The Importance of Green Brand Knowledge to Purchase Intention

Roberto Roy Purba[1]* iD, Owen De Pinto Simanjuntak[1], Elisabet Tambunan[1], Muhammad Rahmat[2], Satria Tirtayasa[3]
[1]Sari Mutiara Indonesia University, Medan 20123, North Sumatra, Indonesia
[2]Universitas Muslim Nusantara Al Washliyah, Medan 20147, North Sumatra, Indonesia
[3]Universitas Muhammadiyah Sumatera Utara, Medan 20238, North Sumatra, Indonesia
*Corresponding Email: robertoroypurba@gmail.com

ARTICLE INFORMATION

ABSTRACT

This research aims to determine the influence of green brand knowledge and environmental concern on green purchase intention among consumers who use the Shopee application in the city of Medan. This type of research is descriptive quantitative. The population in this study were customers who used the Shopee application with the research sample using the Lemeshow formula, namely 96 respondents using the Sample Random Sampling technique. The data analysis methods used are Instrument Test, Classic Assumption Test, Multiple Linear Regression Test and Hypothesis Test using the SPSS Version 26 for Windows program. The research results show that green brand knowledge has a positive and significant effect on green purchase intention. Environmental concern has a positive and significant effect on green purchase intention. green brand knowledge and environmental concern simultaneously have a positive and significant effect on green purchase intention.

Keywords: Environmental Concern; Green Brand Knowledge; Green Purchase Intention; Multiple Linear Regression; Shopee

INTRODUCTION

Increasing global awareness of environmental issues has significantly influenced consumer behavior, prompting businesses to integrate sustainability into their branding strategies. Green marketing, which includes the promotion of environmentally friendly products and practices, has become an important component of strategic management in both developed and developing countries (Leonidou et al., 2020). As environmental degradation increases, particularly in emerging markets such as Indonesia, understanding the psychological dimensions and behaviors of green purchasing becomes important.

Green brand knowledge, defined as consumers' awareness and understanding of a brand's environmental initiatives, plays an important role in shaping perceptions and intentions. When consumers have higher levels of green brand knowledge, they tend to develop favorable attitudes towards environmentally responsible brands (Nguyen et al., 2021). In the Indonesian context, where environmental education and sustainability initiatives are gaining interest, such knowledge is a key antecedent to green consumerism (Rahman & Reynolds, 2022).

In addition, environmental concern, which refers to an individual's level of awareness of environmental problems and support efforts to solve them, also strongly influences purchase intentions. Several studies confirm that environmentally concerned consumers show stronger intentions to support green products, even at premium prices (Yadav & Pathak, 2020; Taufique et al., 2021). In Southeast Asia, particularly Indonesia, environmental concerns are increasing due to increased media exposure and government initiatives, which in turn encourage pro-environmental behavior (Wibowo & Chen, 2023).

The integration of green brand knowledge and environmental concern offers a holistic view of the psychological processes that drive green purchase intentions. Previous research suggests that both cognitive (brand knowledge) and affective (environmental stewardship) dimensions are critical to developing effective green marketing strategies (Wongprawmas & Canavari, 2021). However, research focusing specifically on Indonesia is limited, creating a significant research gap, especially given its unique socio-cultural context and rapidly growing middle class.

Moreover, the dynamics of green consumer behavior in emerging markets vary, influenced by factors such as economic status, environmental literacy, and cultural values (Biswas, 2021). As such, the Indonesian market presents a valuable opportunity for research, particularly in examining how consumers' perceptions of green brands and their environmental values translate into purchase intentions.

This research aims to fill this gap by analyzing the influence of green brand knowledge and environmental concerns on consumer purchase intentions in Indonesia. Understanding these factors is important for businesses looking to implement effective green marketing strategies and contribute to sustainable development goals (SDGs) (Lim et al., 2020).

