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Determinants of ESG Performance: The Roles of Digital Transformation, Green Innovation, Environmental Leadership, And Sustainable Organizational Culture

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ABSTRACT: Environmental, social, and governance (ESG) performance has emerged as a central strategic concern for firms seeking long-term sustainability and competitive advantage in increasingly dynamic and stakeholder-oriented business environments. Despite the growing attention devoted to ESG-related practices, the mechanisms and organizational factors influencing ESG performance remain insufficiently explored, particularly in emerging economies. Drawing on the resource-based view, dynamic capability theory, stakeholder theory, and organizational culture theory, this study develops and empirically examines an integrated framework explaining the determinants of ESG performance. Specifically, the study investigates the effects of digital transformation, green innovation, environmental leadership, and sustainable organizational culture on ESG performance. The study contributes to the sustainability and ESG literature in several important ways. First, it integrates technological, innovation, leadership, and cultural perspectives into a unified framework explaining ESG performance. Second, it highlights the strategic importance of organizational capabilities and sustainability-oriented leadership in improving ESG outcomes. The findings provide important implications for managers, policymakers, and researchers seeking to enhance corporate sustainability and responsible business practices.

KEYWORDS: ESG performance; Digital transformation; Green innovation; Environmental leadership; Sustainable organizational culture; Sustainability; Vietnam.

1. INTRODUCTION

Over the past two decades, environmental, social, and governance (ESG) performance has evolved from a peripheral corporate concern into a central strategic priority shaping organizational legitimacy, competitiveness, and long-term sustainability. Increasing pressure from governments, investors, customers, regulators, employees, and civil society has compelled organizations to integrate ESG considerations into strategic decision-making processes. ESG performance is now widely recognized as a multidimensional indicator reflecting firms' commitment to sustainable development, ethical governance, environmental responsibility, and social accountability. The growing significance of ESG performance can be attributed to multiple global challenges, including climate change, environmental degradation, social inequality, resource scarcity, and increasing stakeholder expectations regarding corporate responsibility. Firms are increasingly expected not only to generate financial returns but also to contribute positively to society and environmental sustainability. Consequently, ESG performance has become a critical benchmark used by investors, regulators, and stakeholders to evaluate organizational sustainability and long-term value creation.

Prior studies suggest that strong ESG performance improves organizational reputation, stakeholder trust, financial performance, operational resilience, and long-term competitiveness (Friede et al., 2015). Firms with superior ESG performance often experience lower capital costs, enhanced investor confidence, stronger customer loyalty, and improved regulatory relationships. Accordingly, understanding the determinants of ESG performance has become an important research priority in management, sustainability, and organizational studies. Although the ESG literature has expanded rapidly in recent years, the mechanisms and organizational factors influencing ESG performance remain insufficiently understood. Existing research has primarily focused on financial outcomes of ESG practices or external institutional drivers such as regulation and stakeholder pressure. Comparatively limited attention has been devoted to internal organizational capabilities and strategic resources that enable firms to achieve superior ESG performance. Among these organizational capabilities, digital transformation has emerged as a critical strategic factor influencing sustainability outcomes. Digital transformation refers to the integration of digital technologies into organizational processes, structures, and business models to improve organizational effectiveness and value creation (Vial, 2019). Technologies such as artificial intelligence (AI), cloud computing, Internet of Things (IoT), blockchain, and big data analytics enable organizations to improve operational efficiency, enhance information transparency, optimize resource utilization, and strengthen sustainability management. Recent studies indicate that digital transformation contributes positively to ESG performance by improving environmental monitoring, operational transparency, stakeholder engagement, and sustainability-oriented decision-making (Lyu et al., 2025). Digital technologies facilitate data-driven environmental management, improve energy efficiency, reduce waste generation, and enhance supply chain sustainability. However, despite growing interest in digital transformation and sustainability, empirical evidence regarding its impact on ESG performance remains limited, particularly in emerging economies.

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Another important factor influencing ESG performance is green innovation. Green innovation refers to environmentally sustainable innovations involving eco-friendly products, cleaner production processes, energy-efficient technologies, and environmentally responsible managerial systems (Chen, 2008). Green innovation enables firms to reduce environmental impacts while simultaneously improving operational efficiency and competitive advantage. Previous studies demonstrate that green innovation positively affects environmental performance, resource efficiency, and sustainability outcomes (Xie et al., 2019). Furthermore, green innovation contributes to ESG performance by reducing emissions, enhancing social legitimacy, and improving corporate governance practices related to sustainability management.

