INTRODUCTION

Countries around the world are experiencing problems related to the environment. Long-term problems such as ozone layer depletion, climate change, pollution, and lack of vital raw materials (Yusuf et al. 2023; Yusuf, Ashari, and Razalli 2018). It impacts the importance of a sustainable economy and sustainable development that ensures current and future generations (Vilkaite-Vaitone and Skackauskiene 2019). So that environmental orientation is important to be implemented and improved (Noor and Saputra 2020).

Regulations are getting stricter and public awareness of environmental issues is increasing. 63% of Indonesian consumers are willing to spend more money to consume environmentally safe products (Firmansyah 2018). Consumption of environmentally friendly products and consumer attitudes towards such products have driven the development of green strategies (Nekmahmud and Fekete-Farkas 2020; Tsai et al. 2020; Widhiarini, Pradiani, and Fathorrahman 2023). It provides opportunities for companies to implement strategies that meet environmental standards in improving business performance and Indonesia as a member of the United Nations has targets that must be achieved by 2030, such as achieving the implementation of a 15-year framework for responsible consumption and production, management of chemicals and hazardous waste, and achieving sustainable business practices.

Yogyakarta Special Region has many handicraft SMEs such as batik, bamboo, leather, agel fiber, water hyacinth, mending, wood and others. Most of the craft SMEs in Yogyakarta Special Region are home industries and small and medium enterprises. The SME sector contributes 60.5% of GDP and 96.9% of employment (Junianto 2023). It is noted that SMEs in Yogyakarta are experiencing rapid growth with a total of 464,033 and
10% of the population in the Yogyakarta area who prefer to work in the creative economy sector (Sujatmiko 2023). The sales of Yogyakarta's SMEs increased by more than 1.5 compared to the previous year. The highest sales index of Yogyakarta SMEs beat several regions with sales percentages as high as (67%), Surabaya (48%), and Bandung (65%) (Abdul Hamied Razak 2023). Thus, SMEs are the largest informal sector drivers in Indonesia that have a significant contribution to the economic system. (Subagyo, Suhendra, and Ernestivita 2023).

The dynamic business environment and increasingly stringent environmental regulations mean that traditional marketing practices are insufficient to cope with these market conditions (Muhammad, Shaukat, and Ming 2022). So it is important to integrate sustainability in the performance of people, services, supply chains and products. This will encourage companies to operationalize green marketing in the process of their activities (Papadas et al. 2019). Functional strategies that are integrated with the environment can generate strong competitive advantage and profitability in the long run so that it will have an impact on improving business performance (Leonidou, C. N., Katsikeas, C. S., & Morgan 2013). An important indicator in achieving corporate goals is business performance that must reflect an green economy and economy with a sustainable concept. Business performance is the final result obtained after carrying out business strategies by utilizing resources.

The use of green marketing strategy and green supply chain management as independent variables is supported by the resource-based view (RBV) (Famiyeh et al. 2018). RBV argues that the foundation of a firm's competitive advantage lies in the use of valuable resources within a firm (Raafat Saade and Nijherhors 2016). Management must pay attention to vital resources that are available, unique, and difficult to replicate (Pulka, Ramli, and Mohamad 2021). RBV theory explains that one of the determinants of business performance and competitive advantage is the company's internal resources (Chabowski and Mena 2017).

Green marketing is a form of strategy that can improve business performance. Empirical studies prove that green marketing is a very important need to be implemented in introducing green products (Mukonza and Swarts 2020). The high level of sales of green products is a form of the company's successful marketing strategy in introducing new products made from natural ingredients and obtained from environmentally friendly supply chains (Sugandini et al. 2020). Green marketing strategies can increase market share and improve profits (Eneizan, Abd Wahab, and S. 2016). Implementing an environmentally friendly marketing strategy can make it easier for consumers to find environmentally friendly products, which will have an impact on increasing sales and profits (Bloom 2004). This is in line with research conducted (Hasan and Ali 2015) (Muhammad et al. 2022) that green marketing strategies can have a positive and significant impact on business performance. As suggested by (Hasnah Devina, Kastaman, and Mardawati 2022) there are four dimensions of green marketing strategies, including green products, green prices, green distribution and green promotion.

