

# From Hype To Habit: Decoding Eco-Literacy and Digital Driven Premium Demand For Sustainable Products

Daranti Rahmadhani <sup>1\*</sup>, Ramadania <sup>2</sup>, Harry Setiawan <sup>3</sup>, Juniwati <sup>4</sup>, Ana Fitriana <sup>5</sup>

<sup>1\*,2,3,4,5</sup> Management Study Program, Faculty of Economics and Business, Tanjungpura University, Pontianak, Indonesia.

Email: [darantirahmadhani11@gmail.com](mailto:darantirahmadhani11@gmail.com) <sup>1\*</sup>, [ramadania@ekonomi.untan.ac.id](mailto:ramadania@ekonomi.untan.ac.id) <sup>2</sup>, [harry.setiawan@ekonomi.untan.ac.id](mailto:harry.setiawan@ekonomi.untan.ac.id) <sup>3</sup>, [juniwati@ekonomi.untan.ac.id](mailto:juniwati@ekonomi.untan.ac.id) <sup>4</sup>, [ana.fitriana@ekonomi.untan.ac.id](mailto:ana.fitriana@ekonomi.untan.ac.id) <sup>5</sup>

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## Abstrak

Penelitian ini mengkaji pengaruh Pemasaran Hijau Digital (DGM), Nilai Hijau yang Dirasakan (GPV), dan Kepedulian Lingkungan (EC) terhadap Kesiediaan Konsumen untuk Membayar Harga Premium (WTPP) di Indonesia, dengan Literasi Lingkungan (EL) sebagai variabel moderator. Dengan menggunakan pendekatan kuantitatif terhadap 200 responden berusia 18–30 tahun dan dianalisis menggunakan SEM-PLS, hasil penelitian menunjukkan bahwa DGM, GPV, dan EC memiliki pengaruh positif yang signifikan terhadap WTPP. Selain itu, Literasi Lingkungan secara signifikan memperkuat semua hubungan antara variabel independen dan WTPP, yang menunjukkan perannya yang krusial dalam mengubah kesadaran lingkungan menjadi komitmen ekonomi yang nyata. Temuan ini menunjukkan bahwa meskipun konsumen semakin terpapar pada isu-isu keberlanjutan, kesiediaan mereka untuk membayar harga premium tidak hanya bergantung pada paparan pemasaran dan nilai yang dirasakan, tetapi juga pada tingkat pemahaman lingkungan mereka. Studi ini berkontribusi pada literatur dengan menyoroti literasi lingkungan sebagai kondisi batas kunci dalam perilaku konsumsi berkelanjutan. Secara praktis, studi ini menekankan pentingnya mengintegrasikan unsur-unsur pendidikan ke dalam strategi pemasaran hijau digital untuk meningkatkan kesiediaan konsumen dalam mendukung produk berkelanjutan.

**Kata Kunci:** Pemasaran; Pemasaran Hijau; Kesiediaan Untuk Membayar; Literasi Lingkungan.

## Abstract

This study examines the influence of Digital Green Marketing (DGM), Green Perceived Value (GPV), and Environmental Concern (EC) on consumers' Willingness to Pay Premium Price (WTPP) in Indonesia, with Eco-literacy (EL) as a moderating variable. Using a quantitative approach with 200 respondents aged 18–30 and analyzed SEM-PLS, the results show that DGM, GPV, and EC have a significant positive effect on WTPP. Furthermore, Eco-literacy significantly strengthens all relationships between the independent variables and WTPP, indicating its critical role in transforming environmental awareness into actual economic commitment. These findings suggest that although consumers are increasingly exposed to sustainability issues, their willingness to pay premium prices depends not only on marketing exposure and perceived value but also on their level of environmental understanding. This study contributes to the literature by highlighting eco-literacy as a key boundary condition in sustainable consumption behavior. Practically, it emphasizes the importance of integrating educational elements into digital green marketing strategies to enhance consumer willingness to support sustainable products.