LITERATURE REVIEW

Green Brand Knowledge (Independent Variable)

Green brand knowledge refers to consumers' awareness, understanding, and memory regarding a brand's environmental attributes, such as its green initiatives, use of eco-friendly materials, sustainability policies, and the presence of green labels or

certifications (Chen & Chang, 2020). This concept is grounded in Keller's brand knowledge theory, which posits that the associations stored in a consumer's memory influence their response to brand-related stimuli (Keller, 2013). When consumers are well-informed about a brand's environmental efforts, they are more likely to develop trust and show support for the brand (Nguyen et al., 2021). Green brand knowledge plays a crucial role in reducing consumer uncertainty and strengthening credibility toward green product claims, particularly in markets where greenwashing practices are still prevalent (Biswas, 2021).

In the context of developing countries such as Indonesia, where public awareness of environmental issues is gradually increasing, green brand knowledge serves as a key cognitive factor that drives environmentally responsible purchasing behavior (Rahman & Reynolds, 2022). Therefore, it is essential for companies to enhance their environmental communication strategies to ensure consumers are well-informed about their sustainability practices. This, in turn, can significantly influence consumers' purchase intentions and brand loyalty in the long term.

Environmental Concern (Independent Variable)

Environmental concern refers to the extent to which individuals are aware of environmental issues and are willing to engage in behaviors that support environmental protection (Schultz et al., 2005). It reflects a personal sense of moral responsibility toward sustainability and has been widely acknowledged as a significant predictor of green consumption behavior. Individuals with high levels of environmental concern tend to make consumption choices that align with ecological values. Yadav and Pathak (2020) emphasize that such consumers are more likely to purchase environmentally friendly products, even at a higher cost, due to their strong commitment to sustainability. In line with this, Taufique et al. (2021) assert that environmental concern positively influences attitudes toward green labels and eco-conscious branding efforts.

In the Indonesian context, rising awareness driven by climate-related events and government sustainability campaigns has contributed to a growing public sensitivity to environmental issues. According to Wibowo and Chen (2023), environmental concern among Indonesian millennials significantly impacts sustainable lifestyle choices, including eco-friendly purchasing decisions. This increasing concern highlights a shift in consumer values toward more responsible and conscious consumption patterns.

Environmental concern is frequently examined within the framework of the Value-Belief-Norm (VBN) theory, which suggests that pro-environmental behavior is driven by personal norms activated through deeply held environmental values (Stern, 2000). When individuals perceive environmental problems as personally relevant, they are more motivated to act, including by supporting green brands through their purchasing behavior. Thus, environmental concern not only shapes consumer attitudes but also serves as a critical factor influencing actual behavior toward sustainable consumption.

Purchase Intention (Dependent Variable)

Purchase intention refers to a consumer's plan or willingness to buy a specific product or brand in the future, and is widely recognized as a strong predictor of actual purchasing behavior (Ajzen, 1991). In the context of green marketing, this intention is influenced by both cognitive and affective factors, including environmental knowledge, brand trust, values, and concern (Leonidou et al., 2020). Numerous studies have found that green brand knowledge and environmental concern significantly affect consumers' intentions to purchase eco-friendly products (Mathea & Laksmidewi, 2024). For instance, Wongprawmas & Canavari (2021) demonstrated that green brand positioning increases purchase intention, especially when mediated by environmental concern.

The Theory of Planned Behaviour (TPB) offers a useful framework for understanding this relationship, explaining that purchase intention is shaped by attitudes, subjective norms, and perceived behavioral control (Astuti & Solihin, 2024). When consumers possess greater knowledge about green brands, their attitudes become more favorable, and when environmental concern is high, social norms around green consumption are strengthened, leading to increased purchase intention (Yadav & Pathak, 2020).

In Indonesia, where traditional consumption habits coexist with a rising environmental awareness, green purchase intention is growing steadily. Lim et al. (2020) found that the availability of green products, combined with environmental education, has significantly strengthened the intention to buy green products among Indonesian consumers. Overall, purchase intention reflects not only a consumer's likelihood to choose green products but also their willingness to recommend and pay more for such products.

