

Implications of the Theory of Planned Behavior for Green Purchase Intention in Cosmetic Products

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Abstract

The rising demand for eco-friendly cosmetics in Indonesia reflects a shift in consumer awareness toward sustainability. This study examines the influence of social media marketing, green attitude, and green product knowledge on green purchase intention, with green trust as a moderating variable. Using a quantitative approach, data were collected from 150 consumers of sustainable cosmetic products in Central Java and analyzed using Structural Equation Modeling-Partial Least Squares (SEM-PLS). The results show that social media marketing, green attitude, and green trust have a significant positive impact on green purchase intention; however, green product knowledge does not have a significant effect. Furthermore, green trust strengthens the relationship between the three independent variables and purchase intention, indicating its moderating role. This research contributes to the development of sustainable marketing strategies, particularly in the cosmetics industry. The findings provide a strategic implication for companies: building authentic consumer trust is paramount and acts as a catalyst to convert positive attitudes and marketing exposure into tangible purchase intentions, thereby supporting the sustainable consumption goals of SDG 12.

Implikasi Theory of Planned Behavior Terhadap Niat Beli Hijau pada Produk Kosmetik

Abstrak

Meningkatnya permintaan kosmetik ramah lingkungan di Indonesia mencerminkan pergeseran kesadaran konsumen terhadap keberlanjutan. Penelitian ini menguji pengaruh Social Media Marketing, Green Attitude, dan Green Product Knowledge terhadap Green Purchase Intention, dengan Green Trust sebagai variabel moderasi. Dengan menggunakan pendekatan kuantitatif, data dikumpulkan dari 150 konsumen produk kosmetik berkelanjutan di Jawa Tengah dan dianalisis menggunakan Structural Equation Modeling-Partial Least Squares (SEM-PLS). Hasil penelitian menunjukkan bahwa pemasaran media sosial, sikap hijau, dan kepercayaan hijau memiliki dampak positif yang signifikan terhadap niat beli hijau, namun pengetahuan produk hijau tidak memiliki pengaruh yang signifikan. Lebih lanjut, kepercayaan hijau memperkuat hubungan antara ketiga variabel independen dan niat beli, yang mengindikasikan peran moderasi. Penelitian ini berkontribusi pada pengembangan strategi pemasaran yang berkelanjutan, khususnya di industri kosmetik. Temuan ini memberikan implikasi strategis bagi perusahaan: membangun kepercayaan konsumen yang otentik adalah yang terpenting dan bertindak sebagai katalisator untuk mengubah sikap positif dan eksposur pemasaran menjadi niat pembelian yang nyata, sehingga mendukung tujuan konsumsi berkelanjutan SDG 12.

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INTRODUCTION

Sustainability has become a central issue in global consumer markets, including the cosmetics industry, which faces criticism for plastic waste and carbon-intensive processes. In Indonesia, cosmetics consumption is growing rapidly, yet sustainability practices are still limited. Previous studies often emphasize general environmental concerns without fully addressing how digital marketing and consumer trust shape green purchase behaviors in emerging markets.

The global climate crisis has emerged as one of the most pressing challenges of the 21st century, with wide-ranging environmental, economic, and social implications. Among the key contributors to climate change are greenhouse gas emissions, unsustainable resource use, and pollution, particularly from industries reliant on non-renewable materials and excessive waste production. Indonesia, as an archipelagic nation situated along the equator and surrounded by vulnerable coastal ecosystems, faces unique climate threats. These include sea-level rise, deforestation, temperature anomalies, and increased frequency of hydrometeorological disasters (Haryanto, 2020; BMKG, 2023).

In line with its global commitment to the Sustainable Development Go-

als (SDGs), particularly Goal 12, which emphasizes responsible consumption and production, Indonesia has introduced several national policy initiatives. Notably, Presidential Regulation No. 98 of 2021 demonstrates a formal acknowledgment of the need for emissions reductions and climate resilience strategies. However, actual implementation remains limited across various sectors, particularly in consumer-facing industries like cosmetics, where environmental sustainability is not yet fully institutionalized (Setiawan et al., 2022).