**Keyword:** Marketing; Green Marketing; Willingness to Pay; Eco-literacy.

## 1. Introduction

Climate change, plastic pollution, and unsustainable consumption patterns have become pressing global challenges over the past decades, encouraging a shift toward more sustainable consumption behavior (Mahasuweerachai & Suttikun, 2023; UNEP, 2021). As a result, consumers are increasingly considering environmental aspects in their purchasing decisions, including their willingness to pay a premium price for environmentally friendly products (Gomes *et al.*, 2023). A global survey by PwC (2024) further indicates that consumers are willing to pay an average of 9.7% more for sustainable products, highlighting a growing market opportunity for green businesses. In parallel, the rapid development of the digital era has transformed how companies communicate with consumers. Digital transformation has enabled the widespread adoption of Digital Green Marketing, where sustainability messages are delivered through social media, e-commerce platforms, and digital campaigns to influence consumer attitudes and behavior (Ramadania *et al.*, 2024; Dwivedi *et al.*, 2021). These digital interactions are particularly influential among younger consumers, who actively engage with sustainability content and contribute to shaping market trends (Dwivedi *et al.*, 2021). However, despite increasing awareness and exposure to sustainability issues, a notable gap persists between consumers' environmental concern and their actual willingness to pay a premium price for green products (Wei *et al.*, 2018; Ningrum *et al.*, 2023). This gap suggests that awareness alone is insufficient to drive real purchasing behavior, especially when higher prices are involved. In the context of Indonesia, although environmental awareness is gradually increasing due to government policies and sustainability campaigns, challenges remain in terms of low environmental literacy and limited transparency in green marketing practices (KLHK, 2022; Alamsyah & Ekasari, 2025). Previous studies have primarily focused on the direct effects of digital green marketing, perceived value, and environmental concern on purchase intention or willingness to pay (Gupta & Syed, 2021; De Medeiros *et al.*, 2016). However, limited attention has been given to the role of eco-literacy as a moderating variable that can strengthen the relationship between these factors and consumers' willingness to pay a premium price (Rusyani *et al.*, 2021). Moreover, most empirical studies have been conducted in developed countries with relatively high levels of environmental literacy, leaving a gap in understanding consumer behavior in developing countries such as Indonesia (De Medeiros *et al.*, 2016; Ramadania *et al.*, 2024). Therefore, this study aims to examine the influence of Digital Green Marketing, Green Perceived Value, and Environmental Concern on consumers' Willingness to Pay Premium Price, with Eco-literacy as a moderating variable. By focusing on Indonesian consumers in the productive age group, this study seeks to provide a deeper understanding of how cognitive and psychological factors interact in shaping sustainable consumption behavior in the digital era.

## 2. Literature Review

### 2.1 Digital Green Marketing (DGM)

Digital transformation improves information accessibility and accelerates interaction between consumers and brands (Ramadania *et al.*, 2024). Digital Green Marketing is a digital-based marketing strategy that emphasizes sustainability messages through social media, e-commerce, and websites to influence consumer decisions (Dwivedi *et al.*, 2021). This activity has been proven to foster positive attitudes and increase consumers' willingness to pay for green products (Gupta & Syed, 2021). Effective DGM strategies can also strengthen loyalty and preference for sustainable products. (Nekmahmud & Fekete-Farkas, 2020). Based on the Theory of Planned Behavior (Ajzen, 1991), DGM is able to shape positive attitudes toward environmentally friendly products, which encourages higher purchase intent.

### 2.2 Green Perceived Value (GPV)

Describing consumer perceptions of the benefits, quality, and added value of green products (De Medeiros *et al.*, 2016). This value encompasses functional aspects such as product quality and

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performance, as well as the emotional value that arises from the satisfaction of contributing to environmental preservation (Abubakari *et al.*, 2025; Cahyasita *et al.*, 2024). In addition, GPV also has social and symbolic dimensions, as consumers feel recognized as part of an environmentally conscious group (Chen & Chang, 2012). Based on the Knowledge–Attitude– Behavior (KAB) Model (Hines *et al.*, 1987), GPV can shape positive attitudes toward green products, which encourage sustainable purchasing intentions and behaviors. Research shows that the higher the perceived green value, the greater the willingness of consumers to pay a premium price for environmentally friendly products (Abubakari *et al.*, 2025; Cahyasita *et al.*, 2024).