In addition to technological and innovation-related factors, leadership plays a crucial role in shaping organizational sustainability strategies and ESG commitment. Environmental leadership refers to leadership behaviors emphasizing environmental responsibility, sustainability orientation, and ethical decision-making. Leaders strongly influence organizational values, strategic priorities, and employee behaviors. Environmentally responsible leaders are more likely to promote sustainability initiatives, allocate resources toward ESG practices, and foster organizational commitment to environmental responsibility.

Moreover, sustainable organizational culture represents another critical determinant of ESG performance. Organizational culture influences employee values, norms, attitudes, and behaviors. Sustainable organizational culture reflects shared organizational beliefs and practices supporting environmental responsibility, ethical conduct, stakeholder orientation, and long-term sustainability. Organizations characterized by strong sustainability-oriented cultures are more likely to integrate ESG considerations into daily operations, strategic planning, and decision-making processes. Such organizations encourage environmentally responsible behaviors, stakeholder engagement, transparency, and ethical governance.

Despite the recognized importance of digital transformation, green innovation, leadership, and organizational culture in sustainability management, few studies have integrated these factors into a comprehensive framework explaining ESG performance. Most existing studies examine these variables independently, thereby limiting understanding of how multiple organizational capabilities collectively influence ESG outcomes.

The study addresses the following research questions: What factors positively influence ESG performance?

2. LITERATURE REVIEW AND HYPOTHESES DEVELOPMENT

2.1 Theoretical Foundations

2.1.1 Resource-Based view

The resource-based view (RBV) argues that firms achieve sustainable competitive advantage through valuable, rare, inimitable, and non-substitutable resources (Barney, 1991). Organizational capabilities such as digital technologies, innovation systems, leadership competencies, and sustainability-oriented cultures represent strategic resources enabling firms to improve ESG performance. Firms possessing advanced digital capabilities, environmentally responsible leadership, and sustainability-oriented organizational cultures are better positioned to develop effective ESG strategies and sustainable competitive advantages.

2.1.2 Dynamic capability theory

Dynamic capability theory emphasizes the ability of firms to integrate, build, and reconfigure internal and external resources to address rapidly changing environments (Teece et al., 1997). ESG-related challenges require firms to continuously adapt to evolving stakeholder expectations, environmental regulations, and sustainability standards. Digital transformation, green innovation, and organizational learning capabilities represent dynamic capabilities enabling firms to improve ESG performance.

2.1.3 Stakeholder theory

Stakeholder theory argues that firms must satisfy the expectations of multiple stakeholder groups, including customers, employees, regulators, investors, communities, and environmental organizations (Freeman, 1984). ESG performance reflects organizational responsiveness to stakeholder demands regarding environmental responsibility, social accountability, and ethical governance. Environmental leadership and sustainable organizational culture facilitate stronger stakeholder engagement and sustainability commitment.

2.1.4 Organizational culture theory

Organizational culture theory suggests that shared values, norms, and beliefs strongly influence organizational behavior and strategic orientation (Schein, 2010). Sustainable organizational culture encourages environmentally responsible behaviors, ethical decision-making, and stakeholder-oriented practices. Organizations characterized by strong sustainability cultures are more likely to implement ESG practices successfully.

2.2 Research model

Digital transformation refers to the strategic integration of digital technologies into organizational activities to improve operational effectiveness and value creation (Vial, 2019). Digital transformation improves ESG performance through several mechanisms. First, digital technologies improve environmental monitoring and resource efficiency. Second, digital transformation enhances operational transparency and governance systems. Third, digitalization strengthens stakeholder communication and sustainability reporting. Fourth, technologies such as AI and IoT facilitate energy optimization and waste reduction. Prior studies indicate that digital transformation positively influences sustainability performance. Lyu et al. (2025) found that digital transformation significantly improves ESG performance among Chinese firms.

Therefore: H1: Digital transformation positively influences ESG performance.

Green innovation refers to environmentally sustainable innovations reducing ecological impacts while improving organizational efficiency (Chen, 2008). Green innovation contributes to ESG performance by: reducing emissions, improving energy efficiency, minimizing waste, strengthening environmental responsibility, improving stakeholder trust. Xie et al. (2019) found that green innovation significantly improves environmental and financial performance. Similarly, Liu et al. (2024) reported that green innovation positively affects ESG performance.

Therefore: H2: Green innovation positively influences ESG performance.

