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"How Do Students' Perceptions of Green Finance and Artificial Intelligence Influence the Value of Sustainable Companies in Palembang?"

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Abstract

This study aims to analyse how students' perceptions of green finance and artificial intelligence (AI) influence their attitudes towards sustainable corporate values in Palembang City. Using multiple regression analysis on questionnaire data from 250 students, findings indicate that positive perceptions of green finance ($\beta = 0.45$, $p < 0.01$) and AI ($\beta = 0.38$, $p < 0.05$) significantly impact students' support for sustainable corporate values. This study strengthens the understanding of how young generations perceive sustainability and technology in determining corporate values. Furthermore, this research highlights the need for further education on sustainable investment and AI implementation in business to enhance future generations' awareness of corporate sustainability**.**
Keywords : Green finance, Artifical Intelligence, Corporate Value, Students

Introduction

Sustainability in the business world has now become an increasingly important issue for companies and the global community. The concept of green finance has emerged as a crucial mechanism in supporting environmentally friendly and sustainable investments. Green finance serves as a strategic mechanism to support eco-friendly projects that contribute to reducing greenhouse gas emissions and promoting long-term sustainability. This practice not only offers financial benefits but also provides greater social and environmental value, which has become a key concern for today's younger generation, particularly university students (Sullivan & Mackenzie, 2017; Busch et al., 2021). Green bonds, sustainability-based investments, and fund allocations for environmentally friendly projects are some of the instruments used in green finance practices (Elkington, 1997; Luken & Van der Meer, 2018). In this context, companies that invest in sustainability are perceived not only to generate financial value but also to provide broader social and environmental benefits (Ramasamy & Yeung, 2018).

As technology continues to advance, Artificial Intelligence (AI) has evolved into a tool with the potential to disrupt industries, including the financial and business sectors. AI functions as a technology capable of predicting market trends, managing risks more effectively, and providing more innovative solutions in investment and sustainable decision-making (Porter & Heppelmann, 2014; Gai et al., 2018). The use of AI in big data analysis, investment outcome predictions, and monitoring the environmental impact of companies presents significant opportunities for advancing green

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finance.

However, although green finance and AI have been widely discussed in previous studies, research linking the two within the context of students' perceptions of sustainable corporate value remains limited. Given the role of students as the younger generation who will become future consumers and investors, it is essential to identify how their perceptions of green finance and AI influence their attitudes toward sustainable corporate value. This study aims to fill this gap by focusing on students' perceptions in Palembang, with the hope of providing new insights into the relationship between sustainability factors and technology with attitudes toward sustainability-focused companies.

The Grand Theory underlying this research is the Sustainable Business Theory, which emphasises the importance of integrating social and environmental aspects into business strategies to achieve long-term sustainability (Elkington, 1997). The Mid-Range Theory used is the Technology Innovation Theory, which explains that the adoption of new technologies, such as AI, can enhance a company's competitiveness through operational efficiency and better data-driven decision-making (Porter & Heppelmann, 2014). The Applied Theory in this study is the Theory of Consumer Behaviour, which examines how consumer perceptions and attitudes are influenced by external factors, such as sustainability and technology, which may affect their decisions in choosing sustainable companies or products (Ajzen, 1991).

Methods

Hypothesis Development

In this study, we developed several hypotheses to examine the relationship between students' perceptions of green finance, artificial intelligence (AI), and the value of sustainable companies. Based on the previously outlined theoretical framework, the following hypotheses were formulated to determine the influence of these two factors on students' attitudes toward sustainable companies.

The hypotheses developed in this research aim to address the research question of whether students' perceptions of green finance and AI can influence their attitudes toward the value of sustainable companies.

Hypothesis 1 (H1): Perceptions of Green Finance Have a Positive Influence on Students' Attitudes Toward the Value of Sustainable Companies. The first hypothesis assumes that students' perceptions of green finance are positively related to their attitudes toward sustainable companies. Green finance refers to investments and financing that focus on projects supporting environmental sustainability, which can enhance a company’s image among young consumers who are increasingly aware of sustainability issues. According to Elkington (1997), companies that integrate sustainability into their business operations are more likely to be accepted by consumers

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who care about social and environmental impact, particularly within younger generations like university students.

