

Sabihaini; Kurniawan, Arief; Prasetyo, Januar Eko; Rusdiyanto

Article

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Cogent Economics & Finance

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Suggested Citation: Sabihaini; Kurniawan, Arief; Prasetyo, Januar Eko; Rusdiyanto (2024) : Environmental analysis and impact on green business strategy and performance in SMEs post the Covid-19 pandemic, Cogent Economics & Finance, ISSN 2332-2039, Taylor & Francis, Abingdon, Vol. 12, Iss. 1, pp. 1-25,
<https://doi.org/10.1080/23322039.2024.2330428>

This Version is available at:

<https://hdl.handle.net/10419/321453>

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To cite this article: Sabihaini, Arief Kurniawan, Januar Eko Prasetyo & Rusdiyanto (2024) Environmental analysis and impact on green business strategy and performance in SMEs post the Covid-19 pandemic, Cogent Economics & Finance, 12:1, 2330428, DOI: [10.1080/23322039.2024.2330428](https://doi.org/10.1080/23322039.2024.2330428)

To link to this article: <https://doi.org/10.1080/23322039.2024.2330428>



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Environmental analysis and impact on green business strategy and performance in SMEs post the Covid-19 pandemic

Sabihaini^a , Arief Kurniawan^b, Januar Eko Prasetyo^c  and Rusdiyanto^d 

^aFaculty of Economics and Business, Universitas Pembangunan Nasional Veteran Yogyakarta, Kabupaten Sleman, Indonesia; ^bSTIKes Ibnu Sina Ajibarang, Jawa Tengah, Indonesia; ^cAccounting Department, Universitas Pembangunan Nasional “Veteran” Yogyakarta, Kabupaten Sleman, Indonesia; ^dFaculty of Economics, Universitas Gresik, Jawa Timur, Indonesia

ABSTRACT

Purpose: This study aims to obtain empirical evidence on the effect of environmental analysis on environmentally friendly business strategies and performance in SMEs after the Covid-19 Pandemic.

Methodology: The study included primary data sources such as environmental orientation, top management awareness, environmental performance, green business strategy, and SMEs performance. It involved 103 SMEs, of which 36 were in the food processing industry, 37 were in the leather processing industry, and 30 were involved in furniture manufacturing.

Findings: In this study, 103 SMEs were examined with a focus on performance, environmental performance, top management environmental awareness, green business strategy, and environmental orientation. These findings can support resource-based display theory and assist corporate management in making judgments regarding business plans. A positive mediation association between ecological performance and environmental orientation toward green company strategy through top management's environmental awareness was also discovered in this study.

Implications of research: A mediating relationship between environmental direction, green business strategy, and top management's ecological awareness and performance orientation is revealed, which supports managers in their decision-making.

Originality/value: This study focuses on green business strategies, environmental performance, environmental performance awareness, and environmental orientation to improve the operations of Indonesian SMEs and address environmental challenges.

IMPACT STATEMENT

The environment is an important part and factor that must be considered in the management of business activities. The business environment influences future business development from the external and internal environment. The external environment is a factor outside the company that can influence the organizational structure, direction, internal processes and company actions in its business activities. The relationship between the environment and business is so close that companies must be observant in predicting changes or recognizing environmental problems. Environmental management is an aspect that must be considered and improved in carrying out management functions to achieve company goals that are oriented toward environmental sustainability. It becomes a demand or obligation for a business to pay attention to sustainability and an orientation toward the environment. These efforts are used to anticipate or fulfil various demands from stakeholders regarding environmental protection or preservation.

ARTICLE HISTORY

Received 26 September 2023

Revised 26 January 2024

Accepted 10 March 2024

JEL CLASSIFICATION

A11; C12; C39; D04; D22

KEYWORDS

SMEs, top management; environmental; performance; green business, strategy; SEM

REVIEWING EDITOR



Goodness Aye, Academic Editor, University of Agriculture, Makurdi Benue State, Nigeria

SUBJECTS

Economics; finance; business, management and accounting; industry and industrial studies; accounting; business history; corporate governance; corporate social responsibility and business ethics; entrepreneurship and small business management

1. Introduction

Small and medium-sized businesses (SMEs), which managed to escape the 1998 financial crisis, were crucial to Indonesia's economy. SMEs are essential to the economy because they equalize the economic

CONTACT Sabihaini  sabihaini@upnyk.ac.id  Faculty of Economics and Business, Universitas Pembangunan Nasional Veteran Yogyakarta, Jl. Padjadjaran/SWK 104 Ring Road Condongcatu, Kec. Depok, Kabupaten Sleman, Daerah Istimewa Yogyakarta 55283, Indonesia

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status of the average individual, fight poverty, and generate money. They are the biggest credit borrowers and make a considerable contribution to GDP. Government rules such as the Job Creation Law and the Indonesian Proud Made campaign are essential for the expansion and development of SMEs (Martha Hendrati et al., 2024; Sabihaini et al., 2023).

To lessen the impact of the Covid-19 epidemic, this study addresses the government's income tax reduction for SMEs. However, structural problems that affect SMEs include inconsistencies in production, accessibility to marketing, and the caliber of human resources. The absence of governmental monitoring in the Yogyakarta Special Region is a major contributor to these problems. The federal government can work with provincial governments, Bank Indonesia, and other organizations, such as colleges and universities, to address these issues (Prasetio et al., 2024; Sabihaini et al., 2023).

The COVID-19 pandemic has highlighted the importance of social capital in promoting creativity, innovation, and productivity, which in turn improves a company's reputation in society and ensures its survival and longevity (Al-Omoush et al., 2022; Shabbir et al., 2021). The success of SME's is not considerably impacted by environmental instability; however, in chaotic environments, information processing requirements rise. Turbulence hurts high-tech businesses because they spend money on R&D (Asyik et al., 2023; Bashir et al., 2023; Eko Prasetio et al., 2023). This study emphasizes the relationship between corporate knowledge management and knowledge organization in small and medium-sized businesses (SMEs), emphasizing the latter's role in promoting innovation and enhancing business performance, notably in the financial industry (Chaithanapat et al., 2022; Prasetyo et al., 2023). According to research, security and complexity concerns slow down the adoption of cloud computing, and CSPs should inform SMEs about their advantages, architecture, and services (Chen et al., 2023; Nuswantara et al., 2023).

According to a survey, there is a lack of cloud adoption due to complexity and security concerns, and CSPs should collaborate, share resources, and train SMEs on disaster preparedness, security, and maintenance to compensate for lost time and money (Chopra et al., 2022; Hendrati et al., 2023). According to a Bank Dunia 2020 study, among 999 enterprises, digital competencies had no discernible effect on company success, indicating that high HDI levels have a greater effect on digital capabilities and call for digital development for innovation (Heredia et al., 2022; Prasetyo et al., 2022). According to the study, businesses that wait longer for innovation generate more value for their growth and become more original and creative as they do so (Asyik et al., 2022; Hilmeresson & Hilmeresson, 2021). Combining knowledge, skills, and resources for innovation is a process that frequently calls for capacity to create, adapt to change, and communicate information. This study examines the increased interest in business economics and operations research management sectors in Industry 4.0, particularly blockchain and COVID-19 (Kalbuana et al., 2022; Martínez et al., 2022). This study discovered a U-shaped relationship between innovation and commercial success, which examines the effect of innovation subsidies on the export performance of Peruvian SMEs. Technological innovation has a particularly substantial impact on workers and employees (Ortigueira-Sánchez et al., 2022; Tjaraka et al., 2022). Examining nine non-profit LBCs in the Italian loan market, this study demonstrates how they have different financial cycles than bank credit. Increased investor safety and transparency in Fintech loans has been emphasized (Stefanelli et al., 2022; Sudaryanto et al., 2022). Due to lower compensation, non-profit organizations have trouble attracting and maintaining their employees. Offering rewards, promotions, and modern amenities, such as flexible scheduling and professional growth, might be helpful (Slatten et al., 2021; Utari, Sudaryanto, et al., 2021).

