The Mediating Role of Customer Trust and Customer Satisfaction in The Relationship Between ESG Management and Business Performance

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ABSTRACT

This study examines the mediating roles of customer trust and customer satisfaction in the relationship between environmental, social, and governance (ESG) management and hotel business performance. Although ESG has become a strategic priority within the hospitality industry, empirical research investigating the psychological mechanisms through which ESG practices translate into improved business performance remains limited, particularly in the context of mid-scale hotels. A quantitative cross-sectional research design was employed. Data were collected from 82 general managers and hotel managers representing three-to five-star hotels across East Java, Indonesia. The proposed research model was tested using partial least squares structural equation modeling (PLS-SEM) with SmartPLS 4.0. The results reveal that the ESG dimensions, namely environmental, social, and governance practices, exert significant positive effects on customer trust and customer satisfaction. In turn, both customer trust and customer satisfaction significantly enhance hotel business performance. However, the direct effect of ESG management on business performance was found to be insignificant. More importantly, customer trust and customer satisfaction fully mediate the relationship between ESG management and business performance. These findings indicate that ESG initiatives must first cultivate customer trust and satisfaction before they can effectively generate superior business outcomes. This study is among the first to empirically investigate the mediating roles of customer trust and customer satisfaction in the ESG-business performance relationship within the mid-scale hotel sector. Furthermore, it extends the application of Signaling Theory in hospitality ESG research by demonstrating how ESG practices serve as strategic signals that shape customer perceptions and ultimately influence organizational performance

ABSTRAK

Penelitian ini menguji peran mediasi kepercayaan dan kepuasan pelanggan pada pengaruh antara manajemen Environmental, Social, and Governance (ESG) terhadap kinerja bisnis hotel. Meskipun ESG telah menjadi perhatian utama pada industri perhotelan, namun penelitian yang mengeksplorasi mekanisme psikologis bagaimana praktik ESG diterjemahkan menjadi kinerja bisnis masih terbatas, terutama pada segmen hotel menengah. Metode kuantitatif cross-sectional digunakan dimana ada 82 data dikumpulkan dan siap diolah dari general manager dan manajer hotel bintang tiga hingga bintang lima di Jawa Timur, Indonesia. Model penelitian diuji menggunakan Partial Least Squares Structural Equation Modeling (PLS-SEM) dengan SmartPLS 4.0. Hasil penelitian mengungkapkan bahwa dimensi ESG (lingkungan, sosial, dan tata kelola) secara signifikan dan positif memengaruhi kepercayaan dan kepuasan pelanggan. Kepercayaan dan kepuasan pelanggan, pada gilirannya, secara signifikan meningkatkan kinerja bisnis hotel. Namun, pengaruh langsung

1. NTRODUCTION

The global business landscape has undergone a significant paradigm shift toward sustainable and responsible corporate practices, with **Environmental, Social, and Governance (ESG)** criteria emerging as a crucial framework for evaluating organizational performance and long-term viability (Qing & Jin, 2023).

ESG encompasses three interrelated dimensions: environmental practices, including emission reduction, waste management, and energy efficiency; social responsibility, such as employee welfare, community engagement, and human rights protection; and governance quality, which includes transparency, accountability, and ethical business conduct (Cek & Eyupoglu, 2020; Huang, 2021). Governments, investors, and consumers are increasingly incorporating ESG considerations into their decision-making processes. The growing awareness of sustainable business practices has been driven by their potential to mitigate risks while enhancing corporate reputation and financial performance (Sun, 2023; Alsayegh et al., 2020).

The hospitality industry provides a particularly compelling context for ESG research because of its substantial environmental footprint, including intensive energy and water consumption, waste generation, and carbon emissions, as well as its considerable social impact on local communities and the workforce (Wu & Tham, 2023). Hotels that adopt ESG practices can achieve operational efficiencies through energy and water conservation, waste reduction initiatives, and enhanced brand reputation, thereby attracting environmentally and socially conscious consumers (Fu & Zhang, 2020; Tang et al., 2022). Despite these potential benefits, ESG adoption remains uneven across different hotel categories. In particular, limited attention has been devoted to mid-scale hotels, which constitute a dominant segment of the hospitality market in many regions of East Java.