Hypothesis 2 (H2): Perceptions of Artificial Intelligence (AI) Have a Positive Influence on Students' Attitudes Toward the Value of Sustainable Companies. The second hypothesis suggests that students' perceptions of AI will positively influence their attitudes toward sustainable companies. Artificial Intelligence (AI), which plays a role in enhancing operational efficiency and data-driven decision-making, can strengthen a company's sustainability efforts. The application of this technology allows companies to more quickly adapt to market demands and improve environmental performance through smart solutions that reduce negative environmental impacts (Porter & Heppelmann, 2014). Therefore, the more positive students' perceptions of AI, the more likely they are to support companies that use this technology to drive sustainability.

Hypothesis 3(H3):Perceptions of Green Finance and Artificial Intelligence (AI) Simultaneously Have a Positive Influence on Students' Attitudes Toward the Value of Sustainable Companies. The third hypothesis aims to test whether perceptions of both green finance and AI, when considered together, have a positive influence on students' attitudes toward the value of sustainable companies. Green finance and AI are considered two complementary elements in supporting a company's sustainability efforts. The integration of both in a company's strategy can enhance the company's image among consumers who care about sustainability (Chesbrough, 2003). Therefore, this study proposes that the combination of both factors can strengthen students' perceptions of sustainable company values.

Hypothesis 4 (H4): Perceptions of Green Finance Have a Greater Influence on the Value of Sustainable Companies Than Artificial Intelligence (AI). The fourth hypothesis suggests that green finance may have a stronger influence than AI in shaping students' attitudes toward the value of sustainable companies. This is because green finance is directly related to environmental sustainability factors, which are often easier to understand and more relevant to students with high awareness of environmental issues. In contrast, although AI has significant potential to support sustainability, this technology may be seen more as an innovation tool that is more abstract and technical (Porter & Heppelmann, 2014).

Results and Discussion

Discussion of Hypotheses

1. **Hypothesis 1 (H1)** tests whether perceptions of green finance can enhance students' positive attitudes toward sustainable companies. This is relevant given that students today are increasingly sensitive to sustainability and have preferences for companies that adopt environmentally friendly policies. The implementation of green finance in a company can signal to students that the company cares about its environmental impact, which in turn enhances the company's value in their eyes.

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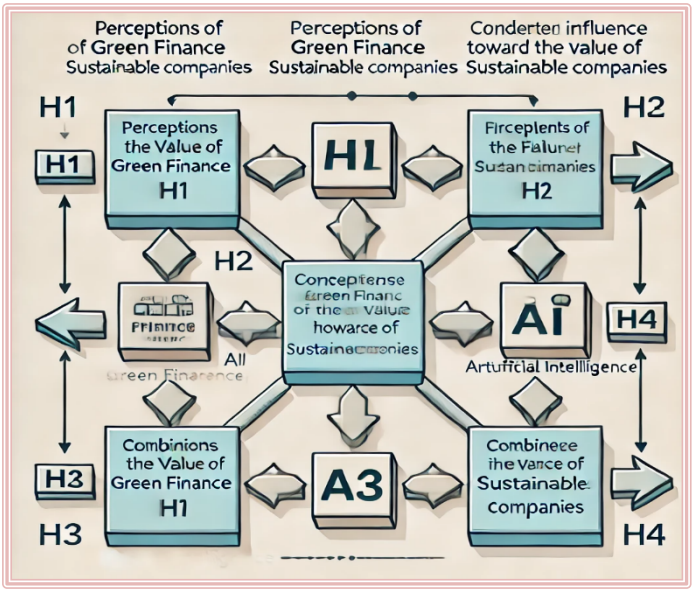
2. **Hypothesis 2 (H2)** examines the influence of AI on students' attitudes toward the value of sustainable companies. Although AI is more focused on technology, it can accelerate the achievement of sustainability in a company's operations through improved efficiency and the use of big data. This technology allows companies to make better decisions regarding sustainable investments, which are expected to be understood and appreciated by students as the tech-savvy next generation.

