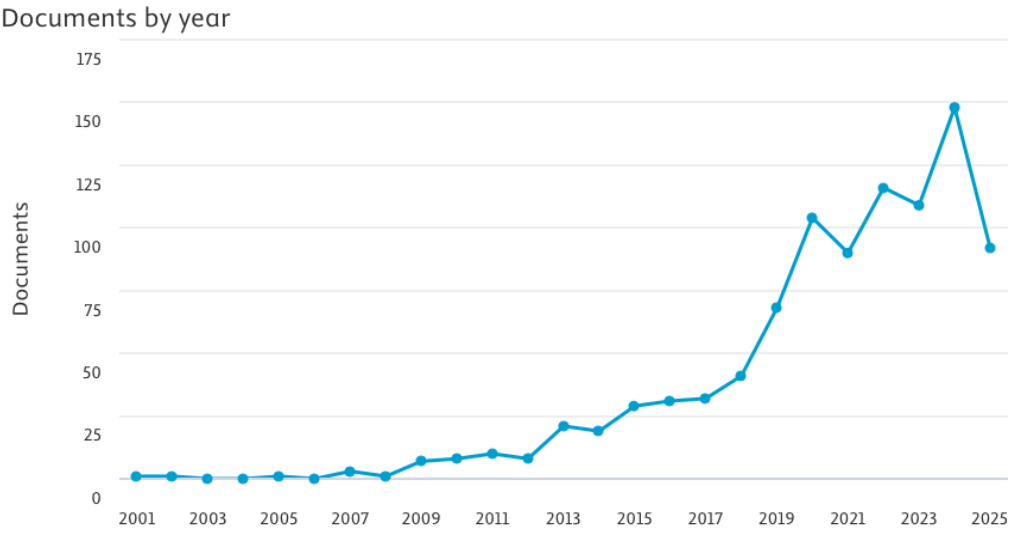


Figure 1: Number of Publications Related to Team Diversity and Strategic Performance Research, Source: Author Creation, 2025.

Table 2: Top 10 documents in Bibliographic Coupling Analysis.

Rank	Publication	Citation	Total Link Strength
1	(Van Dijk *et al.*, 2012) - Defying conventional wisdom: A meta-analytical examination of the differences between demographic and job-related diversity relationships with performance.	365	226
2	(Joshi and Roh, 2009) - The Role Of Context In Work Team Diversity Research: A Meta-Analytic Review.	979	205
3	(Hülsheger *et al.*, 2009) - Team-level predictors of innovation at work: A comprehensive meta-analysis spanning three decades of research.	1143	196
4	(Richard, 2007) - The Impact of Racial Diversity on Intermediate and Long-term Performance: The Moderating Role of Environmental Context.	274	165
5	(Perry-Smith, 2017) - From Creativity to Innovation: The Social Network Drivers of the Four Phases of the Idea Journey.	758	164
6	(Guillaume, 2017) - (Harnessing Demographic Differences in Organizations: What Moderates the Effects of Workplace Diversity?).	270	157
7	(Harvey, 2014) - (Creative Synthesis: Exploring the Process of Extraordinary Group Creativity).	366	146
8	(Harvey, 2013) - (Collective Engagement in Creative Tasks).	236	134
9	(Sarooghi *et al.*, 2015) - (Examining the relationship between creativity and innovation: A meta-analysis of organizational, cultural, and environmental factors).	326	133
10	(Ruiz – jimenez, 2016) - (Knowledge Combination Capability and Innovation: The Effects of Gender Diversity on Top Management Teams in Technology-Based Firms).	132	132

Source: Author Creation, 2025.

social capital and knowledge sharing in multinational enterprises. Their study underscores the importance of strategically mobilising human capital to stimulate innovation within cognitively and demographically diverse teams. Complementing this, Enkel *et al.* (2017) explore the role of individual-level absorptive capacity specifically, how employees' abilities to identify and assimilate external knowledge contribute to both exploratory and exploitative innovation outcomes. Their findings suggest that ambidextrous innovation strategies are heavily influenced by individual competencies in navigating knowledge flows across organizational boundaries. Ardito and Messeni (2017) extend this narrative by investigating the moderating influence of strategic HR practices, such as the use of heterogeneous teams and structured brainstorming, on the relationship between external knowledge sourcing and product innovation. Their empirical evidence reveals that well-designed team diversity mechanisms can mitigate the drawbacks of broad external searches, ultimately enhancing firms' innovation capabilities. Overall, this cluster illustrates a growing scholarly focus on the intersection of team composition, knowledge integration, and HR-driven innovation strategies, emphasising the foundational role of diverse and strategically managed teams in achieving sustained innovation and strategic performance.

