

MAPPING THE INTELLECTUAL LANDSCAPE AND EMERGING PARADIGMS OF TRANSFORMATIONAL LEADERSHIP RESEARCH (2021–2025): A GLOBAL BIBLIOMETRIC AND THEMATIC ANALYSIS USING VOSVIEWER

Widyastuti Cahyaningrum¹, Oskar Dousin¹, Suddin Lada¹, and Ahmad Juliana²

¹Faculty of Business, Economics and Accountancy, Universiti Malaysia Sabah, Jalan UMS Kota Kinabalu 88400

²Faculty of Economics and Business, Universitas Borneo Tarakan

E-mail: widyairawan77@gmail.com; odousin@ums.edu.my; suddin@ums.edu.my; ahmadjuliana@borneo.ac.id

ABSTRACT

This study explores the intellectual structure and emerging trends in transformational leadership research from 2021 to 2025 through a global bibliometric and thematic analysis using VOSviewer. Drawing data from Scopus, it identifies key contributors, publication patterns, and thematic clusters. Findings reveal fluctuating research output, peaking in 2023, with Indonesia, China, Malaysia, Vietnam, and the U.S. as leading contributors. Six thematic clusters highlight transformational leadership's roles in innovation, sustainability, empowerment, and performance. The emerging focus on green transformational leadership indicates an interdisciplinary shift toward sustainability. The study concludes with strategic directions for future research on digital and environmental leadership.

Key words: Transformational Leadership; Bibliometric Analysis; VOSviewer; Research Trends; Sustainable Leadership; Knowledge Management; Organizational Innovation

INTRODUCTION

Transformational leadership has become one of the most influential paradigms in organizational research, emphasizing leaders who inspire followers to transcend self-interest for collective goals. Through idealized influence, inspirational motivation, intellectual stimulation, and individualized consideration, transformational leaders foster engagement, creativity, and innovation. This leadership style enhances job satisfaction, trust, and organizational commitment, proving effective across various sectors including business, education, and healthcare.

Recent studies extend its scope beyond performance outcomes, linking transformational leadership with psychological empowerment, resilience, and pro-environmental behavior. The concept of *green transformational leadership* integrates sustainability principles into leadership practices, encouraging ethical decision-making and eco-innovation. Furthermore, organizational culture and knowledge sharing have been identified as mediating mechanisms connecting leadership to innovation and learning outcomes.

However, several research gaps persist. Most studies focus on Western contexts, leaving limited cross-cultural validation in emerging economies. Moreover, boundary conditions—such as technological change and environmental uncertainty—remain underexplored. Empirical work on green transformational leadership is fragmented, and methodological limitations, including cross-sectional designs, restrict causal inference.

To address these gaps, this study maps global research trends in transformational leadership between 2021 and 2025 using bibliometric analysis. By identifying publication patterns, leading authors, institutions, and thematic clusters, it provides a comprehensive overview of intellectual developments. The findings aim to guide future scholarship toward more inclusive, longitudinal, and interdisciplinary explorations of transformational leadership, particularly in digital transformation, sustainability, and adaptive organizational contexts.

The purpose of this study is to close the research gap by systematically mapping the trends and contributions of research on transformational leadership for the 2021–2025 period using a bibliometric approach. Accordingly, the research questions are formulated as follows:

1. What is the trend in the number of annual publications on transformational leadership for the 2021–2025 period?
2. What are the top 10 academic sources publishing the most research on transformational leadership?
3. Which countries are among the top 10 contributors to research on transformational leadership?
4. Which academic affiliations or institutions are among the top 10 most active in transformational leadership research?
5. Who are the top 10 authors in the field of transformational leadership based on citation impact?
6. What are the dominant research themes and their relationships, particularly transformational leadership, as revealed through co-occurrence analysis?

METHOD

Scopus, one of the most referenced academic databases, includes more than 4,015 journals of high impact. It is deemed more complete and trustworthy than other databases such as Web of Science, Google Scholar, as far as bibliometric analysis is concerned. We applied the Scopus Database, which is a global citation database that is comprehensive and independent and covers a wide range of research fields and commonly used by VOS viewer in bibliometric analysis. We found literature written between 2021 and August 25, 2025, with the aid of an advanced search. All of the eligible records' complete records and cited references were exported in plain text format.