Conceptual Framework
The conceptual framework of this study is constructed based on the integration of the Theory of Planned Behavior (TPB) (Ajzen, 1991) and Brand Knowledge Theory (Keller, 2013). According to TPB, individual behavioral intentions—such as the intention to purchase green products—are influenced by attitudes, subjective norms, and perceived behavioral control (Astuti & Solihin, 2024). Within this framework, green brand knowledge and environmental concern serve as critical antecedents that shape consumer attitudes and moral obligations, which in turn influence their purchase intentions.

Green brand knowledge represents the extent to which consumers are familiar with, understand, and can recall a brand's environmentally sustainable efforts (Chen & Chang, 2020). Informed consumers are more confident in making purchase decisions when they perceive the brand as credible and committed to sustainability. This knowledge positively influences their attitudes toward the brand and increases the intention to purchase eco-friendly products (Nguyen et al., 2021).

Environmental concern reflects the degree of a consumer's awareness and personal concern for environmental degradation (Schultz et al., 2005). This concern forms a moral and emotional basis for consumers to engage in pro-environmental behaviors, including green purchasing (Stern, 2000). Concerned consumers are more receptive to eco-labels and green advertisements and demonstrate stronger purchase intentions (Yadav & Pathak, 2020; Taufique et al., 2021).

Figure 1. Research Framework
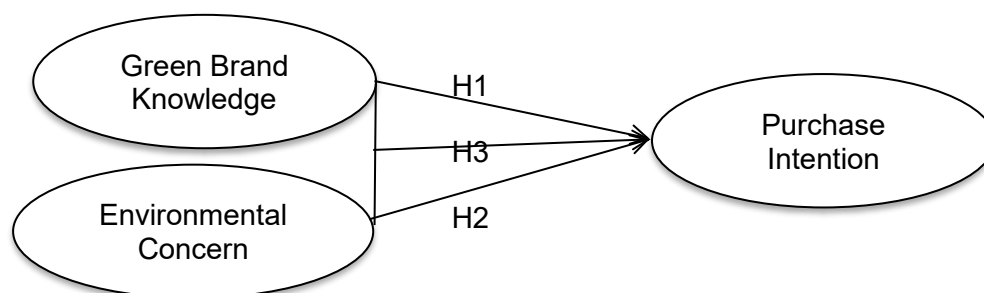
RESEARCH METHOD

This study employed a quantitative research approach to analyze the influence of green brand knowledge and environmental concern on green purchase intention among urban

consumers in Indonesia. The research was conducted across several major cities in Indonesia, including Jakarta, Surabaya, Bandung, Medan, and Makassar, to ensure geographical representation and diversity of respondents.

The research period began in January 2025, with data collection carried out through the distribution of structured questionnaires, both online and offline. The target population comprised residents of major urban areas who had experience purchasing environmentally friendly (green) products at least more than once. This criterion was used to ensure that respondents had basic familiarity with green consumption behavior.

The sampling technique used was simple random sampling, ensuring that each individual in the population had an equal chance of being selected. To determine the required sample size, the study applied the Lemeshow formula, commonly used for health and social science studies when the population size is unknown. Using a 5% margin of error (d = 0.05) and a confidence level of 95%, the calculated sample size was 384 respondents.

Data collected from the questionnaire were analyzed using descriptive statistics and inferential analysis, including multiple linear regression tests, classical assumption tests (normality, multicollinearity, and heteroscedasticity), and hypothesis testing. All analyses were performed using SPSS version 26 for Windows.

RESULTS

The multiple linear regression approach will be applied ascertain the impact or link between the independent factors (green brand knowledge and Environmental concern) and the dependent variable (purchase intention):

Multiple Linear Regression
The multiple linear regression approach will be utilized to ascertain the impact or link between the independent factors (Green brand Knowledge and Environmental Concern) and the dependent variable (Purchase Intention).