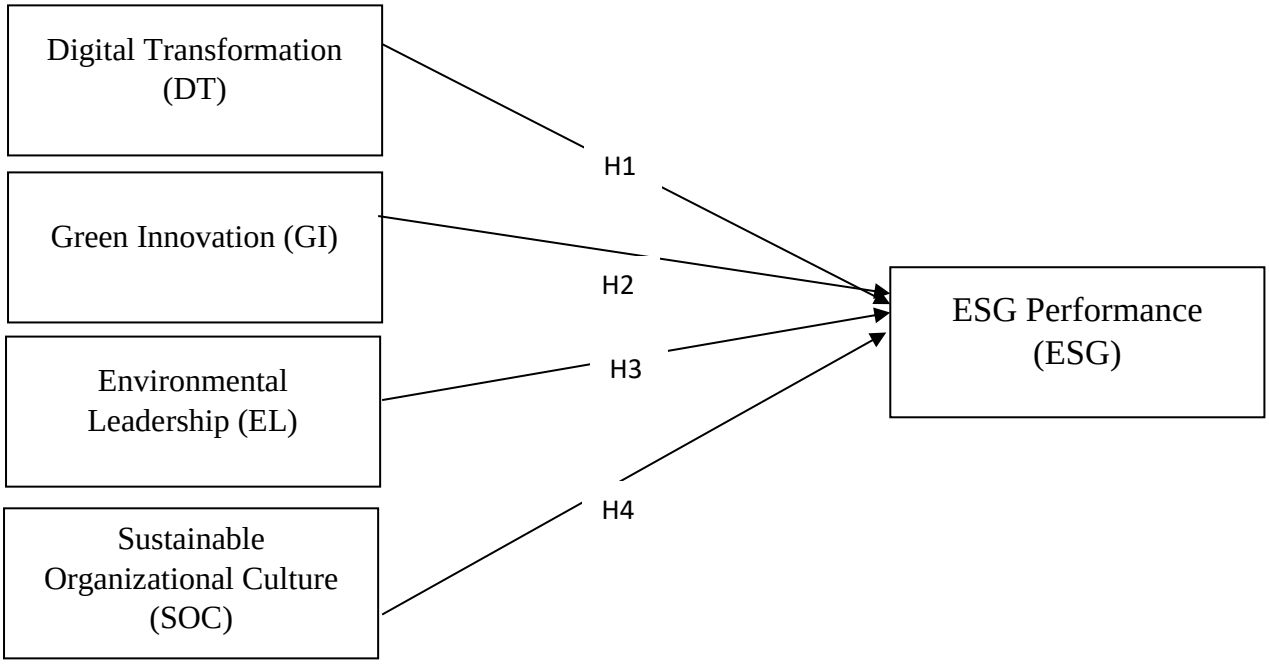
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Environmental leadership refers to leadership behaviors emphasizing sustainability, environmental responsibility, and ethical decision-making. Environmentally responsible leaders: promote sustainability strategies, allocate resources toward ESG initiatives, encourage environmentally responsible behaviors, strengthen organizational sustainability commitment. Robertson and Barling (2013) demonstrated that environmental leadership significantly improves environmental sustainability behaviors. Environmental leadership also strengthens ethical governance and stakeholder trust.

Therefore: H3: Environmental leadership positively influences ESG performance.

Sustainable organizational culture refers to shared organizational values and norms supporting sustainability and responsible business practices. Organizations with strong sustainability cultures: encourage ethical behavior, support environmental responsibility, promote stakeholder orientation, strengthen ESG commitment. Galpin et al. (2015) argued that sustainability-oriented cultures are essential for long-term corporate sustainability. Similarly, Schein (2010) emphasized that organizational culture strongly influences strategic behavior and organizational adaptation.

Therefore: H4: Sustainable organizational culture positively influences ESG performance.



The proposed conceptual framework includes:

Independent Variables:

- Digital Transformation (DT)
- Green Innovation (GI)
- Environmental Leadership (EL)
- Sustainable Organizational Culture (SOC)

Dependent Variable:

- ESG Performance (ESG)

3. DISCUSSION

This study develops a conceptual framework explaining ESG performance through the combined effects of digital transformation, green innovation, environmental leadership, and sustainable organizational culture. Although the proposed model has not yet been empirically tested, the theoretical relationships identified in this study provide important implications for the growing body of literature on sustainability management and ESG-oriented organizational transformation. First, the proposed positive relationship between digital transformation and ESG performance reflects the increasing importance of digital capabilities in contemporary sustainability strategies. Existing literature suggests that digital technologies such as artificial intelligence, cloud computing, Internet of Things (IoT), and big data analytics enhance firms' ability to optimize resource utilization, improve operational transparency, strengthen environmental monitoring, and facilitate sustainability reporting (Vial, 2019; Lyu et al., 2025). In this regard, digital transformation is no longer viewed merely as a technological modernization process but rather as a strategic capability enabling firms to improve environmental and governance performance. The conceptual model therefore supports the argument that firms capable of integrating digital technologies into business operations are more likely to achieve superior ESG outcomes.