Another strategy that can improve business performance is green supply chain management. Green supply chain management is an environmentally friendly business process, from raw material procurement, product design to production. Supply chain management has two dimensions, namely the internal chain (green design and internal environmental management) and the external chain (green purchasing, cooperation with customers and investment recovery) (Tjahjadi et al. 2022). Empirical studies prove that green supply chain management is a functional strategy that can increase profitability and market share by reducing risks and consequences to the environment and improving the environmental efficiency of companies and stakeholders (Awan, Kraslawski, and Huiskonen 2018) (Khan et al. 2019). Companies that implement green supply chain management can improve business performance (Nureen et al. 2023). This is in line with research conducted by (Khaleeli, Faisal, and Anwar 2021) (Wang, Zhang, and Zhang 2020) which proves that green supply chain management has a positive and significant effect on business performance.

A number of studies have shown positive and significant results between green marketing strategies and green supply chain management on business performance. Green marketing strategies have a positive and significant impact on business performance (Hasan and Ali 2015; Hussain Shah 2022; Muhammad et al. 2022; Mukonza and Swarts 2020). Green supply chain management has a positive and significant effect on business performance (Khaleeli et al. 2021; De Souza Zampese, Moori, and Caldeira 2016; Wang et al. 2020). This is inversely proportional to the research conducted by (Mehmet Tantan and Haticce Camgöz Akda ‘g 2023; Novitasari and Agustia 2021; Al Zaabi, Al Dhaheri, and Diabat 2013) which explains that green supply chain management has no impact on business performance. Same with (Braik, Saleh, and Jaaron 2023; Byrne 2002; Peattie and Crane 2005; Sherly and Ety Murwaningsari 2023; Tshuma 2022) which explains that green marketing strategies have no impact on business performance.

Previous research has examined the factors that influence business performance, but few understand the mediating role played by green innovation. Green innovation is perceived as product innovation and green process innovation carried out by companies to reduce business processes on the environment (Tjahjadi et al. 2020). Green innovation can have a good impact on green marketing strategies and green supply chain management. Green innovation provides new things in product creation and green marketing strategies have a
role in promoting these new products, so that it affects the increase in sales of a product (L. Huang et al. 2024). Implementation of green innovation can also improve green supply chain management (Novitasari and Agustia 2021) and green supply chain management is a form of corporate innovation in responding to environmental issues (Tjahjadi et al. 2022). In minimizing environmental impacts and responding to the market, the thing that business actors must do is green innovation. This is in line with research conducted (Tjahjadi et al. 2020) that green innovation enables companies to reduce their impact on the environment. The influence of green strategy practices on business performance will be strong when companies have new ways of designing new products and processes that focus on environmental friendliness. Green innovation has a positive and significant impact on the mediation relationship (Du and Wang 2022). Green innovation is a key enabler in creating economic value for companies that care about the environment (Ong et al. 2019).

This research is important because there are previous phenomena, and research and empirical evidence are needed regarding the relationship between green marketing strategies, green supply chain management, and business performance mediated by green innovation. The purpose of this study is to examine the effect of green marketing strategies and green supply chain management on business performance and determine the mediating role of green innovation.

**METHOD**

The research method used is quantitative method (Sekaran 2017). The population in the study was all SME managers in craft centers in the Special Region of Yogyakarta (DIY). The samples used in this study were 60 SME in DIY with the criteria of SME managers and environmentally friendly oriented. The sampling technique used purposive sampling (Sekaran 2017). Data analysis in this study using Partial Least Square abbreviated as PLS is a type of SEM analysis that is a predictor analysis and not a model test (Ghozali 2021). This study has four variables with several dimensions and indicators as the basis for data collection. Marketing strategy variables adopt four dimensions, namely green products, green prices, green places, green promotions. To measure the dimensions, nine statements were developed (Hasnah Devina et al. 2022). The supply chain management variable has two dimensions: internal chain (green design and internal environmental management) and external chain (green purchasing, cooperation with customers and investment recovery) (Tjahjadi et al. 2022). In supporting these dimensions, six statement items were developed. The green innovation variable has two dimensions, namely product innovation and green processes. In supporting this dimension, seven statement items were developed (Tjahjadi et al. 2020). Variable Business performance is the final achievement of a company. In measuring business performance, nine statement items were developed. The following is a picture of the conceptual framework of this research (Tjahjadi et al. 2022).