### 2.3 Environmental Concern (EC)

Environmental Concern describes an individual's level of concern for environmental conditions and their willingness to change their consumption behavior in order to reduce negative impacts on the ecosystem (Shah & Yang, 2022). Consumers with high awareness tend to pay attention to issues such as climate change and plastic waste and are willing to pay more for sustainable products (R. Lichtenstein & Ridgway, 1993). According to the Theory of Planned Behavior (Ajzen, 1991), Environmental concern shapes positive attitudes toward environmentally friendly behavior. In addition, environmental concern can also serve as a link between perceived value and green purchase intention (Lopes *et al.*, 2023). Research by (Ningrum *et al.*, 2023) shows that environmental concern and customer loyalty are significant predictors of willingness to pay a premium.

### 2.4 Willingness to Pay Premium Price (WTPP)

Consumers' willingness to pay higher prices for green products compared to conventional products because they believe that there are environmental benefits or added value to be gained (Wei *et al.*, 2018). Willingness to Pay Premium Price is an outcome influenced by a combination of consumer attitudes, values, environmental concerns, and knowledge, and is an indicator of actual behavior in Theory of Planned Behavior and a manifestation of personal norms in Value-Belief-Norm (Adialita *et al.*, 2025). According to (De Medeiros *et al.*, 2016; Wei *et al.*, 2018) Willingness to pay more reflects consumers' appreciation of sustainability values and perceived environmental benefits. A similar point was made by (Wei *et al.*, 2018) which states that WTPP can be measured through perception or intention, without necessarily involving actual purchase transactions. Research by (Kurniawan & Vincent, 2024) also found that young consumers in Indonesia tend to have a high willingness to pay when they understand the environmental value of products promoted digitally.

### 2.5 Eco-Literacy (EL)

Eco-literacy is an individual's knowledge and understanding of the relationship between human activities and ecosystems (Hines *et al.*, 1987). (Ramadania *et al.*, 2024) emphasizing that digitization improves digital literacy, skills, and technology-based interactions. This has a positive impact on improving environmental literacy because consumers can more easily access, understand, and filter information related to sustainability issues (Ningrum *et al.*, 2023). Consumers with high levels of environmental literacy tend to have stronger behavioral control in making environmentally friendly consumption decisions (Ajzen, 1991). In addition, individuals with high eco-literacy are also less price sensitive and more easily influenced by green marketing strategies that emphasize sustainability values (Gomes *et al.*, 2023).

### 2.6 Digital Green Marketing to Willingness to Pay Premium Price

Digital Green Marketing can shape positive attitudes toward environmentally friendly products, thereby encouraging stronger purchase intent (Ajzen, 1991). In the context of sustainability, digital green marketing acts as an external stimulus that shapes consumers' positive perceptions of green products through digital content that highlights environmental benefits and brand responsibility (Dwivedi *et al.*, 2021). Research by (Salhab *et al.*, 2023) shows that green marketing on social media increases green brand equity and consumer purchase intent. However, the impact of digital green marketing does not stop at purchase intent but also increases consumers' willingness to pay a premium price by strengthening their

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emotional and ethical attachment to green brands (Gupta & Syed, 2021). H1: Digital green marketing has a significant effect on willingness to pay a premium price.

## 2.7 Green Perceived Value to Willingness to Pay Premium Price

When consumers perceive green products as having superior functional qualities, ethical satisfaction, and environmental benefits, they tend to view higher prices as reasonable (De Medeiros *et al.*, 2016). Based on the Knowledge–Attitude–Behavior (KAB) Model, Green Perceived Value increases consumers' positive attitudes toward green products, which ultimately encourages actual purchasing behavior (Hines *et al.*, 1987). Recent research shows that Green Perceived Value acts as an important mediator between consumers' experiences with green products and their willingness to pay more. Consumers who perceive green products as beneficial tend to be more willing to pay a premium price compared to conventional products (Abubakari *et al.*, 2025). H2: Green Perceived Value has a significant effect on Willingness to Pay Premium Price.

## 2.8 Environmental Concern to Willingness to Pay Premium Price

Individuals with a high level of environmental concern view nature conservation as a personal responsibility and tend to express their concern through sustainable purchasing behavior (González-Rodríguez *et al.*, 2019). In the Theory of Planned Behavior (Ajzen, 1991), Concern for the environment reinforces positive attitudes toward environmentally friendly behavior. The study “Will Customers Pay More for Green Products?” shows that environmental concern and customer loyalty are significant predictors of willingness to pay a premium price (Ningrum *et al.*, 2023). Concern for the environment is further strengthened by exposure to global climate movements and social media activism, which foster an emotional attachment to sustainability issues (Deloitte, 2025). H3: Environmental Concern has a significant effect on Willingness to Pay Premium Price.

