

THE IMPACT OF PRODUCT QUALITY ON GREEN TECHNOLOGY PRODUCT CONSUMPTION BEHAVIOUR IN AN EMERGING MARKET: EVIDENCE FROM URBAN CONSUMERS IN VIETNAM

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Abstract: Green technology products have increasingly attracted attention due to growing environmental concerns and the transition toward sustainable consumption. However, consumer adoption of green technology products in emerging markets remains inconsistent, particularly in an emerging market such as Vietnam. Therefore, this study examines the effects of product quality dimensions on green technology product consumption behavior among urban consumers in Vietnam. A quantitative research approach was employed using survey data collected from 350 urban consumers in Vietnam. The research model examined seven dimensions of product quality, including product performance, product features, durability, reliability, health safety, eco-friendliness, and conformance to standards. Structural Equation Modeling (SEM) was applied to test the proposed hypotheses. The findings reveal that all seven product quality dimensions positively and significantly influence green technology

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product consumption behavior. Among these factors, product performance emerged as the strongest determinant, followed by durability and conformance to standards. The results indicate that urban consumers in Vietnam prioritize functional effectiveness, long-term economic value, and certification credibility when evaluating green technology products. The study concludes that consumers in emerging markets integrate environmental concerns with practical and economic considerations in green purchasing decisions.

Key words: product quality, green technology product, consumption behavior, emerging market, Vietnam

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Introduction

In recent years, environmental issues have become a global concern. Climate change, air pollution and technological waste have caused serious consequences for ecosystems and human health. In that situation, green consumption, especially the consumption of green technology products, has been encouraged as an important solution to minimize negative impacts on the environment and promote sustainable development.

Vietnam provides a relevant emerging-market context for examining green technology product consumption because consumers are increasingly exposed to sustainable products, while purchasing decisions remain strongly influenced by functional quality, affordability, trust, and product accessibility. Therefore, evidence from Vietnam can offer useful insights for other emerging markets where environmental awareness is rising but practical and economic considerations still play an important role in green purchasing decisions.

In the world, many studies have shown the relationship between product quality and green consumption behavior (Dong & Huang, 2025; Thakur et al., 2023), however, in Vietnam, studies about this relationship are still limited, only studied perceived quality affecting green consumption. Most studies only limit to the level of environmental awareness or consumer attitudes, without deeply analyzing specific aspects of product quality such as performance, reliability, eco-friendliness or green certification (Hoai et al., 2021; Chien, 2024; Hung et al., 2025). Addressing this gap is necessary to provide empirical evidence to assist businesses and policy makers build more effective strategies for developing and promoting green technology products.

Materials and methods

This study employed a quantitative research design to examine the effects of product quality dimensions on green technology product consumption behavior among urban consumers in Vietnam. Data were collected through a structured questionnaire survey conducted from June to December 2025 using a five-point Likert scale ranging from 1 (“strongly disagree”) to 5 (“strongly agree”). The measurement scales were adapted from previous studies on product quality, sustainable consumption, and green technology adoption. Specifically, the scales for product performance, product features, durability, and reliability were adapted from David A. Garvin, Sharma and Foroapon (2019), Barbu et al. (2022), and Zhou et al. (2021). Health safety and eco-friendliness were adapted from Mal and Nehra (2023), Mahmood et al. (2025), and Yeong and Tjiptono (2023), while conformance to standards was based on Shang et al. (2023), Choudhury (2024), and Baral (2024). The scale measuring green technology product consumption behavior was adapted from Ceylan (2019), Armutcu et al. (2024), and Zhao et al. (2025). Before the official survey, the questionnaire was reviewed by experts and refined through a pilot survey involving 30 respondents to ensure content validity and contextual appropriateness.

The proposed research model consisted of seven independent constructs, including product performance, product features, durability, reliability, health safety, eco-friendliness, and conformance to standards, together with one dependent construct, namely green technology product consumption behavior. A total of 32 observed variables were used to measure the eight constructs. Purposive sampling was employed to collect data from consumers who had prior experience purchasing or using green technology products in Vietnam, particularly in major urban areas. A total of 350 valid responses were obtained, satisfying the recommended sample size requirement for Structural Equation Modeling (SEM). The collected data were analyzed using SPSS and AMOS software. Reliability and validity of the measurement scales were assessed through Cronbach’s Alpha, Exploratory Factor Analysis (EFA), and Confirmatory Factor Analysis (CFA). Finally, SEM was applied to test the proposed hypotheses and examine the relationships between product quality dimensions and green technology product consumption behavior among urban consumers in Vietnam.

