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Sustainability Leadership: The Role of Strategic Management in Achieving Sustainable Competitive Advantage

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ABSTRACT

This study investigates the role of sustainability leadership in shaping strategic management practices and their combined impact on achieving sustainable competitive advantage. Using a quantitative design with data from 230 managers and sustainability practitioners in Indonesia, the research employed Partial Least Squares Structural Equation Modeling (PLS-SEM) to test the relationships among Sustainability Leadership (SL), Strategic Management (SM), and Sustainable Competitive Advantage (SCA). The findings reveal that SL has a significant positive effect on SM ($\beta = 0.768$, $p < 0.001$), and SM has a strong effect on SCA ($\beta = 0.542$, $p < 0.001$), confirming SM's mediating role in the SL–SCA relationship. These results underscore that sustainability-oriented leadership enhances organizational innovation, stakeholder engagement, and adaptability through structured strategic mechanisms. The study contributes theoretically by integrating the Resource-Based View (RBV) and Natural Resource-Based View (NRBV) frameworks, demonstrating that leadership and strategy function as dynamic capabilities that reconfigure internal competencies for superior sustainable performance. Practically, the results suggest that organizations embedding ethical, visionary, and transformational leadership into strategic processes are more capable of achieving long-term competitiveness in the era of the green economy and digital transformation.

Keywords: Sustainability Leadership; Strategic Management; Sustainable Competitive Advantage; Dynamic Capabilities; Resource-Based View; Natural Resource-Based View.

INTRODUCTION

In recent decades, global attention to environmental, social, and governance (ESG) issues has intensified, reshaping the way organizations are evaluated and managed. Companies are no longer judged solely on their financial performance but also on their ability to generate positive environmental and social impact (Lopez-Torres et al., 2022). This transformation reflects a broader paradigm shift from profit-oriented capitalism toward sustainability-oriented capitalism, in which business success is measured by long-term value creation for all stakeholders, including society and the planet. The growing urgency of climate change, biodiversity loss, and social inequality has compelled both the private and public sectors to adopt sustainability as a strategic priority rather than a peripheral concern. As a result, the traditional view of business as an isolated economic entity is giving way to a more systemic perspective where organizations are integral parts of social and ecological networks (Abdeen et al., 2025). Within this evolving landscape, the principles of the green economy and circular economy have become global imperatives, emphasizing resource efficiency, carbon reduction, and ethical governance

as central pillars of competitiveness. Companies capable of embedding sustainability into their business models not only mitigate environmental risks but also gain reputational credibility, stakeholder trust, and operational resilience (Surono et al., 2023).

This paradigm shift demands a fundamental transformation in leadership and strategic management. Conventional leadership models, which prioritize short-term profits and operational control, are insufficient in addressing the complexities of sustainability challenges. Instead, a new form of leadership sustainability leadership is required, characterized by ethical vision, strategic foresight, and the ability to integrate social and ecological considerations into decision-making (Atty Tri Juniarti et al., 2024). Leaders in this domain act as change agents who inspire innovation, align corporate goals with global sustainability agendas such as the UN Sustainable Development Goals (SDGs), and cultivate organizational cultures that value transparency, collaboration, and accountability (Sudarno et al., 2023). Moreover, the rapid rise of ESG-based investment has made sustainability leadership not only a moral responsibility but also a financial necessity. Investors, consumers, and regulators increasingly reward companies that demonstrate measurable progress in environmental stewardship and social inclusivity, positioning sustainability as both a competitive differentiator and a determinant of long-term resilience (Lopez-Torres et al., 2022). Thus, sustainability leadership and strategic management have become inseparable pillars for navigating the complexities of the modern business ecosystem and achieving sustainable competitive advantage in the global green economy.

The concept of sustainability leadership emerges from the growing recognition that effective leadership plays a pivotal role in harmonizing economic growth, social well-being, and ecological preservation. Leaders with a sustainability-oriented vision perceive profitability not as an isolated objective but as a component of a broader system of long-term value creation that benefits all stakeholders, including employees, communities, customers, and the natural environment (Atty Tri Juniarti et al., 2024). Such leaders possess the capacity to integrate ethical principles, environmental stewardship, and social inclusivity into the core of strategic decision-making, thereby transforming sustainability from a peripheral initiative into an organizational mindset. In this context, sustainability leadership is not merely symbolic it represents a deliberate strategic choice that redefines how organizations formulate goals, allocate resources, and measure success. It requires leaders to balance sometimes conflicting priorities between financial performance and environmental responsibility through evidence-based decision-making and stakeholder engagement. The implementation of sustainability leadership is realized through strategic management processes that translate vision into actionable policies, operational systems, and measurable performance indicators. By embedding sustainability into governance structures and day-to-day operations, leaders cultivate a culture of continuous learning, innovation, and cross-sector collaboration (Sudarno et al., 2023). This inclusive and innovation-driven culture not only strengthens internal cohesion and employee commitment but also enhances the organization's capacity to adapt to external challenges such as market volatility, climate risk, and regulatory change. Ultimately, sustainability leadership positions strategic management as a dynamic and integrative function that ensures all organizational units finance, production, marketing, and human resources contribute cohesively to achieving sustainable development objectives and long-term competitive advantage.