East Java, Indonesia, represents an important setting in which this research gap can be examined. The province has experienced rapid growth in tourism and hospitality activities, with 103 three-to five-star hotels operating across major cities in the region (PHRI East Java, 2024). While this expansion contributes to economic development, it also intensifies environmental pressures and social responsibilities. Nevertheless, the implementation and business implications of ESG practices among these hotels remain largely underexplored. Mid-scale hotels, particularly those in the three- and four-star categories, face distinct challenges in adopting ESG initiatives due to resource constraints, limited regulatory pressure, and insufficient incentives to invest in sustainability programs. These conditions differ markedly from those of luxury hotels, which typically possess greater financial and organizational resources and therefore dominate the existing hospitality ESG literature.

The academic literature on ESG and business performance reveals a significant research gap. Although numerous studies have examined the direct relationship between ESG practices and financial performance, the mechanisms through which ESG influences organizational outcomes remain insufficiently understood, especially within service industries where customer perceptions and experiences play a pivotal role (Rodríguez-Fernández et al., 2019; Min & Na, 2022). Customer trust and customer satisfaction represent critical psychological and relational variables that may explain how ESG practices are translated into superior business performance. Drawing on Signaling Theory (Spence, 1973), ESG practices can be viewed as positive signals that reduce information asymmetry between hotels and customers. Such practices strengthen customers' perceptions of organizational credibility, integrity, and social responsibility, thereby fostering greater trust and satisfaction (Martínez & del Bosque, 2013; Pérez & Rodríguez del Bosque, 2015).

This study addresses this gap by investigating the mediating roles of customer trust and customer satisfaction in the relationship between ESG management and business performance among three-to five-star hotels in East Java, Indonesia. Specifically, this study examines: (1) the effects of environmental, social, and governance management on customer trust and customer satisfaction; (2) the effects of customer trust and customer satisfaction on hotel business performance; (3) the direct effects of ESG dimensions on business performance; and (4) the mediating roles of customer trust and customer satisfaction in the relationship between ESG management and business performance.

By integrating Signaling Theory with the ESG framework, this study contributes to the literature in three important ways. First, it provides empirical evidence regarding the psychological mechanisms through which ESG practices influence hotel business performance, thereby extending theoretical understanding beyond direct-effect models. Second, it addresses the existing research gap concerning ESG implementation in mid-scale hotels within the East Java context. Third, it offers practical implications for hotel managers and policymakers by highlighting how ESG strategies can be designed to effectively cultivate customer trust and satisfaction, ultimately enhancing business performance and long-term competitiveness.

2. THEORETICAL FRAMEWORK AND HYPOTHESES

Signaling Theory

Signaling theory, originally introduced by Spence (1973), explains how information asymmetry between

two parties can be reduced through the use of signals. In business settings, organizations, as signal senders,

communicate information to stakeholders, who act as signal receivers, regarding their quality, credibility and competitive advantages. Effective signals are generally costly to imitate, observable, and credible, enabling stakeholders to make more informed judgments (Spence, 1973).

Within the hospitality industry, customers often have limited knowledge of the quality of services they will receive and the extent of a hotel's commitment to sustainability before experiencing the service firsthand. Hotels can communicate their service quality and organizational values through various signaling mechanisms. ESG practices, including environmental initiatives, social responsibility programs, and transparent governance systems, represent credible signals that demonstrate an organization's genuine commitment to sustainability, ethical conduct, and stakeholder wellbeing (Rahman & Alsayegh, 2021). These signals reduce customer uncertainty and foster trust. Consequently, enhanced trust influences customer satisfaction and behavioral intentions, including revisit intentions and positive word-of-mouth recommendations (Martínez & del Bosque, 2013; Pérez & Rodríguez del Bosque, 2015).

2.2 ESG Management in the Hospitality Industry

ESG management refers to the integration of environmental, social, and governance considerations into an organization's strategic and operational activities (Duan et al., 2023; Putri & Bangun, 2023). Environmental management encompasses practices aimed at minimizing negative environmental impacts, including emission reduction, energy efficiency, waste management and natural resource conservation (Cek & Eyupoglu, 2020; Huang, 2021). Social management focuses on organizational relationships with employees, customers, and local communities through fair labor policies, employee well-being initiatives, community engagement, and corporate social responsibility programs (Karwowski, 2021; Zahroh & Hersugondo, 2021). Governance management emphasizes transparency, accountability, ethical conduct, board diversity, and protection of stakeholder rights (Hoang, 2018; Lee & Suh, 2022).

In the hotel sector, ESG practices serve several strategic purposes. From an environmental perspective, hotels can reduce operational costs through energy and water conservation, waste reduction, and sustainable procurement (Fu & Zhang, 2020). From a social perspective, ESG initiatives enhance employee satisfaction, strengthen community relationships, and attract socially conscious customers (Mooneeapen et al., 2022). From a governance perspective, transparent and ethical management practices contribute to stakeholder trust, reduce regulatory risks, and improve organizational reputation (Kim et al., 2023; Shahrun et al., 2023).