1. Literature Review and Hypothesis Development

1.1. Green Technology Products

Green technology products have increasingly attracted attention from scholars, policymakers, and businesses due to growing environmental concerns and the global transition toward sustainable development. In general, green technology products refer to products developed using environmentally friendly technologies and designed to minimize negative environmental impacts throughout their life cycles, including production, consumption, and disposal processes (Garvin, 1987). Anser et al (2020) defined green products as products that reduce environmental harm, conserve resources, and satisfy consumer needs simultaneously. Similarly, Dangelico & Pujari (2010) argued that green technology products integrate technological innovation with sustainability objectives, thereby enhancing both environmental performance and competitive advantage.

At the business level, green technology products provide opportunities for firms to enhance brand image, strengthen competitiveness, and respond to increasing consumer demand for sustainable products (Yi et al., 2022; Sangwan et al., 2026). For consumers, adopting green technology products reflects not only environmental awareness but also the pursuit of personal benefits such as energy savings, health protection, and long-term economic value.

1.2. Product Quality in the Context of Green Technology Products

Product quality has long been recognized as one of the most important determinants of consumer behavior and purchasing decisions. The concept of quality has been approached from different theoretical perspectives (Garvin, 1987). Rosillo-Díaz et al (2022) defined quality as “fitness for use,” whereas Bhowmick & Seetharaman (2023) emphasized conformance to requirements and standards. Gawshinde & AL Aflak (2023) later proposed eight dimensions of product quality, including performance, features, reliability, durability, serviceability, aesthetics, conformance, and perceived quality. These dimensions have become foundational frameworks for evaluating product quality in both manufacturing and marketing research.

Although traditional product quality literature mainly focuses on functional and technical aspects, recent studies have increasingly emphasized the importance of environmental and sustainability-related dimensions in evaluating product quality. In the context of green technology products, quality extends beyond conventional performance criteria to include eco-friendliness, energy efficiency, recyclability, health safety, and environmental responsibility throughout the product life cycle. Mahmood et al. (2025) argued that consumers increasingly expect green products to provide both environmental benefits and functional value. Likewise, recent studies suggest that consumers are less willing to sacrifice quality and performance for environmental friendliness, particularly in emerging markets where economic considerations remain important (Anser et al., 2020).

1.3. Green Consumption Behavior

Green consumption behavior has become an increasingly important topic in sustainable consumption and environmental marketing literature. Although definitions vary across studies, scholars generally agree that green consumption behavior refers to consumer actions aimed at minimizing negative environmental impacts during purchasing, usage, and disposal processes. Li (2020) defined green consumption behavior as the selection and use of products and services that are perceived to reduce environmental harm. Zhao et al (2025) further emphasized that green consumption behavior reflects consumers' preference for products that are environmentally friendly, health-safe, and socially responsible.

Recent studies have increasingly examined green consumption behavior from psychological and behavioral perspectives. Most prior studies adopted frameworks such as the Theory of Planned Behavior (TPB), Value – Attitude - Behavior (VAB) theory, and perceived value theory to explain green consumption behavior. Existing research indicates that environmental concern, green trust, perceived effectiveness, social norms, and environmental awareness significantly influence green purchasing intention and behavior.

In Vietnam, green consumption behavior has gradually increased due to rising environmental awareness, urbanization, and changing lifestyles. However, several studies indicate that urban consumers in Vietnam still exhibit an intention–behavior gap in green consumption. While consumers may express positive attitudes toward green products, their actual

purchasing decisions remain heavily influenced by price, product quality, trust, and perceived value. This suggests that environmental awareness alone may not sufficiently explain green technology product consumption behavior in emerging markets such as Vietnam (Hoai et al., 2021; Chien, 2024; Hung et al., 2025).

1.4. Product Quality Factors Affecting Green Technology Product Consumption Behavior

Product Performance and Green Technology Product Consumption Behavior

In the realm of green technology, performance is uniquely manifested through technical benchmarks such as energy-saving metrics, carbon footprint reduction, and resource optimization without compromising core functionality (Garvin, 1987). While traditional consumers prioritize environmental benefits, contemporary green tech consumers demand a “no-compromise” approach, where ecological products must match or exceed the functional standards of conventional alternatives (Garvin, 1987). When a green technology product demonstrates superior operational efficiency, it directly elevates the consumer's perceived utilitarian value, thereby mitigating the “green tariff” (the premium price barrier) (Sharma & Foroapon, 2019). Recent empirical evidence confirms that functional performance remains a primary driver of pro-environmental product adoption, as sub-optimal performance triggers green skepticism (Dong & Huang, 2025). Therefore, the following hypothesis is proposed:

Hypothesis H1: Product performance positively influences green technology product consumption behavior.

