

Leadership and ESG-Based Innovation (Environmental, Social, Governance): Implications for SME Performance in the START-UP Environment

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Abstract. In recent years, the paradigm shift towards social and environmental responsibility has become a top priority across various sectors, including among SMEs and start-ups. The ESG concept, encompassing environmental, social, and governance aspects, has become a crucial foundation for developing sustainable business strategies. The importance of ESG-based leadership in SMEs lies in the ability of leaders to integrate ESG principles into the company's culture and operations. This study aims to provide deeper insights into the strategies and best practices in ESG-based leadership and innovation and their implications for the success and sustainability of SMEs in an increasingly complex and dynamic context. The research employs a qualitative approach using a literature review method. Data is collected through a literature search on Google Scholar, covering the period from 2015 to 2024. The findings of the study indicate that first, effective leadership plays a crucial role in integrating ESG principles into SME strategies and operations. Visionary leaders can motivate teams, create a culture that supports sustainability, and ensure that ESG practices are consistently applied. Second, ESG-based innovation not only enhances the competitiveness of SMEs but also provides more sustainable and socially responsible solutions. Start-ups that successfully implement these innovations tend to see improvements in reputation, customer satisfaction, and financial performance. Third, the environmental, social, and governance aspects of ESG have a significant impact on SME performance, helping them manage risks, seize new opportunities, and meet stakeholder expectations. Case study examples from various start-ups show that integrating ESG principles can provide competitive advantages and support sustainable growth.

Keywords: Leadership, Innovation, Environmental, Social, Governance, SME Performance, START-UP

1. Introduction

In recent years, the paradigm shift towards social and environmental responsibility has become a primary focus across various sectors, including among SMEs and start-ups. The Environmental, Social, and Governance (ESG) concept, encompassing environmental, social, and governance aspects, has now become a fundamental basis for developing sustainable business strategies [1]. This shift indicates a focus not only on financial profits but also on the social and environmental impacts of every business decision. Effective leadership in the context of ESG plays a crucial role in guiding companies to make strategic decisions that are financially beneficial and socially and environmentally responsible. Additionally, such leadership has a profound impact on motivating the entire team to prioritize sustainable and responsible initiatives. A company can minimize its negative impact on the environment and society and capitalize on opportunities for sustainable and innovative growth, creating long-term sustainable profits with leaders who understand and integrate ESG principles.

The importance of ESG-based leadership in SMEs lies in the leader's ability to integrate ESG principles into the company's culture and operations. This leadership requires a deep understanding of environmental, social, and governance issues, as well as skills to drive innovation aligned with these principles. Leaders who can adopt and promote ESG principles help SMEs create added value through sustainable and ethical



approaches and enhance their competitiveness in the market [2]. Leaders can encourage companies to develop more environmentally friendly products and services and business models that are more inclusive and transparent by prioritizing ESG aspects. An SME in the manufacturing sector that adopts environmentally friendly practices can reduce its carbon footprint and attract customers and business partners who value sustainability, creating significant competitive advantages.

In the context of start-up SMEs, integrating ESG principles often presents its own set of challenges. Start-ups, which are generally in the early stages of growth, often face pressure to grow rapidly while still maintaining compliance with ESG standards [3]. These challenges include limited resources, lack of experience, and difficulties in implementing adequate ESG practices. For instance, a technology start-up might face constraints in implementing environmentally friendly solutions due to budget and human resource limitations. However, start-ups that effectively implement ESG principles can gain significant competitive advantages, such as enhancing the company's reputation, attracting investors who care about sustainability, and expanding their market. By strategically addressing these challenges, such as seeking partnerships with organizations with similar goals or leveraging technology that supports sustainability, start-ups can overcome obstacles and seize opportunities for sustainable growth.