Customer Trust

Customer trust refers to customers' belief that an organization will act competently, honestly, and in the best interests of its customers (Martínez & del Bosque, 2013). Trust develops when customers perceive that an organization is not solely profit-oriented but is also committed to ethical values, social responsibility, and customer well-being (Pérez & Rodríguez del Bosque, 2015). The primary dimensions of customer trust include credibility, which reflects the belief that a company provides accurate information and fulfills its promises; integrity, referring to perceptions of honesty and ethical behavior; reliability, indicating consistency in delivering services according to promised standards; and benevolence, reflecting genuine concern for customer welfare (Pérez & Rodríguez del Bosque, 2015; Martínez & del Bosque, 2013).

Customer Satisfaction

Customer satisfaction is defined as a customer's overall evaluation of service experiences based on a comparison between expectations and actual performance (Han et al., 2011). Satisfaction occurs when the perceived performance meets or exceeds customer expectations. Higher levels of satisfaction significantly influence future customer behavior, including repurchase intentions, customer loyalty, and positive recommendations (Lee et al., 2018).

Customer satisfaction comprises several dimensions. First, **expectation confirmation**, which refers to the extent to which actual experiences align with prior expectations. Second, **emotional satisfaction**, which reflects the positive feelings experienced during service interactions. Third, **functional satisfaction**, which relates to the technical quality and effectiveness of the service provided. Finally, **behavioral intentions** represent customers' willingness to revisit, repurchase, or recommend the service to others (Han et al., 2011; Lee et al., 2018).

Hotel Business Performance

Hotel business performance refers to the financial and operational outcomes that reflect how efficiently organizational resources are utilized, the level of profitability achieved, and the extent to which the business sustains its growth over time (Olsen & Zhao, 2001; Jones et al., 2016). Key performance indicators commonly used to assess hotel performance include the occupancy rate, average daily rate (ADR), revenue per available room (RevPAR), food and beverage revenue, profitability, guest satisfaction, employee satisfaction and productivity, and sustainability-related performance measures (Chen, 2011; Horwath HTL, 2023). In the contemporary business environment, organizational performance is increasingly evaluated beyond purely financial indicators by incorporating non-financial dimensions such as customer satisfaction, operational efficiency, and contributions to society and the environment (Lee et al., 2023).

Hypothesis Development

ESG Management and Customer Trust

ESG practices function as signals that communicate an organization's commitment to sustainability, ethical conduct, and stakeholder well-being. Environmental initiatives demonstrate a company's concern for environmental preservation. Social initiatives indicate a commitment to employee welfare and community development. Governance practices reflect transparency, accountability, and responsible business conduct. These signals help reduce information asymmetry and strengthen customer confidence in the organization (Pérez & Rodríguez del Bosque, 2015). Empirical evidence has consistently supported a positive relationship between ESG practices and customer trust (Min & Na, 2022; Bux et al., 2022; Duan et al., 2023). Accordingly, the following hypotheses are proposed:

H_1: Environmental management positively influences customer trust.

H_3: Social management has a positive influence on customer trust.

H_5: Governance management positively influences customer trust.

ESG Management and Customer Satisfaction

ESG practices enhance customer satisfaction through various mechanisms. When organizations engage in environmentally responsible activities, customers perceive additional value in the services provided and experience positive emotions toward the company (Lee et al., 2018; Preziosi et al., 2022). Similarly, social initiatives that contribute to community welfare strengthen customers' emotional connections with the organization. Customers perceive such companies as genuinely caring rather than solely profit-oriented, which improves their evaluations of service quality and overall experience (Kim et al., 2023; Shahrun et al., 2023).

Good governance practices play a critical role in shaping customer satisfaction. Effective governance ensures service consistency, operational reliability, and transparent conduct of business. Customers are more confident when they can anticipate consistent service outcomes and trust that the company operates with honesty and responsibility. When organizational performance exceeds customer expectations, satisfaction increases, ultimately fostering stronger customer loyalty (Han et al., 2011; Lee et al., 2018). Therefore, the following hypotheses are proposed:

H_2: Environmental management has a positive influence on customer satisfaction. H_4: Social management has a positive influence on customer satisfaction.

H_6: Governance management positively influences customer satisfaction.