Second, green innovation is proposed as another critical determinant of ESG performance. Prior studies consistently emphasize that environmentally sustainable innovations contribute significantly to resource efficiency, emission reduction, waste minimization, and environmentally responsible production systems (Chen, 2008; Xie et al., 2019). The present framework extends this perspective by positioning green innovation as a direct antecedent of ESG performance rather than solely an environmental outcome. This conceptualization is particularly important because ESG performance encompasses not only environmental responsibility but also broader social and governance dimensions. Green

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innovation may improve stakeholder trust, organizational legitimacy, and corporate reputation while simultaneously strengthening long-term sustainability performance.

Third, the inclusion of environmental leadership contributes to the emerging literature emphasizing the role of leadership in sustainability transformation. Existing studies indicate that leadership behaviors strongly influence organizational priorities, strategic orientations, and employee commitment toward sustainability initiatives (Robertson & Barling, 2013). Leaders who prioritize environmental responsibility are more likely to allocate organizational resources toward ESG activities, encourage ethical decision-making, and foster sustainability-oriented organizational values. Consequently, the proposed relationship between environmental leadership and ESG performance reflects the view that sustainability transformation is not solely technology-driven but also leadership-driven. In emerging economies such as Vietnam, where ESG practices are still evolving, leadership commitment may become an especially important factor influencing organizational sustainability performance.

Fourth, sustainable organizational culture is conceptualized as a fundamental organizational condition supporting ESG implementation. Organizational culture shapes employees' attitudes, values, and behavioral norms, thereby influencing organizational responses to sustainability challenges (Schein, 2010). Firms characterized by sustainability-oriented cultures are more likely to integrate ESG principles into strategic planning, operational processes, and stakeholder engagement practices. The proposed framework therefore supports the argument that ESG performance depends not only on technological resources or managerial systems but also on deeply embedded organizational values and sustainability-oriented behavioral norms.

The proposed research model also contributes theoretically by integrating multiple theoretical perspectives into a unified ESG framework. Specifically, the resource-based view explains how organizational capabilities such as digital transformation and green innovation function as strategic resources contributing to ESG outcomes. Dynamic capability theory explains how firms adapt to changing sustainability requirements through innovation and technological integration. Stakeholder theory highlights the importance of responding to stakeholder expectations regarding environmental and social responsibility, while organizational culture theory explains how shared organizational values influence sustainability-oriented behaviors. The integration of these theoretical perspectives provides a more comprehensive understanding of ESG performance determinants compared to prior studies focusing on isolated organizational factors.

Another important contribution of this conceptual framework lies in its applicability to emerging economy contexts. Most prior ESG studies have focused primarily on developed economies, while relatively limited attention has been devoted to developing countries such as Vietnam. Vietnamese firms increasingly face international pressure regarding sustainability standards, ESG disclosure, and responsible business practices due to participation in global supply chains and international trade agreements. Consequently, the proposed model offers important insights into how firms in emerging economies may strengthen ESG performance through technological transformation, innovation capability, leadership commitment, and organizational culture development.

From a managerial perspective, the conceptual framework suggests that firms seeking to improve ESG performance should adopt integrated sustainability strategies rather than isolated sustainability initiatives. Managers should simultaneously invest in digital technologies, promote green innovation, strengthen environmentally responsible leadership, and cultivate sustainability-oriented organizational cultures. The interaction among these organizational capabilities may create synergistic effects that significantly enhance ESG performance and long-term competitiveness. The proposed framework also has important implications for policymakers and regulatory institutions. Governments should encourage digital transformation and green innovation through financial incentives, sustainability regulations, technological infrastructure development, and ESG reporting standards. Furthermore, sustainability education and leadership development programs may help organizations strengthen environmental leadership and sustainability-oriented organizational cultures. Despite its theoretical contributions, this study remains conceptual in nature and therefore presents several limitations. First, the proposed relationships have not yet been empirically tested using primary or secondary data. Future studies should employ quantitative approaches such as structural equation modeling (SEM) or partial least squares structural equation modeling (PLS-SEM) to validate the proposed hypotheses. Second, the framework focuses primarily on manufacturing firms in Vietnam, which may limit generalizability across industries and countries. Future research may extend the model to service industries or conduct cross-country comparisons. Third, future studies may examine additional mediating or moderating variables such as organizational resilience, stakeholder pressure, environmental regulation, or sustainable human resource management.