RESULTS AND DISCUSSION

Publication Trends (2021–2025)

The bibliometric analysis reveals a fluctuating trajectory in transformational leadership research output between 2021 and 2025. The number of publications increased from 47 in 2021 to a peak of 66 in 2023 before declining sharply to 13 in 2025. This pattern suggests that academic attention to transformational leadership was at its highest during the post-pandemic recovery period, reflecting organizational interest in leadership adaptability, employee engagement, and resilience. The subsequent decline may indicate research fatigue, funding limitations, or a shift in scholarly priorities toward other emerging leadership paradigms, such as digital or sustainable leadership. Similar publication fluctuations have been observed in other post-crisis research cycles, emphasizing the contextual sensitivity of leadership studies.

Dominant Research Domains and Sources

The dominance of the *Business, Management, and Accounting* field—with over 220 publications—underscores that transformational leadership remains central to organizational and managerial discourse. The growing presence of *Social Sciences* and *Decision Sciences* indicates the integration of behavioral and cognitive dimensions into leadership research. Meanwhile, limited contributions from *Environmental Science*, *Psychology*, and *Medicine* suggest that transformational leadership studies are gradually expanding beyond conventional management contexts toward multidisciplinary applications. These findings support Bakker et al. (2023) and Kloutsiniotis et al. (2022), who emphasized the versatility of transformational leadership in addressing complex, cross-sectoral challenges.

Global and Institutional Contributions

Indonesia emerged as the leading contributor with 50 authors, followed by China, Malaysia, Vietnam, and the United States (each with 18 authors). This highlights a notable shift of scholarly production from Western to Asian contexts, suggesting that transformational leadership has gained strong empirical grounding in emerging economies. The growing engagement of universities such as Al-Ahliyya Amman University, the University of North Sumatra, and Erasmus Universiteit Rotterdam reflects an increasingly global research network. The prominence of Southeast Asian and Middle Eastern institutions demonstrates the universal applicability of transformational leadership and signals the democratization of leadership scholarship across diverse cultural settings.

Influential Authors and Citation Impact

Among the most influential contributors, Bakker et al. (2023) and Kaur Bagga et al. (2023) recorded the highest citation counts, underscoring their theoretical and methodological influence in linking transformational leadership to performance and organizational culture. Other highly cited works (Islam et al., 2021; Kloutsiniotis et al., 2022; Rafique et al., 2022) collectively emphasize the mediating roles of trust, psychological empowerment, and human resource management practices. The consistent citation of these studies highlights the convergence of transformational leadership research toward explaining employee well-being, engagement, and innovation. This trend reflects an academic movement from leader-centric to relational and contextual perspectives on leadership effectiveness.

Keyword Co-occurrence and Thematic Clusters

The co-occurrence analysis identified six major thematic clusters representing the intellectual structure of transformational leadership research. Cluster 1 (Hospitality and HRM) reflects leadership's role in enhancing service performance and employee retention. Cluster 2 (Change Management and Public Sector) emphasizes leadership in navigating organizational change and innovation within governmental and healthcare settings. Cluster 3 (Green Transformational Leadership) marks the integration of sustainability and environmental performance, confirming the emergence of eco-conscious leadership research. Cluster 4 (Leadership, Innovation, and SMEs) associates transformational leadership with competitiveness and entrepreneurial success. Cluster 5 (Knowledge Management and Organizational Learning) underscores leadership's contribution to dynamic capabilities, while Cluster 6 integrates adaptive learning and resilience.

The increasing focus on “green transformational leadership” (Tian et al., 2023) and “innovation-driven leadership” indicates that the field has evolved from behavioral descriptions to strategic and sustainability-oriented

frameworks. The clusters collectively demonstrate that transformational leadership is being reframed as a multidimensional construct encompassing ethical, cognitive, and ecological dimensions.

Integrative Discussion

The results demonstrate that transformational leadership research between 2021 and 2025 has undergone significant conceptual expansion. Thematically, it has shifted from traditional performance-oriented approaches toward sustainability, digital adaptation, and human-centered leadership. This aligns with Deng et al. (2023) and Vermeulen et al. (2022), who found that transformational leadership remains a robust predictor of organizational outcomes, even amid evolving workplace dynamics.