This study examines how senior management's ecological awareness affects green business strategy and performance and demonstrates how their emphasis on sustainability creates an indirect link between environmental performance and green business strategy.

2. Literature review and development hypothesis

2.1. Small and medium enterprises (SMEs) in Indonesia

Small and medium-sized businesses (SMEs), operated by individuals or groups, are crucial to Indonesia's economy. SMEs are defined by assets and sales value in rupiah by the Central Bureau of Statistics, whereas statistics are provided by the Ministry of Industry and Trade, Bank Indonesia, and Finance

(Nohong et al., 2024; Prasetyo et al., 2021). Small and medium-sized firms (SMEs) are those with a net value of at least IDR, with the purpose of producing goods or services for commercial exchange, according to Law No. 9 of 1995. SMEs must employ fewer than 100 people and have yearly sales of at least 1 billion rupiah.

Indonesia is economically affected country, especially economically (Aliyyah, Siswomihardjo, et al., 2021; Pakpahan, 2020). The Covid-19 pandemic has significantly affected the economy, causing difficulties in job acquisition, daily expenses, and financial stability. SMEs, including up to 37,000, have reported four main difficulties: reduced social interaction, capital issues, obstacles to product distribution, and a lack of sufficient raw materials. These issues have made SMEs less resilient and more vulnerable to the pandemic, making them more susceptible to changes in their business strategies.

SMEs need flexible ways to respond to demands from the global economy, technical SMEs need flexible ways to respond to the demands of the global economy, technical improvements, demographic shifts, innovation, and financial support. An entrepreneurial mindset prioritizes the pursuit of opportunities, ensuring flexibility and adaptability in the face of constantly shifting market conditions (Indrawati et al., 2021; Xi et al., 2024). An attitude known as entrepreneurial orientation places a high value on breaking new ground in the market, taking calculated risks, and foreseeing market trends (Endarto, Taufiqurrahman, Kurniawan, et al., 2021; Ivanega & Szczepanek, 2024). According to Blocker et al. (2024) and Utari, Iswoyo, et al. (2021). Market-focused companies focus on meeting customer needs, leading to rapid growth, profitability, market share, and long-term competitive advantage through profitable flagship goods.

To protect the environment, the government has adopted rules to promote ecologically friendly goods, placing an emphasis on profit over environmental concerns, particularly for SMEs (Prasetyo, Aliyyah, Rusdiyanto, Utari, et al., 2021; Usada & Murni, 2020). In contrast to relying on raw resources and production methods, technological improvements foster creativity and innovation, motivating SMEs to continuously develop new products and support governmental initiatives (Endarto, Taufiqurrahman, Suhartono, et al., 2021; Nguyen & Vu, 2024). The goal of the environmental movement is to increase public awareness of the harm that human activity and weather patterns are causing to the environment. As modern society increasingly selects environmentally friendly options for consumption, it highlights the necessity for businesses, including SMEs, to produce environmentally friendly products (Abadi et al., 2021; Bowen et al., 2024). To provide SMEs with cutting-edge retail market space and ISO 14000 and ISO 14005 certifications to ensure eco-friendly product management, the Indonesian government and a major retail corporation are working together (Usada & Murni, 2020; Prasetyo, Aliyyah, Rusdiyanto, Kalbuana, et al., 2021). With SMEs playing a prominent role, the 2005–2025 National Long-term Development Plan seeks to expand Indonesia's home economy based on regional advantages. They have proven that they can make use of local resources and strengthen the economy of the country.

According to Fatimah and Azlina (2021) and Aliyyah, Prasetyo, et al. (2021), multidimensional concepts and performance indicators have an impact on the relationship between entrepreneurial approach and performance. Employee satisfaction and a competitive advantage result from effective organizational performance, necessitating ongoing protection of the company's edge (Mohsin et al., 2024; Rusdiyanto et al., 2021).

2.2. Resource-based view theory

This theory offers a conceptual framework for comprehending the value of organizational resources, emphasizing how ownership and management affect performance and sustainability (Chandra & Rahman, 2024; Kalbuana, Suryati, et al., 2021). Through access to financial resources, which are broken down into many categories including physical, financial, technological, human, and organizational resources, organizations can acquire new resources (Pham et al., 2024; Prasetyo, Aliyyah, Rusdiyanto, Nartasari, et al., 2021) and according to the resource-based perspective, companies can maintain their competitive edge by using their own or acquired resources well (Alkaraan et al., 2024; Kalbuana, Prasetyo, et al., 2021). The resource-based approach teaches participants how SMEs can flourish and attain financial sustainability by securing financial and nonfinancial resources. SMEs in Indonesia are essential for local economies, community engagement, and balance of payments. Scientific,

technological, and creative advances that have fueled globalization have shifted attention to financial systems and democratic governments.

2.2.1. Environmental orientation and green business strategy

This theory offers a conceptual framework for comprehending the value of organizational resources, emphasizing how ownership and management affect performance and sustainability (Bustinza et al., 2024; Prasetyo, Aliyyah, Rusdiyanto, Suprpti, et al., 2021). According to Hoskisson et al. (2018) and Prasetyo, Aliyyah, Rusdiyanto, Chamariah, et al. (2021) the resource-based perspective, which emphasizes the significance of firms successfully employing their physical, financial, technological, human, and organizational resources to maintain a competitive edge, is highlighted by Alkhatib and Valeri (2024) and Prasetyo, Aliyyah, Rusdiyanto, Nartasari, et al. (2021). By acquiring both financial and non-financial resources, participants can better grasp how a resource-based approach can assist SMEs in thriving and achieving economic sustainability.

For SMEs to remain competitive and adaptive in rapidly shifting market conditions, they need strategies that can be adjusted to the needs of global commerce, technical breakthroughs, demographic changes, innovation, financial aid, and entrepreneurship (Chávez-Rivera et al., 2024; Prasetyo et al., 2021). Entrepreneurial orientation emphasizes opportunity identification and exploitation is known as entrepreneurial orientation. The entrepreneurial approach entails setting a standard for innovation, taking calculated risks, and anticipating market trends (Avelar et al., 2024; Luwihono et al., 2021). Market orientation is a business philosophy that emphasizes meeting customer requirements and preferences (Peng, 2024; Susanto et al., 2021). Businesses with a strong competitive advantage focus on market performance, profitability, and market share. Government initiatives place strong emphasis on environmental preservation and SME performance (Al-Swidi et al., 2024; Rusdiyanto, Karman, et al., 2020). By consistently creating new products and marketing plans that support government goals, SMEs can use creativity and innovation to raise the economic worth of their goods and services (Prabowo et al., 2020; Usada & Murni, 2020).

By consistently creating new products and marketing plans that support government goals, SMEs can use creativity and innovation to increase the economic value of their goods and services (Kar et al., 2020; Rusdiyanto, Hidayat, et al., 2020). A corporation's obligation to detect and reduce harmful environmental effects, which includes both internal and external factors, is known as its environmental orientation (Kar et al., 2020; Rusdiyanto, Agustia, et al., 2020). An organization's obligation to recognize and reduce negative environmental effects, which include both internal and external issues, is referred to as having an environmental orientation (Juanamasta et al., 2019; Olayeni et al., 2021). Green business strategies include several facets, including green marketing, production, R&D, and purchasing (Kar et al., 2020). Recent research shows that green business methods are favorably related to environmental awareness, which benefits businesses. The IEO is an internal corporate code of conduct that promotes environmental preservation. It is frequently initiated by business executives (Sabihaini et al., 2019). IEO is the strategic value of a firm that emphasizes environmental preservation in strategic planning, dealing with environmental challenges, and satisfying stakeholder expectations and legal requirements (Kar et al., 2020).