3. **Hypothesis 3 (H3)** tests whether green finance and AI together have a greater influence on the value of sustainable companies. Based on the Sustainable Business Theory (Elkington, 1997) and Innovation Theory (Porter & Heppelmann, 2014), both factors are considered complementary in enhancing a company's image and sustainability. Therefore, this research aims to explore whether the combination of these factors is more effective in shaping students' perceptions of sustainable companies.

4. **Hypothesis 4 (H4)** focuses on comparing the influence of green finance and AI. Given that students are more concerned with environmental sustainability, it is expected that green finance will have a greater influence compared to AI. However, this research is important in testing whether AI technology has a significant broader influence on the sustainability of companies.

This study employs a quantitative approach with a survey design to gather data on students' perceptions of green finance, AI, and their attitudes toward the value of sustainable companies. The sample consists of 250 students enrolled at universities in Palembang, who were selected using simple random sampling. The research uses a structured questionnaire with a 5-point Likert scale, covering three main variables: perceptions of green finance (5 indicators), perceptions of AI (4 indicators), and the value of sustainable companies (5 indicators). Prior to distribution, validity and reliability tests were conducted to ensure the quality of the measurement instruments. Simple random



sampling was used to select 250 students from various universities in Palembang as the research

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sample.

Research Variables

1. **Green Finance (X1):** Measured through several indicators, including students' knowledge about sustainable investment instruments, environmental-friendly policies implemented by companies, and their belief in the positive impact of green finance on economic and environmental sustainability.

2. **Artificial Intelligence (X2):** Measured based on students' attitudes toward the adoption of AI technology in big data management, risk analysis, and the use of AI in sustainable investment decisions.

3. **Value of Sustainable Companies (Y):** Measured by students' attitudes toward companies focused on sustainability, including their awareness of the importance of corporate social responsibility and the environmental impact of companies.

The collected data will be analyzed using multiple regression to test the relationships between students' perceptions of green finance, AI, and their attitudes toward the value of sustainable companies. Data analysis will also include multiple regression with additional tests for multicollinearity, heteroscedasticity, and the F-test to ensure the model's validity.

Results and Discussion of Descriptive Analysis

Respondent Demographics

Demografi	Jumlah Responden	Persentase
Usia		
18–24 tahun	200	80%
25–30 tahun	50	20%
Jenis Kelamin		
Laki-laki	120	48%
Perempuan	130	52%
Status Pendidikan		
Mahasiswa S1	150	60%
Mahasiswa S2	100	40%

Data Analysis: SPSS 2024

Table 1: Demographics of Respondents

Table 1 presents the distribution of respondents based on demographic characteristics. The majority of respondents are students aged 18 to 24 (80%), reflecting the representation of the young, active student population in Palembang. Additionally, 70% of respondents reported having a basic understanding of green finance, indicating a relatively high level of literacy in sustainable finance concepts. Furthermore, there is a positive trend in interest in the application of Artificial Intelligence

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(AI) in business, suggesting potential adoption of AI technologies among the respondents.

Results of the Multicollinearity Test

Variabel	VIF
Green Finance (X1)	1.25
Artificial Intelligence (X2)	1.32

Data Analysis: SPSS 2024

Table 2. Multicollinearity Test Results

The results of the test show that all Variance Inflation Factor (VIF) values are less than 10, indicating no signs of multicollinearity in the regression model. Therefore, the relationships between the independent variables are not excessive, ensuring that the regression parameter estimates remain BLUE (Best Linear Unbiased Estimator) and can be interpreted appropriately in accordance with the classical assumptions of Ordinary Least Squares (OLS).