Geographically, the expansion of research participation beyond Western contexts underscores the model's cross-cultural adaptability. The bibliometric evidence confirms the consolidation of transformational leadership as a global framework for managing change and fostering innovation. The strong representation from Indonesia and other emerging economies indicates the localization of leadership concepts within diverse cultural and institutional contexts.

Conceptually, the intersection between transformational leadership, green innovation, and psychological empowerment suggests an ongoing integration between leadership theory and sustainability science. As organizations confront climate challenges and technological disruption, transformational leaders are increasingly viewed as catalysts for responsible and adaptive transformation.

Implications and Future Directions

The findings underscore the need for longitudinal and mixed-method approaches to capture the causal dynamics of transformational leadership in complex environments. Future research should explore cross-level models that connect individual leader behavior with organizational performance and societal impact. Moreover, given the rising prominence of “green” and “digital” leadership paradigms, integrating transformational leadership theory with environmental psychology, digital transformation, and ethical governance could provide a richer, more holistic understanding of effective leadership in the 21st century

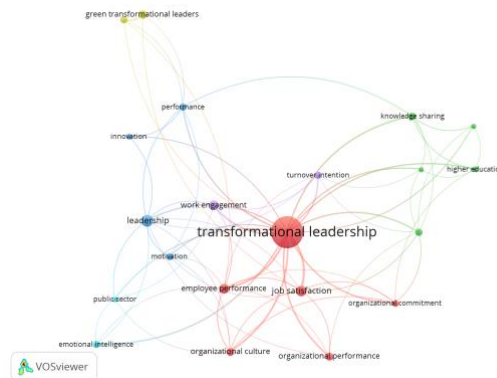


Figure 1: Overlay Visualization On Topic Transformational Leadership

The first cluster (red) focuses on the *hospitality industry*, *human resource management*, and *employee retention*, reflecting the application of transformational leadership within tourism and human capital contexts. The second cluster (green) emphasizes *change management*, *public sector*, and *innovative behavior*, signifying the relevance of transformational leadership to organizational change and innovation in public administration. The third cluster (blue) addresses *green transformational leadership* and *environmental performance*, demonstrating the growing research orientation toward environmentally responsible leadership practices.

Meanwhile, the fourth cluster (yellow) comprises themes such as *leadership*, *innovation*, and *performance*, highlighting the strong linkage between leadership style and organizational outcomes. The fifth cluster (purple) centers on *transformational leadership*, *organizational performance*, and *knowledge management*, underlining the pivotal role of leadership in fostering organizational learning and competitive advantage. Lastly, the sixth cluster connects *organizational learning* with *dynamic capabilities*, pointing to emerging studies on adaptive organizational capacity.

Overall, the overlay visualization indicates that research on transformational leadership has evolved into a multidimensional field encompassing business, environmental, and innovation perspectives. This mapping not only displays the thematic interconnections among clusters but also reflects a notable academic shift—from theoretical exploration toward more contextualized and sustainability-oriented applications of transformational leadership.

Table 1. Co-occurrence analysis of keywords (top 10 keywords in the 5 clusters)

No	Cluster 1 (Red)	Cluster 2 (Green)	Cluster 3 (Blue)	Cluster 4 (Yellow)	Cluster 5 (Purple)
1	Hospitality Industry (14)	Change Management (13)	Green Transformational Leadership (27)	Leadership (55)	Transformational Leadership (280)
2	Hotel (10)	Public Sector (12)	Green Innovation (19)	Performance (22)	Organizational Performance (20)
3	Human Resource (10)	Commitment (11)	Social Exchange Theory (8)	Innovation (13)	Knowledge Management (10)
4	Firm Performance (10)	Affective Commitment (8)	Environmental Performance (7)	Smes (9)	Organizational Learning (6)
5	PL-SEM (9)	Healthcare (8)	Hotel Industry (7)	Sustainability (8)	Organizational Learning Culture (6)
6	Employee Retention (8)	Innovative Behavior (8)	Green Dynamic Capability (6)	Business, Management and Accounting (6)	Competitive Intensity (5)
7	Green Organizational Support (8)	Leadership Style (7)	Pro-Environmental Behavior (6)	Perceived Organizational Support (5)	Dynamic Capabilities (5)
8	Indonesia (8)	Burnout (7)	Work Environment (4)	MSMES (4)	Human Capital (4)
9	Championing Behavior (6)	Change Support (7)	Natural Resource-Based View (4)	Supply Chain Transformational (4)	Competitive Advantage (3)
10	Organizational Behavior (6)	Emotional Exhaustion (7)	Hotel (4)	Training (2)	