Cluster 2 (green)

Comprising 17 publications, this cluster is labelled "Demographic Diversity and Organizational Performance Outcomes." This thematic group focuses on how gender and demographic diversity influence innovation efficiency, compensation dynamics, and strategic performance across varied organizational contexts. The studies in this cluster emphasis both the instrumental and symbolic value of diversity in enhancing organizational decision-making, innovation capacity, and equity-focused outcomes. A pivotal contribution comes from Xie *et al.* (2020), who investigate how gender diversity within R&D teams contributes to firms' innovation efficiency. Drawing on a dataset from Chinese manufacturing firms, the study demonstrates that gender-diverse teams yield superior innovation outputs per unit of R&D investment. These effects are amplified under conditions of high task intensity and market competition, where the informational and social benefits of gender diversity, such as improved communication and risk assessment become particularly salient. Complementing this, Leslie *et al.* (2017) challenge the assumption of a universal gender pay gap by introducing the concept of a"*female premium*" for high-potential women. Through field and lab experiments, they find that organizational diversity goals enhance perceived diversity value, leading to higher compensation for

women who are seen as critical to achieving diversity objectives, especially in upper-level roles. Gomez and Bernet (2019) extend the discourse into the healthcare sector, conducting an umbrella review that links workforce diversity to improved innovation, risk management, and both financial and patient outcomes. Their findings highlight that the return on diversity investments is maximised when embedded within inclusive organizational climates. Overall, this cluster underscores a growing consensus that demographic diversity particularly gender inclusion not only fosters innovation and fairness but also strengthens the adaptive and strategic capabilities of organisations. Theoretical perspectives from strategic HRM, diversity management, and contingency theory converge to frame diversity as a key enabler of long-term organizational performance.

Cluster 3 (blue)

Comprising 13 publications, this cluster is labelled "Leadership, Motivation, and Cognitive Diversity in Driving Team Innovation." It focuses on the interplay between leadership behaviours, individual cognitive traits, and motivational mechanisms as critical enablers of innovation and team performance in cognitively diverse settings. The literature in this cluster converges on how psychological constructs such as self-efficacy, prosocial motivation, and leader-follower dynamics translate diversity into high-impact innovation outcomes. Ng (2017) provides an integrative meta-analysis of Transformational Leadership (TFL), identifying five core mechanisms affective, motivational, identification, social exchange, and justice enhancement that mediate the relationship between TFL and various performance outcomes, including innovative behaviour. This work demonstrates that leadership exerts influence not just directly, but through complex cognitive and relational pathways that are particularly salient in diverse team contexts. Similarly, Liu *et al.* (2016) examine the motivational underpinnings of employee creativity by analysing over 190 studies. Their findings highlight the distinct roles of intrinsic motivation, creative self-efficacy, and prosocial motivation as key drivers of creativity in diverse work environments. These motivational pathways are shown to be differentially sensitive to both personal attributes and contextual variables, such as leadership style and cultural background. Adding a critical perspective, Hughes *et al.* (2018) review 195 empirical studies to explore how leadership enhances creativity and innovation. The study not only maps existing frameworks but also identifies substantial measurement and design limitations in creativity research, calling for more rigorous empirical models that account for cognitive and contextual diversity. Overall, this cluster sheds light on how individual psychological resources and leadership dynamics operate within cognitively diverse teams to foster innovation. It emphasises that diversity alone does not guarantee performance rather, its potential is activated through well-aligned motivational mechanisms and leadership strategies. The studies collectively advocate for a shift toward more nuanced, empirically grounded models that incorporate cognitive diversity and psychological variables as central drivers of team-based innovation and strategic outcomes (Table 3).