The application of ESG principles in SMEs affects both the internal aspects of the company and its external relationships with stakeholders. Good relationships with customers, business partners, and local communities are crucial for the success of start-ups. Good ESG practices can strengthen these relationships by demonstrating the company's commitment to social and environmental responsibility. SMEs actively involved in social or environmental programs can enhance customer trust and loyalty and attract business partners with similar values [4]. Transparency in ESG reporting can also build stakeholder trust and support the company's positive reputation, strengthening existing relationships and opening opportunities for new partnerships.

ESG-based innovation presents significant opportunities for SMEs to create sustainable and relevant value in the market. This innovation focuses on developing green technologies or environmentally friendly products and includes innovations in business models and corporate governance. SMEs can introduce new solutions that meet market needs while contributing to global sustainability goals by adopting innovative approaches to ESG. SMEs that develop circular business models can reduce waste and improve resource efficiency while creating more sustainable products that appeal to environmentally conscious consumers [5]. SMEs can adapt to market changes but also play an active role in achieving global sustainability goals by leveraging these innovation opportunities.

In this study, the role of leadership in facilitating ESG-based innovation is critical. Visionary and adaptive leadership can create an environment that supports the exploration of new ideas and the implementation of innovative ESG practices [6]. Leaders who understand the challenges and opportunities related to ESG can help SMEs overcome barriers and capitalize on market potential. Effective leadership in this context means creating an ESG-oriented innovation culture that encourages the exploration of new ideas and the implementation of best practices in sustainability. Leaders can help SMEs address existing challenges and achieve success in a dynamic market by fostering an environment that supports the exploration and implementation of ESG-based innovations.

Existing literature indicates that ESG-based leadership can influence both financial and non-financial performance of SMEs. Previous research shows that companies adopting ESG practices often experience improvements in long-term financial performance, reduced risks, and increased customer satisfaction [7]. This underscores the importance of a deep understanding of the relationship between leadership, ESG-based innovation, and SME performance. ESG-based leadership can enhance a company's ability to manage risks, reduce negative environmental impacts, and improve customer satisfaction (Sarumpaet, Susi 2024). Companies committed to ESG practices may experience reductions in long-term operational costs and increased customer loyalty, ultimately contributing to better financial performance.

Through this literature review, it is hoped that insights can be gained on how leadership and ESG-based innovation affect SME performance, as well as the challenges and opportunities faced by start-ups in implementing these principles. This study aims to provide a deeper understanding of strategies and best practices in leadership and ESG-based innovation and their implications for the success and sustainability of SMEs in an increasingly complex and dynamic context. By analyzing existing literature, effective strategies for overcoming challenges faced by SMEs in implementing ESG principles and identifying opportunities for achieving long-term success and sustainability are expected to be discovered.

1.1. Leadership

Leadership is the process of influencing and directing individuals or groups to achieve common goals through motivation, communication, and effective decision-making [8]. Leadership involves the ability to

motivate and inspire others, establish a clear vision, and create an environment that supports organizational goal achievement [9]. Leaders must possess skills in planning, organizing, and problem-solving while building strong relationships and managing team dynamics. Effective leadership often involves adapting to change and challenges, as well as driving innovation and growth in dynamic and often uncertain contexts.

1.2. Innovation

Innovation is the process of creating or introducing new ideas, products, services, or methods that bring positive change and enhance value within a given context [10]. It involves applying creative ideas that can lead to more efficient, effective, or relevant solutions compared to existing ones. Innovation encompasses not only the development of new technologies but also changes in work methods, business models, or approaches to solving existing problems. The primary goal of innovation is to create a competitive advantage, meet unmet market needs, or improve performance and productivity by providing better and impactful solutions [11].

1.3. Environmental

Environmental refers to all aspects related to the environment and its impact on ecosystems and the health of the planet [12]. In the context of business and policy, this term includes efforts to understand and manage the impact of human activities on the environment, such as air and water pollution, climate change, and resource usage. Environmental aspects involve sustainable practices aimed at reducing ecological footprints, conserving biodiversity, and ensuring that industrial and commercial activities do not harm ecosystems or human health [13]. Focus on environmental aspects typically includes initiatives like waste reduction, renewable energy use, and responsible resource management.