Sustainability-oriented strategic leadership also serves as the driving force in building organizational capabilities that adapt to external environmental changes. Through a dynamic capabilities approach, organizations can respond flexibly to uncertainty by fostering continuous innovation (Abdeen et al., 2025). Sustainability-

driven leaders promote organizational learning, invest in green innovation, and create environmentally responsible value chains. Strategic management for sustainability frequently adopts the Resource-Based View (RBV) and Natural Resource-Based View (NRBV) frameworks, emphasizing that internal resources such as knowledge, culture, and green innovation are key sources of competitive advantage that are difficult to replicate (Abdeen et al., 2025). Success in sustainability strategies therefore depends on how effectively organizations mobilize these resources to support long-term competitiveness.

Empirical evidence has consistently shown that transformational leadership style has a strong positive correlation with sustainable organizational performance. Transformational leaders inspire employees to innovate, heighten environmental awareness, and actively contribute to the firm's long-term sustainability vision by fostering creativity and moral commitment (Surono et al., 2023). Recent research further substantiates this relationship: a study conducted in Malaysian manufacturing firms found that transformational leadership significantly enhances environmental performance when coupled with corporate social responsibility (CSR) and a green organizational culture (GOC), with GOC acting as a mediator between leadership behavior and sustainability outcomes (Rahman et al., 2024). Similarly, a recent empirical study in the Philippine sustainable manufacturing industry demonstrated that transformational leadership positively affects organizational agility and resilience, both of which serve as mechanisms that lead to sustainable business performance (Cordero et al., 2025). Transformational leaders not only model ethical behavior and open communication but also promote participatory decision-making, thereby strengthening corporate social responsibility practices and fostering stakeholder trust (Atty Tri Juniarti et al., 2024).

Furthermore, the role of organizational culture that embraces sustainability values has become increasingly recognized as a cornerstone of effective strategic management. A systematic literature review spanning 2010–2024 concluded that ethical leadership, employee engagement, and transparent internal communication are critical cultural elements that reinforce the implementation of sustainability initiatives across diverse industries (Ibrahim & Saleh, 2024). This aligns with findings from Indonesia's tourism sector, where sustainable leadership combined with a supportive organizational culture significantly enhanced sustainability performance, particularly when knowledge sharing acted as a moderating variable (Suryani et al., 2024). In addition, recent research on green leadership indicates that workplace spirituality and employee adaptability positively influence green creativity, which subsequently drives sustainable organizational performance (Li & Zhang, 2025). Without a strong sustainability-oriented culture, however, many environmental or social initiatives tend to remain symbolic lacking operational depth and measurable outcomes thus limiting their strategic impact on long-term competitiveness (Sudarno et al., 2023).

Globally, sustainable innovation is a crucial mechanism that links leadership with long-term competitive advantage. Companies capable of producing eco-friendly products and processes gain additional value through energy efficiency, brand reputation, and consumer loyalty (Lopez-Torres et al., 2022). This demonstrates that sustainability is no longer a cost burden but a new source of strategic differentiation. An organization's capacity for green innovation also reflects the maturity of its strategic management. Green innovation not only improves operational efficiency but also creates unique, hard-to-imitate product differentiation (Surono et al., 2023). Thus, sustainability leadership acts as a bridge connecting business strategy and social responsibility. Nevertheless, the adoption of sustainability strategies continues to face several challenges. Conflicts between economic and environmental goals, internal resistance to change, and high

initial investment costs remain major obstacles (Lopez-Torres et al., 2022). Hence, leaders must possess strategic vision and managerial competence to balance short-term performance with long-term sustainability.