Co-word Analysis

From the extracted dataset, a total of 3,642 unique author keywords were identified. To construct a network that is both interpretable and thematically representative, several minimum-occurrence thresholds were tested, yielding networks that ranged from 65 to 46 keywords. A minimum threshold of 13 occurrences was

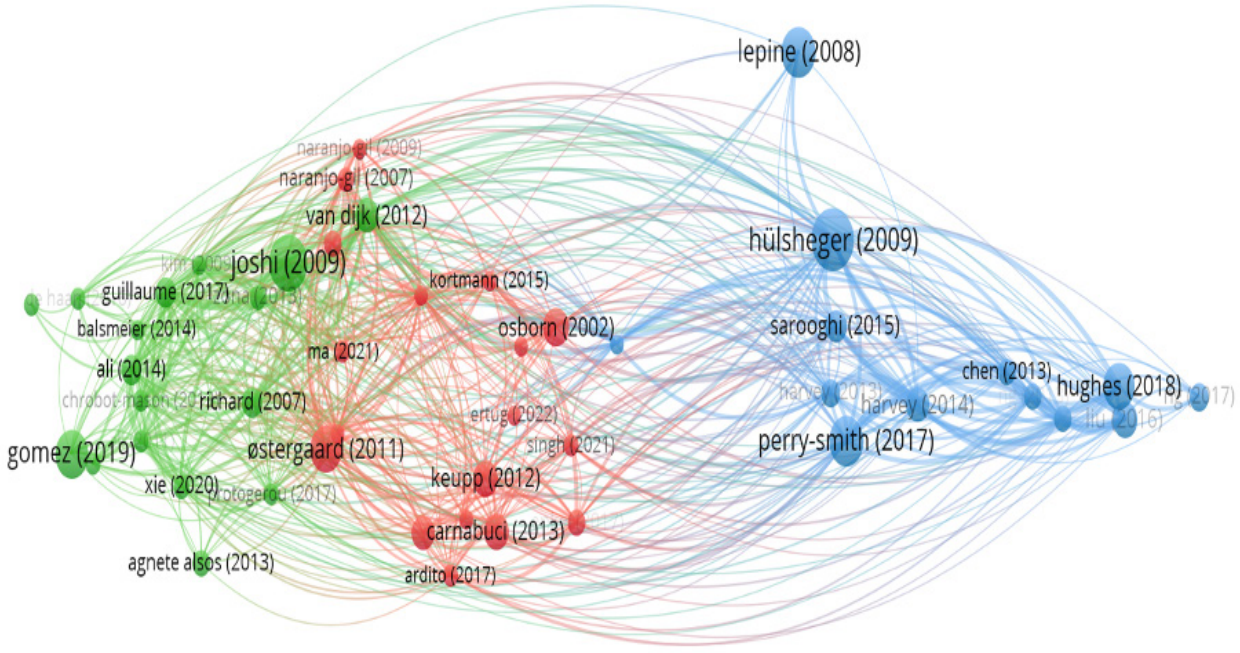


Figure 2: Bibliographic Coupling Network of Team Diversity and Strategic Performance Research, Source: Author Creation, 2025.

Table 3: Bibliographic coupling analysis on Team Diversity and Strategic Performance Research.

Cluster No and color	Cluster label	Number of publications	Representative publication
1 (red)	Enhancing Innovation Through Knowledge Integration and Strategic HR Practices	18	Singh *et al.* (2021), Enkel *et al.* (2017), Ardito and Petruzzelli (2017)
2 (green)	Demographic Diversity and Organizational Performance Outcomes	17	Xie *et al.* (2020), Leslie *et al.* (2017), Gomez and Bernet (2019)
3 (blue)	Leadership, Motivation, and Cognitive Diversity in Driving Team Innovation	13	Ng (2017), Liu *et al.* (2016), and Hughes *et al.* (2018)

Source: Author Creation, 2025.

ultimately retained, at which 46 keywords met the criterion and resolved into three distinct clusters. Lower thresholds produced dense networks dominated by low-frequency terms that obscured the thematic structure, whereas higher thresholds eliminated conceptually relevant keywords and fragmented the clusters. Table 4 reports the most frequently co-occurring keywords in team diversity and strategic performance research.