H₁: Environmental orientation has a positive effect on green business strategy for SMEs

2.2.2. Environmental orientation and performance

Because they are the inputs that make daily operations possible, this theory emphasizes the critical role that organizational resources play in improving an organization's sustainability and performance (Xie et al., 2024), according to Hoskisson et al. (2018) Because they are the inputs that make daily operations possible, this theory emphasizes the critical role that organizational resources play in improving an organization's sustainability and performance (Sahoo et al., 2024). Given that these are the main inputs for everyday operations, the theory highlights the critical role that organizational resources play in boosting an organization's sustainability and performance (Asad et al., 2024). With the help of financial and non-financial resources, the resource-based strategy teaches SMEs how to achieve financial sustainability while promoting environmentally friendly products to help them succeed and retain customers

(Asad et al., 2024). With the help of financial and non-financial resources, the resource-based strategy teaches SMEs how to achieve financial sustainability while promoting environmentally friendly products to help them succeed and retain customers (Usada & Murni, 2020).

The Indonesian government and major retailers have joined forces to give SMEs modern market space with ISO 14000 and ISO 14005 certificates to develop the local economy and strengthen the economic foundation of the populace. A company's performance is evaluated using the Balanced Scorecard, which considers four factors: financial, customer, internal business process, and learning and growth. Performance is greatly impacted by environmental orientation, which has a favorable effect on financial performance. A company's success and long-term competitive advantage can be improved by incorporating IEO principles into its operations.

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H₂: Environmental orientation has a positive effect on the performance of SMEs

2.2.3. Environmental orientation and environmental performance

By conserving energy, resources, and recycling, an environmental perspective helps businesses to adapt, handle environmental issues, and achieve a competitive edge. This mindset influences a company's market share and reputation, enhances performance, and assists in daily operations (Mohsin et al., 2024). This resource-based strategy aids in comprehending how SMEs in Indonesia can thrive and attain economic sustainability. The government supports SMEs, which are expected to number 64,2 million by 2021, with programs such as KUR funding, productive aid, investment finance, the Job Creation Law, and loans with lower interest rates.

An organization's comprehension of the effects of its operations on the environment and the need for corrective action is known as environmental orientation (EEO). EEO affects how many resources are used, how regulations are followed, how involved stakeholders are, and how productive employees are, which lowers operational air pollution and waste management.

H₃: Environmental orientation has a positive effect on environmental performance in SMEs

2.2.4. The influence of environmental performance on the performance of SMEs

The theory emphasizes the significance of organizational resources, including those that are material, financial, technological, human, and organizational, and how ownership and management of these resources affect an organization's success and sustainability, allowing businesses to consistently outperform their rivals (Al-Omoush et al., 2024). Understanding how SMEs can attain economic sustainability by accumulating financial and nonfinancial resources is easier from a resource-based perspective. Businesses can now incorporate environmental considerations into operations according to regulations adopted by the Ministry of Environment and Bank Indonesia (Utama et al., 2024).

With PROPER legislation backing environmental protection initiatives with little adverse impact, businesses can integrate environmental concerns into operations and stakeholder engagement. Operations, market share, client retention, and consumer influence can all benefit from ongoing improvements in environmental performance (Ong et al., 2019) the financial success of a business and benefits stakeholders, investors, and potential investors. The utilization of resources, compliance with regulations, stakeholder involvement, and productivity are all factors. Recent empirical investigations indicate that ecological performance influences performance (Ong et al., 2019) demonstrating that environmental performance might impact financial performance.

H₄: Environmental Performance has a positive effect on the performance of SMEs.

2.2.5. The effect of green business strategy on the performance of SMEs

The resource-based perspective places strong emphasis on the value of organizational resources in guaranteeing the performance and viability of an organization. The physical, monetary, technological, human, and organizational components comprise these resources. Utilizing these resources well, whether bought or retained, can provide businesses with a competitive advantage (Alghamdi & Agag, 2024). The resource-based approach helps to understand the benefits of acquiring financial and non-financial resources for SMEs' economic sustainability and growth during the Covid-19 pandemic, which negatively impacts Indonesia's SMEs due to lockdown measures and quarantine procedures (Yunus & Rezki, 2020). The government's lockdown policy slows economic growth, has an impact on trade, lowers air pollution, and stops the spread of COVID-19. However, some customers still make purchases online or offline, which hurts businesses.

Bıçakcıoğlu et al. (2020) In order to attain the best environmental performance, a company's strategy is integrated with environmental considerations. Financial outcomes, export financial performance, and environmental preservation are heavily impacted by this strategy. Green businesses expand their customer base, make financial savings, boost output, and preserve their environment. Additionally, they provide a competitive advantage that lasts for a long time, improves performance, and has a positive and significant impact on financial success (Olayeni et al., 2021).

H₅: Green business strategy has a positive effect on the performance of SMEs

2.2.6. The influence of environmental orientation on green business strategy through top management ecological awareness as a mediating variable

As their performance depends on satisfying the requirements of all stakeholders, stakeholder theory underlines the significance of companies undertaking stakeholder-driven efforts to address pressure and requests successfully (Lim & Pope, 2022). Stakeholders are looking for SMEs with adaptable, environmentally conscious strategies that consider demographic changes, technology improvements, globalization, and entrepreneurship. Spotting possibilities, dictating market speed, taking prudent risks, and foreseeing trends are stressed in an entrepreneurial mindset. Market orientation places strong emphasis on meeting customer needs, which promotes rapid development and profitability (Abbas et al., 2024).

To prove that an independent variable X influences a distal dependent variable Y through a mediating variable, three tests are offered (Capasso et al., 2024). When a variable satisfies specific criteria, such as a zero Path c, no discernible relationship between the independent and dependent variables, and little correlation, as shown in Figure 1, it can operate as a mediator. An organization's strategy for tackling environmental problems, encouraging stakeholder engagement, and disseminating information is referred to as its environmental orientation. This offers a managerial perspective on CSR initiatives and guiding principles. The relationship between implementing green business strategies and having an ecological mindset is strengthened by high-level management's environmental knowledge, enabling enterprises to utilize resources and reap the benefits to the fullest extent (Yasir et al., 2020). The essay places a strong emphasis on the value of senior management in supporting a green business strategy.

H₆: Environmental orientation has a positive and significant effect on green business strategy through top management environmental awareness as a mediating variable in SMEs

2.6.7. The influence of environmental orientation on the performance of SMEs through ecological performance as a mediating variable

The resource-based perspective, which considers physical, monetary, technological, human, and organizational resources, highlights the importance of organizational resources for guaranteeing sustainability and success. Businesses may have a competitive advantage if these resources are effectively used (Alghamdi & Agag, 2024). According to the resource-based strategy, SMEs should prioritize stakeholders, including shareholders, creditors, clients, suppliers, the government, and the local community, while assembling financial and non-financial resources for economic sustainability (Vania & Anwar, 2022). In this instance, stakeholders seek an environmentally focused strategy.