Table 1. T-Test Results (Multiple Regression Output)

Multiple Regressions					
Model	Unstandardized Coefficients		Standardized Coefficients		
	B	Std.Error	Beta	T	Sig.
1 (Constant)	5.346	1.610		3.309	.001
Green brand Knowledge	.492	.082	.478	7.881	.000
Environmental Concern	.142	.051	.481	3.829	.000
a. Dependent Variable: Purchase Intention					

Source: Processed Data using SPSS 26 (2025)

Based on the results of multiple regression analysis in Table 1, both Green Brand Knowledge and Environmental Concern have a positive and significant effect on Purchase Intention, as tested using SPSS version 26. The Green Brand Knowledge variable shows a B coefficient of 0.492, a t-value of 7.881, and a significance level of 0.000, which is below the alpha value of 0.05, indicating a strong influence on consumers' intention to purchase green products and supporting Hypothesis 1 (H1). Similarly, the Environmental Concern variable has a B coefficient of 0.142, a t-value of 3.829, and a p-value of 0.000, also confirming a significant impact and supporting Hypothesis 2 (H2).

These results suggest that consumers who are well-informed about a brand's environmental initiatives and who are more environmentally concerned tend to exhibit a stronger intention to purchase eco-friendly products, highlighting the critical role of both variables in shaping green consumer behavior.

Simultaneous Test (F)
Table 2. F Test (Simultaneous Test)

ANOVA^a						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	308,920	2	154,460	42,746	,000^b
	Residual	317,981	382	3,613		
	Total	626,901	384			
a. Dependent Variable: Purchase Intention						
b. Predictors: (Constant) green brand knowledge, Environmental concern						

The F test is used to determine whether the independent variables, namely green brand knowledge and environmental concern, simultaneously have a significant influence on the dependent variable, which in this study is purchase intention. The analysis was conducted using SPSS version 26, and the results are presented in Table 2. Based on the ANOVA output, the F count value is 42.746, which is higher than the F table value of 3.10. Additionally, the significance value obtained is 0.000, which is lower than the standard alpha value of 0.05. These results indicate that the regression model is statistically significant, meaning that green brand knowledge and environmental concern together have a positive and significant effect on purchase intention. Therefore, it can be concluded that both independent variables jointly influence the likelihood of consumers intending to purchase environmentally friendly products.

Coefficient of Determination
Table 3. Coefficient of Determination

Model Summary				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	,702^a	,493	,481	1,901
a. Predictors: (Constant), *green brand knowledge and environmental concern*				

The coefficient of determination is used to measure how much the independent variables—in this case, green brand knowledge and environmental concern—are able to explain the variation in the dependent variable, which is purchase intention. Based on the Model Summary in Table 3, the R Square value is 0.493, or 49.3%. This means that 49.3% of the variation in consumers' purchase intention can be explained by the combined influence of green brand knowledge and environmental concern. In other words, nearly half of the changes in purchase intention are determined by how well consumers understand a brand's environmental practices and how concerned they are about environmental issues.

The remaining 50.7% of the variation in purchase intention is influenced by other factors not included in this research model, such as price sensitivity, product availability, brand image, peer influence, or individual values. These external variables may also play a role in shaping consumer behavior but were not analyzed in this particular study. Therefore, while green brand knowledge and environmental concern significantly contribute to understanding purchase intention, future research is recommended to explore additional variables that may further explain consumer decision-making in the context of green product consumption. Incorporating qualitative methods or mixed-method approaches

may also offer deeper insights into consumers' motivations, preferences, and barriers, thereby enhancing the overall understanding of sustainable purchasing behavior across diverse demographic and cultural segments.

DISCUSSION

This study aimed to examine the influence of green brand knowledge and environmental concern on purchase intention among consumers in Indonesia using multiple linear regression analysis. The statistical results provide significant insights into how these independent variables contribute individually and jointly to shaping consumer intention to purchase green products. These findings emphasize the importance of increasing environmental education and brand transparency, encouraging companies and policymakers to develop more effective strategies that promote green product adoption. By understanding the cognitive and emotional drivers behind green purchasing, businesses can tailor their marketing efforts more precisely and foster more sustainable consumer behaviors in the long term.