Overall, this study provides an integrated conceptual foundation for understanding the determinants of ESG performance in contemporary organizations. The proposed model highlights that ESG performance is shaped not only by technological capabilities but also by innovation orientation, leadership commitment, and sustainability-oriented organizational culture. As sustainability increasingly becomes a strategic imperative, organizations must develop integrated capabilities enabling them to respond effectively to evolving environmental, social, and governance challenges.

REFERENCES

1) Argyris, C., & Schön, D. A. (1978). Organizational learning: A theory of action perspective. Addison-Wesley.
2) Barney, J. (1991). Firm resources and sustained competitive advantage. Journal of Management, 17(1), 99–120. https://doi.org/10.1177/014920639101700108
3) Chen, Y. S. (2008). The driver of green innovation and green image – Green core competence. Journal of Business Ethics, 81(3), 531–543. https://doi.org/10.1007/s10551-007-9522-1
4) Eccles, R. G., Ioannou, I., & Serafeim, G. (2014). The impact of corporate sustainability on organizational processes and performance. Management Science, 60(11), 2835–2857. https://doi.org/10.1287/mnsc.2014.1984
5) Freeman, R. E. (1984). Strategic management: A stakeholder approach. Pitman.
6) Friede, G., Busch, T., & Bassen, A. (2015). ESG and financial performance. Journal of Sustainable Finance & Investment, 5(4), 210–233. https://doi.org/10.1080/20430795.2015.1118917

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7) Galpin, T., Whitttington, J. L., & Bell, G. (2015). Is your sustainability strategy sustainable? Corporate Governance, 15(1), 1–17. https://doi.org/10.1108/CG-06-2014-0074
8) Guo, L., Xu, L., & Yin, H. (2023). Digital transformation and green innovation. Technological Forecasting and Social Change, 189, 122345. https://doi.org/10.1016/j.techfore.2023.122345
9) Hair, J. F., Hult, G. T. M., Ringle, C. M., & Sarstedt, M. (2022). A primer on partial least squares structural equation modeling (PLS-SEM) (3rd ed.). Sage Publications.
10) Khin, S., & Ho, T. C. F. (2019). Digital technology, digital capability and organizational performance. International Journal of Innovation Science, 11(2), 177–195. https://doi.org/10.1108/IJIS-08-2018-0083
11) Liu, X., Zhang, H., & Wang, Y. (2024). Green innovation and corporate ESG performance. Pacific-Basin Finance Journal, 86, 102512. https://doi.org/10.1016/j.pacfin.2024.102512
12) Liu, Y., Zhao, X., & Li, Q. (2025). ESG performance, digital transformation, and green innovation. Humanities and Social Sciences Communications, 12(1), 115. https://doi.org/10.1057/s41599-025-06027-9
13) Lyu, Y., Chen, J., & Sun, H. (2025). Digital transformation as an ESG performance catalyst. Scientific Reports, 15, 18120. https://doi.org/10.1038/s41598-025-18120-9
14) Robertson, J. L., & Barling, J. (2013). Greening organizations through leaders' influence on employees' pro-environmental behaviors. Journal of Organizational Behavior, 34(2), 176–194. https://doi.org/10.1002/job.1820
15) Schein, E. H. (2010). Organizational culture and leadership (4th ed.). Jossey-Bass.
16) Teece, D. J., Pisano, G., & Shuen, A. (1997). Dynamic capabilities and strategic management. Strategic Management Journal, 18(7), 509–533. https://doi.org/10.1002/(SICI)1097-0266(199708)18:7<509::AID-SMJ882>3.0.CO;2-Z
17) Vial, G. (2019). Understanding digital transformation: A review and a research agenda. Journal of Strategic Information Systems, 28(2), 118–144. https://doi.org/10.1016/j.jsis.2019.01.003
18) Xie, X., Huo, J., & Zou, H. (2019). Green process innovation, green product innovation, and corporate financial performance. Journal of Business Research, 101, 697–706. https://doi.org/10.1016/j.jbusres.2019.01.010

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