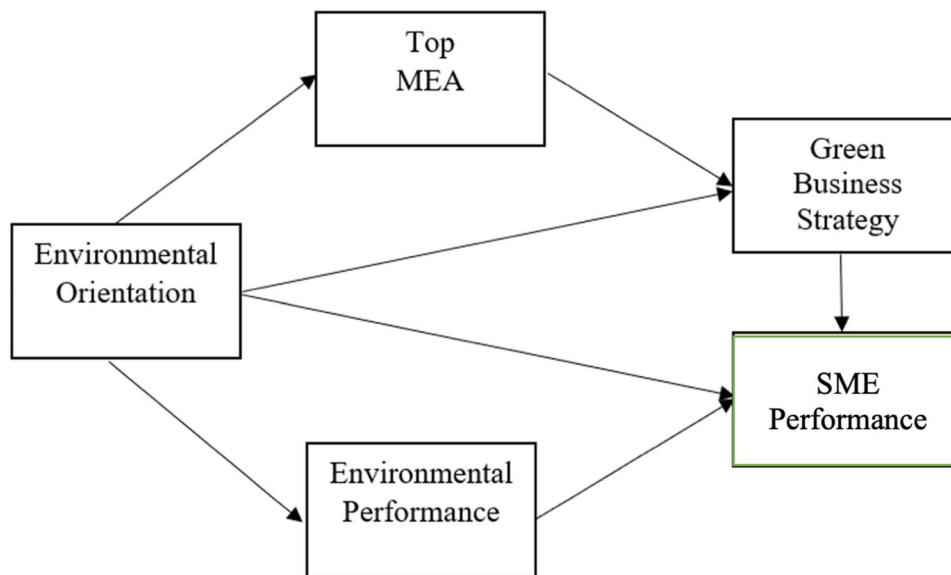


Figure 1. Research framework.

Flexible plans for SMEs are required based on the needs of global commerce, technological advancements, demographic changes, innovation, financial support, and entrepreneurship. While market orientation concentrates on meeting customer demands, entrepreneurial orientation stresses opportunity identification and exploitation, innovative market strategies, and proactive responsiveness to market development (Franczak et al., 2024). Companies that are market focused can advance more swiftly, as seen by the popularity, profitability, market share, and sustained competitive advantage of their new flagship products (Allal-Chérif et al., 2024). When a previously significant link ceases to be significant when Paths a and b are controlled for, a variable is called a mediator if changes in its levels significantly explain changes in the mediator, Path a, and Path b.

Flexible plans for SMEs emphasize opportunity identification, innovative tactics, and proactive responses to adjust to factors such as global trade, technical improvements, demographic changes, innovation, financial support, and entrepreneurship (Avelar et al., 2024). Therefore, we contend that to improve performance, environmental elements must be considered.

H₇: Environmental orientation has a positive and significant effect on the performance of SMEs through environmental performance as a mediating variable for SMEs

2.3. Research conceptual framework

The conceptual framework explains the independent and dependent variables, which are the mediating variables used in this study. Considering the explanations of the theoretical foundations, concepts, and hypotheses offered above, the conceptual framework of the study can be stated as follows:

3. Research methodology

This study examines the impact of environmental orientation on green business strategy and SME performance using quantitative methodology and hypothesis testing. All SMEs in the Special Region of Yogyakarta were included in the population, which were selected using non-probability sampling and purposeful sampling methods. With sample sizes ranging from 30 to 500, this study focuses on processing SME food, leather, and furniture that have a dedication to environmental sustainability (Omoloso et al., 2024). N samples were used in this investigation. There were 130 responses. distributed surveys to 130 SMEs; however, only 103 responded. As a result, the data processing is complete (Table 1).

Table 1. Percentage Amount Sample.

No	Types of SMEs	Amount	Percentage (%)
1	Processing Food	36	35
2	Processing Skin	37	36
3	Furniture	30	29
Total		103	100

Table 2. Dimensions and Indicators of the Balanced ScoreCard.

Dimensions	Indicator	Source
Perspective Money	ROA Sales Growth Cash Flow	(Vieira et al., 2024)
Perspective Customer	Satisfaction Customer Market Share	
Internal Business Process Perspective	Retention Customer Operation Process	
Perspective Learning and Growth	Innovation Capability Employee Climate Organization	

Table 3. Dimensions and indicators of green business strategy.

Dimensions	Indicator	Source
Green HRM	Green Recruitment Green Selection Green Training and Development	(Yasir et al., 2020)
Green Financing	Reach Superiority Industry Development Investment	(Porzionato et al., 2020)
Green Marketing	Green Price Green Promotion Green Distribution	(Yasir et al., 2020).
Green Production	Green Materials Waste Reduction	
Green R&D	Green Product Development Green Technology Innovation	
Green Purchasing	Purchase Environmentally Friendly Raw Materials Green Supplier Selection	

Table 4. Dimensions and indicators of environmental orientation.

Dimensions	Indicator	Source
Internal Environmental Orientation	Company Commitment Protection Value Environment	(O'Brien et al., 2018; Yasir et al., 2020).
External Environmental Orientation	Connection with Stakeholders Understanding Demands Stekholder	

3.1. Definition operational variables and measurement

3.1.1. SME performance

A corporation's performance is anything a corporation does over a specific length of time at a specified level (Liu et al., 2024). A thorough 'Balanced Score Card' (BSC) was used to assess the SME performance. Four parameters, and, sign a firm that measures performance (Vieira et al., 2024) (Table 2).

3.1.2. Green business strategy (GBS)

Green business strategies incorporate environmental issues into business plans. to create a performance-enhancing environment (Bıçakcıoğlu et al., 2020). The dimensions and Indicators of Green business strategy were adopted from (Yasir et al., 2020) (Table 3).

3.1.3. Environmental orientation (EO)

The extent to which a corporation understands problematic environments and attitudes is referred to as its environmental orientation. to change problematic settings (Yasir et al., 2020). The dimensions and indicators of environmental orientation were adopted from (O'Brien et al., 2018) (Table 4).

Table 5. Environmental performance dimensions and indicators.

Dimensions	Indicator	Source
Resource Usage	Source Power Financial Source Power Physique Source Power Man	(Zhang et al., 2024)
Regulatory Compliance	Specification Standard	(Fitriyani et al., 2020)
Stakeholder Interaction	Each other Dependency Harmony Objective	(Barboza et al., 2024)
Productivity	Trust Efficiency Quality	(Apip et al., 2020) (Snapp et al., 2018).

Table 6. Top management environmental awareness dimensions and indicators.

Dimensions	Indicator	Source
General Awareness	Knowledge Action	(Sugiarto & Gabriella, 2020)
Cost Benefit Awareness	Cost Prevention Environment Cost Detection Environment	(Bibri et al., 2024)
Environmental Attitude	Connectedness to Nature	(Mohammadi et al., 2024)

Table 7. Likert Scale.

Answer	Mark	Source
Absolutely No Agree	1	(Memmedova & Ertuna, 2024)
No Agree	2	
Neutral	3	
Agree	4	
Strongly Agree	5	

3.1.4. Environmental performance (EP)

Environmental performance connects businesses to the environment through operations. to apply appropriate environmental practices to a business (Yasir et al., 2020). The dimensions and indicators were adopted from (Yasir et al., 2020) (Table 5).

3.1.5. Top management environmental awareness (TMEA)

Executive-level environmental awareness refers to a manager's or senior management's commitment, attitudes, and views regarding the problematic environment, as well as their participation in the business's environmental protection strategy (Yasir et al., 2020). The dimensions and indicators of top management environmental awareness were adopted from (Yasir et al., 2020) (Table 6).

3.1.6. Measurement variable

Measurement technique variable in study This is with the use of a Likert scale. The Likert scale was designed to evaluate the extent to which a large attitude agrees with a statement (Memmedova & Ertuna, 2024). The Likert scale was used in scale 5, as follows:

1. **To measure the green variable business strategy and environmental performance (Table 7).**
2. **For measure variable SME performance, environmental orientation, and top management environmental awareness (Table 8)**

4. Discussion

4.1. Statistics descriptive

In a study of 103 SMEs in the Special Region of Yogyakarta that focused on the processing of leather, food, and furniture, it was discovered that men made up the majority of respondents, with 66% of them being men, 37% being between the ages of 41 and 50, 38% being high school graduates, and 33% having been in company for between six and ten years (Goh et al., 2020).

Table 8. Likert Scale.