Figure 3 presents the network map derived from the co-word analysis, revealing three well-defined clusters, each representing a unique thematic orientation. Cluster labels were assigned through inductive interpretation by the author, based on the keywords' conceptual alignment and co-occurrence patterns. The subsequent discussion delves into each cluster's specific structures and emerging themes.

Cluster 1 (red)

Anchored by 27 keywords, Cluster 1 is labelled "Exploring Diversity as a Catalyst for Innovation." This thematic cluster examines how various dimensions of diversity, spanning from demographic and institutional to knowledge-based diversity, enhance innovation performance across teams, organisations, and scientific networks. The central focus lies in understanding how diverse compositions stimulate novel ideas, foster interdisciplinary collaboration, and drive impactful innovation outcomes. For instance, Jia *et al.* (2025) construct a multilayered network model that captures how collaboration among institutions and the recombination of heterogeneous knowledge elements influence innovation performance in scientific research. Their empirical findings underscore that the embeddedness of diverse actors and ideas within collaborative networks significantly affects research outputs, confirming the strategic value of diversity in scientific innovation systems. Similarly, using decision tree algorithms, Liu *et al.* (2024) explore the complex interplay between team diversity and innovation performance within interdisciplinary research teams. Their results reveal that research interest diversity is the most critical factor in driving novelty, and that certain combinations of diversity characteristics such as high institutional and moderate member diversity are strongly associated with both innovation novelty and impact. Additionally, Hemmert *et al*, (2024) investigate how gender diversity within Top Management Teams (TMTs) in manufacturing firms across Germany and India relates to innovation performance. Their findings demonstrate a significant positive association between TMT gender diversity and innovation outcomes, particularly in egalitarian cultural contexts, thus highlighting how cultural norms mediate the effectiveness of diversity in strategic decision-making. Collectively, this cluster reflects a growing scholarly consensus that diversity, when strategically managed, functions not merely as a descriptive trait, but as a dynamic enabler of innovation. The studies in this group emphasis that unlocking innovation potential requires understanding the non-linear, often complex relationships between different types of diversity and how they interact with internal capabilities and knowledge structures.

Cluster 2 (green)

With 11 keywords, Cluster 2 is labelled "*Human-Centric Approaches to Creativity in Organizations*." This cluster centres on how human-centred strategies, talent development, and organizational design intersect to foster creativity, resilience, and performance in the evolving landscape of Industry 5.0. The literature emphasises the critical role of people, not just processes or technology, as the primary enablers of sustainable organizational transformation. For example, Sheikh *et al.* (2024) explore the global evolution of Industry 5.0, offering a strategic roadmap for integrating human-centricity, sustainability, and resilience into industrial systems. Their study highlights the centrality of human–machine collaboration, emotional intelligence, and ethical innovation in shaping the next generation of value creation systems. Bucci *et al.* (2024) advance this perspective through the development of a lean self-assessment model rooted in socio-technical theory. Designed and implemented with employee collaboration, the model measures organizational performance by evaluating people, processes, and technology across multiple departments, reinforcing the importance of bottom-up engagement for continuous improvement. Complementing this, Shvetsova (2025) examines global talent management in high-tech sectors, proposing a human-centric strategy that addresses global megatrends such as technological disruption, demographic shifts, and evolving workplace values. The study underscores that sustainable talent development requires aligning strategic

Table 4: Top 15 Keywords in The Co-Occurrence of Keywords Analysis.

Rank	Keyword	Occurrences	Total Link Strength
1	Innovation	157	248
2	Human	46	224
3	Article	39	190
4	Female	22	145
5	Adult	21	135
6	Male	19	135
7	Humans	21	125
8	China	35	104
9	Creativity	38	104
10	Human Experiment	17	98
11	Leadership	33	95
12	Organisation	17	94
13	Gender Diversity	52	84
14	Innovation Performance	50	72
15	Human Resource Management	37	69

Source: Author Creation, 2025.

organizational goals with individual well-being, inclusivity, and purpose. Collectively, this cluster positions human agency, creativity, and inclusiveness at the forefront of organizational evolution. The studies advocate for a reconfiguration of traditional systems—moving from efficiency-driven models to ones that embrace empathy, adaptability, and collaborative intelligence. As organisations navigate the complexities of Industry 5.0, the integration of human-centric principles emerges as a defining factor for creativity, resilience, and long-term success.