Customer Trust, Customer Satisfaction, and Hotel Business Performance

Customer trust reduces perceived risks and strengthens customers' confidence in the organization, thereby enhancing satisfaction. When customers trust a company, they are more likely to remain loyal, make repeat purchases, and recommend the service to others (Martínez & del Bosque, 2013; Chen et al., 2020). Likewise, satisfied customers demonstrate stronger loyalty, higher repurchase intentions, and greater willingness to engage in positive word-of-mouth communications. These behavioral outcomes directly contribute to higher occupancy rates, increased revenue, and improved profitability in the hotel industry (Han et al., 2011; Lee et al., 2018). Accordingly, the following hypotheses are proposed.

H7: Customer trust positively influences hotel performance.

H_8: Customer satisfaction positively influences hotel performance.

Direct Effects of ESG Management on Hotel Business Performance

ESG practices can directly improve organizational outcomes through enhanced operational efficiency, resource optimization and risk reduction (Almeyda & Darmansya, 2019; Sani et al., 2020). However, within the service industry, the direct impact of ESG initiatives may be less apparent because customers' perceptions and evaluations often serve as critical mechanisms linking ESG activities to organizational performance outcomes. Therefore, the following hypotheses are proposed:

H_9: Environmental management positively influences hotel business performance.

H_{10}: Social management positively influences hotel performance.

H_{11}: Governance management positively influences hotel business performance.

The Mediating Roles of Customer Trust and Customer Satisfaction

Drawing upon signaling theory, the influence of ESG signals on organizational performance depends on how customers interpret and respond to these signals. First, ESG initiatives must be recognized and evaluated by customers before generating business value. When customers perceive strong ESG practices, they are more likely to develop trust in the organization. Increased trust subsequently enhances customer satisfaction, which then encourages favorable behavioral outcomes, including stronger loyalty, repeat patronage, and positive recommendations. Consequently, ESG signals do not affect business performance solely through a direct pathway but rather through customers' cognitive and emotional responses.

Accordingly, this study proposes that customer trust and satisfaction serve as mediating mechanisms in the relationship between ESG management and hotel business performance.

H_{12}: Customer trust mediates the relationship between environmental management and hotel performance.

H_{13}: Customer trust mediates the relationship between social management and hotel business performance. H_{14}: Customer trust mediates the relationship between governance management and hotel business performance.

H_{15}: Customer satisfaction mediates the relationship between environmental management and hotel business performance.

H_{16}: Customer satisfaction mediates the relationship between social management and hotel business performance.

H_{17}: Customer satisfaction mediates the relationship between governance management and hotel business performance.

3. RESEARCH METHOD`

Research Design and Sample

This study employed a quantitative cross-sectional research design with a causal-comparative approach to examine the hypothesized relationships among the study variables. The target population consisted of 103 three-to five-star hotels operating in East Java, Indonesia, based on data obtained from the East Java Hotel and Restaurant Association (PHRI). A census approach was adopted, whereby all hotels within the population were invited to participate in the study. A total of 82 valid responses were collected and deemed suitable for analysis.

The respondents comprised general managers (43 respondents; 52.44%) and hotel managers (39 respondents; 47.56%) who possessed extensive strategic knowledge of hotel operations, ESG implementation, and customer-related issues. The sample included 39 three-star hotels (47.56%), 32 four-star hotels (39.02%), and 11 five-star hotels (13.42%). These hotels were distributed across major destinations in East Java, including Surabaya (43.90%), Batu (13.41%), Malang (13.41%), and several other municipalities in the province.

Measurement Instruments

Data were collected using a structured questionnaire measured on a five-point Likert scale ranging from 1 (**strongly disagree**) to 5 (**strongly agree**). All constructs were operationalized using established measurement scales adapted from previous studies.

Environmental Management (five items): Adapted from Cek and Eyupoglu (2020) and Huang (2021), measuring waste management policies, renewable energy utilization, water conservation practices, adoption of energy-efficient technologies, and carbon emission reduction programs. A sample item is:

"The hotel implements programs to reduce carbon emissions, such as minimizing the use of single-use plastics."
Social Management (five items): Adapted from Karwowski (2021) and Zahroh and Hersugondo (2021), this dimension assesses diversity and inclusion policies, occupational health and safety practices, fair compensation and benefits, community engagement, and philanthropic activities. A sample item is: *"The hotel implements policies related to occupational health and workplace safety."*
Governance Management (5 items): Adapted from Hoang (2018) and Lee and Suh (2022), this measures transparent management structures, enforcement of business ethics codes, internal audit systems, performance-based compensation, and risk management practices. A sample item is: *"The hotel has a business code of ethics that is consistently implemented."*
Customer Trust (five items): Adapted from Pérez and Rodríguez del Bosque (2015) and Martínez and del Bosque (2013), measuring credibility, integrity, reliability, and benevolence. A sample item is: *"The hotel ensures and safeguards guests' privacy and data security."*
Customer Satisfaction (five items): Adapted from Han et al. (2011) and Lee et al. (2018), this scale assesses expectation confirmation, emotional satisfaction, functional satisfaction, and behavioral intentions. A sample item is: *"Most guests express satisfaction with the hotel's services."*
Hotel Business Performance (five items): Adapted from Chen (2011) and Horwath HTL (2023), measuring occupancy rates, average daily rate (ADR), food and beverage revenue, net profit performance, and comparative business performance. A sample item is: *"The hotel consistently generates net profit each year."*

Data Analysis
The collected data were analyzed using **partial least squares structural equation modeling (PLS-SEM)** through SmartPLS 4.0. The analytical procedure was conducted in two stages.
First, the **measurement model (outer model)** was evaluated to assess its construct validity and reliability. Convergent validity was examined using outer loadings (> 0.70) and Average Variance Extracted (AVE >0.50). Discriminant validity was assessed using the Fornell-Larcker criterion and the HTMT ratio (< 0.90). Reliability was evaluated using Cronbach's alpha (> 0.70) and composite reliability (> 0.70).
Second, the **structural model (inner model)** was assessed by examining the path coefficients, coefficients of determination (R^2), effect sizes (f^2), predictive relevance (Q^2), and hypothesis testing results. The statistical significance of the hypothesized relationships was determined using a bootstrapping procedure with 5,000 resamples, following established PLS-SEM guidelines. This approach enabled the estimation of both direct and indirect effects, thereby allowing a comprehensive assessment of the mediating roles of customer trust and customer satisfaction in the relationship between ESG management and hotel business performance.

4. DATA ANALYSIS AND DISCUSSION

Measurement Model Assessment
Convergent validity was established as all indicator outer loadings exceeded the recommended threshold of 0.70, ranging from 0.742 to 0.928. Furthermore, all Average Variance Extracted (AVE) values surpassed the minimum requirement of 0.50, with values of 0.730 for Environmental Management, 0.786 for Social Management, 0.782 for Governance Management, 0.771 for Customer Trust, 0.647 for Customer Satisfaction, and 0.692 for Hotel Business Performance. Discriminant validity was confirmed using the Fornell-Larcker criterion, whereby the square root of each construct's AVE exceeded its correlations with other constructs. Additionally, all Heterotrait-Monotrait (HTMT) ratios were below the recommended threshold of 0.90. Reliability was also demonstrated, with Cronbach's alpha values ranging from 0.864 to 0.932 and composite reliability values ranging from 0.902 to 0.948, all exceeding the acceptable threshold of 0.70.

Descriptive Statistics
Table 1 presents the descriptive statistics for all the variables in this study. Environmental management had mean scores ranging from 3.51 to 3.70, indicating a moderate level of implementation. Social management achieved mean scores ranging from 3.80–4.06, suggesting a good level of implementation. Governance management recorded mean values between 3.65 and 3.80, reflecting a moderate level of governance. Customer trust and satisfaction demonstrated relatively higher scores, ranging from 3.87 to 4.16 and 3.94 to 4.15, respectively, both categorized as good. Hotel business performance exhibited mean scores ranging from 3.65 to 3.89, indicating a moderate level of performance.

Overall, the findings suggest that ESG practices among hotels in East Java are perceived to be implemented at moderate-to-good levels. Among the ESG dimensions, social management received the highest evaluation, whereas environmental management received the lowest rating.

Table 1. Descriptive Statistics of Research Variables

Variable	Mean Range	Standard Deviation	Category
Environmental Management	3.51-3.70	0.81-0.89	Moderate
Social Management	3.80-4.06	0.74-0.85	Good
Governance Management	3.65-3.80	0.78-0.88	Moderate
Customer Trust	3.87-4.16	0.72-0.82	Good
Customer Satisfaction	3.94-4.15	0.70-0.80	Good
Hotel Business Performance	3.65-3.89	0.76-0.86	Moderate

Structural Model Assessment

The structural model explained 33.1% of the variance in customer trust ($R^2 = 0.331$), 33.0% of the variance in customer satisfaction ($R^2 = 0.330$), and 60.4% of the variance in hotel performance ($R^2 = 0.604$). These results indicate moderate explanatory power for the mediating variables and substantial explanatory power for hotel business performance.