Effective sustainability leadership also requires a profound understanding of stakeholder management, where leaders act as boundary spanners who bridge the interests of diverse parties governments, investors, communities, and customers toward shared sustainability goals. Transparent communication, multi-stakeholder collaboration, and participatory governance are no longer optional; they are essential mechanisms for maintaining legitimacy and social acceptance in sustainability-driven markets (Dzhengiz & Niesten, 2023). Leaders must cultivate trust through dialogue, co-creation, and inclusive decision-making processes that integrate social and environmental priorities into corporate governance (Freeman et al., 2024). Such engagement-based leadership not only strengthens the ethical foundation of corporate behavior but also improves long-term resilience and adaptability to shifting stakeholder expectations. Recent empirical evidence suggests that participatory sustainability governance positively influences corporate environmental performance by enhancing internal accountability and external legitimacy (Kumar & George, 2024).

In addition, the global acceleration of digitalization and green economy transformation has expanded the meaning of sustainability leadership into what scholars now refer to as green digital leadership. This new paradigm emphasizes the integration of digital technologies such as artificial intelligence, big data analytics, and the Internet of Things (IoT) into sustainability strategies to achieve energy efficiency, circular supply chains, and carbon reduction (Bai et al., 2025). Modern leaders are thus expected to master both environmental knowledge and digital capabilities to navigate complex socio-technological transitions (Nguyen & Lee, 2024). The intersection between digital transformation and sustainability, often termed "twin transition," is increasingly recognized as a critical driver of innovation, competitiveness, and corporate resilience (Ghobakhloo & Iranmanesh, 2024). Through this synergy, organizations can design smart, low-carbon business models that optimize resource use while fostering transparency and accountability across their value chains. Consequently, sustainability leadership in the digital era represents not only moral responsibility but also a strategic competence essential for achieving long-term competitive advantage in the global marketplace (Freeman et al., 2024).

Empirical studies further confirm that leadership that embeds green values into strategic management strengthens long-term organizational performance. Firms that integrate sustainability into their business models tend to be more resilient during crises, more innovative, and more reputable in the eyes of stakeholders (Surono et al., 2023). This supports the notion that sustainability is both a moral imperative and a strategic instrument. From a practical standpoint, sustainability leadership necessitates measurable management systems, such as Environmental Performance Index (EPI), carbon footprint tracking, and periodic ESG reporting (Lopez-Torres et al., 2022). These tools enable firms to evaluate their progress and identify improvement areas essential to achieving sustainable competitive advantage. Thus, sustainability leadership and strategic management share a synergistic relationship in shaping long-term competitiveness. Organizations that successfully integrate the two are more adaptive to environmental changes and more capable of creating shared value between business and society (Abdeen et al., 2025). Overall, sustainability leadership within strategic management represents a critical determinant of organizational success in the green economy era. Visionary, ethical, and innovative leaders transform sustainability from a

corporate slogan into a tangible source of sustainable competitive advantage (Atty Tri Juniarti et al., 2024).

METHOD

This study employed a quantitative research design to examine the influence of sustainability leadership and strategic management on sustainable competitive advantage. A cross-sectional survey method was chosen because it enables the collection of empirical data from a large sample at a single point in time and facilitates hypothesis testing through statistical analysis (Saunders et al., 2023). The population comprised managers and sustainability practitioners from organizations in Indonesia that have implemented environmental, social, and governance (ESG) or sustainability programs between 2020 and 2025. Using purposive sampling, 300 questionnaires were distributed, and 230 valid responses were analyzed, which exceeded the minimum sample size requirements for Structural Equation Modeling (SEM) (Hair et al., 2023).

The research instrument used a structured questionnaire consisting of items adapted from validated scales sustainability leadership from the Multifactor Leadership Questionnaire (Bass & Avolio, 1994), strategic management from Freeman et al. (2024), and sustainable competitive advantage from Bai et al. (2025) all measured on a five-point Likert scale ranging from 1 (strongly disagree) to 5 (strongly agree). Data were analyzed using Partial Least Squares Structural Equation Modeling (PLS-SEM) with SmartPLS 4 software, which allows the simultaneous testing of measurement and structural models suitable for exploratory research with multiple latent constructs (Hair et al., 2023). The measurement model was assessed through indicator reliability, composite reliability (>0.70), and average variance extracted (AVE > 0.50), while discriminant validity was tested using the Fornell–Larcker criterion. The structural model tested hypotheses using bootstrapping with 5,000 subsamples to determine the significance of relationships among constructs. To ensure validity and reliability, a pilot test involving 25 respondents was conducted, and all items met acceptable thresholds. Ethical considerations were also observed, where respondents participated voluntarily and confidentiality was guaranteed (Bell et al., 2022). Overall, the quantitative design was chosen to provide objective, generalizable, and statistically robust evidence on how sustainability-oriented leadership and strategic management practices contribute to the achievement of long-term sustainable competitive advantage.

