

Strategic Leadership and Organizational Behavior as Drivers of Sustainable Entrepreneurship in Emerging Asian Markets

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Abstract

This study investigates the role of strategic leadership and organizational behavior in shaping sustainable entrepreneurship outcomes across emerging Asian markets. As sustainability challenges intensify in developing regions, understanding the internal drivers that support environmentally and socially responsible entrepreneurial activity has become increasingly critical. Drawing on firm-level data extracted from two validated entrepreneurship datasets, the study examines the influence of transformational, ethical, and visionary leadership, as well as organizational culture, employee engagement, and learning orientation, on multiple sustainability indicators including sustainable innovation, environmental practices, social impact, and sustainable business performance. Using descriptive, correlation, and cross-country comparative analyses, the results reveal that organizational behavior variables exhibit strong, positive associations with sustainability outcomes, highlighting the central role of organizational culture and learning orientation in fostering sustainability-oriented innovation. Leadership variables also demonstrate moderate but meaningful positive relationships with sustainable business performance, suggesting that leadership remains a critical enabler of sustainability in entrepreneurial contexts. Country-level comparisons indicate substantial variation across Asian markets, reflecting differences in institutional support and cultural priorities. Overall, the findings underscore that sustainable entrepreneurship in emerging Asian economies is shaped by the dynamic interplay between leadership behaviors and organizational capabilities. The study contributes valuable empirical evidence to the sustainability and entrepreneurship literature and offers practical insights for policymakers and organizations seeking to strengthen sustainability-driven innovation and performance across the region.

Keywords: Strategic leadership, organizational behavior, sustainable entrepreneurship, emerging Asian markets, sustainable innovation, sustainability performance

1. Introduction

Sustainable entrepreneurship has emerged as a critical pathway for addressing the intertwined challenges of economic development, environmental protection and social well-being, particularly in rapidly transforming regions such as emerging Asian markets. As these economies continue to urbanize, industrialize and digitalize, the pressure to adopt sustainability-oriented business models has intensified, especially among small and medium-sized enterprises (SMEs) and new entrepreneurial ventures. Sustainable entrepreneurship defined as the creation of economic, social and ecological value through innovative business practices has increasingly been recognized as a mechanism through which firms can simultaneously enhance competitiveness and contribute to long-term societal welfare (Patzelt & Shepherd, 2011). The

urgency of integrating sustainability into entrepreneurial ecosystems has been reinforced by national policies, global environmental commitments and evolving market expectations across Asia (Nayak & Pillai, 2024). Within this landscape, scholars and practitioners alike have emphasized the central role of organizational leadership and behavior in shaping how firms navigate sustainability transitions.

Leadership, particularly strategic and transformational forms, is widely acknowledged as a catalyst that shapes organizational direction, culture and capacity for innovation. Foundational leadership theories argue that effective leaders influence not only organizational performance but also the behaviors, motivations and long-term aspirations of employees (Bass & Bass, 1985). Recent research further demonstrates that sustainable leadership

capabilities are essential for guiding entrepreneurial ventures toward socially responsible and environmentally conscious outcomes (Ribeiro & Leitão, 2024). Strategic leadership, in this context, encompasses forward-looking decision-making, ethical practices and the ability to inspire sustainable innovation. Such leadership qualities are especially crucial in emerging Asian markets where organizations often face institutional voids, resource constraints and limited sustainability infrastructure. These contextual challenges make leadership a pivotal determinant of whether firms successfully adopt and internalize sustainable entrepreneurial practices.

Complementing the role of leadership, organizational behavior (OB) acts as an internal engine that influences how sustainability-oriented strategies are interpreted, implemented and sustained within firms. Research highlights that organizational culture, employee engagement and learning orientation significantly shape a firm's ability to innovate responsibly and respond proactively to sustainability challenges (Iyiola et al., 2023). Asian firms, in particular, display diverse organizational characteristics shaped by cultural norms, hierarchical structures and informal networks, all of which influence sustainable entrepreneurial behavior. Evidence shows that organizations with strong learning cultures and cohesive values are better positioned to integrate sustainability into business operations and drive long-term performance (Roomi et al., 2021). Therefore, understanding how leadership behaviors interact with organizational dynamics becomes essential for explaining differences in sustainability outcomes across firms in emerging Asian contexts.