## 2.9 Eco-Literacy Moderates the Relationship between Digital Green Marketing and Willingness to Pay a Premium Price

Eco-literacy refers to an individual's level of knowledge and understanding of environmental and sustainability issues (Rusyani *et al.*, 2021). Consumers with high levels of eco-literacy are better able to recognize credible green messages and distinguish between authentic environmental efforts and greenwashing practices (Biswas & Roy, 2015). Although Digital Green Marketing has been proven effective in raising environmental awareness and influencing purchase intent, its impact is often weakened among consumers with low levels of eco-literacy (Wei *et al.*, 2018). Therefore, eco-literacy acts as a moderating factor that strengthens the relationship between digital green marketing and willingness to pay a premium price (Wei *et al.*, 2018). H4: Eco-Literacy strengthens the positive relationship between Digital Green Marketing dan Willingness to Pay Premium Price.

## 2.10 Eco-Literacy Moderates the Relationship between Green Perceived Value dan Willingness to Pay Premium Price

Consumers with higher levels of eco-literacy are better able to evaluate the functional, emotional, and symbolic benefits of environmentally friendly products, so they tend to view sustainable products as having higher value (Singh & Pandey, 2018; Zhan *et al.*, 2025). In addition, consumers with high environmental literacy are also more aware of the long-term environmental and social impacts of their purchasing decisions, which increases their appreciation of the sustainability value of products (Kanchanapibul *et al.*, 2014). Thus, eco-literacy acts as a moderating variable that strengthens the relationship between green perceived value and willingness to pay a premium price. The higher consumers' understanding of the green value of a product, the stronger their commitment to pay a premium price for environmentally friendly products (Zhan *et al.*, 2025). H5: Eco-Literacy strengthens the positive relationship between Green Perceived Value dan Willingness to Pay Premium Price.

### 2.11 Eco-Literacy Moderates the Relationship between Environmental Concern dan Willingness to Pay Premium Price

Consumers with a high level of environmental concern are generally more likely to behave sustainably. However, this relationship becomes stronger when supported by a high level of eco-literacy (Shi & Jiang, 2023). Individuals with environmental literacy not only show concern for environmental damage but also have the knowledge to translate that concern into concrete actions, such as a willingness to pay a premium price for green products (Rusyani *et al.*, 2021). therefore, eco-literacy strengthens the influence of environmental concern on willingness to pay a premium price, acting as a cognitive enabler that transforms concern into tangible environmentally friendly consumption behavior (Shi & Jiang, 2023). H6: Eco-Literacy strengthens the positive relationship between Environmental Concern dan Willingness to Pay Premium Price.

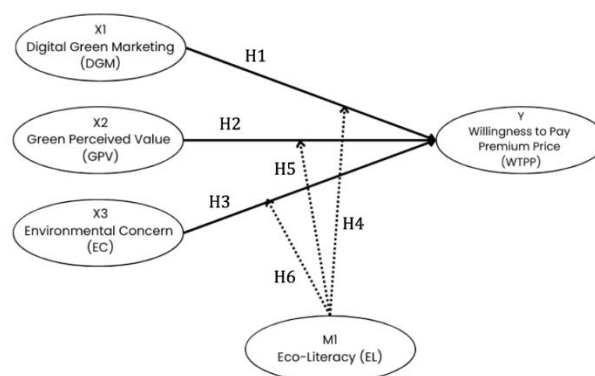


Figure 1. Conceptual framework

Based on the problem formulation and conceptual framework above, the research hypothesis put forward by the researcher is as follows:

- H1: Digital green marketing has a significant effect on willingness to pay a premium price.
- H2: Green perceived value has a significant effect on willingness to pay a premium price.
- H3: Environmental concern has a significant effect on willingness to pay a premium price.
- H4: Eco-literacy strengthens the positive relationship between digital green marketing and willingness to pay a premium price.
- H5: Eco-literacy strengthens the positive relationship between perceived green value and willingness to pay a premium price.
- H6: Eco-literacy strengthens the positive relationship between environmental concern and willingness to pay a premium price.