Table 1 illustrates the number of cosmetic companies and their environmental performance and related impacts between 2020 and 2024. Overall, the number of cosmetic companies steadily increased from 800 to 1,000, while the proportion of non-eco-friendly firms gradually declined from 80% to 70%. Despite this improvement, both carbon footprint and plastic waste continued to rise, with emissions growing from 1.2 million to 1.4 million tons of CO₂e and plastic waste escalating from 2.8 million to 3.2 million tons over the period. This suggests that although a larger share of companies have adopted environmentally friendly practices, the rapid growth of the industry has outweighed these efforts, resulting in a higher overall environmental burden.

Table 1. Comparison of Cosmetic Companies in Indonesia Based on Global Contributions

| Year | Number of Cosmetic Company | Non-Eco-Friendly (%) | Carbon Footprint (Ton CO ₂ e) | Plastic Waste (Ton) |
|------|----------------------------|----------------------|--|---------------------|
| 2020 | 800 | 80% | 1200000 | 2800000 |
| 2021 | 850 | 78% | 1250000 | 2900000 |
| 2022 | 900 | 75% | 1300000 | 3000000 |
| 2023 | 950 | 72% | 1350000 | 3100000 |
| 2024 | 1000 | 70% | 1400000 | 3200000 |

Source: BMKG (2024)

The cosmetics industry, which encompasses skincare, makeup, and personal care products, is not only a booming economic sector but also a contributor to

significant environmental degradation. The widespread use of plastic packaging, non-biodegradable microbeads, and synthetic chemicals places a substantial bur-

den on ecosystems, particularly aquatic environments (Ahmed et al., 2021; UNEP, 2022). While global brands are increasingly adopting eco-labels and sustainable practices, the transition in Indonesia has been uneven, and consumer awareness is still in development.

Despite these challenges, there is growing momentum among consumers to shift towards more environmentally responsible purchasing behaviors. This trend is particularly notable among younger generations—millennials and Gen Z—who are more responsive to environmental campaigns and digital advocacy. The concept of Green Purchase Intention (GPI) is gaining traction as a behavioral construct that reflects a consumer's intention to purchase environmentally safe, sustainable, and ethically produced products (Chen & Chang, 2020; Nguyen et al., 2021).

Table 2 illustrates survey findings from Nielsen Indonesia and Kantar

Worldpanel on consumer adoption of eco-friendly products between 2019 and 2024. Overall, there was a steady upward trend, with the proportion of consumers switching to eco-friendly products rising from 38% in 2019 to 67% in 2024. The largest increases were recorded in 2020 and 2021, each showing a 7% growth compared to the previous year, while subsequent years experienced slightly slower but consistent gains of 6% in both 2022 and 2023. By 2024, growth had moderated to just 3%, indicating that although adoption remains on the rise, the pace of expansion has started to plateau as the market reaches a more mature stage. This growth can be attributed to several factors, including heightened environmental awareness, greater access to information regarding product sustainability, and increased education on the environmental impacts of non-eco-friendly products (Khan & Rahman, 2022).

Table 2. Trends in Indonesian Consumer Adoption of Eco-Friendly Products

| Year | Consumers Switching to Eco-Friendly Products | Increase (%) Compared to the Previous Year |
|------|--|--|
| 2019 | 38% | - |
| 2020 | 45% | +7% |
| 2021 | 52% | +7% |
| 2022 | 58% | +6% |
| 2023 | 64% | +6% |
| 2024 | 67% | +3% |

Source : Nielsen Indonesia, Worldpanel (2024)

A key driver of this green behavioral transformation is the evolution of digital marketing, especially Social Media Marketing (SMM). With the ubiquity of platforms such as Instagram, TikTok, and YouTube, brands now have the ability to engage directly with environmentally conscious audiences. SMM facilitates brand-customer interaction, spreads awareness about eco-friendly practices, and builds emotional connections that can influence attitudes and intentions (Yan et al., 2023; Wu & Long, 2024).