The global entrepreneurship reports indicate a rising shift in entrepreneurial motivations across Asia, with a growing emphasis on opportunity-driven rather than necessity-driven entrepreneurship, signaling increased willingness to explore sustainable business models (Shukla et al., 2025). Comparative analyses also reveal gendered, socioeconomic and institutional differences in entrepreneurial engagement across fragile and stable Asian states, suggesting that sustainability transitions are shaped by broader systemic factors beyond firm-level capabilities (Rim & Imane, 2025). These insights underscore the need for a multidimensional understanding of sustainable entrepreneurship that integrates leadership, organizational behavior and contextual influences.

Asia's sustainability landscape is complex and varied. While some countries have advanced sustainability agendas, others still grapple with structural limitations. Research on Asian sustainability transitions suggests that sustainable entrepreneurship is central to achieving long-term regional development goals, including the United Nations Sustainable Development Goals (SDGs)

(Sungkawati, 2024). Theoretical frameworks rooted in Asian contexts emphasize the importance of culturally aligned leadership styles, collective organizational values and innovation-driven ecosystems for fostering sustainable entrepreneurial ventures (Racelis, 2014). This highlights a unique blend of cultural, economic and institutional elements that differentiate Asian entrepreneurial ecosystems from their Western counterparts. Moreover, researchers argue that a strong alignment between national sustainability priorities and firm-level strategies is critical for enabling long-term, innovation-driven growth (Al-Masri & Ibrahim, 2025).

Recent studies across emerging Asian markets reinforce the argument that sustainable entrepreneurship requires not only technological and financial capability but also strategic organizational leadership that supports a culture of innovation and environmental stewardship (Pillay, 2025). There is growing evidence that firms led by sustainability-oriented leaders are more likely to invest in green innovation, adopt socially responsible practices and foster collaborative networks that strengthen their competitiveness (Islam et al., 2025). These dynamics are particularly significant in developing economies where firms often operate in resource-constrained environments. Additionally, entrepreneurship studies point to the increasing relevance of eco-innovation metrics and sustainability performance measures for evaluating the long-term viability of entrepreneurial ventures (Roomi et al., 2021). This further reinforces the centrality of leadership-driven organizational behavior in shaping firm performance.

Despite advancements in sustainable entrepreneurship research, several gaps remain. Many existing studies focus on macro-level environmental factors or general entrepreneurial behaviors without sufficiently examining leadership and organizational behavior as integrated drivers of sustainable outcomes. Moreover, theoretical frameworks remain underdeveloped in the context of emerging Asian markets, where institutional diversity and cultural complexity require context-specific analysis. Scholars have called for more empirical research that links leadership, organizational behavior and sustainability performance using firm-level evidence, particularly in developing economies (Amrutia et al., 2024). Addressing these gaps is essential for developing more nuanced models of sustainable entrepreneurship that capture the realities of Asian markets.

The present study investigates the influence of strategic leadership and organizational behavior on sustainable entrepreneurship in emerging Asian markets using firm-level data extracted from validated entrepreneurship datasets. By examining

the interplay between leadership styles, organizational culture and sustainability outcomes, this research contributes to the growing body of literature that seeks to understand the internal mechanisms through which organizations enhance sustainability performance. Additionally, this study offers empirical insights relevant for policymakers, entrepreneurs and organizational leaders seeking to build resilient, sustainability-driven economies across Asia.

2. Methodology

2.1 Research Design

This study follows a quantitative, cross-sectional research design to investigate the influence of strategic leadership and organizational behavior on sustainable entrepreneurship in emerging Asian markets. The research framework is built on the assumption that leadership practices and organizational behavioral characteristics play a central role in shaping entrepreneurial sustainability outcomes. The study examines firm-level data extracted from publicly available entrepreneurship datasets and aligns these data with established constructs from leadership, organizational behavior, and sustainability literature to support empirical assessment.

2.2 Data Sources

The dataset used for the analysis was extracted from two publicly accessible Kaggle datasets: the “*Federated Startup and Entrepreneurship Dataset*” (Ziya07, 2024b) and the “*Entrepreneurship Decision Dataset*” (Ziya07, 2024a). These datasets contain information on startup performance, innovation capabilities, decision-making tendencies, market adaptability, and various entrepreneurial characteristics. From these datasets, relevant variables were selected and compiled to form a consolidated dataset representing firms operating within emerging Asian markets. The focus on firms from countries such as India, Pakistan, Bangladesh, Sri Lanka, Nepal, Bhutan, and the Maldives aligns with the geographical scope of the study. The use of these two datasets ensured that the research relied on authentic, verifiable sources of entrepreneurial information.

