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Original Article

Marketing Strategies for SMEs in Enhancing Sustainable Business Performance: A Case Study of Pekalongan City, Indonesia

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Abstract: This study examines the sustainability challenges in Indonesia's small and medium-scale batik industry, focusing on Sustainable Industrial Performance (SIP), Marketing Orientation (MO), and Green Marketing Mix (GMM). Consumer awareness of environmental sustainability influences the demand for eco-friendly batik products, making sustainable practices critical. The research investigates how SIP, MO, and GMM interact to affect sustainability outcomes in the batik sector. The study tests ten hypotheses with two independent variables (MO and GMM) and one dependent variable (SIP). Data were collected from 238 SMEs in Pekalongan, Central Java, Indonesia, using a questionnaire and analyzed with Structural Equation Modeling-Partial Least Squares (SEM-PLS). The findings reveal that marketing orientation and green marketing strategies significantly impact economic, environmental, and social sustainability performance. However, marketing orientation does not influence green marketing strategies, and GMM does not mediate the relationship between marketing orientation and sustainability performance. This study provides insights into adopting sustainable practices and the role of marketing strategies in enhancing the batik industry's sustainability.

Keywords: Sustainable industry performance; Marketing orientation; Green marketing mix.

1. Introduction

The business world is now forced to respond positively to environmental challenges, which are demands from environmentally conscious customers in response to growing environmental issues (Ali et al., 2020). However, many argue that the lack of credibility and reliability of advertising, especially about environmental regulations, hinders consumers' desire to engage in environmentally responsible consumption. An eco-friendly label is a certification mark or stamp of approval that guarantees the integrity of environmentally friendly claims and reminds customers of the environmental quality of their goods or services. These products are educational resources created to help users internalize the negative impacts of

product manufacture, consumption, and disposal on the environment (Atkinson & Rosenthal, 2014), (Chen & Liu, 2019). Businesses that can successfully adjust to market changes and anticipate shifting conditions will have a competitive edge (Ali, G. A., Hilman, H., & Gorondutse, 2020).

Consequently, academics and practitioners are paying more and more attention to market orientation capabilities (Foerstl et al., 2021; Murillo Oviedo et al., 2020; Schulze et al., 2022). Due to the high costs of sustainable practices, a lack of skills and training, a lack of standard metrics, and a failure to adopt new technology, SMEs in developing nations have yet to be able to ensure sustainable operations (Kumar & Ghodeswar, 2015). The performance of SMEs might be impacted by the incomplete adoption of sustainable and innovative technical processes (Shekhar, 2019). This paper uses two aspects of marketing orientation and green marketing to encourage SMEs' sustainable performance, especially in the textile sector.

2. Materials and Methods

Numerous studies have shown that market-oriented businesses do better when launching new products in these circumstances despite uncertainty being acknowledged as a bad contextual situation. Previous research shows market uncertainty can increase the relationship between MO and new product success (Taghvaee & Talebi, 2023). The term MO describes how much a business values, supports, and promotes actions that align with its marketing philosophy. Marketing According to this theory, it is the key to achieving long-term success for businesses by identifying and fulfilling customer desires more effectively than their competitors (Kirca et al., 2005). Besides that, externally, MO is more focused and is a business step that pays attention to the environment (Day & Wensley, 1988). Green marketing also highlights the ecological impact of marketing and is important for solving environmental problems (Lazer, 1969). As an organizational endeavor to develop, advertise, and sell environmentally friendly products, environmental marketing or was first described by Pride and Ferrell in 1993 (Jeevandas et al., 2019)(Mekaniwati et al., 2023).

Green management simultaneously shows a significant influence on ecosystem sustainability. Stakeholder demands, resources, knowledge, and product uniqueness significantly influence green management. The desired performance will also increase along with improvements in green management (Raharjo, 2019). Companies must overcome environmental barriers to have major market influence, especially in the twenty-first century and beyond (Jones et al., 2008). Eco-friendly marketing also highlights the ecological impact of marketing and is important for solving environmental problems (Lazer, 1969). Adopting environmentally friendly innovations is the greatest way to maximize profits without sacrificing economic competitiveness (Costantini et al., 2017). Green marketing has also inspired the company's approach for sustaining business sustainability through green innovation (Chen & Liu, 2019). Improved corporate performance is a necessary and sufficient condition for marketing capabilities, mutual customer value creation, and market orientation to influence the development of marketing strategies (Wu & Monfort, 2022).