However, while social media provides a platform for green messaging, it also opens space for greenwashing—the dissemination of misleading or exaggerated claims regarding a product's environmental benefits. This phenomenon undermines consumer trust and highlights the importance of Green Trust (GT)—a consumer's belief in the credibility and reliability of green claims—as a moderating variable in the relationship between green marketing and purchase behavior (Szabo & Webster, 2021; Zhang & Yuan, 2024). Without suf-

ficient trust, even the most informative or engaging green campaigns may fail to convert interest into purchasing decisions.

Another critical factor influencing GPI is the Green Attitude (GA) of consumers, which encompasses their beliefs, values, and personal norms related to environmental conservation. Consumers with a strong pro-environmental attitude are more likely to support green products, provided they perceive authenticity and effectiveness in their environmental claims (Kumar & Mohan, 2020; Paul et al., 2021). Complementing a green attitude is Green Product Knowledge (GPK)—the depth and breadth of a consumer's understanding about the ecological features, environmental impacts, and sustainability credentials of a product. A well-informed consumer is not only more discerning but also more likely to support environmentally responsible brands and resist greenwashing tactics (Lee & Chen, 2020; Zhang & Wei, 2021).

Despite the increased focus on green marketing and the rise of environmentally conscious consumers, previous studies still leave two important gaps. First, although research has highlighted the role of GA and GPK, many studies stop at identifying the “intention–behavior gap,” where positive attitudes and intentions toward green products do not consistently translate into actual purchasing behavior. This gap is often worsened by distrust, misinformation, and misleading environmental claims (Pittman et al., 2021; Szabo & Webster, 2021; Rahman et al., 2022). Second, there is a limited understanding of how these factors interact within the Indonesian context, particularly in the cosmetics industry and among digitally active consumers. Most prior research has been concentrated in Western and East Asian markets, thereby neglecting the cultural, regulatory, and digital characteristics unique to Indonesia (Ali et al., 2022; Pratiwi et al., 2023).

This study seeks to fill these gaps by

proposing an integrative model that not only examines the direct effects of Social Media Marketing (SMM), GA, and GPK on GPI but also investigates the moderating role of Green Trust (GT). By situating the study in Central Java—an area with a high density of youth, strong digital engagement, and increasing environmental awareness—it provides a relevant empirical setting to assess these relationships.

The study leverages the Theory of Planned Behavior (TPB) (Ajzen, 1991) as its foundational framework, emphasizing that consumer intentions are shaped by attitudes, subjective norms, and perceived behavioral control. In this model, GA aligns with attitude, SMM serves as a vehicle for shaping norms and perceived control, and GPK enhances consumer efficacy. By exploring these relationships in an empirical setting, this study aims to contribute to both theory and practice. Theoretically, it offers a refined model of GPI in the context of emerging markets and bridges the gap between intention and trust in green marketing. Practically, it provides strategic insights for cosmetic brands seeking to align marketing strategies with environmental values and consumer trust. Ultimately, the study supports the broader agenda of sustainable development and green consumer empowerment in Indonesia and beyond.

Hypothesis Development

Social media marketing has a positive and significant effect on consumers' green attitudes in the green cosmetics context. This suggests that eco-focused social media content can improve how favorably consumers view green products (Pop et al., 2020; Wu & Long, 2024; Nabivi, 2025).

Social media marketing positively influences consumers' green product knowledge by enhancing the informativeness and educational value of eco-centric content, thereby increasing consumer understanding of green product attributes (Koay

et al., 2021; Al-Dewachi et al., 2022; Li et al., 2025; Putri, 2025).

Social media marketing has a significant positive effect on green purchase intention by increasing eco-conscious engagement, shaping consumer preferences, and motivating intentions to buy eco-friendly products through informative and trustworthy digital content (Almoussawi et al., 2022; Nekmahmud et al., 2022; Nazish et al., 2024; Wu & Long, 2024).

Green attitude has a strong and consistent positive effect on green purchase intention, indicating that consumers with favorable views toward eco-friendly products are significantly more inclined to buy them (Pop et al., 2020; Saari et al., 2021; Zhuang et al., 2021; Limbu et al., 2022; Bevan-Dye & Synodinos, 2025).