Table 1 presents the results of the co-occurrence analysis of keywords related to the topic of *Transformational Leadership*, identifying the top ten keywords within five dominant clusters. This analysis, conducted using VOSviewer, provides insight into the thematic structure and intellectual landscape of research published between 2021 and 2025. Each cluster represents a major research stream that reflects how transformational leadership is conceptualized and applied across various organizational and contextual domains.

Cluster 1 (Red) is dominated by keywords such as *hospitality industry*, *human resource*, *firm performance*, and *employee retention*. This cluster indicates that transformational leadership has been extensively explored in service-oriented sectors, particularly focusing on workforce motivation, performance outcomes, and retention strategies within the hospitality context.

Cluster 2 (Green) includes terms like *change management*, *public sector*, *commitment*, *innovative behavior*, and *burnout*. These keywords highlight research examining how transformational leadership fosters organizational adaptability and psychological resilience among employees during periods of change, especially in public and healthcare institutions.

Cluster 3 (Blue) is characterized by *green transformational leadership*, *green innovation*, *environmental performance*, and *pro-environmental behavior*. This suggests a growing emphasis on sustainability, reflecting the role of transformational leaders in promoting eco-innovation and corporate environmental responsibility.

Cluster 4 (Yellow) focuses on *leadership*, *performance*, *innovation*, and *SMEs*, emphasizing the influence of leadership behavior on organizational competitiveness and innovation capacity, particularly in small and medium enterprises.

Cluster 5 (Purple) features keywords such as *transformational leadership*, *organizational performance*, *knowledge management*, and *organizational learning*, representing the core conceptual framework of the field. This cluster underscores the central role of transformational leadership in enhancing learning culture, dynamic capabilities, and sustainable performance.

Collectively, these clusters demonstrate that transformational leadership research spans multiple dimensions—strategic, behavioral, and environmental—indicating its continuing evolution as a multidisciplinary domain.

CONCLUSION

The research findings lead to the following conclusions:

- 1) There is a positive and significant influence of communication on employee performance at PT Surya Buddi Utama.
- 2) Communication is in the good category, as shown by its indicators.
- 3) Employee performance is in the moderately good category, although there are still aspects that need improvement according to company standards.
- 4) The better the communication established in the work environment, the higher the employee performance in carrying out their duties and responsibilities.

As an implication, the company management is expected to strengthen the internal communication system to be more open, fast, and responsive in order to improve overall employee performance. It is also suggested that the company implement communication training programs for employees to effectively convey information and support the achievement of ISO 9001:2015 quality standards. Future research could consider adding other variables, such as work motivation or job satisfaction, and expanding the number of respondents to obtain a more comprehensive picture of the factors affecting employee performance.