Cluster 3 (blue)

Consisting of 8 keywords, Cluster 3 is labelled "Corporate Governance and Diversity for Sustainable Firm Performance." This cluster highlights the crucial interplay between governance structures particularly board composition and organizational sustainability outcomes. The thematic focus centres on how diversity, expertise, and strategic configuration within corporate boards directly shape long-term firm performance and ethical sustainability initiatives. For instance, Collevecchio *et al.* (2025) investigate the role of board members' sustainability experience in European listed firms, emphasising how younger boards amplify the positive effect of such expertise on firm sustainability performance. Their findings suggest that age-diversity dynamics within boards moderate the translation of sustainability knowledge into tangible performance outcomes, bridging the gap between ethics-driven leadership and generational sustainability imperatives. Similarly, Yang *et al.* (2024) employ fuzzy-set Qualitative Comparative Analysis (fsQCA) to identify multiple configurations of corporate governance mechanisms such as board diversity, ownership structure, managerial incentives, and transparency that jointly foster sustainable development. In a complementary study, Godbole and Manogna (2024) examine family-owned firms in India, revealing that internationalization and gender-diverse boards significantly enhance firm performance, particularly within mid- and large-cap enterprises. Their study underscores the importance of board-level gender representation and firm maturity in sustaining performance across global markets. It also notes the moderating role of firm size and internal governance structures. Collectively, these studies underscore that sustainability performance is not merely the result of isolated governance elements, but rather emerges from the strategic orchestration of diverse board attributes. This cluster signals a growing shift toward inclusive, expertise-driven, and ethically anchored governance models as essential levers for achieving corporate sustainability and long-term stakeholder value (Table 5).

Implications

Theoretical implications

The findings of this study contribute to the theoretical advancement of team diversity and strategic performance by extending several interrelated theoretical frameworks, particularly the Resource-Based View (RBV), Social Capital Theory (SCT), and strategic Human Resource Management (HRM) literature. First, the results support and refine the RBV by demonstrating how knowledge-based HRM practices, especially those embedded in diverse team environments, enable firms to develop unique and hard-to-imitate capabilities that enhance innovation performance (Barney *et al.*, 2011; Minbaeva, 2013). Cluster 1, for instance, reveals that strategic mobilisation of

human capital through absorptive capacity and social capital significantly strengthens an organisation's innovation trajectory, suggesting that diversity-driven HRM initiatives are essential mechanisms for knowledge transfer and integration.

Second, this study advances the literature on social capital by highlighting how diverse teams, when strategically structured, facilitate knowledge sharing and interpersonal trust that catalyst creativity and innovation. As demonstrated by Singh *et al.* (2021) and Enkel *et al.* (2017), socially embedded networks within diverse teams act as conduits for collaborative learning and innovation, confirming SCT's relevance in contemporary innovation management.

Third, the findings contribute to the growing diversity research by illuminating how gender and demographic heterogeneity in R&D teams (as seen in Cluster 2) enhance innovation efficiency, especially under dynamic market conditions (Xie *et al.*, 2020; Leslie *et al.*, 2017). These results provide empirical grounding for contingency and upper echelon theories, which posit that leadership and team composition interact with environmental factors to shape organizational outcomes. Additionally, the study enriches the meso-level theoretical paradigm (House *et al.*, 1995) by linking macro-level diversity goals with micro-level employee perceptions and behaviours. Finally, Cluster 3 underscores the strategic role of governance diversity in shaping sustainability outcomes, providing new theoretical insights into the relationship between inclusive board structures and long-term performance. The evidence supports the notion that diversity operates not merely as a static demographic characteristic, but as a dynamic capability embedded within governance systems (Collevecchio *et al.*, 2025; Yang *et al.*, 2024).