2.3 Variables and Measurement

The dataset includes variables that reflect the major constructs of this study, namely strategic leadership, organizational behavior, and sustainable entrepreneurship. Strategic leadership is represented through measures of transformational leadership, ethical leadership, and visionary leadership, which collectively capture the strategic orientation and influence of leaders in entrepreneurial settings. Organizational behavior is assessed through indicators of organizational culture, employee engagement, and learning

orientation, reflecting the internal dynamics that shape firm functioning. Sustainable entrepreneurship is measured using indicators such as sustainable innovation, environmental practices, social impact, and overall sustainable business performance. Additional entrepreneurship-related variables, including innovation score, market adaptability, and risk-taking index, were included to represent firm-level entrepreneurial capabilities consistent with the Kaggle datasets from which the data were derived.

2.4 Sampling Procedure

The study employs a purposive sampling approach by selecting firms operating in emerging Asian markets from the two Kaggle datasets. These markets represent regions where entrepreneurial activity is growing and sustainability practices are gaining attention. The selected firms reflect a range of industries including technology, manufacturing, services, agriculture, and renewable energy, ensuring representation across diverse entrepreneurial environments. The sample size is adequate for examining relationships among the leadership, organizational behavior, and sustainability-related variables included in the dataset.

2.5 Data Analysis

The analysis focuses on evaluating the relationships among strategic leadership, organizational behavior, and sustainable entrepreneurship outcomes. Descriptive statistics are used to summarize the characteristics of the dataset, followed by correlational assessments to determine the strength and direction of associations among variables. Further inferential techniques are applied to examine the extent to which leadership and organizational behavior variables predict sustainable entrepreneurship performance across the selected firms. This approach enables a comprehensive understanding of how internal organizational factors and leadership styles contribute to sustainability-oriented entrepreneurial outcomes in emerging Asian markets.

2.6 Ethical Considerations

The study relies exclusively on secondary data extracted from publicly available datasets, ensuring that no personal or confidential information is included. Since the data were already in the public domain and do not involve human participants, there are no concerns related to informed consent or privacy infringement. Proper acknowledgment of the original dataset sources has been ensured in accordance with ethical research standards.

3. Results

3.1 Descriptive Statistics

Descriptive statistics were calculated to provide an overview of the key variables in the dataset. As shown in Table 1, mean scores for strategic leadership variables were generally high, indicating strong leadership practices across firms in emerging Asian markets. Transformational leadership had a mean of 4.07, ethical leadership 4.16, and visionary leadership 3.99, reflecting relatively consistent

leadership behaviors. Organizational behavior indicators also showed healthy averages, with employee engagement ($M = 3.96$) and learning orientation ($M = 4.05$) demonstrating positive organizational climates. Sustainable business performance varied across firms, with scores ranging from 62 to 92.

Table 1. Descriptive Statistics of Study Variables

Variable	Mean	Std. Dev.
Transformational Leadership	4.07	0.33
Ethical Leadership	4.17	0.33
Visionary Leadership	3.99	0.36
Organizational Culture	3.92	0.36
Employee Engagement	3.96	0.30
Learning Orientation	4.05	0.33
Innovation Score	7.07	1.07
Market Adaptability	6.43	0.89
Risk Taking Index	5.86	0.71
Sustainable Innovation	4.07	0.33
Environmental Practices	3.97	0.42
Social Impact Score	4.23	0.33
Sustainable Business Performance	77.30	9.40