![Conceptual Framework](image)

(H1a) Green marketing strategy has a positive and significant effect on business performance. (H1b) Green supply chain management has a positive and significant effect on business performance. (H2a) Green marketing strategy has a positive and significant effect on green innovation. (H2b) Green supply chain management has a positive and significant effect on green innovation. (H3) Green innovation has a positive and significant effect on business performance. (H4a) Green marketing strategy has an indirect effect on business performance through green innovation. (H4b) Green supply chain management has an indirect effect on business performance through green innovation.

**RESULTS**

The validity test in this study is determined by convergent validity (outer model) provided that the loading factor value is > 0.70 and the reliability test is measured by the composite reliability value above > 0.6 and Cronbach alpha > 0.7 (Hair et al. 2019). The green marketing strategy variable adopts four dimensions, namely
green products, green prices, green places, and green promotions. To measure the dimensions, nine statements were developed. The supply chain management variable has two dimensions, namely the internal chain (green design and internal environmental management) and the external chain (green purchasing, cooperation with customers and investment recovery). In supporting these dimensions, six statement items were developed. The green innovation variable has two dimensions, namely product innovation and green processes. In supporting these dimensions, seven statement items were developed. Variable Business performance is the final achievement of a company. In measuring business performance, nine statement items were developed. Each questionnaire statement item for each variable is declared valid because it has a loading factor value > 0.70 and is reliable with a composite reliability value above > 0.6 and Cronbach alpha > 0.7. Each variable is defined by its measurement and tested with partial least square (PLS). Primary data was collected by questionnaires distributed online and in person, 80 questionnaires were distributed with 60 questionnaires returned ready for further processing.

![Figure 2. Bootstrap PLS](image)

<table>
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<tr>
<th>Hypothesis</th>
<th>Total Effects</th>
<th>Original Sample</th>
<th>T Statistic</th>
<th>p-value</th>
<th>Description</th>
</tr>
</thead>
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<td>1.190</td>
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<tr>
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<td>2.266</td>
<td>0.024</td>
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</tr>
<tr>
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<td>2.497</td>
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<td></td>
</tr>
<tr>
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<td>7.099</td>
<td>0.000</td>
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<td></td>
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<tr>
<td>H3. Green Innovation → Business Performance</td>
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<td></td>
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<tr>
<td>H4a. Green Marketing strategy → Green Innovation → Business Performance</td>
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<td>0.128</td>
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<td></td>
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<tr>
<td>H4b. Green Supply Chain Management → Green Innovation → Business Performance</td>
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<td>3.390</td>
<td>0.001</td>
<td>Accepted</td>
<td></td>
</tr>
</tbody>
</table>

**DISCUSSION**

This study proves that green marketing strategies have a direct effect on business performance. The results of this study support previous research (Hasan and Ali 2015; Muhammad et al. 2022). Consumer behavior patterns that prefer green products make businesses aware and understand the importance of green marketing (Hussain Shah 2022). Businesses that prioritize service quality and benefits for the local community will gain customer trust, so consumers will be willing to pay premium prices for products and as a result, business performance will increase (Thanh Van Nguyen, Duy Nguyen, and Chi Minh City 2020). By implementing green marketing, companies can increase profits, extend product life, and improve worker health (Tshuma 2022). Therefore, this study strengthens previous research that the better the implementation of green marketing strategies, the higher the business performance.
This study proves that green supply chain management affects business performance. This result supports previous research conducted by (Khaleeli et al. 2021; De Souza Zampese et al. 2016; Wang et al. 2020). Implementing green supply chain management can reduce the environmental impact when products are designed and save materials efficiently, thereby improving business performance for the better (Abdallah and Al-Ghwayeen 2020). Green supply chain management is one of the strategies that can improve business performance (Acquah, Agyabeng-Mensah, and Afum 2021).