Managerial Implications

From a practical perspective, this study offers several actionable insights for managers, HR practitioners, and policymakers aiming to leverage team diversity for sustained performance and innovation. First, organisations should recognise that knowledge-based HRM practices, such as: strategic recruitment, training in absorptive capabilities, and incentivizing knowledge-sharing behaviours are foundational for activating the innovation potential of diverse teams. Investing in these systems can cultivate internal social capital and create an environment conducive to both exploratory and exploitative innovation (Enkel *et al.*, 2017; Ardito and Messeni, 2017). Second, the results highlight the critical importance of gender-balanced R&D teams, particularly in knowledge-intensive sectors. Managers are encouraged to adopt gender-sensitive HR policies, such as flexible work arrangements and inclusive career development pathways, to mitigate barriers and maximise the innovation benefits of female participation in technical roles. Moreover, firms operating in high-intensity, competitive environments should consider gender diversity not only a compliance goal but a strategic imperative that enhances resilience and creativity (Xie *et al.*, 2020; Gomez and Bernet, 2019).

Third, the study calls for a reimagining of leadership and team motivation practices, especially in cognitively diverse environments. Leaders should be trained to recognise and align individual psychological resources, such as: self-efficacy and prosocial motivation—with team-level innovation goals. Doing so can enhance trust, reduce relational conflict, and convert diversity into high-impact innovation outcomes (Liu *et al.*, 2016; Hughes *et al.*, 2018). Finally, this research underscores the need for inclusive and strategically diverse governance structures. Boards should comprise individuals with varied demographic backgrounds, sustainability expertise, and international experience to address evolving stakeholder demands and regulatory expectations. Firms, especially those engaged in global operations or ESG initiatives, should consider gender and age diversity in their governance design to enhance long-term performance and accountability (Collevecchio *et al.*, 2025; Godbole and Manogna, 2024). In sum, the insights generated from this study equip decision-makers with a roadmap to operationalize diversity as a lever for innovation, sustainability, and strategic agility, outcomes that are increasingly essential in the post-pandemic and Industry 5.0 era.

Table 5: Summary of co-word analysis of Team Diversity and Strategic Performance.

Cluster No and Color	Cluster Label	Number of Keywords	Representative Keywords
1 (red)	Exploring Diversity as a Catalyst for Innovation	26	Innovation, Innovation Performance, Gender Diversity, Diversity, Innovative Performance.
2 (green)	Human-Centric Approaches to Creativity in Organizations	11	Leadership, Human, Creativity, Organization, Human Experiment.
3 (blue)	Corporate Governance and Diversity for Sustainable Firm Performance	9	Corporate Governance, Board of Directors, Firm Performance, Sustainability, Racial Diversity.

Source: Author Creation, 2025.