1.4. Social

Social refers to the aspect related to the interaction and well-being of communities, as well as the relationships between individuals and groups within a community [14]. In business and policy contexts, social aspects involve responsibility towards human rights, employee welfare, diversity and inclusion, and the social impact of corporate activities. This includes efforts to ensure that business practices are not only financially beneficial but also provide positive benefits to society, such as creating fair jobs, supporting local communities, and ensuring that products and services do not harm social well-being. Focus on social aspects often involves initiatives like community development, protection of workers' rights, and corporate social responsibility (CSR) programs [15].

1.5. Governance

Governance are structures, processes, and practices used to manage and direct organizations or entities, including decision-making, accountability, and transparency [16]. In business and policy contexts, governance encompasses systems and procedures that ensure that companies or institutions operate ethically, comply with regulations, and are accountable for their actions and decisions [17]. This includes various elements such as internal policies, control mechanisms, and oversight by boards of directors or supervisory bodies, all functioning to ensure that organizations operate with integrity, protect stakeholder interests, and achieve objectives in a responsible and sustainable manner.

1.6. SME (Small and Medium Enterprises)

SME (Small and Medium Enterprises) performance refers to the extent to which these businesses achieve their established goals and objectives, measured through various indicators such as profitability, revenue growth, operational efficiency, and customer satisfaction [18]. SME performance encompasses financial aspects like profit and cash flow, as well as non-financial aspects such as innovation, product or service quality, and the ability to maintain and expand market share. Evaluating SME performance is crucial for understanding how well companies can adapt to market changes, manage resources effectively, and contribute to local and national economic growth [19].

1.7. Start-up

A start-up is a new company that is in the early stages of development and typically focuses on innovation and rapid growth [20]. Start-ups are often launched with unique business ideas or new technologies, aiming to address problems or meet unmet market needs. These companies generally operate with untested business models and strive to achieve larger scale through rapid expansion strategies. Start-ups often face challenges in terms of funding, management, and marketing, but they have the potential to grow into large enterprises if they successfully overcome these barriers and find the right market [21].

2. Method

This study employs a qualitative approach with a literature review method to explore the topic of ESG (Environmental, Social, Governance) based leadership and innovation and its implications for SME performance in the start-up environment. The qualitative approach is chosen to provide an in-depth and comprehensive understanding of the phenomenon under investigation through descriptive analysis of relevant literature. Data was collected through a literature search on Google Scholar, covering the period from 2015 to 2024. The data collection process began with the identification and gathering of 47 articles relevant to the research topic. Subsequently, a rigorous selection process was conducted to ensure the quality and relevance of the articles. This selection process included assessing the methodology, findings, and contribution of each article to the understanding of ESG-based leadership and innovation. After the selection process, 30 articles meeting the criteria for quality and relevance were chosen for further analysis. Descriptive analysis was used to organize, summarize, and interpret the data obtained from these articles. This method aims to present a clear picture of trends, themes, and patterns emerging from the reviewed literature, as well as to identify relevant implications for SME performance in the start-up context. This approach allows the researcher to review various perspectives and findings in the literature to provide a comprehensive insight into the topic under study.

3. Result and Discussion

Effective leadership is a crucial element in implementing ESG principles in SMEs. A visionary and committed leader can integrate environmental, social, and governance principles into the company's strategy and operations [22]. For example, PT. TaniHub, a digital agriculture start-up in Indonesia, demonstrates how strong leadership can facilitate the adoption of sustainable practices. TaniHub's leaders design strategies to enhance operational efficiency and are active in formulating policies that reduce agricultural waste and optimize resource use. TaniHub's leaders have been able to create a culture that supports responsible environmental management by integrating sustainability principles into the company's vision and mission. This leadership helps TaniHub attract stakeholders and investors who support sustainable initiatives and enhances the company's reputation as a pioneer in environmentally friendly agricultural practices.