## 3. Research Methodology

This study uses a quantitative approach with a cross-sectional survey design to examine the influence of Digital Green Marketing, Green Perceived Value, and Environmental Concern on Willingness to Pay Premium Price, as well as the moderating role of Eco-Literacy. A cross-sectional design was chosen because it is able to capture the relationship between variables at a single point in time, making it efficient for identifying consumer behavior patterns (Adialita *et al.*, 2025; Singh & Pandey, 2018). The quantitative approach also allows for objective statistical analysis and results that can be replicated in a wider population (Rusyani *et al.*, 2021). The population of this study consists of active digital consumers in Indonesia who have been exposed to green marketing campaigns for sustainable products such as skincare, fashion, and eco-friendly lifestyle products. Some examples of local brands that serve as references are Avoskin, True to Skin, and Sensati Botanicals, The Body Shop which highlight

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sustainability- oriented digital marketing strategies. The sampling technique used purposive sampling with the following respondent criteria: (1) interested in purchasing environmentally friendly products, (2) are active on social media or e-commerce, and (3) Although the respondents were within the productive age group (18–30 years), the sample was dominated by students, reflecting early-stage economically active consumers. Based on the guidelines of Hair *et al.* (2014), the minimum sample size is 5–10 times the number of indicators; with a total of  $\pm 20$  indicators, 200 respondents were determined to increase validity and reduce the risk of bias (Putu Gede Subhaktiyasa, 2024). The research use Primary data was obtained through the distribution of online questionnaires using Google Forms, with a 5-point Likert scale (1 = strongly disagree to 5 = strongly agree) in accordance with consumer research practices (Joshi & Pal, 2015). Covering five variables: Digital Green Marketing, Green Perceived Value, Environmental Concern, Eco-Literacy, and Willingness to Pay Premium Price. Data analysis was conducted using Structural Equation Modeling–Partial Least Squares (SEM-PLS) with the assistance of SmartPLS 4. SEM-PLS was chosen due to its suitability for predictive research, its ability to handle complex models with multiple constructs and interaction effects, and its robustness in dealing with non-normal data distributions (Hair *et al.*, 2014). The analysis procedure consisted of two main stages. First, the measurement model was evaluated to assess construct validity and reliability using indicator loadings, average variance extracted (AVE), composite reliability, and discriminant validity criteria. Second, the structural model was assessed to examine the hypothesized relationships among constructs by evaluating path coefficients, t-values, and p-values obtained through a bootstrapping procedure with 5,000 subsamples. The research instruments were developed based on previous theories and research to ensure academic validity. The variable indicators measured are as follows:

Table 1. Indikator Variable

| No | Variable                         | Indikator                                                                                                                                                                                                                                                | Sitation                                                                                     |
|----|----------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------|
| 1  | Digital Green Marketing          | <ul style="list-style-type: none"> <li>- Environmentally friendly digital campaign exposure</li> <li>- Social media interaction about green products</li> <li>- Green message customization</li> <li>- Digital word of mouth</li> </ul>                  | (Gupta & Syed, 2021; Nekomahmud & Fekete-Farkas, 2020)                                       |
| 2  | Green Perceived Value            | <ul style="list-style-type: none"> <li>- Perception of environmental benefits of products</li> <li>- Perception of green quality</li> <li>- Added value of green products</li> <li>- Trust in green claims</li> </ul>                                    | (Gomes <i>et al.</i> , 2023; Román-Augusto <i>et al.</i> , 2022; Singh & Pandey, 2018)       |
| 3  | Environmental Concern            | <ul style="list-style-type: none"> <li>- Concern for environmental issues</li> <li>- Belief in the importance of nature conservation</li> <li>- Concern for environmental damage</li> <li>- Personal commitment to protecting the environment</li> </ul> | (Gomes <i>et al.</i> , 2023; Nekomahmud & Fekete-Farkas, 2020; Rusyani <i>et al.</i> , 2021) |
| 4  | Eco-literacy                     | <ul style="list-style-type: none"> <li>- Knowledge of environmental issues</li> <li>- Understanding of the impact of consumption on the environment</li> <li>- Ability to identify environmentally friendly products</li> </ul>                          | (Al Mamun & A. Rahman, 2023; Wei <i>et al.</i> , 2018)                                       |
| 5  | Willingness to Pay Premium Price | <ul style="list-style-type: none"> <li>- Willingness to pay more for green products</li> <li>- Preference for green products</li> </ul>                                                                                                                  | De Medeiros <i>et al.</i> (2016); Wei <i>et al.</i> (2018); Kurniawan & Vincent (2024)       |