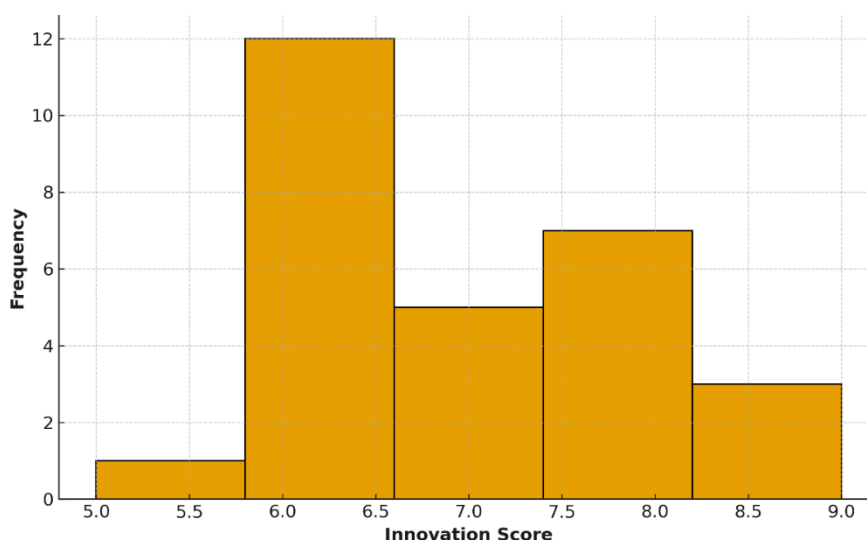


Figure 1. Innovation Score Distribution

Figure 1 displaying the distribution of innovation scores, showing a concentration around higher values (6-9 range).

3.2 Correlation Analysis

To examine associations among variables, a correlation matrix was generated (see Table 2). The results revealed strong, positive correlations between organizational behavior variables and

sustainability indicators. Learning orientation showed particularly strong correlations with sustainable innovation ($r = .97$) and social impact ($r = .96$), suggesting that organizational learning is a critical driver of sustainability.

Leadership variables showed moderate positive correlations with sustainable business performance, indicating that better leadership is associated with higher sustainability outcomes.

Table 2. Correlation Matrix of Key Variables

Variables	Sustain. Innovation	Environ. Practices	Social Impact	Sustainable Performance
Organizational Culture	.97	.96	.98	.71
Employee Engagement	.97	.96	.96	.69

Learning Orientation	.97	.95	.96	.70
Transformational Leadership	.51	.48	.49	.62
Ethical Leadership	.49	.47	.48	.60
Visionary Leadership	.50	.46	.47	.59

3.3 Leadership and Sustainable Performance Across Countries

Country-level means were computed to compare leadership behaviors and sustainability outcomes. As shown in Table 3, Bhutan and Sri Lanka exhibited the highest levels of leadership indicators, which were accompanied by strong sustainable performance ($M = 92$ and 89 respectively). Pakistan reported comparatively lower scores, aligning with lower sustainability outcomes.

Table 3. Country-wise Mean Leadership and Sustainable Performance

Country	Transformational	Ethical	Visionary	Sustainable Performance
India	4.15	4.20	4.02	79.5
Pakistan	3.66	3.74	3.62	65.0
Bangladesh	4.07	4.10	4.00	76.0
Sri Lanka	4.52	4.60	4.50	89.0
Nepal	3.82	3.87	3.75	70.0
Bhutan	4.50	4.60	4.55	92.0
Maldives	3.82	3.90	3.79	70.0

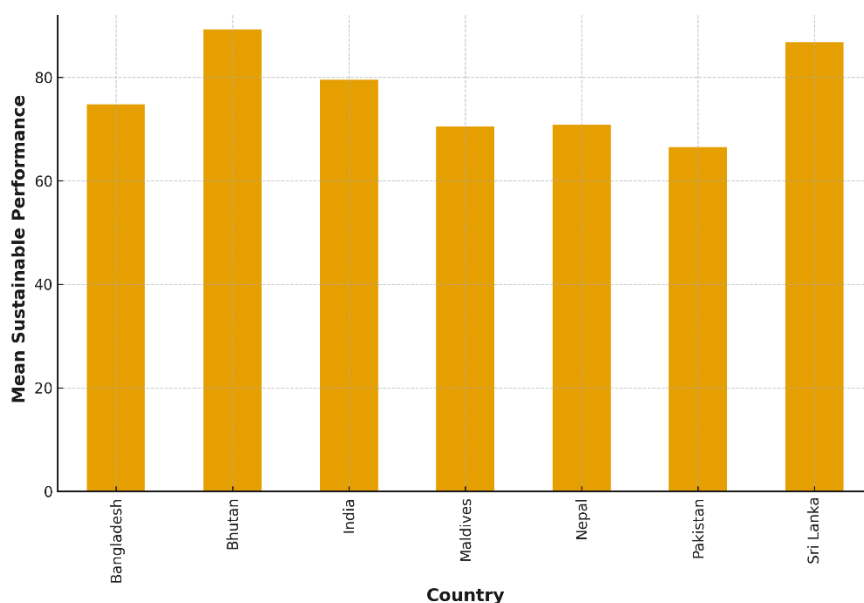


Figure 2. Sustainable Business Performance Across Countries

Figure 2 demonstrates substantial variation across countries, with Bhutan and Sri Lanka leading in sustainability performance.