Green product knowledge positively influences green purchase intention, as consumers who are better informed about eco-friendly product features are more likely to trust and intend to purchase such products (Wang et al., 2019; Yadav et al., 2021; Limbu et al., 2022; Li, 2025).

Green trust is expected to strengthen the relationship between green product knowledge and green purchase intention,

as knowledgeable consumers are more likely to act on their understanding when they trust the credibility of a product's green claims (Chen & Deng, 2016; Wang et al., 2019; Nazish et al., 2024). Accordingly, to investigate the interrelationships among the identified constructs and to validate the proposed research model, the study posits the following hypotheses:

- H1: Social Media Marketing affects Green Attitude.
- H2: Social Media Marketing affects Green Product Knowledge.
- H3: Social Media Marketing affects Green Purchase Intention.
- H4: Green Attitude affects Green Purchase Intention.
- H5: Green Product Knowledge affects Green Purchase Intention.
- H6: Green Trust positively affects Green Purchase Intention.
- H7: Green Trust moderates green attitude and green purchase intention.
- H8: Green Trust moderates Social Media Marketing and Green Purchase Intention.
- H9: Green Trust moderates Green Product Knowledge and Green Purchase Intention.

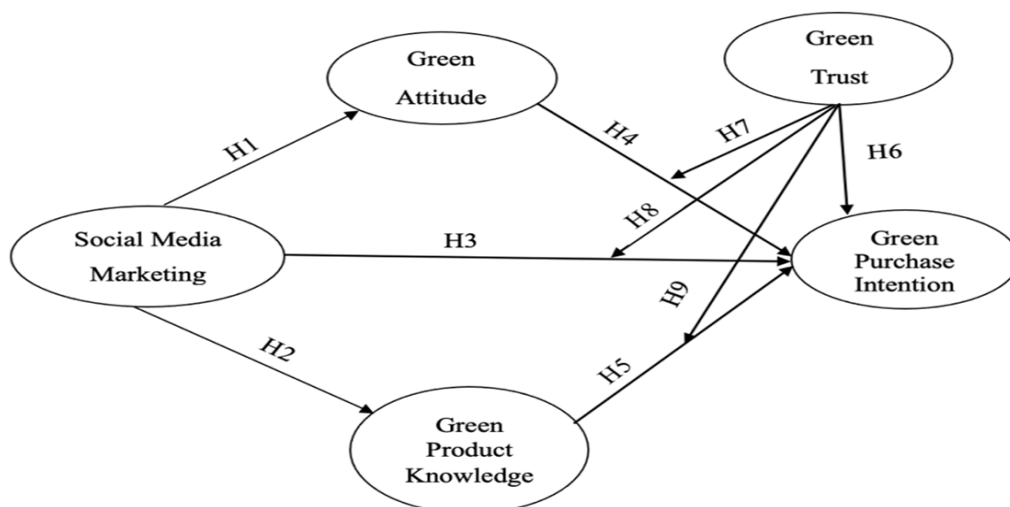


Figure 1. Research Model

METHOD

This study employed a quantitative survey with purposive sampling, targeting 150 consumers of sustainable cosmetic products in Central Java. The sample size exceeds the minimum threshold (96) suggested for SEM-PLS, ensuring sufficient statistical power. Respondents were aged 18–45, active social media users, and had prior experience purchasing eco-friendly cosmetic brands such as Wardah, Avoskin, and The Body Shop. The questionnaire was adapted from validated scales in prior research, covering green purchase intention, social media marketing, green attitude, green product knowledge, and green trust. Each construct was measured using a 5-point Likert scale. Ethical considerations were followed by ensuring voluntary participation, anonymity, and informed consent from all respondents.

Data were analyzed using SmartPLS 4.0 with tests for convergent validity, discriminant validity, and reliability. Structural model evaluation included R^2 , path coefficients, effect sizes, and predictive relevance. The study further applies Structural Equation Modeling (SEM) through SmartPLS 4.0 software to facilitate hypothesis testing by examining path coefficients, t-statistics, and p-values. These statistical evaluations help confirm the significance and strength of relationships among the variables, enabling validation of the research model and theoretical framework developed within this study.