RESULTS AND DISCUSSION

1. Descriptive Statistics and Measurement Model Evaluation

Descriptive analysis revealed that most respondents were mid-level managers (58%) and senior executives (24%) who had been involved in sustainability programs for at least three years. The mean scores for all constructs were above 4.0, indicating strong agreement regarding sustainability-oriented practices within the surveyed organizations. Reliability and validity tests confirmed that the measurement model met statistical requirements. Cronbach's Alpha and Composite Reliability (CR) values exceeded 0.70, while Average Variance Extracted (AVE) values were above 0.50, demonstrating acceptable convergent validity. Discriminant validity was verified using the Fornell–Larcker criterion, confirming that each construct was empirically distinct.

Table 1. Reliability and Validity of Constructs

Construct	Cronbach's Alpha	Composite Reliability (CR)	AVE	Interpretation
Sustainability Leadership (SL)	0.892	0.917	0.615	Reliable & Valid
Strategic Management (SM)	0.876	0.904	0.598	Reliable & Valid
Sustainable Competitive Advantage (SCA)	0.901	0.926	0.646	Reliable & Valid

Source: SmartPLS Output (2025)

The results in Table 1 indicate strong internal consistency and reliability across all constructs, confirming that the instrument effectively measures each latent variable. Cronbach's Alpha values above 0.87 and CR values above 0.90 demonstrate stability and coherence of measurement items (Hair et al., 2023). The AVE values above 0.50 show sufficient convergent validity, meaning that the indicators adequately represent their respective constructs. Specifically, the high reliability for Sustainability Leadership (α = 0.892; CR = 0.917) suggests that respondents consistently associate sustainability leadership with vision, ethics, and environmental stewardship. Similarly, Strategic Management (α = 0.876; CR = 0.904) reflects perceptions of integration between planning, innovation, and stakeholder collaboration, while Sustainable Competitive Advantage (α = 0.901; CR = 0.926) represents multidimensional outcomes—economic, environmental, and social performance. These results confirm that the measurement model is statistically robust and theoretically coherent, consistent with prior sustainability leadership studies (Rahman et al., 2024; Bai et al., 2025).

2. Structural Model Evaluation

The PLS-SEM structural analysis revealed significant and positive relationships among all hypothesized constructs. The R^2 value for Strategic Management (SM) was 0.589, indicating that Sustainability Leadership (SL) explains approximately 58.9% of the variance in strategic management. Meanwhile, the R^2 for Sustainable Competitive Advantage (SCA) was 0.647, suggesting that SL and SM together explain 64.7% of the variance in sustainable competitiveness. Predictive relevance (Q^2) values exceeded 0.35, confirming strong model predictive power.

Table 2. Structural Model Results

Hypothesis	Relationship	Path Coefficient (β)	t-value	p-value	Result
H1	SL → SM	0.768	15.214	0.000	Supported
H2	SM → SCA	0.542	9.781	0.000	Supported
H3	SL → SCA	0.297	4.923	0.001	Supported

Source: SmartPLS Output (2025)

The results in Table 2 confirm that all hypothesized relationships are statistically significant ($p < 0.05$). The strongest relationship is observed between Sustainability Leadership and Strategic Management (β = 0.768; t = 15.214), demonstrating that sustainability-oriented leaders have a substantial influence on how organizations design and execute strategic initiatives. This finding supports Transformational Leadership Theory, which argues that visionary and ethical leaders inspire followers to embrace

shared organizational goals and drive change toward sustainability (Bass & Avolio, 1994; Surono et al., 2023).

The second significant relationship (SM → SCA; β = 0.542; t = 9.781) highlights that strategic management is a crucial mechanism that links sustainability leadership to long-term competitive outcomes. This result aligns with the Resource-Based View (RBV), suggesting that internal strategic capabilities such as planning, innovation, and stakeholder integration are valuable, rare, and inimitable assets that strengthen organizational competitiveness (Barney, 1991; Lopez-Torres et al., 2022). In other words, sustainability-oriented strategic management transforms intangible resources such as environmental knowledge and stakeholder trust—into tangible performance advantages.

The third path (SL → SCA; β = 0.297; t = 4.923) shows that sustainability leadership also has a direct but smaller effect on competitive advantage, implying that leadership alone cannot produce sustainable outcomes without being institutionalized through strategic processes. This partial mediation effect of strategic management supports the Natural Resource-Based View (NRBV), which argues that environmental and ethical capabilities become sources of sustained competitive advantage when integrated into strategic systems (Hart, 1995; Ghobakhloo & Iranmanesh, 2024). The high explanatory power of the model (R^2 = 0.647) confirms that sustainability leadership and strategic management together explain most of the performance variance, consistent with recent empirical findings that leadership–strategy alignment is essential for organizational resilience in dynamic environments (Nguyen & Lee, 2024).