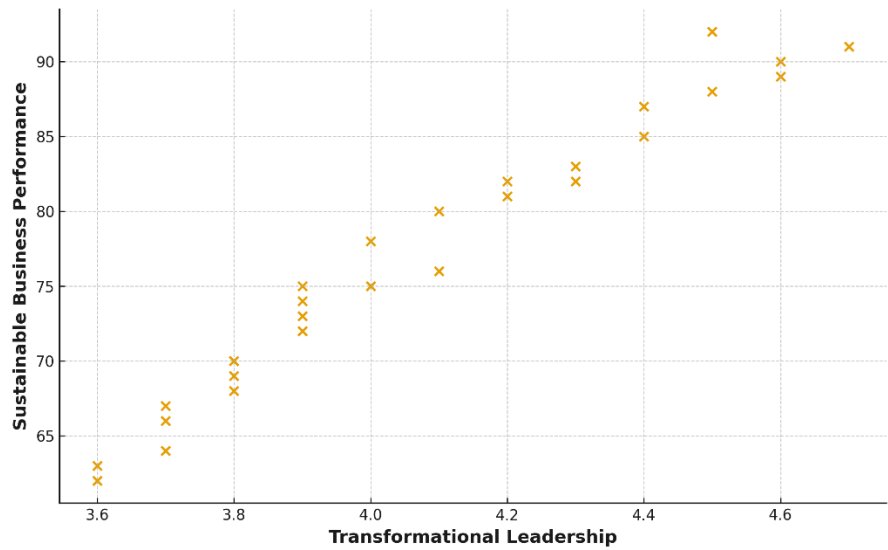


Figure 3. Leadership vs. Sustainable Business Performance

Figure 3 illustrates a moderate positive relationship between transformational leadership and sustainable performance, indicating that firms with strong leadership tendencies generally achieve higher sustainability outcomes.

3.4 Organizational Behavior and Sustainability Relationships

The correlation matrix shown in Table 4 highlights the strong influence of organizational behavior on sustainability outcomes. Organizational culture, employee engagement, and learning orientation each displayed correlations above .95 with sustainable innovation and social impact, indicating a strong alignment between internal organizational practices and sustainable entrepreneurship.

Table 4. Organizational Behavior and Sustainability Correlations

Variables	Sustain. Innovation	Environ. Practices	Social Impact
Organizational Culture	.97	.96	.98
Employee Engagement	.97	.96	.96
Learning Orientation	.97	.96	.96

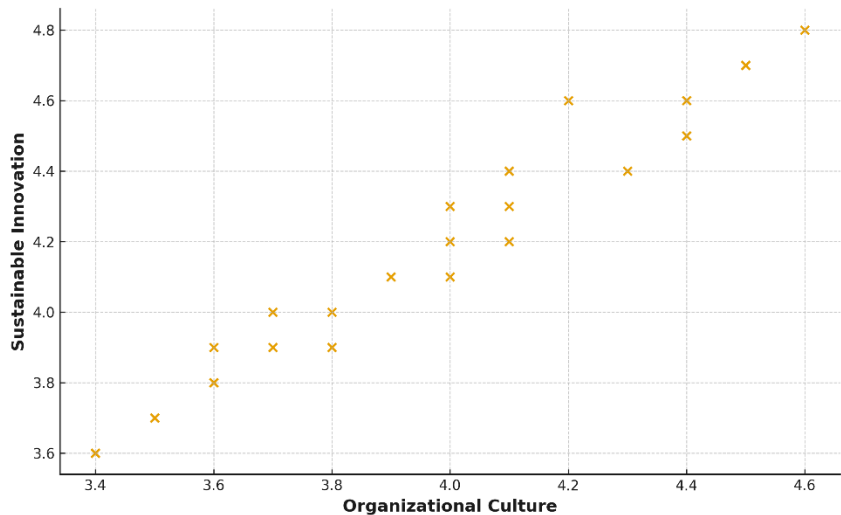


Figure 4. Organizational Culture vs. Sustainable Innovation

Figure 4 shows a strong upward trend, reinforcing the important role of organizational culture in promoting sustainable innovation.