Product Features and Green Technology Product Consumption Behavior

Product features encompass the secondary characteristics, smart capabilities, and technological updates that supplement a product's core function to enrich user experience. For green technology, these features often involve digitalization, smart-grid connectivity, automated eco-modes, and real-time energy consumption tracking (Garvin, 1987; Bhowmick & Seetharaman, 2023). Advanced features transform a passive green product into an interactive, innovative solution (Mahmood et al., 2025). According to the Technology Acceptance Model (TAM), specialized green features enhance the “perceived usefulness” and “perceived ease of use,” making eco-friendly behaviors more convenient and habitual for consumers.

Furthermore, contemporary consumers view cutting-edge green features as symbols of modernity and status, driving consumption through both functional and emotional utilities (Dong & Huang, 2025). Thus, the following hypothesis is proposed:

Hypothesis H2: Product features positively influence green technology product consumption behavior.

Product Durability and Green Technology Product Consumption Behavior

Durability denotes the product's operational lifespan and its capacity to withstand wear, tear, and decay under normal usage conditions. In the paradigm of the circular economy, durability is a foundational pillar of sustainability, as long-lasting products directly reduce electronic waste, manufacturing emissions, and resource depletion (Garvin, 1987). From the consumer's economic perspective, green technologies (e.g., solar panels, electric vehicles) typically require high upfront capital investments. Product durability acts as a critical mechanism to offset these initial costs by promising long-term amortized savings and lower replacement frequencies. Some studies using the Theory of Planned Behavior indicate that high perceived durability strengthens consumer confidence and reduces the perceived financial risk associated with adopting novel green systems (Sharma & Foropon, 2019; Gnanapragasam et al., 2018). Therefore, the following hypothesis is proposed:

Hypothesis H3: Product durability positively influences green technology product consumption behavior.

Reliability and Green Technology Product Consumption Behavior

Reliability represents the probability of a product performing its required function without failure, interruption, or degradation over a specified time interval. Because green technologies often integrate novel, complex systems (such as advanced battery management or inverter technology), consumers frequently encounter performance anxiety and high perceived functional risk (Garvin, 1987; Sirish Kumar Gouda et al., 2019). Product reliability serves as a core determinant of consumer trust in sustainable innovations. When a green technology product demonstrates operational stability, it bridges the "green trust gap," reassuring consumers that their environmental commitment will not result in functional inconvenience or hidden maintenance penalties (Barbu et al., 2022). Recent literature highlights that reliability is the bedrock of customer satisfaction and positive word-of-mouth in high-involvement green tech

markets (Zhou et al., 2021). Therefore, the following hypothesis is proposed:

Hypothesis H4: Reliability positively influences green technology product consumption behavior.

Safety and Green Technology Product Consumption Behavior

Safety refers to the degree to which a product mitigates risks of physical harm, toxicity, or health hazards to the user and their immediate environment during operation. In the wake of global health crises and rising environmental awareness, modern consumerism has shifted toward holistic well-being, where personal health protection is inextricably linked to environmental preservation (Garvin, 1987). Green technology products that explicitly guarantee health and operational safety address the intrinsic self-directed motivations of consumers (protection of self and family), which are often more potent drivers than altruistic environmental concerns alone (Mal & Nehra, 2023). When safety expectations are fulfilled, consumers experience lower psychological stress and higher affective commitment toward the green brand (Ahmadian et al., 2026). Accordingly, the following hypothesis is proposed:

Hypothesis H5: Safety positively influences green technology product consumption behavior.

Eco-Friendliness and Green Technology Product Consumption Behavior

Eco-friendliness represents the environmental attribute of a product, characterized by its capacity to minimize ecological degradation through energy conservation, low carbon emissions, non-toxic components, and recyclable design (Kianpour et al., 2014; Barbu et al., 2022; Agarwal et al., 2025). This attribute constitutes the core identity that differentiates green technology from conventional counterparts. Grounded in the Norm Activation Model (NAM), a product's explicit eco-friendliness triggers a consumer's personal norms and moral obligation to protect the environment (Chen et al., 2021). As environmental literacy increases globally, consumers derive psychological benefits, often referred to as "warm glow" feelings from purchasing products with verified green credentials, thereby reinforcing their sustainable self-identity (Mahmood et al., 2025). Empirical insights from recent literature confirm that a product's transparent ecological benefits strongly dictate green purchase intentions across both developed and emerging economies (Yeong & Tjiptono, 2023). Therefore, the following hypothesis is proposed:

Hypothesis H6: Eco-friendliness positively influences green technology product consumption behavior.

Conformance to Standards and Green Technology Product Consumption Behavior

Conformance to standards refers to the degree to which a product complies with established industry benchmarks, safety regulations, and official environmental certifications (e.g., Energy Star, Eco-labels, ISO standards). In the green technology market, information asymmetry is a pervasive challenge; consumers cannot easily verify the actual environmental performance of a product prior to purchase, leading to rampant fears of “greenwashing” (Shang et al., 2023).