ESG-based innovation has significant potential to improve SME performance by creating more environmentally and socially friendly products and services. For instance, the start-up Bluebird in Indonesia has innovated its taxi fleet by integrating electric vehicles, a step that contributes to reducing the carbon footprint of their taxi fleet. This innovation increases the company's appeal to environmentally conscious customers and provides a competitive advantage in a market increasingly aware of environmental issues. Bluebird's steps help the company strengthen its market position, increase customer loyalty, and attract larger investments. The implementation of electric vehicles also demonstrates how technology can be used to achieve sustainability goals while meeting market demands, proving that ESG-based innovation can be an effective strategy to enhance business performance and achieve financial benefits [23].

The environmental aspect of ESG includes efforts to reduce negative impacts on ecosystems and promote sustainability. Start-ups that successfully implement environmentally friendly practices often experience improved performance [24]. For example, the e-commerce start-up Tokopedia in Indonesia has prioritized sustainability by implementing plastic reduction initiatives and using renewable energy in their facilities. These steps reduce the environmental impact of their operations and improve the company's image among increasingly environmentally conscious customers. Tokopedia has successfully reduced its ecological footprint and strengthened its position as a socially responsible company by implementing these practices. Tokopedia's success in running these initiatives illustrates how attention to environmental aspects can provide additional benefits in terms of company reputation and customer satisfaction, which in turn positively impacts financial performance and competitiveness.

The social aspect of ESG involves corporate responsibility towards the well-being of communities and employees [25]. Social start-ups like Warung Pintar, which provides digital solutions for traditional shops in Indonesia, are examples of how focusing on community empowerment can have a positive impact. Warung Pintar helps enhance operational efficiency and competitiveness for small businesses by providing access to technology and training for traditional shops. Additionally, Warung Pintar contributes to local economic growth and improves the quality of life by increasing their ability to run businesses and access broader markets. This focus on social responsibility also strengthens relationships with local communities and builds a positive reputation for Warung Pintar as a company supporting local economic empowerment. This demonstrates how

social responsibility integrated into a business model can support sustainable growth and provide broad benefits for the community and local economy.

Good governance is an important element in ensuring that ESG principles are effectively applied within an organization [26]. Start-ups like Gojek show how strong governance can support ESG implementation by ensuring that all company operations and decisions align with sustainability and social responsibility principles. Gojek has a clear oversight structure and transparent policies that help ensure all aspects of company operations comply with high ESG standards. This good governance supports better performance by enhancing investor and stakeholder trust, as well as ensuring that the company can maintain its integrity and reputation in the long term. Good governance contributes to adherence to ESG principles and enhances company stability and sustainability, ultimately supporting business growth and success.

Start-ups often face challenges in implementing ESG principles due to limited resources and experience. For example, start-ups in the local food and beverage sector often struggle to fully implement environmentally friendly practices due to high costs and the need to adapt operational processes to sustainability principles. However, some start-ups manage to overcome these challenges by seeking creative solutions, such as partnering with suppliers that support environmentally friendly practices or utilizing efficient technologies to reduce waste. This example shows that despite challenges, with the right approach and strategic partnerships, start-ups can successfully implement ESG principles and benefit from sustainable practices. Additionally, this experience can provide valuable insights for other start-ups facing similar challenges and strengthen the understanding of how to integrate ESG principles into their business models.

Descriptive analysis of the existing literature shows that ESG-based innovation trends are increasing, reflecting a greater awareness of the importance of sustainability among start-ups [27]. Start-ups like Ruangguru, which provides an online education platform, implement ESG principles by offering more inclusive and sustainable educational access. Ruangguru enhances educational quality while supporting broader social goals by integrating sustainability principles into their services, such as reducing educational gaps. This innovation helps Ruangguru reach more students and provide more affordable and inclusive educational services. Ruangguru's success demonstrates how ESG principles can be integrated into a business model to achieve positive social impact while strengthening business performance and adding value for customers.