Answer	Mark	Source
Absolutely No Agree	1	(Memmedova & Ertuna, 2024)
No Agree	2	
Neutral	3	
Agree	4	
Strongly Agree	5	

4.2. Inferential statistical analysis

4.2.1. Validity test

Validity test between construct variables Environmental Orientation, Green Business Strategy, Top Management Environmental Awareness, Environmental Performance and Performance with Confirmatory Factor Analysis as follows (Table 9):

Items or indicators of a latent construct must converge or share a high proportion of variance, called convergent validity. To measure construct validity, it can be seen from factor loading. The condition that must be met is that the standardized loading estimate must be equal to 0.50 or more; ideally, it must be 0.70 (Kubiszyn & Borich, 2024). Based on the results of the standardized loading estimate output above, in general, all loading factors are above 0.50. So, it can be said that the indicators for each variable are valid

4.2.2. Reliability test

According to Kubiszyn & Borich, (2024) Reliability is a measure of the internal consistency of the indicators of a formed variable, which shows the degree to which each arrow indicates a generally included variable. Two methods can be used: composite (construct) reliability and variance extracted. The cut-off value for composite (construct) reliability is a minimum of 0.70, while the cut-off value for variance extracted is 0.50.

$$\text{ConstructReliability} = \frac{(\sum \text{Std.loading})^2}{(\sum \text{Std.loading})^2 + \sum e_j}$$

Construct Reliability of 0.70 or more indicates good Reliability, while Reliability of 0.60–0.70 is still acceptable, provided that the validity of the indicators in the model is good (Table 10).

The results of the reliability test show that all variables have a Construct Reliability of 0.70 or more, indicating good reliability. This way, all the variable items in this research are reliable and can be used as research instruments.

4.2.3. Data normality evaluation

Normality evaluation was carried out using the multivariate critical ratio criterion, with a range of ± 2.58 at a significance level of 0.01 (1%). Data can be concluded to have a normal distribution if the critical ratio for multivariate shows a value below 2.58 (Kubiszyn & Borich, 2024). The results of data normality testing are presented as follows (Table 11):

Based on the table, it shows that the multivariate normality test has a normal distribution because the critical ratio (c.r) value is in the range of ± 2.58 , namely 0.489. Thus, it can be concluded that the manifest variable data (observed variables) are normally distributed.

4.2.4. Multivariate outlier evaluation

An outlier is an observation condition of data with unique characteristics that appear very different from other observations and appear in extreme values, either for a single variable or a combination of variables. Detection of multivariate outliers is carried out by paying attention to the value of the chi-square at 57 degrees of freedom, namely the number of indicators at a significance level of $p < 0.001$. Mahalonabis distance value $\div 2 (57; 0.001) = 95.75$. This means all cases with a mahalonobis distance greater than 95.75 are multivariate outliers (Kubiszyn & Borich, 2024). The following are the results of

Table 9. Confirmatory factor analysis validity test.

Variable	Item	Factor loading
Environmental Orientation	EO1	0.812
	EO2	0.850
	EO3	0.831
	EO4	0.834
	EO5	0.872
	EO6	0.853
Green Business Strategy	GBS1	0.763
	GBS2	0.850
	GBS3	0.848
	GBS4	0.887
	GBS5	0.845
	GBS6	0.759
	GBS7	0.853
	GBS8	0.885
	GBS9	0.872
	GBS10	0.881
	GBS11	0.864
	GBS12	0.845
SME Performance	GBS13	0.880
	GBS14	0.863
	GBS15	0.876
	GBS16	0.857
	GBS17	0.874
	GBS18	0.888
	KI1	0.855
	KI2	0.861
	KI3	0.855
	KI4	0.857
	KI5	0.914
	KI6	0.904
Environmental Performance	KI7	0.851
	KI8	0.873
	KI9	0.880
	KI10	0.841
	KI11	0.917
	KI12	0.883
	EP1	0.860
	EP2	0.841
	EP3	0.839
	EP4	0.859
	EP5	0.876
	EP6	0.864
Top Management Environmental Performance	EP7	0.853
	EP8	0.865
	EP9	0.855
	EP10	0.874
	EP11	0.874
	EP12	0.852
	TMEA1	0.837
	TMEA2	0.851
	TMEA3	0.823
	TMEA4	0.889
	TMEA5	0.880
	TMEA6	0.881
	TMEA7	0.899
	TMEA8	0.872
	TMEA9	0.806

the Mahalanobis distance output from the AMOS 21.0 program. Because there are no Mahalanobis values above 95.75, it can be concluded that there are no outliers in the data (Table 12).

4.3. Testing feasibility of the goodness of fit index model

The adequacy of the model employed for the confirmatory factors was determined by the feasibility of the goodness-of-fit index model. Model appropriateness was considered in the SEM testing. Regarding the findings of the goodness-of-fit test for the complete research model, according to this with a cut-off value (Kubiszyn & Borich, 2024) served as follows (Table 13):

Table 10. Construct reliability.

Variable	Item	Factor loading	Construct reliability	Variance extracted
Environmental Orientation	EO1	0.812	0.9360	0.7093
	EO2	0.850		
	EO3	0.831		
	EO4	0.834		
	EO5	0.872		
	EO6	0.853		
Green Business Strategy	GBS1	0.763	0.9800	0.7323
	GBS2	0.850		
	GBS3	0.848		
	GBS4	0.887		
	GBS5	0.845		
	GBS6	0.759		
	GBS7	0.853		
	GBS8	0.885		
	GBS9	0.872		
	GBS10	0.881		
	GBS11	0.864		
	GBS12	0.845		
	GBS13	0.880		
	GBS14	0.863		
SME Performance	GBS15	0.876	0.9750	0.7649
	GBS16	0.857		
	GBS17	0.874		
	GBS18	0.888		
	KI1	0.855		
	KI2	0.861		
	KI3	0.855		
	KI4	0.857		
	KI5	0.914		
	KI6	0.904		
	KI7	0.851		
	KI8	0.873		
Environmental Performance	KI9	0.880	0.9713	0.7385
	KI10	0.841		
	KI11	0.917		
	KI12	0.883		
	EP1	0.860		
	EP2	0.841		
	EP3	0.839		
	EP4	0.859		
	EP5	0.876		
	EP6	0.864		
	EP7	0.853		
	EP8	0.865		
Top Management Environmental Awareness	EP9	0.855	0.9624	0.7401
	EP10	0.874		
	EP11	0.874		
	EP12	0.852		
	TMEA1	0.837		
	TMEA2	0.851		
	TMEA3	0.823		
	TMEA4	0.889		
	TMEA5	0.880		
	TMEA6	0.881		
	TMEA7	0.899		
	TMEA8	0.872		
	TMEA9	0.806		

The overall results are a good fit based on the quality of fit. In light of the findings of the goodness of fit testing performed on the study's standard model, the following examples illustrate how the data are observed in accordance with theory or models (Figure 2):

4.4. Testing influence live and discussion

Evaluating direct influence: Testing the hypothesis is another step in the process of providing evidence that satisfies the assumptions made by SEM. testing the study's seven main hypotheses This was accomplished using the critical ratio (CR) value of a causal relationship (G.-Z. Wong et al., 2024) can explained via table as following (Table 14):

Table 11. Data normality evaluation.