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even if they cost more  
- Belief that paying more means  
contributing to environmental  
conservation

## 4. Results and Discussion

### 4.1 Results

#### 4.1.1 Respondent Characteristics

The analysis of respondent characteristics in this survey is based on the following demographics:

Table 2. Respondent Characteristics

| I        | Items                | F   | Category                                                                              | Items                                                      | F   |
|----------|----------------------|-----|---------------------------------------------------------------------------------------|------------------------------------------------------------|-----|
| Gender   | Female               | 148 | Job                                                                                   | PNS/ASN                                                    | 3   |
|          | Male                 | 52  |                                                                                       | BUMN/BUMD                                                  | 7   |
|          | Total                | 200 |                                                                                       | Karyawan Swasta                                            | 16  |
| Age      | 18                   | 3   | Apakah anda pernah melihat kampanye digital tentang produk ramah lingkungan?          | Wiraswasta                                                 | 9   |
|          | 19                   | 11  |                                                                                       | Freelance                                                  | 22  |
|          | 20                   | 19  |                                                                                       | Pegawai Kontrak                                            | 4   |
|          | 21                   | 74  |                                                                                       | Wirausaha                                                  | 2   |
|          | 22                   | 42  |                                                                                       | Mahasiswa                                                  | 135 |
|          | 23                   | 20  |                                                                                       | Pelajar                                                    | 2   |
|          | 24                   | 10  |                                                                                       | Total                                                      | 200 |
|          | 25                   | 7   |                                                                                       | Ya                                                         | 200 |
|          | 26                   | 3   |                                                                                       | Tidak                                                      | 0   |
|          | 27                   | 4   |                                                                                       | Total                                                      | 200 |
|          | 28                   | 2   | Pada sektor apa anda melihat kampanye digital tersebut?                               | Skincare (Bahan natural, kemasan daurulang, refill)        | 108 |
|          | 29                   | 2   |                                                                                       | Fashion (Material ramah lingkungan, Upcyled, slow fashion) | 46  |
|          | 30                   | 3   |                                                                                       | Makanan (Organik, plant-based, bebasbahan kimia)           | 46  |
|          | Total                | 200 |                                                                                       | Total                                                      | 200 |
| Domicile | Kalimantan           | 72  | Apakah Anda aktif menggunakan media sosial atau e-commerce setidaknya 1 jam per hari? | Ya                                                         | 200 |
|          | Sumatra              | 37  |                                                                                       | Tidak                                                      | 0   |
|          | Jawa                 | 31  |                                                                                       | Total                                                      | 200 |
|          | Bali & Nusa Tenggara | 33  | Jika anda melihat brand skincare, brand apa yang sering ada lihat?                    | Avoskin                                                    | 32  |
|          | Sulawesi             | 11  |                                                                                       | True to Skin                                               | 19  |
|          | Maluku               | 9   |                                                                                       | Sensati Botanicals                                         | 21  |
|          | Papua                | 7   |                                                                                       | The Body Shop                                              | 128 |
|          | Total                | 200 |                                                                                       | Total                                                      | 200 |

This study involved 200 respondents from all over Indonesia aged 18–30 years. The respondents involved in this study were those who were interested in purchasing environmentally friendly products in the fashion, food, or skincare sectors and had been exposed to Green Marketing content. These criteria

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were set to ensure that the respondents had relevant understanding and experience in the context of the study. Based on the characteristics of the respondents, the demographic distribution is quite diverse and reflects the exposure to green campaign content, which is dominated by young and productive groups aged 18-30 years, with the majority being female. The majority are from Kalimantan and are students. Many respondents chose The Body Shop as the brand they saw and recognized most often in digital campaigns about sustainable products. Most respondents spend at least 1 hour a day using social media and e-commerce.