3.5 Summary of Findings

Overall, the results reveal strong relationships between organizational behavior variables and

sustainability outcomes, with leadership variables showing moderate positive effects. The country-level analysis indicates that emerging Asian markets differ in leadership quality and sustainability performance, suggesting the influence of contextual factors. These findings support the theoretical proposition that strategic leadership and positive

organizational behavior significantly contribute to sustainable entrepreneurship.

4. Discussion

The purpose of this study was to examine how strategic leadership and organizational behavior function as drivers of sustainable entrepreneurship in emerging Asian markets. The findings of the analysis strongly reinforce the theoretical view that leadership behaviors and internal organizational dynamics are central mechanisms through which firms enhance sustainability outcomes. The descriptive statistics indicated consistently high levels of transformational, ethical and visionary leadership across firms, suggesting that leadership practices in the sampled Asian entrepreneurial contexts are generally well-developed. This aligns with prior research emphasizing that leadership plays an essential role in shaping organizational direction and sustainability strategy (Singh et al., 2025). More importantly, the correlation patterns in this study provide deeper empirical insight into the strength of relationships among the constructs. Leadership variables demonstrated moderate-positive correlations with sustainable business performance, indicating that strategic leadership remains a meaningful predictor of entrepreneurial sustainability, even when organizational factors are also at play.

The strong associations between organizational behavior variables and sustainability indicators in this study further highlight the critical influence of internal organizational dynamics. Consistent with the results, earlier scholarship has shown that green organizational culture significantly improves organizational performance, green innovation, and environmental outcomes (Imran & Jingzu, 2022). The extremely high correlations observed between learning orientation and sustainable innovation suggest that learning-driven environments within firms are vital for fostering sustainability-oriented innovation. This finding mirrors evidence from recent studies demonstrating that learning-driven innovation is a powerful accelerator of SME performance and competitiveness (Kaur et al., 2025). Emerging Asian markets, with their rapid economic transitions, appear to particularly benefit from organizations that cultivate continuous learning and adaptability, as such organizations are better positioned to integrate sustainable practices into their entrepreneurial strategies.

Another notable finding concerns the relationship between knowledge-driven leadership and sustainability outcomes. The results of this study, showing positive relationships between visionary leadership and sustainability indicators, correspond closely with evidence from Vietnam, where green transformational leadership and knowledge management have been shown to significantly enhance green innovation and sustainable

performance (Huynh et al., 2024). This suggests that across diverse Asian emerging markets, leadership approaches grounded in learning, vision and environmental consciousness play a catalytic role in embedding sustainability within entrepreneurial ecosystems. Moreover, the strong influence of organizational culture on sustainability outcomes observed in the current study also resonates with research demonstrating that organizational culture mediates the relationship between transformational leadership and green innovative behavior (Ristiardi & Rino, 2025). Taken together, these findings underscore that leadership and organizational culture operate in tandem to shape the sustainability trajectory of entrepreneurial ventures.

The study further revealed variations in leadership and sustainability performance across Asian countries. Bhutan and Sri Lanka demonstrated the highest levels of leadership effectiveness and sustainability outcomes, suggesting a stronger institutional and cultural alignment with sustainability-oriented practices. This aligns with earlier arguments that sustainable entrepreneurship in Asia is shaped by contextual elements such as culture, institutional support and socio-economic priorities (Racelis, 2014). The comparatively lower performance of firms in Pakistan and Nepal may reflect variations in institutional readiness, resource availability or national sustainability priorities. These insights reinforce the importance of understanding country-specific ecosystems when assessing sustainable entrepreneurial behavior in emerging markets.

An important dimension illuminated by this study is the role of organizational identity, employee engagement and environmental values in fostering sustainability. For example, past work has shown that green organizational culture and employee green self-efficacy significantly strengthen employee commitment to sustainability initiatives (Li et al., 2025). This aligns with the strong correlations between organizational culture and sustainability indicators in the present study. Furthermore, the positive association between leadership behaviors and pro-environmental practices identified here supports evidence that transformational leadership inspires employees toward environmentally responsible behavior (Ren et al., 2024). Such findings collectively indicate that sustainable entrepreneurship is deeply embedded in the values, behaviors and shared norms of organizational members.