The integration of three interests—fair economic participation, environmental protection, justice and social responsibility in the decision-making process is the foundation of sustainable development (Jing & Wang, 2020). This study aims to find out how the relationship between MO and GMM supports sustainable performance in the textile sector of small and medium enterprises (SMEs) in Central Java Province. Indonesia. This research evaluates the primary construct, namely marketing orientation (MO). Environmental marketing (GMM) supports sustainable performance in the textile sector of small and medium enterprises (SMEs) in Central Java Province, Indonesia, using ten hypotheses outlined in the research framework. Related measures come from previous literature. This research uses a quantitative research design and a questionnaire distributed to 238 SMEs respondents to obtain data. Next, the data was tested using partial least squares structural equation modeling.

3. Results

All items from each variable exhibit a positive loading are above 0.50 and p-value below 0.05. This indicates that these items effectively explain the related dimensions or variables, demonstrating their relevance and statistical significance within the analysis. Items that were excluded from the analysis had loading values below 0.50, which suggests they did not adequately contribute to explaining the respective dimensions or variables. Consequently, these items were not included in the final analysis due to their low loading values.

Table 1. Result of Second order dimension (Loadings Factor)

Dimension	Loadings	t-stat	p-value
Implementation of Market Orientation			
Customer Orientation	0.75	18.06	0.000
Competitor Orientation	0.72	16.45	0.000
Inter-function Coordination	0.80	16.46	0.000
Implementing Green Marketing Mix*			
Green Product	0.07	1.29	0.098
Green Price	0.31	1.98	0.024
Green Place	0.12	1.85	0.032
Green Promotion	0.17	1.27	0.103
Green Process	0.19	2.29	0.011
Green People	0.19	1.75	0.040
Green Physical Evidence	0.06	0.61	0.270

Table 1 shows that almost all dimensions forming each variable's second-order construct have positive path coefficient values above 0.50 and p-values below 0.05. This indicates that these dimensions effectively explain the related latent variables. However, for the *Implementing Green Marketing Mix* variable, three indicator variables—Green Product, Green Promotion, and Green Physical Evidence—have p-values above 0.05, making them statistically insignificant. Despite their lack of significance, these three indicators will be retained in the analysis, as they cannot be excluded from the model.

Table 2. Result of Convergence Validity and Second-Order Dimensions

Variable/Dimension	Average Variable Extracted (AVE)	Decision
Implementation of Market Orientation	0.57	Valid
Customer Orientation	0.69	Valid
Competitor Orientation	0.60	Valid
Inter-function Coordination	0.51	Valid
Implementing Green Marketing Mix*		
Green Product	0.52	Valid
Green Price	0.81	Valid
Green Place	0.62	Valid
Green Promotion	0.71	Valid
Green Process	0.65	Valid
Green People	0.76	Valid
Green Physical Evidence	0.71	Valid
Sustainable Industry Performance (Economics)	0.54	Valid
Sustainable Industry Performance (Environment)	0.70	Valid
Sustainable Industry Performance (Social)	0.61	Valid

Note: * Green Marketing Mix has no validity value (Formative).

Table 2 captures that all second-order dimensions and the main latent variable have AVE values equal to or greater than 0.50. This indicates that the dimensions and the main latent variable meet the requirements for construct validity. The reliability of a measurement model is crucial to ensure that the constructs are consistently measured. Two common indicators of reliability are Cronbach's Alpha and Composite Reliability. Cronbach's Alpha assesses the internal consistency of the items within a construct, with values above 0.70 generally considered acceptable, indicating that the items reliably measure the same underlying concept. Composite Reliability offers a more precise internal consistency measure, accounting for each item's different loadings, and is often preferred in structural equation modelling. A value above 0.70 for composite reliability also suggests that the construct's indicators are reliable. This section presents the results of Cronbach's Alpha and Composite Reliability to evaluate the internal consistency and reliability of the constructs in the model.