Discussion

The findings provide strong empirical evidence that sustainability leadership functions as a catalyst for developing effective strategic management practices, which in turn lead to sustainable competitive advantage. The significant effect of SL on SM (β = 0.768) underscores the role of transformational and ethical leaders in embedding sustainability values across organizational systems (Freeman et al., 2024). Such leaders cultivate innovation, collaboration, and stakeholder engagement—key pillars of sustainability-oriented management. The confirmed mediation of SM in the SL–SCA relationship implies that leadership's impact on competitive advantage is maximized when supported by systematic strategic mechanisms such as planning, innovation, and performance monitoring (Rahman et al., 2024).

These results substantiate theoretical propositions from both RBV and NRBV, which view leadership and strategy as dynamic capabilities that enable organizations to reconfigure internal competencies and external relationships to achieve superior performance (Hart, 1995; Bai et al., 2025). Practically, this means that firms combining visionary sustainability leadership with structured strategic execution tend to display greater adaptability, stakeholder trust, and innovation capability. In line with Nguyen & Lee (2024), the integration of sustainability leadership into strategic management fosters organizational learning and resilience, allowing firms to thrive amid environmental and market uncertainties. The interpretation of both measurement and structural results demonstrates that the synergy between sustainability leadership and strategic management creates a dynamic system of continuous improvement and innovation, transforming sustainability from an ethical obligation into a strategic source of long-term competitive advantage.

Moreover, recent studies strengthen these findings. For example, Enhancing the impact of transformational leadership on sustainability through agility and resilience with application of Lewin's Change Model in sustainable manufacturing (2025) shows

that transformational leadership significantly influences organizational agility, which in turn shapes sustainable outcomes. The study found serial mediation through agility and resilience, highlighting that leadership sets in motion change ("unfreezing"), enabling agility and resilience ("moving"), and finally embedding sustainability practices ("refreezing") (Gloria et al., 2025). This aligns with the current model's mediated pathway via strategic management.

In addition, research on Green Transformational Leadership, Green Human Resource Management, and Environmental Performance in Indonesia reveals that green leadership positively influences environmental performance, mediated by green work engagement, although with green organizational culture playing a less strong role in some cases (Sekolah Tinggi Ilmu Ekonomi, 2025) (Satriadi, Agusven, Marhalinda et al., 2025). Such findings suggest that while culture is important, engagement and operationalization via strategic practices may serve as more immediate channels for leadership impact.

Another recent study, Transformational Leadership and Sustainable Practices: How Leadership Style Shapes Employee Pro-Environmental Behavior (2024), shows that environmentally specific transformational leadership (ESTL) significantly enhances employee environmental awareness, which in turn boosts pro-environmental behaviors. The study also points out that high emotional exhaustion can weaken this mediation effect, emphasizing the need for leadership to also attend to employee well-being (Ren, Li, & Mavros, 2024). This underscores that in our model, leadership's direct effect (SL → SCA) may be attenuated or moderated by internal factors such as emotional burnout, suggesting avenues for future research. Overall, integrating these recent studies with our results strengthens the validity of the model, emphasizing that the transformational leadership → strategic management → sustainable competitive advantage pathway is robust across sectors. Our findings, combined with these external studies, support the idea that leadership must be more than visionary: it must translate vision into action via agility, engagement, supportive culture, and attention to human factors.

CONCLUSIONS

The study provides strong empirical evidence that sustainability leadership is a crucial antecedent of effective strategic management, which subsequently drives sustainable competitive advantage. The mediation results confirm that leadership's influence on competitiveness operates most effectively when embedded within structured strategic systems, emphasizing that visionary leadership alone is insufficient without operational alignment. This finding highlights the pivotal role of strategic management in translating sustainability visions into measurable outcomes through innovation, stakeholder collaboration, and performance monitoring. Theoretically, the results validate both the RBV and NRBV perspectives, affirming that sustainability leadership and strategy serve as dynamic capabilities that enable organizations to adapt, learn, and reconfigure resources in response to environmental and market challenges. Practically, the study implies that companies investing in sustainability-driven leadership development, digital transformation, and green innovation are better positioned to sustain competitive advantages in volatile global environments. Future research should explore moderating factors such as organizational culture, digital maturity, and stakeholder engagement intensity to deepen understanding of how leadership and strategic mechanisms jointly shape long-term sustainable performance

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