Partial Influence: t-Test Results
Based on the t-test results presented in Table 1, both green brand knowledge and environmental concern have a positive and statistically significant effect on purchase intention. The green brand knowledge variable recorded a t-value of 7.881 with a significance level of 0.000, which is below the standard threshold of 0.05. This confirms that green brand knowledge significantly influences consumers' purchase intention, thereby supporting Hypothesis 1 (H1). The regression coefficient (B = 0.492) indicates that as consumers become more informed about a brand's environmental practices, their intention to purchase green products increases. This result aligns with findings from Chen and Chang (2020), who observed that consumers who are aware of a brand's green attributes are more confident and motivated to support it. It is also consistent with Biswas (2021), who found that green brand awareness significantly influences green purchasing behavior in emerging markets.

Likewise, the environmental concern variable shows a t-value of 3.829 with a significance level of 0.000, also well below the 0.05 threshold, thereby confirming Hypothesis 2 (H2). The regression coefficient (B = 0.142) suggests that although environmental concern positively affects purchase intention, its influence is relatively smaller compared to green brand knowledge. This finding supports previous research by Nguyen et al. (2021), which highlighted that consumers who are concerned about environmental issues tend to favor eco-friendly products, although their purchasing behavior may still be influenced by other considerations such as price and product accessibility.

Overall, the results indicate that Indonesian consumers are becoming increasingly aware of environmental issues, and their purchasing behavior is notably influenced when they have sufficient knowledge of a brand's green initiatives. This emphasizes the importance for companies to communicate their environmental efforts clearly and consistently to enhance consumer trust and drive green purchasing intentions.

Simultaneous Influence: F-Test Results
The results from the F-test (Table 2) indicate that both independent variables together have a significant joint effect on purchase intention. The F-value of 42.746 is significantly higher than the F-table value of 3.10, with a significance level of 0.000 < 0.05. This indicates that the combined influence of green brand knowledge and environmental concern on purchase intention is statistically significant. These results underscore the importance of considering both cognitive (knowledge-based) and affective (concern-based) factors in green marketing strategies.

These findings are consistent with the Theory of Planned Behaviour (Ajzen, 1991), which posits that behavioural intentions are influenced by an individual's attitudes, which in turn are shaped by knowledge and personal values. When consumers possess both the information and the motivation to act sustainably, their intentions become stronger and more likely to result in actual green purchasing behaviour.

Coefficient of Determination (R²)
The coefficient of determination (Table 3) shows an R-square value of 0.493, which means that 49.3% of the variance in purchase intention can be explained by the independent variables—green brand knowledge and environmental concern. The remaining 50.7% is attributed to other factors not examined in this study, such as price sensitivity, product quality, brand trust, green advertising, or social influence.

This level of explanatory power is moderately strong and highlights the strategic importance of investing in environmental branding and awareness campaigns. As noted by Leonidou et al. (2020), companies that effectively integrate environmental messaging and educate their customers about their sustainability practices are more likely to see positive shifts in consumer behaviour.

CONCLUSION

In the context of green marketing, the purpose of this study is to examine how Indonesian customers' purchase intentions are impacted by their awareness of green brands and environmental concerns. The findings of the multiple linear regression analysis show that customers' interest in buying green items is positively and significantly influenced by both independent variables: environmental stewardship and knowledge of green brands.

The findings of the t-test show that, with a high degree of statistical significance, purchase intention is most strongly influenced by green brand knowledge. This implies that customers are more likely to have positive intents when it comes to buying green items if they are more aware of a brand's environmental policies. In a similar vein, it was discovered that, although to a lesser degree, environmental concern also strongly influences purchase intention, suggesting that consumers who care more about the environment are more likely to support sustainable products.