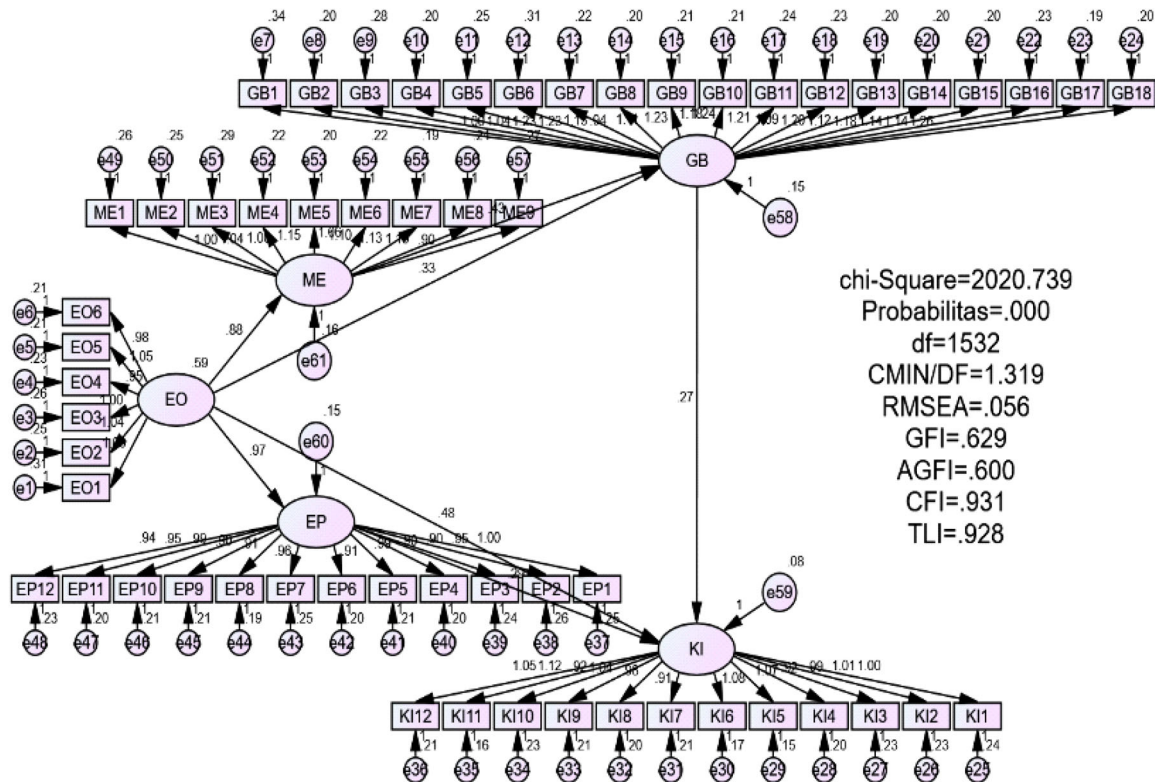
Variable	Min	Max	Skew	c.r	Kurtosis	c.r
TMEA9	2.000	5.000	-.384	-1.591	-.578	-1.197
TMEA8	1.000	5.000	-.560	-2.320	-.506	-1.049
TMEA7	1.000	5.000	-.716	-2.966	-.229	-.475
TMEA6	1.000	5.000	-.606	-2.509	-.101	-.209
TMEA5	2.000	5.000	-.416	-1.722	-.765	-1.584
TMEA4	1.000	5.000	-.750	-3.107	-.295	-.612
TMEA3	1.000	5.000	-.427	-1.769	-.470	-.975
TMEA2	2.000	5.000	-.358	-1.482	-.965	-1.998
TMEA1	1.000	5.000	-.560	-2.322	-.207	-.429
EP12	2.000	5.000	-.329	-1.364	-.792	-1.640
EP11	1.000	5.000	-.509	-2.110	.173	.358
EP10	1.000	5.000	-.722	-2.991	-.039	-.081
EP9	2.000	5.000	-.444	-1.840	-.516	-1.070
EP8	1.000	5.000	-.406	-1.683	-.103	-.214
EP7	1.000	5.000	-.655	-2.712	.167	.346
EP6	1.000	5.000	-.550	-2.279	.055	.115
EP5	1.000	5.000	-.560	-2.322	.049	.101
EP4	1.000	5.000	-.784	-3.249	.870	1.802
EP3	1.000	5.000	-.398	-1.649	-.244	-.505
EP2	1.000	5.000	-.513	-2.125	-.370	-.766
EP1	1.000	5.000	-.485	-2.011	-.461	-.954
KI12	1.000	5.000	-.728	-3.015	.161	.334
KI11	1.000	5.000	-.620	-2.568	-.405	-.838
KI10	2.000	5.000	-.360	-1.491	-.662	-1.372
KI9	1.000	5.000	-.527	-2.182	-.350	-.726
KI8	1.000	5.000	-.491	-2.034	-.201	-.417
KI7	1.000	5.000	-.498	-2.064	.084	.174
KI6	1.000	5.000	-.664	-2.749	.059	.123
KI5	2.000	5.000	-.554	-2.295	-.675	-1.399
KI4	1.000	5.000	-.523	-2.168	.085	.175
KI3	2.000	5.000	-.307	-1.270	-.859	-1.780
KI2	1.000	5.000	-.688	-2.850	-.083	-.172
KI1	2.000	5.000	-.462	-1.916	-.678	-1.404
GBS18	1.000	5.000	-.603	-2.499	-.070	-.146
GBS17	2.000	5.000	-.249	-1.030	-.840	-1.741
GBS16	1.000	5.000	-.740	-3.068	.161	.334
GBS15	1.000	5.000	-.676	-2.802	.005	.010
GBS14	2.000	5.000	-.500	-2.071	-.463	-.960
GBS13	2.000	5.000	-.612	-2.535	-.480	-.993
GBS12	1.000	5.000	-.570	-2.361	.047	.098
GBS11	2.000	5.000	-.435	-1.801	-.832	-1.724
GBS10	1.000	5.000	-.633	-2.623	-.268	-.555
GBS9	1.000	5.000	-.582	-2.409	-.166	-.344
GBS8	1.000	5.000	-.497	-2.061	-.405	-.838
GBS7	1.000	5.000	-.500	-2.071	-.101	-.210
GBS6	1.000	5.000	-.566	-2.345	.262	.542
GBS5	1.000	5.000	-.561	-2.325	-.181	-.376
GBS4	1.000	5.000	-.634	-2.627	.070	.145
GBS3	1.000	5.000	-.553	-2.291	-.507	-1.051
GBS2	2.000	5.000	-.404	-1.676	-.481	-.997
GBS1	1.000	5.000	-.537	-2.223	-.112	-.232
EO6	1.000	5.000	-.573	-2.375	.094	.195
EO5	1.000	5.000	-.476	-1.973	-.261	-.540
EO4	2.000	5.000	-.355	-1.472	-.630	-1.306
EO3	1.000	5.000	-.505	-2.093	-.200	-.415
EO2	1.000	5.000	-.698	-2.892	.243	.504
EO1	1.000	5.000	-.728	-3.016	.273	.566
Multivariate					7.906	.489

Table 12. Output Mahalanobis distance.

Observation number	Mahalanobis d-squared	p1	p2
38	76.073	.047	.993
56	73.360	.071	.996
83	73.145	.073	.984
57	71.807	.090	.985
8	70.332	.110	.991
49	69.662	.121	.989
24	69.546	.123	.976
76	68.375	.144	.986
67	68.360	.144	.970
34	67.536	.160	.976

Table 13. Goodness of fit index.

Goodness of fit index	Cut-off value	Research model	Model
Chi Square Statistics		2020,739	
Probability	≥ 0.05	0.000	Marginal Fit
RMSEA	≤ 0.08	0.056	Good Fit
GFI	≥ 0.90	0.629	Marginal Fit
AGFI	≥ 0.90	0.600	Marginal Fit
CMIN/DF	≤ 2.0	1.319	Good Fit
TLI	≥ 0.90	0.931	Good Fit
CFI	≥ 0.90	0.928	Good Fit

**Figure 2.** Full model structural equation modeling.**Table 14.** Testing influence direct.

			Estimates	S.E	CR	p	Label
TMEA	<—	E.O	.883	.102	8.650	***	par_56
GBS	<—	E.O	.328	.126	2.595	.009	par_53
EP	<—	E.O	.968	.105	9.193	***	par_55
GBS	<—	TMEA	.432	.126	3.421	***	par_58
KI	<—	E.O	.484	.135	3.575	***	par_54
KI	<—	GBS	.273	.088	3.107	.002	par_57
KI	<—	EP	.295	.103	2.863	.004	par_59

Significance level 1% (***), 5%(**), 10%(*).