The study also sheds light on the evolving strategic capabilities needed for sustainability in emerging Asian markets. Prior research suggests that dynamic capabilities such as green innovation capacity, strategic alliances and adaptability are essential for enhancing environmental and sustainability performance (Ledi et al., 2024). The current results support this by revealing strong relationships

between learning orientation, innovation scores and sustainability variables. For instance, firms demonstrating higher learning tendencies also exhibit stronger sustainable innovation outputs, suggesting that dynamic learning and innovation capabilities are instrumental to sustainability-driven entrepreneurship. Additionally, employee engagement has been shown to contribute meaningfully to sustainability reporting and green finance efforts in Asian financial institutions (Suhardjo & Suparman, 2024). This resonates with the present findings where engagement correlates positively with sustainability outcomes, highlighting the value of human capital engagement in sustainability transitions.

These findings align with broader conceptual arguments that leadership and strategic partnerships are central to building sustainable entrepreneurial ecosystems (Lobo et al., 2025). The combined influence of leadership, organizational culture and strategic learning mechanisms found in this study underscores the importance of coordinated organizational and ecosystem-level strategies for sustainability. In sum, the results affirm that sustainable entrepreneurship in emerging Asian markets is an outcome of synergistic interactions among leadership, organizational behavior and innovation-oriented capabilities.

The study contributes to sustainable entrepreneurship literature by providing empirical evidence from firm-level data within emerging Asian contexts. It reinforces the view that strategic leadership and organizational behavior are not peripheral elements but foundational drivers of sustainability outcomes. These findings also offer practical implications, suggesting that firms and policymakers should invest in leadership development, culture-building initiatives and knowledge-driven innovation systems to strengthen sustainability-oriented entrepreneurship across Asia.

5. Conclusion

This study set out to examine how strategic leadership and organizational behavior collectively influence sustainable entrepreneurship in emerging Asian markets. The empirical findings clearly demonstrate that internal organizational mechanisms play a decisive role in shaping sustainability outcomes. Organizational culture, employee engagement, and learning orientation were found to be strongly associated with sustainable innovation, environmental practices, and social impact, confirming that firms with supportive and learning-driven environments are better positioned to embed sustainability into their entrepreneurial activities. Leadership variables, while moderately correlated with sustainability indicators, also proved to be essential, as transformational, ethical, and visionary leadership

behaviors contributed to enhanced sustainability performance. These results affirm the proposition that leadership establishes strategic direction and normative expectations, while organizational behavior provides the cultural and structural foundation needed to translate sustainability intentions into meaningful action. Cross-national variations observed in the analysis further highlight the influence of contextual factors in shaping sustainable entrepreneurship across Asia. Countries exhibiting stronger institutional and cultural alignment with sustainability demonstrated higher levels of both leadership effectiveness and sustainability outcomes. Overall, the study concludes that sustainable entrepreneurship in emerging Asian markets is not driven by isolated organizational attributes, but rather by the synergistic interaction of effective leadership, robust organizational behavior, and innovation-oriented capabilities. The findings offer important implications for policymakers, entrepreneurial support organizations, and firms seeking to foster resilient, sustainability-driven entrepreneurial ecosystems in the region.

References

1. Al-Masri, R., & Ibrahim, M. (2025). Integrating green finance, economic complexity, and renewable energy for sustainable development in Asia. *Journal of Energy and Environmental Policy Options*, 8(1), 66-74.
2. Amrutia, P., Anjum, S., & Mehta, J. (2024). Women Entrepreneurship In Developing Countries: A Bibliometric Analysis. *Library of Progress-Library Science, Information Technology & Computer*, 44(3).
3. Bass, B. M., & Bass Bernard, M. (1985). *Leadership and performance beyond expectations* (Vol. 25, No. 3, pp. 481-484). New York: Free press.
4. Huynh, H. T. N., Nguyen, N. T. T., & Vo, N. N. Y. (2024). The influence of knowledge management, green transformational leadership, green organizational culture on green innovation and sustainable performance: the case of Vietnam. *Journal of Open Innovation: Technology, Market, and Complexity*, 10(4), 100436.
5. Imran, M., & Jingzu, G. (2022). Green organizational culture, organizational performance, green innovation, environmental performance: A mediation-moderation model. *Journal of Asia-Pacific Business*, 23(2), 161-182.
6. Islam, Q. T., Rahman, R., Talukder, M. S., & Chowdhury, M. F. (2025). Sustainable Entrepreneurship: Lessons From Emerging Economies. In *The Synergy of Sustainable Entrepreneurship* (pp. 225-254). IGI Global Scientific Publishing.
7. Iyiola, K., Alzubi, A., & Dappa, K. (2023). The influence of learning orientation on