The results of the F-test also demonstrate that both factors taken together significantly impact purchase intention, highlighting the significance of integrating cognitive (knowledge) and emotive (concern) dimensions in the study of consumer behavior. According to the coefficient of determination ($R2 = 0.493$), the combined effects of environmental concern and green brand awareness account for around 49.3% of the variance in purchase intention, with additional factors not covered in this study accounting for the remaining 50.7%. In conclusion, the results show that increasing consumers' awareness of green companies and encouraging environmental stewardship are crucial tactics to increase their propensity to buy green goods. For marketers and legislators looking to encourage sustainable consumption practices in Indonesia, these insights are extremely pertinent. In order to better understand customer buy intents in the green market segment, future research is recommended to examine additional elements including pricing perception, green advertising, brand trust, or societal norms.

LIMITATION
This study has several limitations that should be acknowledged. First, the research focused solely on two independent variables—environmental concern and green brand awareness—while other potential factors such as price sensitivity, brand trust, social

influence, and perceived product quality were not considered, potentially limiting the model's explanatory power. Second, the sample may not fully represent the diverse demographics of Indonesian consumers, as the respondents were limited in scope and number, which could affect the generalizability of the findings. Third, the use of a cross-sectional design captures purchase intentions at a single point in time, thereby not accounting for changes in consumer behavior over time. Future research is encouraged to adopt a longitudinal approach and explore a broader range of variables to gain a more comprehensive understanding of green purchase behavior in Indonesia.

ACKNOWLEDGMENT

DECLARATION OF CONFLICTING INTERESTS

REFERENCES

Ajzen, I. (1991). The theory of planned behaviour. *Organizational Behavior and Human Decision Processes, 50*(2), 179–211. https://doi.org/10.1016/0749-5978(91)90020-T

Astuti, N. C., & Solihin, I. (2024). The mediating role of the TPB in the relationship between entrepreneurship education and entrepreneurial intention among Indonesian undergraduate students. *Asia Pacific Journal of Management and Education, 7*(3). 397-415. https://doi.org/10.32535/apjme.v7i3.3514

Biswas, A. (2021). A study of consumers' willingness to pay for eco-friendly products in an emerging economy: The role of perceived value. *Business Strategy and the Environment, 30*(1), 123–134. https://doi.org/10.1002/bse.2610

Chen, Y. S., & Chang, C. H. (2020). Environmental brand knowledge and green purchase intention: The mediating role of green brand trust. *Sustainability, 12*(6), 2483. https://doi.org/10.3390/su12062483

Keller, K. L. (2013). *Strategic brand management* (4th ed.). Pearson Education.

Leonidou, C. N., Katsikeas, C. S., & Morgan, N. A. (2020). Greening the marketing mix: Do greeners lead to greener? *Journal of the Academy of Marketing Science, 48*(1), 101–120. https://doi.org/10.1007/s11747-019-00664-0

Lim, W. M., Ting, D. H., & Ng, Y. Y. (2020). Drivers and barriers to green consumerism in Asia: Insights from Indonesia. *Asian Journal of Business Research, 10*(3), 1–14. https://doi.org/10.14707/ajbr.200086

Mathea, N., & Laksmidewi, D. (2024). The influence of social media influencer endorsement on purchase intention with the mediating roles of parasocial interaction and possession envy. *International Journal of Applied Business and International Management, 9*(2). 308-322. https://doi.org/10.32535/ijabim.v9i2.2732

Nguyen, T. N., Lobo, A., & Greenland, S. (2021). Pro-environmental purchase behaviour: The role of consumers' biospheric values, environmental concern and guilt. *Journal of Retailing and Consumer Services, 58*, 102291. https://doi.org/10.1016/j.jretconser.2020.102291

Rahman, M., & Reynolds, N. (2022). Exploring green brand trust and purchase intention in emerging economies: Evidence from Indonesia. *Asia Pacific Journal of Marketing and Logistics, 34*(3), 789–808. https://doi.org/10.1108/APJML-04-2020-0261