Based on the above table, we interpret the results as follows.

4.4.1. The influence of environmental orientation on green business strategy

Based on Estimation parameters for testing, the influence of environmental orientation on green business strategy shows a mark coefficient estimation of 0.328 and a CR of 2.595 with a probability of 0.009, and a significance probability of <0.05 . It can be concluded that hypothesis First stated environmental orientation has a positive and significant influence on green business strategy in SMEs in the Special Region of Yogyakarta, and increasingly tall environmental mental orientation has an impact on improvement towards green business strategy in SMEs, and vice versa, the more low environmental mental orientation has an impact on the decline of SMEs' green business strategy in the Special Region of Yogyakarta.

According to earlier studies, the results of Structural Equation Modeling (SEM) research utilizing AMOS show that an organization's orientation environment has a considerable impact on its strategy-friendly environment (Yasir et al., 2020). The study supporting the idea that emphasizing the environment has a favorable influence on creating a climate conducive to business strategy. This underlines the significance of the environmental direction in creating such an environment, as environmentally conscious SMEs are prospering and implementing successful business plans. This component must be maintained and improved for SMEs to succeed.

Strategic planning for SMEs must consider the internal environment's orientation, including its values, vision, mission, and dedication to environmental protection (Chavez et al., 2021). To satisfy the demands of customers, suppliers, and regulatory authorities, SMEs must design stakeholder-driven strategies to ensure that they are in line with external surroundings and serve the interests of all stakeholders (Khan et al., 2021). For green business plans to succeed, orientation ecology is essential because it creates a protective environment that influences the internal and external environments of SMEs and enhances their business strategies.

4.4.2. The effect of environmental orientation on SME performance

According to the study, environmental orientation has a beneficial impact on SME performance in Yogyakarta's Special Region, with higher orientation resulting in enhanced performance and lower orientation resulting in declining performance. These conclusions were supported by the AMOS SEM investigation (Aboelmaged, 2018). The declaration affirms that not enough is known about the substantial and good effects of the ecology company on performance (Yu & Huo, 2019). According to the survey, SMEs emphasize their surroundings for improved performance. These findings imply that an oriented setting can improve SME performance. The variable orientation ecology demonstrates the importance of exposure to the best internal and external environments to enhance SME performance.

By integrating internal environmental orientation ideals and practices with external environmental orientation, implementation orientation in a proactive environment can improve the performance, resulting in superior and long-term competitiveness (Zeng et al., 2024). For SMEs to project a positive image, boost sales, and gain market share, environmental orientation is essential, because it improves performance by encouraging both positive internal and external environmental orientations.

4.4.3. Effect of environmental orientation on environmental performance

Based on parameters estimation For testing The influence of environmental orientation on environmental performance shows mark coefficient estimation of 0.968 and CR of 9.193 with probability of 0.000 then significance probability <0.05 , can concluded that hypothesis third stated 'Environmental orientation has an influence positive and significant on the environmental performance of SMEs in the Special Region of Yogyakarta' is proven. This means that a higher environmental orientation can increase environmental performance in SMEs, and vice versa, while a lower environmental orientation can impact the environmental performance of SMEs in the Special Region of Yogyakarta.

According to an AMOS SEM study, the orientation environment increased the performance environment. As stated by Yasir et al. (2020), According to the report, SMEs that place a strong prioritize environmental considerations perform better. It focuses on how crucial it is to comprehend and improve exposure situations to improve performance. A company's performance is affected by both internal and external factors. Businesses that prioritize environmental concerns in their operations help create a sustainable performance environment by generating less waste and pollution (Ali et al., 2024). Consequently, SMEs must preserve and enhance their ecological emphasis. The environmental performance of SMEs is influenced by their orientation from exposure to good internal and external ecology.

4.4.4. Influence of environmental performance on SME performance

Based on estimated parameters For testing the influence of environmental performance on SME performance shows mark coefficient estimation of 0.295 and CR of 2.863 with probability of 0.004 then significance probability <0.05 , can concluded that hypothesis fourth stated 'Environmental Performance has an influence positive and significant to SME performance in the Special Region of Yogyakarta' is proven. This means that higher environmental performance can improve SME performance, and vice versa,

the lower environmental performance impact declines SME performance in the Special Region of Yogyakarta.

Based on results analysis, SEM that utilizes AMOS shows that the performance environment increases SME performance (Siswanto & Soewarno, 2018). According to the study, and that SMEs perform better when their performance environment is high, highlighting the significance of considering aspects such as productive power, regulatory compliance, stakeholder dialogue, and efficient power to improve their performance and potentially increase market share, alter prospects, and retain customers (I. A. Wong et al., 2021). SMEs can become more competitive by reducing pollutants, utilizing eco-friendly settings, and establishing sustainable procedures. Environmental performance improves SMEs' use, compliance, stakeholder interests, and productivity, and boosts public trust. To increase market share, persuade customers, and maintain customer loyalty, volunteers should concentrate on environmental conservation and preserving stakeholder relationships (Ewane, 2024). By reducing pollutants, fostering a welcoming atmosphere for products, and adopting sustainable business practices, environmental performance helps SMEs compete more effectively, while also gaining public trust (Jia & Shang, 2024). SMEs that perform well in terms of their environment, including resource use, regulatory compliance, stakeholder engagement, and productivity, can become more competitive and improve both their present and future performance.

4.4.5. Effect of green business strategy on SME performance

Based on the estimation parameter results, to test the influence of green business strategy on SME performance, shows a mark coefficient estimation of 0.273 and a CR of 3.107 with a probability of 0.002, and a significance probability of <0.05 , it can be concluded that the fifth hypothesis states that the green business strategy is positively and significantly influential on SME performance in the Special Region of Yogyakarta. This means that a taller green business strategy can enhance SME performance, and vice versa, and a lower green business strategy can impact the decline in SME performance in the Special Region of Yogyakarta.

Based on results SEM analysis using AMOS shows that green business strategy influential positive and significant to SME performance Research results This in line with study previously done by Hanafiah et al. (2021) which states that green business strategy has an effect positive and significant on financial performance and (Bıçakcıoğlu-Peynirci et al., 2020). According to research, a green company strategy has a big impact on SME and export financial performance. A highly green business strategy improves performance by emphasizing ecologically responsible choices. Green human resource management (HRM), finance, marketing, manufacturing, R&D, and marketing are important components. To perform best, SMEs should consider environmental factors while making decisions. Developing a green business plan entails promoting environmental protection, using natural and organic products, and sourcing supplies and designs in a responsible manner. Putting into practice A green approach has several advantages, including market access, cost savings, assistance, and productivity (Naumova-Mihajlovska, 2023). Managing a green business strategy can be considered an opportunity to save expenditure or costs (Asad et al., 2024).

By reducing pollutants and promoting a product-friendly environment, SMEs can become more competitive and improve their performance over time using green business strategies (Ge et al., 2018). Using efficient techniques, SMEs can improve their performance by applying green business strategies, including green HRM, finance, marketing, production, R&D, and marketing.

4.5. Testing influence no live and discussion

Based on table above (Table 15), then furthermore can done interpretation on results testing as following

4.5.1. The influence of environmental orientation on green business strategy through top management environmental awareness as variable mediation

Based on the results, testing does not directly show that the t-statistic value is $3.187 > 1.96$, and the sig value is $0.001 < 0.05$, showing that top management environmental awareness is capable of mediating

Table 15. Testing influence no direct.