The effect size (f^2) values ranged from small to moderate. Environmental management demonstrated a moderate effect on customer trust ($f^2 = 0.225$), while customer satisfaction had a moderate effect on hotel business performance ($f^2 = 0.320$). The predictive relevance values (Q^2) were above zero for all endogenous constructs, including customer trust ($Q^2 = 0.236$), customer satisfaction ($Q^2 = 0.199$), and hotel business performance ($Q^2 = 0.398$), confirming adequate predictive relevance. Furthermore, the model achieved a goodness-of-fit (GoF) value of 0.545, exceeding the recommended threshold of 0.36 for a large model fit, thereby indicating strong overall model performance.

Hypothesis Testing Direct Effects (H1-H8)

Table 2 presents the results of the direct-effect hypothesis testing. All hypotheses examining the effects of ESG dimensions on customer trust and satisfaction were supported. Environmental management

Significantly influenced customer trust ($\beta = 0.391$; $t = 3.753$; $p < 0.001$) and customer satisfaction ($\beta = 0.298$; $t = 2.823$; $p < 0.01$). Similarly, social management significantly affected customer trust ($\beta = 0.283$; $t = 2.876$; $p < 0.01$) and customer satisfaction ($\beta = 0.268$; $t = 2.889$; $p < 0.01$). Governance management also exhibited significant positive effects on customer trust ($\beta = 0.205$; $t = 2.153$; $p < 0.05$) and customer satisfaction ($\beta = 0.321$; $t = 3.874$; $p < 0.001$).

Moreover, customer trust significantly enhanced hotel business performance ($\beta = 0.457$; $t = 3.557$; $p < 0.001$), and customer satisfaction also exerted a significant positive effect on hotel business performance ($\beta = 0.460$; $t = 5.198$; $p < 0.001$).

Table 2. Direct Effect Hypothesis Testing

Hypothesis	Path	β	t-value	p-value	Result
H_1	Environmental → Customer Trust	0.391	3.753	0.000	Supported
H_2	Environmental → Customer Satisfaction	0.298	2.823	0.005	Supported
H_3	Social → Customer Trust	0.283	2.876	0.004	Supported
H_4	Social → Customer Satisfaction	0.268	2.889	0.004	Supported
H_5	Governance → Customer Trust	0.205	2.153	0.032	Supported
H_6	Governance → Customer Satisfaction	0.321	3.874	0.000	Supported
H_7	Customer Trust → Hotel Performance	0.457	3.557	0.000	Supported
H_8	Customer Satisfaction → Hotel Performance	0.460	5.198	0.000	Supported

Direct Effects of ESG Management on Hotel Business Performance (H9-H11)

The direct effects of ESG dimensions on hotel performance were statistically insignificant. Environmental management has a positive but insignificant effect on hotel performance ($\beta = 0.053$; $t = 0.560$; $p = 0.576$). Likewise, social management has a positive but insignificant relationship with hotel performance ($\beta = 0.037$; $t = 0.384$; $p = 0.701$). Governance management also had a positive but insignificant influence on performance ($\beta = 0.094$; $t = 1.077$; $p = 0.282$).

Therefore, H9, H10, and H11 were not supported. These results indicate that ESG management does not

directly improve hotel business performance and suggest that additional mechanisms may be required to translate ESG initiatives into performance results.

Mediating Effects (H12-H17)

Table 3 presents the results of the indirect effect analyses. All mediation hypotheses were supported. Customer trust significantly mediated the effects of environmental management ($\beta = 0.179$; $t = 2.161$; $p < 0.05$), social management ($\beta = 0.129$; $t = 2.178$; $p < 0.05$), and governance management ($\beta = 0.094$; $t = 2.008$; $p < 0.05$) on hotel performance.

Similarly, customer satisfaction significantly mediated the effects of environmental ($\beta = 0.137$; $t = 2.302$; $p < 0.05$), social ($\beta = 0.123$; $t = 2.154$; $p < 0.05$), and governance management ($\beta = 0.148$; $t = 3.454$; $p < 0.01$) on hotel business performance.

These findings provide strong evidence that customer trust and satisfaction serve as critical mechanisms through which ESG management contributes to superior hotel business performance.