Green marketing strategy has a direct influence on green innovation. This supports previous research (L. Huang et al. 2024; Mehrraj and Kaur 2022; Tjahjadi et al. 2020). Increasingly complex customer needs and changes in the business environment encourage businesses to use more innovative marketing strategies. Green marketing strategies encourage businesses to use more environmentally friendly ways, then motivate companies to create environmentally friendly innovations. Implementing more innovative green marketing strategies in business will add value to customer benefits (Alshehadeh et al. 2022). In creating ecological awareness, saving energy and recycling waste, green innovations play an important role in driving green marketing, thereby impacting corporate image and increasing product value (Negi, Gupta, and Gaur 2023). The first step in implementing an green marketing strategy is to create and develop products with environmentally friendly raw materials (Damayanti and Waskito 2024). Green marketing strategies support green innovations that emphasize green products. The strategy plays an important role in introducing green products (Mukonza and Swarts 2020). A successful green marketing strategy is one that considers the minimum impact of the production process, the impact of the product on the environment as well as the balance of quality, convenience and price that the customer can afford (K. Huang, Lee, and Chou 2024).

Green supply chain management has a direct influence on green innovation. This supports previous research (Novitasari and Agustia 2021). Implementing green supply chain management by choosing suppliers who care about the environment will increase the advantages of green innovation by the company. The decision to purchase raw materials from environmentally friendly suppliers will support the success of green innovation and help deal with external pressures (Abu Seman et al. 2019).

Green innovation has a direct influence on business performance. This supports previous research (Ch’ng, Cheah, and Amran 2021; Chen, Lai, and Wen 2006; Huang and Li 2017). Implementing green innovation will encourage companies to find new ways to manage waste into saleable products that provide additional revenue (Mehraj and Kaur 2022). Green innovation plays an important role in achieving business sustainability (Du and Wang 2022). Even small companies must focus on the production process and innovation as a measure of business performance. (Subagyo et al. 2023). The implementation of green innovation will result in better business performance such as cost efficiency, increased profits, improved product quality, and a better reputation (Tjahjadi et al. 2020). Through the implementation of green innovations, businesses can withstand competitive pressure and increase sales, which will impact their business performance (Novitasari and Agustia 2021). Therefore, this study provides empirical evidence that the better the implementation of green innovation, the higher the business performance.

The results of this study indicate that green innovation does not mediate green marketing strategies on business performance. This is not in line with previous research (Tjahjadi et al. 2020). Green innovation requires considerable investment of resources and is costly. Innovative companies that pursue green goals bear higher risks than competitors that do not pursue green innovation (Xie, Hoang, and Zhu 2022). Green innovations pose more serious risks than traditional innovations, which can lead to negative economic impacts such as reduced financial performance and lower productivity (Li, Huang, and Zhao 2022).

The results of this study indicate that green innovation is able to mediate the green supply chain management to business performance. The results of this study support previous research (Novitasari and Agustia 2021). Environmental issues have an impact on green supply chain management, which in purchasing raw materials from suppliers must be environmentally friendly and adopt green innovations so that it will improve business performance. Improved green supply chain management has the potential to increase green innovation and at the same time create better business performance (Abu Seman et al. 2019).

CONCLUSION

This study uses path analysis to analyze and discuss empirically how green marketing strategies and green supply chain management on business performance are mediated by green innovation. The results of this study indicate that green marketing strategies affect business performance, environmentally friendly supply chain management affects business performance. green marketing strategies affect green innovation, green supply chain management affects green innovation. Green innovation affects business performance. Green innovation is unable to mediate the relationship between green marketing strategies on business performance and green innovation mediates the relationship between green supply chain management on business performance.
However, it is important to recognize that this study has limitations in terms of research scope, which does not encompass all aspects of the observed phenomenon's complexity. Furthermore, there are limitations namely the existence of respondents who lack the ability to understand the statements on the questionnaire. Based on the conclusions of the research results obtained above, some suggestions that can be given are: It is necessary to conduct further research involving other variables, the scope of the research area is expanded not only in Yogyakarta but throughout Indonesia. The latest finding of this research is that this research was conducted on home interior SMEs in Yogyakarta which are oriented towards environmentally friendly and the addition of green marketing strategies as an independent variable.

REFERENCES