Table 3. Measurement Models

| Variable                         | Item   | Uji Validity   |       | Uji Reliability  |       |
|----------------------------------|--------|----------------|-------|------------------|-------|
|                                  |        | Loading Factor | AVE   | Cronbach's Alpha | CR    |
| Digital Green Marketing          |        |                | 0.693 | 0.854            | 0.900 |
|                                  | DGM 1  | 0.736          |       |                  |       |
|                                  | DGM 2  | 0.736          |       |                  |       |
|                                  | DGM 3  | 0.736          |       |                  |       |
|                                  | DGM 4  | 0.736          |       |                  |       |
| Green Perceive Value             |        |                | 0.652 | 0.821            | 0.882 |
|                                  | GPV 1  | 0.801          |       |                  |       |
|                                  | GPV 2  | 0.798          |       |                  |       |
|                                  | GPV 3  | 0.756          |       |                  |       |
|                                  | GPV 4  | 0.870          |       |                  |       |
| Environmental Concern            |        |                | 0.744 | 0.887            | 0.921 |
|                                  | EC 1   | 0.885          |       |                  |       |
|                                  | EC 2   | 0.871          |       |                  |       |
|                                  | EC 3   | 0.840          |       |                  |       |
|                                  | EC 4   | 0.853          |       |                  |       |
| Willingness to Pay Premium Price |        |                | 0.736 | 0.821            | 0.893 |
|                                  | WTTP 1 | 0.873          |       |                  |       |
|                                  | WTTP 2 | 0.862          |       |                  |       |
|                                  | WTTP 3 | 0.838          |       |                  |       |
| Eco-literacy                     |        |                | 0.726 | 0.812            | 0.888 |
|                                  | EL 1   | 0.852          |       |                  |       |
|                                  | EL 2   | 0.814          |       |                  |       |
|                                  | EL 3   | 0.889          |       |                  |       |

As presented in Table 3, the assessment of the measurement model demonstrates that most indicators exhibit standardized factor loadings above the recommended threshold of 0.70, while the remaining indicators are within acceptable limits. Furthermore, the composite reliability and average variance extracted (AVE) values for all constructs satisfy the established criteria, indicating adequate internal consistency and convergent validity. These results suggest that the indicators reliably and accurately capture their respective latent constructs. Therefore, the measurement model is considered appropriate and suitable for subsequent analysis of the proposed structural relationships.

Table 4. Results of Discriminant Validity Testing

| Contracts               | Digital Green Marketing | Green Perceive Value | Environmental Concern | Willingness to Pay Premium Price | Eco-literacy |
|-------------------------|-------------------------|----------------------|-----------------------|----------------------------------|--------------|
| Digital Green Marketing | --                      |                      |                       |                                  |              |

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|                                  |       |       |       |       |    |
|----------------------------------|-------|-------|-------|-------|----|
| Eco-literacy                     | 0.150 | --    |       |       |    |
| Environmental Concern            | 0.074 | 0.150 | --    |       |    |
| Green Perceived Value            | 0.217 | 0.074 | 0.150 | --    |    |
| Willingness to Pay Premium Price | 0.323 | 0.217 | 0.074 | 0.486 | -- |

Table 4 shows the results of discriminant validity testing using Heterotrait –Monotrait Ratio (HTMT), where all HTMT values between constructs, Digital Green Marketing, Green Perceived Value, Environmental Concern, Willingness to Pay Premium Price, and Eco-literacy, are below the conservative limit of 0.85, with the highest value being 0.486, indicating that each construct in the model can be empirically distinguished. Furthermore, Figure 4.1 shows the results of model estimation using the PLS-SEM algorithm, which indicates that all indicators have factor loading values above 0.70, signifying good convergent validity. The structural model results show the influence of Digital Green Marketing, Green Perceived Value, and Environmental Concern on Willingness to Pay Premium Price, both directly and through Eco-literacy as a mediating variable, with a coefficient of determination ( $R^2$ ) value of 0.408, indicating that the model is able to explain 40.8% of the variation in consumers' willingness to pay a premium price, thus having moderate explanatory power.