Partial Least Squares (PLS) analysis using SmartPLS 4.0 software is employed to evaluate the validity and reliability of the collected data. According to Jumardi & Nugroho (2015), the outer model evaluation in SmartPLS is assessed based on three main criteria: convergent validity (evaluated through factor loadings and Average Variance Extracted or AVE), discriminant validity (measured using the Fornell-Larcker criterion and cross-loadings),

and construct reliability (assessed via composite reliability and Cronbach's alpha).

This study investigates several variables: Green Purchase Intention as the dependent variable, defined as consumers' willingness to buy eco-friendly products due to environmental and ethical considerations, measured by willingness to buy, perceived quality, intention to reduce environmental impact, and social influence (Chen et al., 2020; Wang et al., 2021).

Independent variables include Green Attitude, representing consumers' positive mindset towards environmentally friendly practices and products, indicated by environmental awareness, belief in green product effectiveness, social norms, and commitment to sustainability (Chen & Hung, 2020; Kumar & Mohan, 2020). Social Media Marketing, defined as strategic use of social platforms to influence consumer decisions through trendiness, social brand engagement, informative content, and customer support (Adeel et al., 2021; Alghzawi, 2024); and Green Product Knowledge, referring to consumer awareness of eco-friendly attributes, assessed via knowledge of environmental benefits, sustainability, conventional product impacts, and eco-labels (Lee & Chen, 2020; Zhang & Wei, 2021). The moderating variable, Green Trust, reflects consumers' confidence in environmental claims, measured by trust in product information, sustainability practices, product performance, and safety (Mulchandani et al., 2023; Kusuma et al., 2024).

RESULT AND DISCUSSION

In Indonesia, especially Central Java, demand for sustainable cosmetic products is rapidly rising due to increased consumer awareness about environmental and social issues, prompting major brands to adopt sustainability initiatives such as biodegradable packaging, natural ingredients, and carbon-neutral processes. The survey

involved 150 consumers of sustainable cosmetics from Central Java. The majority of respondents were female (66%) and young adults aged 17–25 (66%), followed by those aged 26–35 (21%). Geographically, most participants lived in Jepara (34%) and Semarang (25%), indicating key urban markets for eco-friendly cosmetics. In terms of social media, Instagram was the dominant platform (used by 78% of respondents), with considerable use

of TikTok (48%) and Facebook (22%) as well. For sustainable cosmetic brands, a large proportion preferred the local brand Wardah Nature Beauty (52%), with other brands like Avoskin (15%) and The Body Shop (11%) also garnering notable support alongside various smaller brands. This profile suggests the sample is largely young, female, digitally active, and inclined toward established eco-friendly cosmetic brands.

Tabel 3. Average Index of Variable

| Research Variables | Average Index | Category |
|--|---------------|----------|
| Index Value of Green Attitude Variable (X1) | 77.37% | High |
| Index Value of Social Media Marketing Variables (X1) | 76.67% | High |
| Index Value of Green Product Knowledge Variable (X3) | 77.43% | High |
| Index Value of Green Trust Variable (Z) | 76.53% | High |
| Index Value of Green Purchase Intention Variable (Y) | 78.87% | High |

Source: Processed Data (2025)

This study employs descriptive analysis using a scoring method (scale 1-5). Results indicate high average index scores for all variables: Green Attitude (77.37%), Social Media Marketing (76.67%), Green Product Knowledge (77.43%), Green Trust (76.53%), and Green Purchase Intention (78.87%). Measurement model evaluation confirms validity (AVE > 0.5) and reliability (Composite Reliability and Cronbach's alpha > 0.7) for all variables. Structural model assessment reveals a st-

rong overall Goodness of Fit (0.6683). Determination coefficients (R^2) range from moderate to substantial (0.569–0.614). Effect sizes (f^2) highlight strong influences of Social Media Marketing on Green Attitude (1.318) and Green Product Knowledge (1.592), and Green Trust on Green Purchase Intention (0.368). Predictive relevance (Q^2) is also high (average 0.575), indicating effective explanatory power of the model.