Table 3. Mediating Effect Hypothesis Testing

Hypothesis	Indirect Path	β	t-value	p-value	Result
H_{12}	Environmental → Customer Trust → Hotel Performance	0.179	2.161	0.031	Supported
H_{13}	Social → Customer Trust → Hotel Performance	0.129	2.178	0.030	Supported
H_{14}	Governance → Customer Trust → Hotel Performance	0.094	2.008	0.045	Supported
H_{15}	Environmental → Customer Satisfaction → Hotel Performance	0.137	2.302	0.022	Supported
H_{16}	Social → Customer Satisfaction → Hotel Performance	0.123	2.154	0.012	Supported
H_{17}	Governance → Customer Satisfaction → Hotel Performance	0.148	3.454	0.001	Supported

Discussion

The findings of this study provide important insights into how ESG management contributes to hotel business performance in the hospitality industry. Consistent with Signaling Theory (Spence, 1973), the results demonstrate that ESG practices function as credible signals that enhance customer trust and satisfaction, which subsequently drive business performance outcomes. Notably, the findings reveal that ESG dimensions do not directly influence hotel business performance but instead operate through psychological and relational mechanisms represented by customer trust and customer satisfaction. This finding supports the argument that ESG initiatives generate value only when stakeholders recognize and respond positively to sustainability practices (Qing & Jin, 2023; Rahman & Alsayegh, 2021).

First, the positive effects of environmental, social, and governance management on customer trust indicate that customers perceive ESG initiatives as signals of organizational credibility, integrity, and responsibility. Among the three dimensions, environmental management exerted the strongest influence on customer trust, suggesting that visible sustainability initiatives, such as waste reduction, energy conservation, and environmental stewardship, are highly valued by customers. These findings are consistent with prior studies demonstrating that sustainability-oriented practices strengthen stakeholder confidence by reducing information asymmetry and increasing perceptions of organizational legitimacy (Min & Na, 2022; Bux et al., 2022; Duan et al., 2023). Additionally, environmental responsibility has been shown to enhance stakeholder trust because customers increasingly associate sustainability efforts with organizational competence and ethical conduct (Huang, 2021; Rahman & Alsayegh, 2021).

Second, all ESG dimensions positively influenced customer satisfaction. This result suggests that customers derive both functional and emotional benefits from organizations that demonstrate environmental responsibility, social commitment, and ethical governance. Governance management showed the strongest influence on customer satisfaction, implying that transparency, accountability, and consistency in decision-making significantly contribute to customer evaluations. This finding supports previous studies indicating that responsible governance enhances stakeholder confidence, service quality perceptions, and customer satisfaction (Lee & Suh, 2022; Kim et al., 2023). Moreover, green practices and sustainability initiatives have been reported to generate positive emotional responses among customers, leading to higher satisfaction and favorable behavioral intentions in hospitality settings (Han et al., 2011; Preziosi et al., 2022; Lee et al., 2018).

Third, customer trust and satisfaction significantly improved hotel business performance. These findings

reinforce relationship marketing perspectives, suggesting that trust and satisfaction serve as strategic intangible assets that foster customer loyalty, repeat patronage, and positive word-of-mouth communication. Such customer behaviors subsequently increase occupancy rates, revenue generation, and profitability. This result is consistent with Martínez and del Bosque (2013), who emphasized that trust and satisfaction are key drivers of loyalty formation in hospitality businesses. Similarly, Chen et al. (2020) found that customer trust generated through socially responsible business practices enhances organizational reputation and ultimately contributes to business performance. Han et al. (2011) and Lee et al. (2018) further argued that satisfied customers are more likely to revisit and recommend hospitality services, creating sustainable competitive advantages.

Fourth, one of the most notable findings of this study is the absence of significant direct effects of ESG dimensions on the hotel business performance. The rejection of H9, H10, and H11 suggests that ESG practices alone are insufficient to generate immediate performance improvement. This finding aligns with Rodríguez-Fernández et al. (2019), who argued that ESG performance relationships are often influenced by contextual and stakeholder-related factors rather than operating directly. This also supports Min and Na (2022) view that performance benefits derived from ESG initiatives in hospitality organizations frequently depend on customer perceptions and organizational reputation. While ESG practices can improve operational efficiency and reduce environmental costs (Fu & Zhang, 2020), such benefits may not immediately translate into measurable business outcomes without stakeholder recognition and engagement.

The absence of direct ESG effects also suggests that hotels should view ESG as a relational and strategic capability rather than merely a compliance mechanism. According to Signaling Theory, signals generate value only when they are observed, interpreted, and trusted by stakeholders (Spence, 1973). Consequently, environmental initiatives, social programs, and governance policies do not automatically increase profitability or occupancy rates. Instead, these actions influence customers' perceptions regarding the credibility and responsibility of the organization, which subsequently shapes behavioral outcomes and performance. Similar conclusions were reported by Rahman and Alsayegh (2021) and Qing and Jin (2023), who emphasized that stakeholder responses are critical pathways through which ESG investments create organizational value.