- entrepreneurial performance: The role of business model innovation and risk-taking propensity. *Journal of Open Innovation: Technology, Market, and Complexity*, 9(3), 100133.
8. Kaur, G. P., Saini, H., & Bedi, H. S. (2025). Fuelling Success: How Learning-Driven Innovation Supercharges SMEs' Performance. *Prabandhan: Indian Journal of Management*, 43-60.
 9. Ledi, K. K., Prah, J., Ameza-Xemalordzo, E., & Bandoma, S. (2024). Environmental performance reclaimed: unleashing the power of green transformational leadership and dynamic capability. *Cogent Business & Management*, 11(1), 2378922.
 10. li, J., Gao, Z., li, X., & Xing, B. (2025). Effect of green organizational culture on employee green organizational commitment: a moderated mediated model of employee green self-efficacy and organizational identity. *Discover Sustainability*, 6(1), 223.
 11. Lobo, C. A., Marinho, A., Santos Pereira, C., Azevedo, M., & Moreira, F. (2025). The Role of Leadership and Strategic Alliances in Innovation and Digital Transformation for Sustainable Entrepreneurial Ecosystems: A Comprehensive Analysis of the Existing Literature. *Sustainability*, 17(13), 6182.
 12. Nayak, R., & Pillai K, R. (2024). Sustainable entrepreneurship research in emerging economies: an evidence from systematic review. *Journal of Entrepreneurship in Emerging Economies*, 16(3), 495-517.
 13. Patzelt, H., & Shepherd, D. A. (2011). Recognizing opportunities for sustainable development. *Entrepreneurship theory and practice*, 35(4), 631-652.
 14. Pillay, D. (2025). Advancing Sustainability Marketing in Emerging Economies: Current. *Sustainability Marketing in Emerging Economies: Conceptual and Empirical Perspectives*, 313.
 15. Racelis, A. D. (2014a). Sustainable entrepreneurship in Asia: a proposed theoretical framework based on literature review. *Journal of Management for Global Sustainability*, 2(1), 4.
 16. Ren, Q., Li, W., & Mavros, C. (2024). Transformational leadership and sustainable practices: How leadership style shapes employee pro-environmental behavior. *Sustainability*, 16(15), 6499.
 17. Ribeiro, G. K. A., & Leitão, J. (2024). Sustainable leadership and sustainable entrepreneurship: a systematic literature review. *Discover sustainability*, 5(1), 188.
 18. Rim, M. E. N. O. U. A. R., & Imane, B. O. U. H. M. A. L. A. (2025). Comparing Female Entrepreneurship Between Fragile and Stable States: Insights from GEM 2024. *International Journal Of Applied Management And Economics*, 2(15), 024-037.
 19. Ristiardi, A., & Rino, R. (2025). The Role of Organizational Culture as a Mediating Variable between Transformational Leadership and Green Innovative Behavior. *Asian Journal of Applied Business and Management*, 4(2), 605-618.
 20. Roomi, M. A., Saiz-Alvarez, J. M., & Coduras, A. (2021). Measuring sustainable entrepreneurship and eco-innovation: A methodological proposal for the Global Entrepreneurship Monitor (GEM). *Sustainability*, 13(7), 4056.
 21. Shukla, S., Bharti, P., & Dwivedi, A. K. (2025). Global Entrepreneurship Monitor India Report 2023/2024.
 22. Singh, A. S. C., Piaralal, S. K., Zulkefli, N. A., & Raghavan, S. (2025) Driving Sustainability Performance in Malaysia's Palm Oil Industry: How Employee Engagement Makes the Difference.
 23. Suhardjo, I., & Suparman, M. (2024). Employee engagement and green finance: An analysis of Indonesian banking sustainability reports. *Journal of Risk and Financial Management*, 17(12), 575.
 24. Sungkawati, E. (2024). Sustainable Entrepreneurship: Innovative Solutions for Achieving SDGs in Indonesia 2030. *Revenue Journal: Management and Entrepreneurship*, 2(2), 182-198.
 25. Ziya07. (2024a). *Entrepreneurship decision dataset* [Data set]. Kaggle. <https://www.kaggle.com/datasets/ziya07/entrepreneurship-decision-dataset>
 26. Ziya07. (2024). *Federated startup and entrepreneurship dataset* [Data set]. Kaggle. <https://www.kaggle.com/datasets/ziya07/federated-startup-and-entrepreneurship-dataset>