Table 4. Average Values of the variables data

| Variables | Original Sample | T-Statistic | P Value | Description |
|--|-----------------|-------------|---------|--------------------|
| Social Media Marketing (X2) → Green Attitude (X1) | 0.754 | 21.033 | 0.000 | Significant Effect |
| Social Media Marketing (X2) → Green Product Knowledge (X3) | 0.784 | 27.586 | 0.000 | Significant Effect |
| Social Media Marketing (X2) → Green Purchase Intention (Y) | 0.339 | 3.437 | 0.000 | Significant Effect |
| Green Attitude (X1) → Green Purchase Intention (Y) | 0.155 | 1.897 | 0.029 | Significant Effect |

| | | | | |
|--|-------|-------|-------|--------------------|
| Green Product Knowledge (X3) → Green Purchase Intention (Y) | 0.126 | 1.471 | 0.071 | No Effect |
| Green Trust (Z) → Green Purchase Intention(Y) | 0.387 | 9.285 | 0.000 | Significant Effect |

Source: Processed Data (2025)

Based on the direct effect test results, Social Media Marketing has a significant effect on Green Attitude, with an original sample value of 0.754, t-statistic of 21.033 > 1.6, and p-value of 0.000 < 0.05. This indicates that Social Media Marketing effectively enhances consumer attitudes toward green products. Therefore, H1, which states a positive and significant influence of Social Media Marketing on Green Attitude, is accepted. Social Media Marketing also significantly affects Green Product Knowledge, with an original sample value of 0.784, t-statistic of 27.586 > 1.6, and p-value of 0.000 < 0.05. This shows that Social Media Marketing successfully increases consumers' knowledge about sustainable products. Thus, H2 states a positive and significant influence of Social Media Marketing on Green Product Knowledge is accepted.

Social Media Marketing has a significant effect on Green Purchase Intention, with an original sample value of 0.339, t-statistic of 3.437 > 1.6, and p-value of 0.000 < 0.05. Hence, H3, which states a positive and significant influence of Social Media Marketing on Green Purchase Intention, is accepted. Green Attitude has a significant effect on Green Purchase Intention, with an original sample value of 0.155, t-statistic of 1.897 > 1.6, and p-value of 0.029 < 0.05. This suggests that positive attitudes towards green products contribute to higher purchase intentions. Therefore, H4 stating a positive and significant influence of Green Attitude on Green Purchase Intention is accepted.

Green Product Knowledge has no significant effect on Green Purchase Intention, with an original sample value of 0.126, t-statistic of 1.471 < 1.6, and p-value

of 0.071 > 0.05. This indicates that Green Product Knowledge alone does not necessarily drive purchase intentions. Thus, H5 stating a positive and significant influence of Green Product Knowledge on Green Purchase Intention is rejected. Green Trust significantly affects Green Purchase Intention, with an original sample value of 0.387, t-statistic of 9.285 > 1.6, and p-value of 0.000 < 0.05. Therefore, H6, stating a positive and significant influence of Green Trust on Green Purchase Intention, is accepted.

Based on the moderating effect test results, Green Trust significantly moderates the relationship between Green Attitude and Green Purchase Intention, with an original sample value of 0.138, t-statistic of 1.812 > 1.6, and p-value of 0.035 < 0.05. This indicates that increased Green Trust enhances the positive effect of Green Attitude on consumers' purchase intentions. Therefore, H7 stating that Green Trust positively and significantly moderates the relationship between Green Attitude and Green Purchase Intention is accepted.

Green Trust does not significantly moderate the relationship between Green Product Knowledge and Green Purchase Intention, with an original sample value of 0.108, t-statistic of 1.504 < 1.6, and p-value of 0.066 > 0.05. This implies that Green Trust does not strengthen the effect of Green Product Knowledge on purchase intentions significantly. Hence, H8 stating that Green Trust significantly moderates the relationship between Green Product Knowledge and Green Purchase Intention is rejected.