REFERENCES

- Abuhav, I. (2017). *ISO 9001:2015 – A Complete Guide to Quality Management Systems*. CRC Press.
- Asih, T., Wulandari, D., & Prasetyo, H. (2018). Dampak komunikasi terhadap interaksi kerja karyawan. *Jurnal Ilmu Komunikasi*, 6(2), 55–64.
- Chaidir, A., Sari, D., & Nugraha, P. (2023). Pengaruh motivasi dan kepemimpinan terhadap kinerja karyawan. *Jurnal Ilmu Manajemen*, 15(1), 77–89.
- Crismanto, E., & MprocgMgnt. (2018). ISO 9001 sebagai standar sistem manajemen mutu. *Jurnal Sistem Industri*, 24(3), 112–120.
- Daeli, Y., Manullang, R., & Simanjuntak, P. (2024). Komunikasi organisasi dalam meningkatkan motivasi kerja. *Jurnal Administrasi Bisnis*, 10(2), 99–110.
- Djuhartono, R. (2021). Faktor-faktor yang memengaruhi kinerja karyawan. *Jurnal Manajemen SDM*, 9(1), 22–35.
- Fitri, H., Nuraini, D., & Arif, M. (2023). Komunikasi terbuka dan transparansi terhadap motivasi dan kinerja. *Jurnal Administrasi Bisnis*, 9(1), 44–52.
- Fitriani, A., & Khairunisa, L. (2023). Komunikasi interpersonal dalam organisasi modern. *Jurnal Komunikasi Sosial*, 8(1), 77–85.
- Ganyang, R. (2018). Hakikat komunikasi dalam hubungan antarpribadi. *Jurnal Komunikasi Pendidikan*, 3(1), 33–41.
- Hoyl, D. (2017). *ISO 9000 Quality Systems Handbook*. Routledge.
- Kurniadi, D., Pratama, S., & Lestari, M. (2023). Pengaruh komunikasi terhadap kinerja karyawan. *Jurnal Manajemen Bisnis*, 11(2), 65–78.
- Lubis, I., Sari, R., & Abdullah, T. (2022). Dasar-dasar komunikasi organisasi. *Jurnal Ilmu Komunikasi*, 10(2), 123–132.
- Mahadi, R. (2021). Komunikasi pendidikan dan efektivitas penyampaian pesan. *Jurnal Komunikasi Pendidikan*, 5(1), 12–19.
- Mulyani, D. (2021). Metode penelitian kuantitatif: Proses objektif memperoleh data. *Jurnal Ilmu Sosial dan Pendidikan*, 5(3), 201–210.
- Nur, A., & Sutarni, W. (2017). Semangat kerja dan pengaruhnya terhadap kinerja. *Jurnal Manajemen SDM*, 6(2), 88–97.
- Patty, F., & Rahanra, Y. (2025). Faktor-faktor yang memengaruhi kinerja karyawan. *Jurnal Manajemen dan Bisnis*, 17(1), 23–31.
- Raisyifa, F., & Sutarni, W. (2016). Analisis kinerja karyawan berdasarkan peran dan tanggung jawab. *Jurnal Administrasi*, 8(2), 55–63.
- Re rung, R. (2019). Employee engagement dan organizational citizenship behavior. *Jurnal Manajemen Bisnis*, 7(1), 44–53.
- Rizki, D., & Arianto, N. (2024). Komunikasi, motivasi, dan budaya organisasi terhadap kinerja. *Jurnal Ilmu Manajemen*, 12(1), 34–42.
- Rombean, J., Halim, A., & Yusuf, F. (2021). Pentingnya komunikasi efektif dalam organisasi. *Jurnal Ilmu Komunikasi*, 9(2), 122–131.
- Sahir, A. (2022). Metode penelitian sebagai proses penemuan ilmiah. *Jurnal Penelitian Sosial*, 6(1), 55–63.
- Saleh, A., & Sihite, P. (2020). Pengantar komunikasi organisasi. *Jurnal Komunikasi Bisnis*, 4(1), 11–20.
- Saputri, L., & Azzahra, N. (2024). Komunikasi antarindividu dalam penyampaian pesan. *Jurnal Komunikasi Sosial*, 8(1), 77–85.
- Sekaran, U. (2006). *Research Methods for Business*. Wiley.
- Sugiyono. (2017). *Metode Penelitian Kuantitatif, Kualitatif, dan R&D*. Bandung: Alfabeta.
- Sukma, N., & Sutarni, W. (2018). Pengaruh manajemen sumber daya berbasis ISO 9001 terhadap kinerja karyawan. *Jurnal Manajemen SDM*, 6(2), 101–109.
- Tricker, R. (2017). *ISO 9001:2015 Quality Management System Implementation*. Routledge.
- Susanto, H., Prasetyo, B., & Lestari, A. (2025). Komunikasi internal dan implementasi ISO 9001:2015. *Jurnal Sistem Industri*, 13(1), 88–97.
- Zis, M., Prabowo, D., & Handayani, T. (2021). Komunikasi sebagai proses pembentukan makna. *Jurnal Komunikasi Humaniora*, 5(2), 77–86.