#### 4.1.2 Hypothesis Testing

The outcomes of the structural relationships among the constructs in the proposed research model are reported to demonstrate the direction and statistical significance of the hypothesized effects, as outlined below:

Table 5. Hypothesis Testing

| Path                            | Standardized Estimates ( $\beta$ ) | p-values | Results   |
|---------------------------------|------------------------------------|----------|-----------|
| H1: DGM $\rightarrow$ WTPP      | 0.242                              | 0.002    | Supported |
| H2: GPV $\rightarrow$ WTPP      | 0.183                              | 0.012    | Supported |
| H3: EC $\rightarrow$ WTPP       | 0.203                              | 0.008    | Supported |
| H4: EL x DGM $\rightarrow$ WTPP | 0.248                              | 0.001    | Supported |
| H5: EL X GPV $\rightarrow$ WTPP | 0.285                              | 0.003    | Supported |
| H6: EL X EC $\rightarrow$ WTPP  | 0.236                              | 0.001    | Supported |

#### 4.2 Discussion

This study examines the influence of Digital Green Marketing, Green Perceived Value, and Environmental Concern on consumers' Willingness to Pay a Premium Price, as well as the moderating role of Eco-literacy among consumers of productive age in Indonesia. The findings provide insights into the psychological and cognitive mechanisms underlying sustainable consumption behaviour in the digital era, highlighting how marketing communication, value perception, and environmental awareness jointly shape consumers' pricing decisions toward sustainable products. The results indicate that Digital Green Marketing, Green Perceived Value, and Environmental Concern each have a significant positive effect on Willingness to Pay a Premium Price. Consistent with the Theory of Planned Behaviour and the Knowledge–Attitude–Behaviour model, sustainability-oriented digital marketing enhances ethical engagement and positive attitudes, perceived green value strengthens consumers' justification for higher prices, and environmental concern reinforces moral responsibility toward sustainable consumption. These findings align with prior studies showing that effective green communication, strong value perceptions, and heightened environmental concern increase consumers' acceptance of premium prices for environmentally friendly products. Importantly, this study confirms the moderating role of Eco-literacy in strengthening these relationships. Higher eco-literacy enables consumers to critically evaluate sustainability claims, reduce scepticism toward green marketing, and better understand the long-term

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benefits of sustainable products, thereby lowering price sensitivity. Overall, the findings suggest that transforming sustainability awareness into consistent willingness to pay premium prices requires not only effective digital green marketing and perceived value but also adequate environmental literacy, underscoring the importance of integrating educational elements into sustainability-driven marketing strategies.

## 5. Conclusion

This study examines the determinants of consumers' willingness to pay a premium price for sustainable products among individuals of productive age in Indonesia and finds that Digital Green Marketing, Green Perceived Value, and Environmental Concern significantly influence consumers' willingness to pay premium prices for environmentally friendly products, indicating that sustainable consumption behavior is shaped by marketing exposure, value perceptions, and environmental awareness. In addition, Eco-literacy is confirmed as a significant moderating factor that strengthens these relationships by enabling consumers to better interpret sustainability messages, evaluate the benefits of green products, and translate environmental concern into concrete purchasing decisions. Overall, the findings suggest that encouraging willingness to pay premium prices for sustainable products requires an integrated approach that combines effective digital green marketing strategies, strong perceived green value, environmental concern, and adequate environmental literacy, thereby extending the application of the Theory of Planned Behavior and the Knowledge–Attitude–Behavior model within a developing country context. Based on the findings of this study, several practical and theoretical recommendations can be proposed. From a managerial perspective, companies targeting consumers in the productive age segment should implement transparent, informative, and credibility-driven digital green marketing strategies that clearly communicate the functional, emotional, and environmental benefits of sustainable products while avoiding exaggerated green claims that may lead to consumer skepticism. In addition, integrating educational elements into digital marketing content. Such as information on environmental impacts, sustainability certifications, and product life cycles, can enhance consumers' eco-literacy and strengthen their willingness to pay premium prices. From a policy perspective, government institutions and related stakeholders are encouraged to reinforce environmental education initiatives for economically active consumers through collaborative programs involving the public sector, private sector, and educational institutions to promote long-term sustainable consumption behavior. For future research, longitudinal or experimental designs are recommended to capture behavioral changes over time and establish causal relationships, while incorporating additional variables such as income level, social norms, or trust in green claims as potential moderators or mediators to further deepen understanding of consumers' willingness to pay premium prices for sustainable products.

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