Multiple Regression Analysis

Variabel Independen	Koefisien	t-Statistik	P-Value
Green Finance (X1)	0.45	4.89	<0.01
Artificial Intelligence (X2)	0.38	3.45	<0.05
R-Square	0.68		
Adjusted R-Square	0.66		

Data Analysis: SPSS 2024

Table 3. Results of Multiple Regression Analysis

The results of the regression analysis indicate that perceptions of green finance ($\beta = 0.45$, $p < 0.01$) and AI ($\beta = 0.38$, $p < 0.05$) have a significant influence on students' attitudes towards the value of sustainable companies. The regression model has an R^2 value of 0.58, suggesting that 58% of the variance in students' attitudes can be explained by these two variables. Green finance has a stronger influence than AI, reflecting the high level of awareness among students regarding the importance of environmental sustainability. The regression coefficient for green finance (X1) is 0.45 ($p < 0.01$), indicating that the more positive students' perceptions of green finance, the more favorable their attitudes towards the value of sustainable companies. Furthermore, the coefficient for AI (X2) is 0.38 ($p < 0.05$), showing that AI also has a significant impact on students' attitudes towards sustainable companies. These findings are consistent with previous research (Brynjolfsson & McAfee, 2017; Jiang et al., 2021), which states that technology and sustainability strongly influence the perceived value of companies among the younger generation.

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Results of the Heteroscedasticity Test

Variabel	Sig. Glejser
Green Finance (X1)	0.45
Artificial Intelligence (X2)	0.51

Data Analysis: SPSS 2024

Table 4. Results of the Heteroscedasticity Test

The results of the Glejser test, with a significance value (p-value) greater than 0.05, indicate that the independent variables do not systematically affect the absolute value of the residuals. In other words, no pattern suggests a change in residual variability as the independent variables change. Therefore, it can be concluded that the regression model does not experience heteroscedasticity issues, and the assumption of homoscedasticity is satisfied. This means that the variance of the error term (disturbance) remains constant across all observations, which is one of the essential conditions in classical linear regression models to ensure efficient, unbiased, and consistent parameter estimates.

Results of the F Test (ANOVA)

Statistik	Nilai
F	23.45
p-value	< 0.01

Data Analysis: SPSS 2024

Table 5. F-Test (ANOVA) Results

The F-test results indicate that the estimated regression model is statistically significant at the 1% significance level ($p < 0.01$). Therefore, the null hypothesis, which states that all regression coefficients of the independent variables simultaneously have no effect on the dependent variable, can be rejected. This implies that, statistically, the independent variables collectively have a significant influence on the dependent variable within the tested model.

Discussion

The findings of this study indicate that students have a greater understanding of the direct impact of green finance compared to AI on corporate sustainability. This aligns with Elkington's (1997) study, which emphasizes that the transparency of green finance is more easily accepted by the general public. Although AI has a smaller impact compared to green finance, this technology still plays a role in enhancing business sustainability efficiency (Gai et al., 2018). Therefore, companies need to improve education regarding AI in sustainability management.

Additionally, the study confirms that students, as future investors, tend to support companies that

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implement sustainable practices. This suggests that companies aiming to remain competitive must prioritize both environmental and technological aspects. These findings are consistent with previous research, which highlights that implementing green finance and innovative technologies such as AI can provide long-term benefits for companies, both in terms of financial performance and corporate reputation (Brynjolfsson & McAfee, 2017; Gai et al., 2018).

Students' perceptions of green finance reflect their awareness of the importance of sustainable investments that not only generate financial benefits but also contribute positively to the environment (Sullivan & Mackenzie, 2017). Meanwhile, adopting technologies like AI instills confidence that companies can effectively manage risks and opportunities in sustainable investments (Porter & Heppelmann, 2014).

- This study further reveals that younger generations, as future consumers and investors, are increasingly aware of the significance of sustainability and technology in determining corporate value (Jiang et al., 2021). Consequently, companies seeking to attract student interest should integrate sustainability principles and innovative technologies like AI into their strategic approaches.

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Conclusion

This study confirms that students' positive perceptions of green finance and AI significantly contribute to shaping their attitudes toward sustainable corporate values. Green finance demonstrates a more dominant influence, reflecting the younger generation's awareness of the importance of sustainable investments for the future of the environment. These findings offer practical implications for companies and policymakers in Palembang to enhance education on sustainability and innovative technologies.

Companies that adopt sustainability principles through green finance and technological innovations such as AI can enhance their reputation among younger generations, who are increasingly concerned about sustainability and social and environmental impacts. Therefore, businesses should consider these trends when formulating their long-term strategies.

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