SME performance that adopts ESG principles often sees improvements in various aspects, including profitability and market competitiveness [28]. Fintech start-ups like Jurnal, which provides digital accounting solutions for SMEs, have adopted ESG principles with a focus on transparency and social responsibility in their services. Jurnal is able to attract customers who value integrity and sustainability by offering solutions that support transparency in financial management and encourage social responsibility. This helps Jurnal strengthen its market position and build stronger relationships with customers and other stakeholders. Jurnal's success in implementing ESG principles proves that attention to social responsibility and sustainability can provide a competitive advantage and support sustainable business growth.

Good leadership can drive ESG-based innovation by creating an environment that supports the exploration of new ideas and the development of sustainable solutions [29]. Start-ups like Kredivo, which provides digital credit services, show how visionary leadership can drive innovation in financial technology while ensuring that ESG principles are integrated into their business model. This leadership influences strategic decisions and also inspires the team to focus on sustainability and social responsibility. Kredivo can develop innovative solutions that support business growth while meeting market demands and customer expectations by prioritizing ESG principles in all operational aspects. This demonstrates how effective leadership can be a key factor in driving positive change and integrating ESG principles into business strategies.

An example of a start-up successfully implementing ESG principles is EcoBali, which manages organic waste into compost in Bali. EcoBali shows how applying environmental and social principles can create positive impacts for communities and the environment. EcoBali helps address waste problems and raises community awareness and involvement in sustainability efforts by educating local communities about waste management and implementing environmentally friendly practices. This initiative provides practical solutions to environmental issues while building a more aware and engaged community. EcoBali's success proves that applying ESG principles on a local scale can provide significant benefits for the environment and community, and serve as an example for other start-ups looking to adopt sustainability practices.

This research reveals that the application of ESG principles can have significant practical implications for SMEs, particularly in enhancing reputation, accessing new markets, and attracting investment. Start-ups that successfully adopt ESG principles often experience improvements in these aspects, which in turn supports business growth and sustainability. This underscores the importance for SMEs to consider integrating ESG principles into their strategies to achieve long-term success and build stronger relationships with stakeholders.

The research also highlights how applying ESG principles can help SMEs address market challenges and achieve sustainable competitive advantages.

A literature review shows that ESG principles are relevant to social responsibility and contribute to achieving broader business goals [30]. Start-ups like Alodokter, which provides a digital health platform, implement ESG principles with a focus on accessibility and transparency in their services. By doing so, they fulfill social responsibilities and achieve significant business growth. Integrating ESG principles into Alodokter's business model helps them build a positive reputation and attract customers who value sustainability and social responsibility. This success shows that applying ESG principles can be an effective strategy for achieving business success while meeting greater social demands.

Overall, the application of ESG principles in SMEs, particularly start-ups, offers broad benefits in terms of both sustainability and business performance. Effective leadership, ESG-based innovation, and good governance are key factors in achieving success in this context. The case studies outlined provide concrete evidence of how ESG principles can be practically applied to enhance SME performance and contribute positively to society and the environment. This research highlights the importance of integrating ESG principles into SME strategies to support sustainable growth and social responsibility, and demonstrates the significant potential of start-ups in leading positive change toward a more sustainable future.

Table 1. Key Findings on the Role of ESG Principles in Enhancing MSME Performance and Sustainability