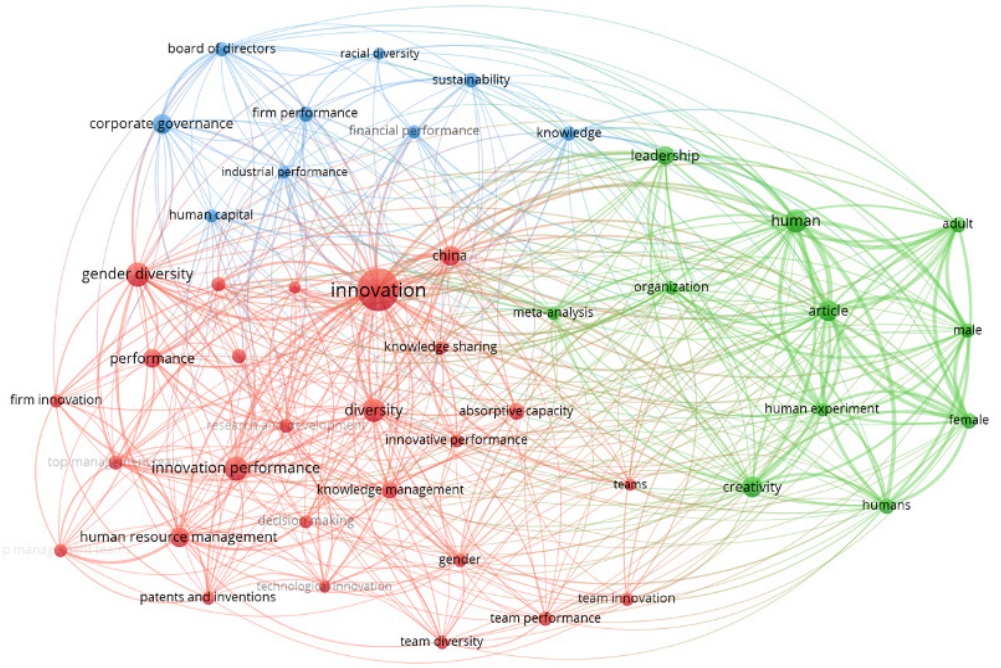


Figure 3: Co-word analysis of Team Diversity and Strategic Performance, Source: Author Creation, 2025.

LIMITATIONS

This study has several limitations worth acknowledging. Although Scopus was deliberately selected because of its broad multidisciplinary coverage, standardised metadata, and compatibility with bibliometric software, relying on a single database may still exclude relevant publications indexed exclusively in Web of Science or other academic databases. Therefore, the findings should be interpreted within the coverage boundaries of Scopus. Additionally, bibliometric techniques capture structural and thematic patterns but cannot explain the contextual or causal mechanisms underlying the diversity performance relationship. The cluster findings are also shaped by citation frequency, meaning research that reports negative or null diversity effects may be underrepresented. Future studies should address these gaps through multi-database searches and complementary qualitative approaches.

FUTURE RESEARCH AVENUES

Building on the findings and limitations of this study, several promising avenues for future research are proposed. First, future studies could employ mixed-method approaches, combining bibliometric mapping with qualitative content analysis, expert interviews, or meta-synthesis to explore the contextual nuances and underlying mechanisms that bibliometric methods alone cannot reveal. For instance, investigating how team diversity translates into strategic outcomes across specific sectors, such as teach startups, healthcare, or public institutions, would allow for contextual depth and practical specificity. Second, researchers may explore less-represented or marginalized perspectives in the literature, such as the role of intersectionality, cultural diversity in non-Western contexts, or the unintended consequences of poorly managed diversity initiatives. These perspectives could challenge dominant paradigms and enrich the conceptual boundaries of diversity-performance research. Third, there is room to integrate emerging technologies such as AI, digital collaboration platforms, and remote team dynamics into future investigations. Understanding how virtual team diversity interacts with algorithmic management, for example, may become increasingly relevant in post-pandemic and Industry 5.0 environments. Finally, future research should consider applying advanced analytics, such as machine learning-based topic modelling or social network analysis, to complement traditional bibliometric methods and offer deeper insights into the structure and diffusion of ideas in this evolving domain.

CONCLUSION

This study provides a comprehensive bibliometric analysis of the research landscape at the intersection of team diversity and strategic performance, uncovering key intellectual structures and emerging conceptual directions. By employing bibliographic coupling and co-word analysis on 940 journal articles retrieved from the Scopus database, the study identified three distinct clusters in each analysis, representing dominant and developing themes in the field. The bibliographic coupling revealed clusters centred on knowledge-based HR practices and innovation, demographic diversity and organizational outcomes, and leadership and cognitive diversity in team dynamics. Meanwhile, co-word analysis highlighted thematic emphases on diversity-driven innovation, human-centric creativity in

organisations, and corporate governance for sustainability. The findings underscore the strategic significance of diversity but as an embedded organizational capability. Moreover, the implications drawn from theoretical and practical domains affirm that effective diversity management is essential for fostering innovation, organizational agility, and long-term performance. Ultimately, this study maps the current state of research and offers a roadmap for future inquiries. By bridging fragmented discourse and proposing interdisciplinary pathways, the research contributes to a more integrated understanding of how team diversity can drive strategic outcomes in an increasingly complex and diverse global environment.

ABBREVIATIONS

VOSviewer: Visualisation of Similarities Viewer; **HRM:** Human Resource Management; **R&D:** Research and Development; **COVID-19:** Coronavirus Disease 2019.

CONFLICT OF INTEREST

The authors declare that there is no conflict of interest.

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Cite this article: Ismail T, Sulistiawan J, Irawan A. Unpacking the Power of Difference: Mapping the Nexus between Team Diversity and Strategic Performance. J Scientometric Res. 2026;15(3):923-34.