Green Trust significantly moderates the relationship between Social Media

Marketing and Green Purchase Intention, with an original sample value of 0.126, t-statistic of $1.779 > 1.6$, and p-value of $0.038 < 0.05$. This result suggests that effective and credible social media marketing enhances consumer trust, leading to higher purchase intentions. Thus, H9 stating that Green Trust positively and significantly moderates the relationship between Social Media Marketing and Green Purchase Intention is accepted.

Effect of Social Media Marketing on Green Attitude

Social media marketing significantly shapes consumer attitudes toward sustainable cosmetics by effectively communicating environmental values and benefits. Consistent with Pop et al. (2020) and Zafar et al. (2021), digital content such as influencer endorsements, interactive campaigns, and informative posts enhances consumer awareness and positive attitudes towards green products. Specifically, engaging and credible sustainability-focused content on platforms like Instagram and TikTok successfully elevates consumers' environmental consciousness and reinforces their favorable attitudes toward eco-friendly practices, supporting SDG 12 by encouraging responsible consumption (Ummar et al., 2023; Widodarjo & Putri, 2023).

Effect of Social Media Marketing on Green Product Knowledge

Social media emerges as a pivotal educational channel, significantly enhancing consumer knowledge about eco-friendly products. Research by Liu and Chaiprasit (2023) confirms social media's role in providing interactive and informative content, bridging consumers' knowledge gaps regarding environmental benefits and sustainable features of cosmetic products. Similarly, Septiarini and Adialita (2024) highlight how deliberate social

media campaigns can successfully enhance consumers' awareness and understanding of product attributes such as natural ingredients and eco-friendly packaging, aligning closely with the goals outlined in SDG 12 to foster informed and responsible consumption.

Effect of Social Media Marketing on Green Purchase Intention

Consistent with previous findings by Pop et al. (2020) and Nekmahmud et al. (2022), social media marketing positively influences consumers' intentions to purchase green cosmetics through engaging and educational content. Effective use of platforms such as Instagram and Facebook for sustainability-oriented campaigns significantly motivates consumer purchasing decisions by reinforcing environmental values and reducing skepticism toward green claims. The role of influencer credibility and peer recommendations further amplifies social media's effectiveness in converting consumer awareness into tangible purchase intentions (Murwaningtyas et al., 2020; Nabivi, 2025), directly supporting sustainable development practices encouraged by SDG 12.

Effect of Green Attitude on Green Purchase Intention

The positive relationship between green attitude and purchase intention is well-established in literature, aligning with the Theory of Planned Behavior (Ajzen, 1991). This research corroborates studies by Limbu et al. (2022) and Shimul et al. (2022), indicating that consumers with stronger pro-environmental attitudes consistently show a greater inclination toward eco-friendly cosmetic products. However, the moderate influence suggests additional contextual factors—such as perceived product quality, social influence, or trust—are necessary for effectively translating positive attitudes into purchasing actions, high-

lighting the complexity of consumer decision-making processes (Wilson & Edelyn, 2022; Venciutė et al., 2023).

Effect of Green Product Knowledge on Green Purchase Intention

In line with Simanjuntak et al. (2023) and Yulianingsih et al. (2025), the results indicate a knowledge-action gap, whereby consumers' environmental product knowledge alone does not necessarily lead to purchase intention. This finding emphasizes that mere awareness of eco-friendly attributes is insufficient unless accompanied by emotional engagement, perceived efficacy, or trust in green claims (Limbu et al., 2022). Thus, marketers should couple informative strategies with motivational appeals or incentives to bridge this gap effectively.

Effect of Green Trust on Green Purchase Intention

Consistent with the findings of Amin & Tarun (2021) and Wijaya & Harsoyo (2025), green trust is identified as a critical factor influencing consumers' willingness to purchase sustainable cosmetics. Trust in sustainability claims significantly reduces consumer uncertainty and skepticism, effectively converting ecological awareness into purchase behaviors. Transparent communication, credible eco-labeling, and consistency in delivering promised benefits are essential strategies for cultivating consumer trust, thereby directly supporting SDG 12's objectives of promoting sustainable consumption practices (Handriana et al., 2024).