		Path			t-Statistics	Std. Error	p-Value
GBS	<—	TMEA	<—	E.O	3,187	0.119	0.001
P	<—	EP	<—	E.O	2,735	0.104	0.006

the influence of environmental orientation on green business strategy. Thus, the influence of environmental orientation on green business strategy will be greater through top management's environmental awareness. Thus, hypothesis sixth which stated 'environmental orientation has a positive and significant influence on green business strategy through top management environmental awareness as variable mediation for SMEs in the Special Region of Yogyakarta'.

The Sobel test results show that the skill environment management peak can have a significant and profitable impact on the connection between orientation ecology and a business strategy-friendly environment. Impact focus ecology on green business strategy will increase along with the knowledge environment management peak (Yasir et al., 2020). This study discovered a strong relationship between ecological orientation and green business strategy, with awareness of environmental management significantly contributing to the development of this relationship. Strong environmental awareness allows managers to meet various demands and advance their companies (Cao et al., 2019). By incorporating environmental protection into business strategies and promoting a more sustainable work environment, top management's commitment to environmental awareness can assist SMEs in enhancing their green business strategies (Latan et al., 2018). In addition to strengthening environmental orientation, the Special Region of Yogyakarta must improve awareness management to build a green business strategy for SMEs.

4.5.2. Influence environmental orientation towards SME performance through environmental performance as variable mediation

Based on the test results, no direct shows that the t-statistic value is $3.187 > 1.96$, and the sig value is $0.001 < 0.05$, indicating that top management environmental awareness is capable of mediating the influence of environmental orientation on green business strategy. Thus, the influence of environmental orientation on green business strategy will be greater through top management's environmental awareness. Thus, hypothesis sixth which stated 'environmental orientation has a positive and significant influence on green business strategy through top management environmental awareness as variable mediation for SMEs in the Special Region of Yogyakarta'.

Based on Sobel testing, the performance environment can have a large and profitable impact on the connection between the orientation ecology and the performance of small and medium enterprises (SMEs). Consequently, the performance environment has a greater influence on the SME performance. Environmental performance-oriented environments help company small and medium sized enterprises (SMEs) maintain and improve performance. This can repair the surrounding environment of small and medium-sized enterprises (SMEs) through performance ecology and company structure. Environmental strategy life will increase production, decrease the cost-protection environment, and improve SME performance. An increase in ecological performance will increase market share, change prospects, and retain consumers (Duan et al., 2024). With increased reputation and operational effectiveness, the performance environment will increase income at a time lower risk related ecology with practice detrimental business performance (Farooq et al., 2024) because an increase in performance and attention to the environment can help SMEs in the Special Region of Yogyakarta operate with more profitability.

5. Conclusion

Based on the test results, no direct shows that the t-statistic value is $3.187 > 1.96$, and the sig value is $0.001 < 0.05$, indicating that top management environmental awareness is capable of mediating the influence of environmental orientation on green business strategy. Thus, the influence of environmental orientation on green business strategy will be greater through top management's environmental awareness. Thus, hypothesis sixth which stated 'environmental orientation has a positive and significant

influence on green business strategy through top management environmental awareness as variable mediation for SMEs in the Special Region of Yogyakarta’.

Based on Sobel testing, the performance environment can have a large and profitable impact on the connection between the orientation ecology and the performance of small and medium enterprises (SMEs). Consequently, the performance environment has a greater influence on the SME performance. Environmental performance-oriented environments help company small and medium sized enterprises (SMEs) maintain and improve performance. This can repair the surrounding environment of small and medium-sized enterprises (SMEs) through performance ecology and company structure. Environmental strategy life will increase production, decrease the cost-protection environment, and improve SME performance. An increase in ecological performance will increase market share, change prospects, and retain consumers (Subagio & Hastari, 2021). With increased reputation and operational effectiveness, the performance environment will increase income at a time lower risk related ecology with practice detrimental business performance (Ju et al., 2024) because an increase in performance and attention to the environment can help SMEs in the Special Region of Yogyakarta operate with more profitability

5.1. Research implications

This study has several implications for theory, practice, and policy formulation. This research provides theoretical and practical implications: It provides empirical evidence in the field of SME Management that has a commitment and orientation towards the environment in its business activities. SME criteria:1) Have liquid, solid, or gas waste management; 2) Process animal skins with environmentally friendly leather raw materials; and 3) The main raw material is wood using environmentally friendly finishing materials. Based on empirical findings supported by the concepts of environmental orientation, green business strategy, and performance, and supported by Resource-Based View Theory.

The results of this research provide input on the development and improvement of corporate financial governance practices in Indonesia, specifically, the following practical implications:1. The results of these empirical findings provide implications for company management as policy making related to Environmental orientation has a positive and significant effect on the green business strategy of SMEs, Environmental orientation has a positive and significant effect on performance in SMEs, Environmental orientation has a positive and significant effect on the environmental performance of SMEs, Environmental performance has a positive and significant effect on SME performance, Green business strategy has a positive and significant effect on SME performance, Environmental orientation has a positive and significant effect on green business strategy through top management environmental awareness of SMEs, Environmental orientation has a positive and significant effect on SME performance through environmental performance of SMEs, so that the empirical findings can be used by company management and the government. 2. These empirical findings provide evidence in the field of SMEs by examining environmental orientation, green business strategy, SME performance, environmental performance, green business strategy, and top management environmental awareness of SMEs. Furthermore, we enrich empirical findings in the field of SME management and serve as a reference for future research.

5.2. Research limitations

This study had inherent limitations. The limitations help explain this research and avoid incorrect inferences. The disclosure of rules also allows future research to fill in the gaps in this study: 130 respondents were used for content analysis. Only 103 of 130 SMEs returned the questionnaire. Therefore, data processing is limited to SMEs in food processing, leather, and furniture management.

Author’s contribution

R, S, JEP, AK carried out the research, wrote and revised the article S, JEP, AK, R conceptualised the central research idea and provided the theoretical framework. R, S, JEP, AK designed and supervised the research progress; S, R, JEP, AK anchored the review revisions and approved the article submission.

Disclosure statement

The authors agree that this research was conducted without any self-benefit commercial or financial conflicts and declare the absence of conflicting interests with the funders.

Funding

The funder in this research is Universitas Pembangunan Nasional "Veteran" Yogyakarta, Jl. Padjadjaran/SWK 104 Ring Road Condongcatur District. Depok, Sleman Regency, Special Region of Yogyakarta 55283, Indonesia.

About the authors



Associate Professor Dr. Sabihaini, SE., M.Si., CIIQA., CRP., CPM, is the AMI Auditor and Higher Education BKD Internal Assessor. He earned a Bachelor of Economics degree from Krisnadwipayana University Jakarta Indonesia with a Bachelor of Management (S.E) degree, a Master of Management Postgraduate Program from Gadjah Mada University Yogyakarta Indonesia with a Bachelor Degree (M.Sc), a Doctor of Management Science Program from the Faculty of Economics and Business, Universitas Brawijaya with the title (Dr.). His research interests include corporate and competitive strategy, strategic management, organizational design, supply chain management, marketing, environmental and social responsibility, and social science and information technology research.



Assistant Professor Dr. Rusdiyanto, SE. M.Ak, CH, CHt. Higher Education S1 Universitas Madura Graduated with a Bachelor of Accounting (SE), Master of Accounting Study Program, East Java Veteran National Development University Graduated with Master of Accounting (M.Ak), Postgraduate of Doctoral Program in Accounting, Faculty of Economics and Business, Universitas Airlangga Surabaya Graduated Doctor of Accounting Science (Dr).

ORCID

Sabihaini  <http://orcid.org/0000-0003-4238-9053>
 Januar Eko Prasetyo  <http://orcid.org/0000-0002-2161-4998>
 Rusdiyanto  <http://orcid.org/0000-0002-7456-7072>

Data availability statement

The study did not involve any data sets and the articles collected were sourced from <https://www.scopus.com/home.uri>, accessed on 2022 and <https://scholar.google.com/>, accessed on 2022.

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