Schultz, P. W., Gouveia, V. V., Cameron, L. D., Tankha, G., Schmuck, P., & Franěk, M. (2005). Values and their relationship to environmental concern and conservation behaviour. *Journal of Cross-Cultural Psychology, 36*(4), 457–475. https://doi.org/10.1177/0022022105275962

Stern, P. C. (2000). Toward a coherent theory of environmentally significant behaviour. *Journal of Social Issues, 56*(3), 407–424. https://doi.org/10.1111/0022-4537.00175

Taufique, K. M. R., Vocino, A., & Polonsky, M. J. (2021). The influence of eco-label knowledge and trust on pro-environmental consumer behaviour in an emerging market. *Journal of Strategic Marketing, 29*(1), 38–55. https://doi.org/10.1080/0965254X.2019.1658765

Wibowo, Y., & Chen, S. C. (2023). Environmental consciousness and green behaviour among Indonesian millennials. *Sustainability, 15*(1), 345. https://doi.org/10.3390/su15010345

Wongprawmas, R., & Canavari, M. (2021). The effect of green brand positioning on green purchase intentions in Asian consumers. *International Journal of Consumer Studies, 45*(5), 942–953. https://doi.org/10.1111/ijcs.12687

Yadav, R., & Pathak, G. S. (2020). Young consumers' intention towards buying green products in a developing nation: Extending the theory of planned behaviour. *Journal of Cleaner Production, 273*, 122–132. https://doi.org/10.1016/j.jclepro.2020.122122

ABOUT THE AUTHOR(S)

1st Author
Roberto Roy Purba is a lecturer in the Management Study Program at Universitas Sari Mutiara Indonesia. He earned his Master of Science degree from Universitas Gadjah Mada in 2017 and completed his Bachelor's degree in Economics at Universitas Kristen Duta Wacana in 2008. As a Lektor and permanent faculty member, he is actively involved in teaching and research. His areas of interest include consumer behavior, marketing strategy, product quality, and business decision-making.
Email: robertoroypurba@gmail.com
ORCID ID: https://orcid.org/0009-0006-2644-6459

2nd Author
Owen De Pinto Simanjuntak is a lecturer in the Management Study Program at Universitas Sari Mutiara Indonesia. He obtained his Doctorate in Management from Universitas Prima Indonesia in 2024. He previously earned a Master's degree from Universitas HKBP Nommensen in 2015 and a Bachelor's degree in Economics from Universitas Bina Nusantara in 2002. As a Lektor and permanent faculty member, he actively engages in teaching and research with a focus on accounting information systems, SME performance, and digital innovation in business.

3rd Author
Elisabeth Tambunan is a lecturer in the Management Study Program at Universitas Sari Mutiara Indonesia. She holds a Master's degree in Economics (S.E.), a Bachelor's degree from Universitas Darma Agung (2001), and a Diploma in Hospitality from Akademi Pariwisata dan Perhotelan Darma Agung (1996). As a Lektor and permanent faculty member, she is actively engaged in teaching and research. Her scholarly interests include marketing strategy, consumer behavior, service quality, and vocational training development.

4th Author
Muhammad Rahmat is a lecturer in the Law Study Program at Universitas Muslim Nusantara Al-Washliyah. He holds a Master of Science degree from Universitas Sumatera Utara, completed in 2017, and a Bachelor's degree in Islamic Education from Universitas Al-Washliyah in 2012. Currently serving as a Lektor and a permanent faculty member, he is actively engaged in teaching and research. His research interests include organizational behavior, public policy, and Islamic-based service quality.

5th Author
Satria Tirtayasa is an Associate Professor (Lektor Kepala) in the Management Study Program at Universitas Muhammadiyah Sumatera Utara. He completed his Doctor of Philosophy at Universiti Sains Malaysia in 2003, earned a Master of Management degree from Universitas Gadjah Mada in 1997, and obtained his Bachelor's degree in Engineering from Universitas Islam Bandung in 1993. As a senior and active permanent lecturer, his research interests focus on regional development, public budgeting, and competitiveness of small and medium enterprises (SMEs).