Moderating Effect of Green Trust on Green Attitude and Green Purchase Intention

Trust emerges as a key moderating factor, enhancing the relationship between consumers' green attitudes and their purchase intentions. The interaction suggests

that consumers who trust eco-friendly product claims are more likely to act upon their environmental attitudes, echoing the findings by Li et al. (2021) and Wang et al. (2022). This underscores trust as essential for converting theoretical support of sustainability into practical consumer action, reinforcing the argument that credible eco-certifications and transparent marketing significantly amplify consumers' pro-environmental behaviors.

Moderating Effect of Green Trust on Green Product Knowledge and Green Purchase Intention

Contrary to expectations, trust does not significantly moderate the relationship between product knowledge and purchase intention. This aligns with findings by Sya'diyah et al. (2024), suggesting knowledge and trust might independently influence consumer decisions without significant interactive effects. Consumers may perceive knowledge as informational and trust as assurance-driven, each independently shaping intentions without necessarily enhancing each other. This implies that marketers must balance educational content with trust-building efforts independently, rather than assuming synergistic effects between the two.

Moderating Effect of Green Trust on Social Media Marketing and Green Purchase Intention

Green trust significantly strengthens the impact of social media marketing on consumers' purchase intentions. Findings by Pop et al. (2020) and Wu & Long (2024) affirm that when consumers trust sustainability-related messages and claims communicated via social media, their intentions to purchase eco-friendly products significantly increase. This moderation highlights trust as critical in amplifying the effectiveness of digital marketing campaigns, suggesting brands must con-

sistently provide credible, authentic, and transparent messaging to effectively leverage social media channels for sustainable consumer behaviors aligned with SDG 12.

CONCLUSION AND RECOMMENDATION

This study concludes that social media marketing and green attitudes positively affect green purchase intention, while green product knowledge alone does not. Green trust emerges as a crucial determinant, both directly and as a moderator. Theoretically, this extends the TPB framework by emphasizing trust as a bridge between attitude and behavioral intention in sustainable consumption.

For marketers and companies, strategies should focus on transparent communication, credible eco-labeling, and consistent delivery of sustainability claims. Combining education with trust-building efforts can narrow the intention-behavior gap. Future research should include longitudinal or experimental designs and expand beyond Central Java to improve generalizability.

The analysis shows that Social Media Marketing positively affects Green Purchase Intention, although this effect is moderate, suggesting other factors are needed to fully translate marketing efforts into actual purchasing behavior. The findings also demonstrate a significant influence of Green Attitude on Green Purchase Intention, albeit modestly, implying that favorable environmental attitudes alone are not sufficient to guarantee consumers' purchase decisions without additional reinforcing factors. The analysis reveals that Green Product Knowledge does not significantly impact Green Purchase Intention. Although consumers may understand the environmental benefits of products, knowledge alone does not di-

rectly lead to purchase intention, highlighting the presence of a knowledge-action gap.

It was found that Green Trust significantly influences Green Purchase Intention. Trust in the authenticity and credibility of green product claims is crucial in motivating consumers' sustainable purchase decisions. The analysis also indicates that Green Trust significantly moderates the effect of Green Attitude on Green Purchase Intention, meaning that trust strengthens the influence of positive attitudes toward actual buying intentions. However, Green Trust does not significantly moderate the relationship between Green Product Knowledge and Green Purchase Intention, suggesting that trust and knowledge independently rather than interactively affect consumers' purchase intentions.

Finally, the results demonstrate that Green Trust significantly moderates the relationship between Social Media Marketing and Green Purchase Intention. This indicates that trustworthy social media content strongly amplifies consumer intentions to buy sustainable cosmetics.

For marketers and cosmetic companies, it is suggested to leverage social media effectively to educate consumers and shape their environmental attitudes. Additionally, companies must prioritize transparency and credibility to build consumer trust, which is crucial for converting positive attitudes and knowledge into actual purchase behavior. Integrating emotional appeals and practical incentives alongside informative content can effectively bridge the knowledge-action gap, enhancing sustainable consumption behaviors among consumers.

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