No	Aspect	Key Finding
1	Leadership	Effective leadership is crucial for implementing ESG principles. Example: PT. TaniHub uses strong leadership to integrate sustainability into strategy, enhancing reputation and attracting investors.
2	ESG-Innovation	ESG-based innovation can significantly improve MSME performance. Example: Bluebird integrates electric vehicles into their taxi fleet to reduce carbon footprint and strengthen market position.
3	Environmental Aspect	Implementing environmentally friendly practices improves performance. Example: Tokopedia reduces plastic packaging and uses renewable energy, improving its image and competitiveness.
4	Social Aspect	Focusing on social responsibility has positive impacts. Example: Warung Pintar empowers local warungs with technology and training, boosting efficiency and local economic growth.
5	Governance	Good governance supports effective ESG implementation. Example: Gojek's clear oversight and transparent policies enhance investor trust and ensure adherence to ESG standards.
6	Challenges	Start-ups face challenges in implementing ESG due to resource constraints. Example: Local food and beverage start-ups find creative solutions like partnerships to adopt sustainable practices.
7	ESG Trends	The trend of ESG-based innovation is rising. Example: Ruangguru offers inclusive and sustainable education, supporting social goals and improving business performance and customer value.
8	SME Performance	Applying ESG principles often boosts profitability and market competitiveness. Example: Jurnal, providing accounting solutions, focuses on transparency and social responsibility, strengthening market position.
9	Leadership and Innovation	Good leadership drives ESG-based innovation. Example: Kredivo integrates ESG principles in digital credit services, supporting business growth and meeting market demands.
10	Practical Example	Local-scale ESG implementation provides significant benefits. Example: EcoBali manages organic waste into compost, raising community awareness and providing practical environmental solutions.
11	Practical Implications	ESG adoption improves reputation, market access, and investment appeal. Start-ups successfully adopting ESG principles often see enhancements in these areas, supporting business growth.
12	Business Goal	ESG principles support broader business goals. Example: Alodokter focuses on accessibility and transparency in health services, achieving significant business growth and building a positive reputation.

4. Conclusion

Based on the discussion on leadership, ESG (Environmental, Social, Governance)-based innovation, and their implications for MSME performance in the start-up context, several important conclusions can be drawn. First, effective leadership plays a crucial role in integrating ESG principles into MSME strategies and operations. Visionary leaders can motivate teams, create a culture that supports sustainability, and ensure that ESG practices are consistently applied. Second, ESG-based innovations not only improve the competitiveness of MSMEs but also provide more sustainable and socially responsible solutions. Start-ups that successfully implement these innovations tend to experience improvements in reputation, customer satisfaction, and financial performance. Third, the environmental, social, and governance aspects of ESG have a significant impact on MSME performance, helping them manage risks, capitalise on new opportunities, and meet stakeholder expectations. Case study examples from various start-ups show that the integration of ESG principles can provide a competitive advantage and support sustainable growth. Suggestions that can be given on the results of this study include:

1. Enhanced ESG Leadership: MSMEs, especially start-ups, are advised to develop leadership skilled in ESG aspects. Training and development for leaders should focus on the ability to integrate ESG principles in strategy and operations, as well as building a corporate culture that supports sustainability.
2. Focus on Sustainable Innovation: Start-ups need to invest in innovation that focuses on environmentally and socially friendly solutions. Implementing new technologies and sustainable business models will not only help in meeting market demands but also strengthen the company's competitiveness.
3. Transparent Governance: Implementation of good governance should be a priority to ensure that ESG principles are applied consistently and effectively. MSMEs should implement clear policies and oversight mechanisms to support transparency and accountability.
4. Collaboration with Stakeholders: MSMEs are advised to collaborate with stakeholders, including local communities, customers, and business partners, to support ESG initiatives. This collaboration can expand networks, improve access to resources, and strengthen the social impact of ESG practices.
5. Monitoring and Evaluation: It is important to conduct regular monitoring and evaluation of the implementation of ESG principles in MSMEs. Regular assessments can help in identifying areas that require improvement, as well as assessing the effectiveness of the ESG strategies implemented.
6. Education and Awareness: MSMEs should raise awareness and education on the importance of ESG among employees and stakeholders. An effective education programme can help all parties to understand the benefits of ESG principles and how to apply them in daily practice.
7. Government Support Policy Development: The government is expected to provide policies and incentives that support the implementation of ESG principles by MSMEs. This support can be in the form of financing, training facilities, and tax deductions for companies that implement sustainable practices.

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