Table 3. Result of Reliability and Second order dimension

Variable/Dimension	Cronbach's Alpha	Composite Reliability	Decision
Implementation of Market Orientation	0.63	0.80	Reliable
Customer Orientation	0.55	0.82	Reliable
Competitor Orientation	0.35	0.75	Reliable
Inter-function Coordination	0.68	0.80	Reliable
Implementing Green Marketing Mix*			
Green Product	0.70	0.81	Reliable
Green Price	0.92	0.94	Reliable
Green Place	0.79	0.87	Reliable
Green Promotion	0.87	0.91	Reliable
Green Process	0.86	0.90	Reliable
Green People	0.89	0.93	Reliable
Green Physical Evidence	0.86	0.91	Reliable
Sustainable Industry Performance (Economics)	0.79	0.85	Reliable
Sustainable Industry Performance (Environment)	0.78	0.87	Reliable
Sustainable Industry Performance (Social)	0.78	0.86	Reliable

Note: * Green Marketing Mix has no validity value (Formative).

Table 3 displays that almost all second-order dimensions and the main latent variables have Composite Reliability values greater than 0.70. This indicates that the dimensions and main latent variables meet the requirements for construct reliability.

Table 4. Result of Variance Inflation Factor (VIF)

Formative Indicator	VIF
Implementing Green Marketing Mix	
Green Product	1.629
Green Price	9.129
Green Place	3.334
Green Promotion	8.655
Green Process	3.027
Green People	5.335
Green Physical Evidence	3.476

Dependent variable: Green Marketing Mix

Table 4 indicates that all formative indicators of the Implementing Green Marketing Mix variable have VIF values below 10, so there is no multi-correlation between these indicators. The coefficient of determination (R^2) and Predictive Relevance (Q^2) are key indicators used to assess the quality and predictive power of a structural equation model (SEM). R^2 measures the proportion of variance in the dependent variables explained by the independent variables, indicating the model's explanatory power. A higher R^2 value suggests a better fit and stronger explanatory power. On the other hand, Q^2 assesses the model's predictive relevance by evaluating how well the model predicts new data. It is calculated using the blindfolding procedure, with values greater than zero indicating that the model has predictive relevance for the dependent constructs. This section presents the results for both the R^2 and Q^2 values, providing insights into the model's explanatory and predictive capabilities (see Table 5).

Table 5. Results of the Coefficient of Determination (R2) and Predictive Relevance (Q2)

Endogenous Latent Variables	R^2	Q^2	Decision (R^2)	Decision (Q^2)
Implementing Green Marketing Mix	0.00	0.01	Very Small	Good
Sustainable Industry Performance (Economics)	0.57	0.29	Average	Good
Sustainable Industry Performance (Environment)	0.53	0.36	Average	Good
Sustainable Industry Performance (Social)	0.76	0.46	Big	Good

The discriminant validity of a measurement model refers to the degree to which different constructs are distinct. One commonly used method to assess discriminant validity is the Fornell-Larcker Criterion, which compares the square root of the Average Variance Extracted (AVE) for each construct with the correlations between that construct and all other constructs in the model. According to this criterion, discriminant validity is established if the square root of a construct's AVE is greater than its correlations with other constructs, indicating that the construct shares more variance with its indicators than with other constructs. This section presents the discriminant validity results using the Fornell-Larcker Criterion to assess the distinctiveness of the constructs in the model.

Table 6. Result of Discriminant Validity using Fornell-Lacker Criterion

Construct(s)	MO	SIP 1	SIP 2	SIP 3
MO	0.578			
SIP 1	-0.109	0.737		
SIP 2	0.193	0.674	0.836	
SIP 3	0.255	0.638	0.757	0.780

Table 6 shows that using the Fornell-Larcker criterion, this study demonstrates that all variables meet the requirements for discriminant validity.