Fifth, the mediation analysis provides strong empirical support for our proposed theoretical framework. Customer trust and satisfaction significantly mediated all relationships between ESG dimensions and hotel business performance. Because the direct ESG-performance relationships were insignificant, while the indirect effects remained significant, the findings indicate full mediation. This result further extends Signaling Theory by clarifying how sustainability-related signals are transformed into tangible business outcomes. ESG initiatives first influence stakeholder perceptions, which subsequently shape the attitudes and behaviors that contribute to organizational success. Similar mediating mechanisms have been identified by Chen et al. (2020), who highlighted the roles of reputation and trust in converting CSR initiatives into better organizational performance. Martínez and del Bosque (2013) demonstrated that trust and satisfaction are fundamental mechanisms that link responsible business practices to stakeholder loyalty.

Among the mediators examined, customer trust emerged as a particularly important relational pathway through which ESG creates value. Hotels operate within a service environment characterized by high uncertainty and intangible service attributes. Consequently, customers often rely on trust-based judgments when evaluating service providers. ESG practices reduce these uncertainties by signaling ethical conduct, transparency, and stakeholder commitment. This finding supports the arguments advanced by Pérez and Rodríguez del Bosque (2015), who emphasized that responsible business practices strengthen organizational credibility and trustworthiness. Furthermore, Rahman and Alsayegh (2021) suggested that ESG initiatives enhance organizational resilience by building stronger stakeholder trust and legitimacy.

Customer satisfaction also emerged as a powerful mechanism for translating ESG management into performance outcomes. Contemporary customers increasingly expect firms to balance economic objectives with environmental stewardship and social responsibility. When hotels effectively implement ESG initiatives, customers not only experience functional benefits through improved service quality but also derive psychological satisfaction from supporting responsible organizations. This finding aligns with the stakeholder-oriented perspective proposed by Lee et al. (2023), which argues that non-financial dimensions increasingly shape organizational performance. It also reinforces evidence from Preziosi et al. (2022) that green hotel practices significantly enhance customer satisfaction and positive behavioral intentions.

Overall, the findings contribute to the growing ESG literature by demonstrating that customer trust and

satisfaction are essential mechanisms through which ESG initiatives influence hotel business performance. Consistent with Signaling Theory, the results suggest that the effectiveness of ESG management depends less on the direct implementation of sustainability practices and more on how those practices shape customer perceptions and experiences. Therefore, ESG should be viewed as a strategic tool for strengthening stakeholder relationships and creating sustainable competitive advantages rather than merely a compliance or operational initiative

5. CONCLUSION, IMPLICATION, SUGGESTION, AND LIMITATIONS

This study examined the role of customer trust and customer satisfaction in linking ESG management to hotel business performance among three-star to five-star hotels in East Java, Indonesia. The findings indicate that environmental, social, and governance management significantly enhance customer trust and customer satisfaction. In turn, both variables positively influence hotel business performance. However, the direct effects of ESG dimensions on business performance were not significant, suggesting that ESG initiatives create value primarily through customer-related mechanisms rather than direct organizational outcomes. These findings extend Signaling Theory by demonstrating that ESG practices act as credible signals that strengthen customer trust and satisfaction, which subsequently translate into superior business performance. The study highlights the importance of understanding the psychological pathways through which sustainability initiatives generate organizational benefits within the hospitality industry. From a managerial perspective, hotel managers should view ESG not only as a sustainability obligation but also as a strategic tool for building stronger customer relationships. Environmental initiatives, social responsibility programs, and good governance practices should be effectively communicated to customers to maximize their impact on trust, satisfaction, and long-term competitiveness. This study has several limitations. First, the cross-sectional design limits causal interpretation. Second, the study focused exclusively on hotels in East Java, which may limit the generalizability of the findings. Third, the analysis relied on managerial perceptions and did not capture customers' direct evaluations. Future studies are encouraged to adopt longitudinal designs, involve multiple stakeholder groups, and examine other contexts and hospitality segments. Future research may also investigate additional mediating variables, such as corporate reputation, customer loyalty, brand image, customer engagement, and perceived value, to provide a more comprehensive understanding of how ESG initiatives contribute to organizational performance. Overall, the study concludes that ESG management alone is insufficient to improve hotel performance. Its effectiveness depends on the extent to which ESG practices foster customer trust and customer satisfaction. Consequently, hotels that successfully transform ESG commitments into positive customer experiences are more likely to achieve sustainable competitive advantages and stronger long-term business performance.

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