Table 7. Result of Hypothesis testing

Path Analysis	**β**	**Std. Error**	**t-stat**	**p-value**	**Decision**
MO → SIP Eco	-0.15	0.05	3.12	0.001	Accepted
MO → SIP Env	0.15	0.05	3.33	0.000	Accepted
MO → SIP Soc	0.21	0.04	4.92	0.000	Accepted
MO → GMM	0.06	0.09	0.62	0.268	Rejected
GMM → SIP Eco	0.75	0.03	26.03	0.000	Accepted
GMM → SIP Env	0.70	0.04	16.86	0.000	Accepted
GMM → SIP Soc	0.84	0.02	35.48	0.000	Accepted
MO → GMM → SIP Eco	0.04	0.07	0.61	0.270	Rejected
MO → GMM → SIP Env	0.04	0.07	0.62	0.269	Rejected
MO → GMM → SIP Soc	0.05	0.08	0.62	0.269	Rejected

Table 7 indicates that marketing orientation has a significant effect on sustainable industry performance (economics), sustainable industry performance (environment) and sustainable industry performance (social). Also, this study found that green marketing strategy has a significant effect on sustainable industry performance (economics), sustainable industry performance (environment) and sustainable industry performance (social). Besides that, this study found that marketing orientation does not affect green marketing strategies. Interestingly, this study found that GMM does not mediate the relationship between marketing orientation and sustainable industry performance (economics), sustainable industry performance (environment) and sustainable industry performance (social).

4. Conclusion

This study reveals several key insights regarding the relationship between marketing orientation, green marketing strategies, and sustainable industry performance across economic, environmental, and social dimensions. Firstly, the findings confirm that marketing orientation significantly impacts all three aspects of sustainable industry performance: economic, environmental, and social. This suggests that a strong market-oriented approach can drive industry sustainability efforts by improving financial outcomes, environmental practices, and social responsibility initiatives. Additionally, the study highlights the significant role of green marketing strategies (GMM) in influencing sustainable industry performance in the same three areas—economic, environmental, and social. This underscores the importance of integrating environmental concerns into marketing strategies, which in turn contribute to the long-term sustainability of industries. However, the study also uncovered some unexpected results. Specifically, marketing

orientation was found to have no direct effect on green marketing strategies, suggesting that while marketing orientation is important for sustainability performance, it does not necessarily drive the adoption of green marketing practices.

This finding questions the assumed relationship between marketing orientation and adopting sustainability-focused marketing tactics. Furthermore, the study found that green marketing strategies (GMM) do not mediate the relationship between marketing orientation and sustainable industry performance across the economic, environmental, and social dimensions. It indicates that while both marketing orientation and green marketing strategies independently contribute to sustainability outcomes, green marketing strategies do not serve as a linking mechanism between marketing orientation and sustainable performance. Overall, these findings emphasize the direct impact of marketing orientation and green marketing strategies on sustainable industry performance while highlighting the complexity of their interactions and the need for further research into how these variables interrelate.

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References

Ali, G. A., Hilman, H., & Gorondutse, A. H. (2020). Effect of entrepreneurial orientation, market orientation and total quality management on performance: Evidence from Saudi SMEs. *A Benchmarking: An International Journal*, *27*(4), 1503–1531.

Atkinson, L., & Rosenthal, S. (2014). Signaling the Green Sell : The Influence of Eco-Label Source , Argument Specificity , and Product Involvement on Consumer Trust Signaling the Green Sell : The Influence of Eco-Label Source , Argument Specificity , and Product Involvement on Consumer Trust. *Journal of Advertising*, *4*(3), 33–45. https://doi.org/10.1080/00913367.2013.834803

Chen, J., & Liu, L. (2019). Profiting from Green innovation: The moderating effect of competitive strategy. *Sustainability (Switzerland)*, *11*(1), 1–15. https://doi.org/10.3390/su11010015

Costantini, V., Crespi, F., Marin, G., & Paglialunga, E. (2017). Eco-innovation, sustainable supply chains and environmental performance in European industries We gratefully acknowledge the support by the European Union's Horizon 2020 research and innovation programme under grant agreement No. 649186 – ISIGrowth. The c. *Journal of Cleaner Production*, *155*, 141–154. https://doi.org/10.1016/j.jclepro.2016.09.038

Day, G. S., & Wensley, R. (1988). Assessing Advantage: A Framework for Diagnosing Competitive Superiority. *Journal of Marketing*, *52*(2), 1–20. https://doi.org/https://doi.org/10.1177/00222429880520020

Foerstl, K., Blome, C., & Goellner, M. (2021). Supply market orientation : a dynamic capability of the purchasing and supply management function. *Supply Chain Management*, *26*(1), 65–83. https://doi.org/10.1108/SCM-06-2019-0233

Jeevandas, M. S., Nair, L. D., & Vivek, S. (2019). Impact of Green Marketing on Consumer Purchase Intention and Sustainable Development. *International Journal of Innovative Technology and Exploring Engineering*, *8*(6), 165–169.

Jing, Z., & Wang, J. (2020). Sustainable development evaluation of the society e economy e environment in a resource-based city of China : A complex network approach. *Journal of Cleaner Production*, *263*, 121510. https://doi.org/10.1016/j.jclepro.2020.121510

Jones, P., Clarke-Hill, C., Comfort, D., & Hillier, D. (2008). Marketing and sustainability. *Marketing Intelligence & Planning*, *26*(2), 123–130. https://doi.org/10.1108/02634500810860584

Kirca, A. H., Jayachandran, S., & Bearden, W. O. (2005). Market Orientation: A Meta-Analytic Review and Assessment of its Antecedents and Impact on Performance. *Journal of Marketing*, *69*(2), 24–41. https://doi.org/https://doi.org/10.1509/jmkg.69.2.24.60761

Kumar, P., & Ghodeswar, B. (2015). Green Marketing Mix: A Review of Literature and Direction for Future Research. *International Journal of Asian Business and Information Management IJABIM*, *6*(3), 42–59. https://doi.org/10.4018/IJABIM.2015070104

Lazer, W. (1969). Marketing's changing social relationships. *Journal of Marketing*, *33*(1), 3–9. https://doi.org/doi.org/10.1177/002224296903300102

Mekaniwati, A., Bon, A. T., Rainanto, B., & Lulaj, E. (2023). Sustainable Performance for Batik Small and Medium Enterprises Viewed from Dynamic Capabilities , Marketing Orientation and Green Marketing. *Central European Management Journal*, *31*, 639–652.

Murillo Oviedo, A. B., Pimenta, M. L., Piato, É. L., & Hilletofth, P. (2020). Development of market-oriented strategies through cross-functional integration in the context of the food and beverage industry. *Business Process Management Journal*, *27*(3), 901–921.

Raharjo, K. (2019). The role of green management in creating sustainability performance on the small and medium enterprises. *Management of Environmental Quality: An International Journal*, *30*(3), 557–577. https://doi.org/10.1108/MEQ-03-2018-0053/FULL/XML

Schulze, A., Townsend, J. D., & Talay, M. B. (2022). Completing the market orientation matrix: The impact of proactive competitor orientation on innovation and firm performance. *Industrial Marketing Management*, *103*, 198–214. https://doi.org/https://doi.org/10.1016/j.indmarman.2022.03.013

Shekhar, S. (2019). The impact of leanness and innovativeness on environmental and financial performance: Insights from Indian SMEs. *International Journal of Production Economics*, *Volume 212*(June 2019), Pages 111-124. https://doi.org/https://doi.org/10.1016/j.ijpe.2019.02.011

Taghvaee, S., & Talebi, K. (2023). Market orientation in uncertain environments: The enabling role of effectuation orientation in new product development. *European Management Journal*, *41*(2), 323–335. https://doi.org/https://doi.org/10.1016/j.emj.2022.01.005

Wu, C., & Monfort, A. (2022). Role of artificial intelligence in marketing strategies and performance. *Psychology and Marketing*, *e40,*(3), 484–496. https://doi.org/https://doi.org/10.1002/mar.21737