According to Signaling Theory, third-party eco-certifications and compliance standards serve as highly credible quality signals that substitute for missing information (Choudhury, 2024). Conformance to recognized standards effectively reduces consumer skepticism, legitimizes the manufacturer's environmental claims, and validates the premium price of green technology (Baral, 2024). Consequently, standardized compliance acts as an institutional trust-builder that accelerates the mainstream consumption of green technologies. Thus, the following hypothesis is proposed:

Hypothesis H7: Conformance to standards positively influences green technology product consumption behavior.

1.5. Research Model

Drawing upon product quality theory (Garvin, 1987), the Technology Acceptance Model (Davis, 1989), the Norm Activation Model, and Signaling Theory, this study develops a multidimensional framework explaining green technology product consumption behavior. The proposed model suggests that consumers' adoption and consumption of green technology products are influenced not only by functional product quality dimensions, such as performance, features, durability, and reliability, but also by sustainability-oriented attributes, including safety, eco-friendliness, and conformance to standards. These dimensions are expected to enhance consumers' perceived value, reduce perceived risk, strengthen environmental trust, and ultimately promote green consumption behavior. Accordingly, Figure 1 illustrates the conceptual model proposed in this study.

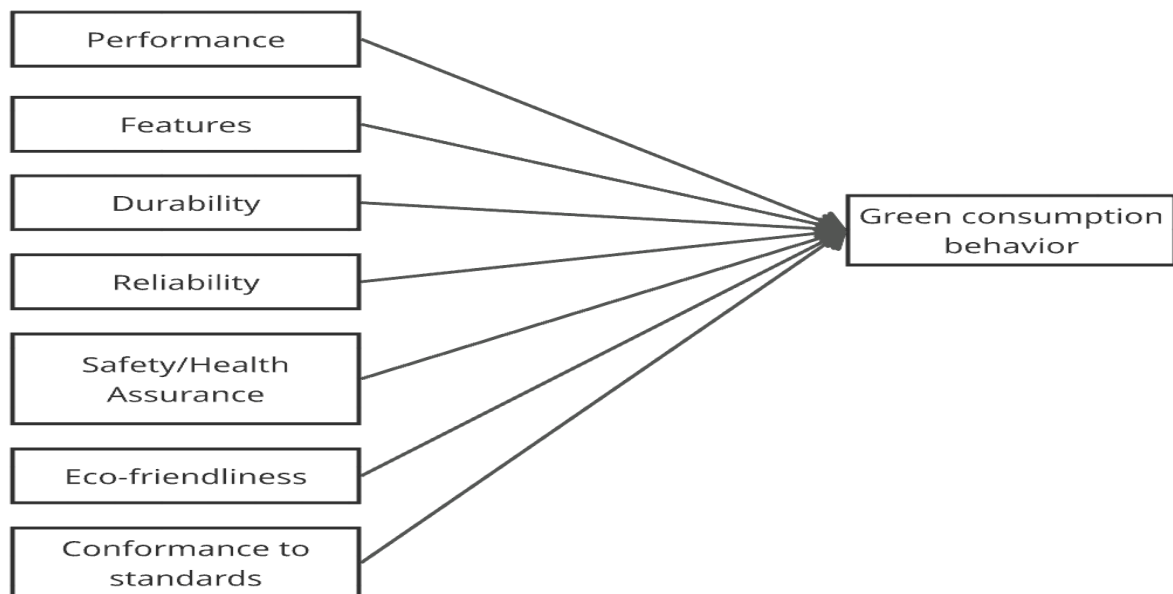


Figure 1. Research model of the impact of product quality on consumption behavior of urban consumers in Vietnam toward green technology products
Source: Authors (2026)

2. Result and discussion

2.1. Results

2.1.1. Measurement Model Assessment

To assess the internal consistency of the measurement scales, Cronbach's Alpha analysis was conducted for all constructs in the research model. According to Hair et al. (2010), a Cronbach's Alpha coefficient greater than 0.70 indicates acceptable reliability and internal consistency among observed variables. The study examined eight constructs, including Product Performance (PF), Product Features (FT), Product Durability (DU), Product Reliability (RL), Health Safety (SA), Eco-friendliness (EF), Conformance to Standards (CS), and Green Technology Product Consumption Behaviour (GCB). Each construct was measured using four observed variables.

The results presented in Table 1.3 indicate that all constructs achieved Cronbach's Alpha values exceeding the recommended threshold of 0.70, ranging from 0.706 to 0.878. Specifically, Product Performance recorded the highest reliability coefficient ($\alpha = 0.878$), followed by Conformance to Standards ($\alpha = 0.818$) and Product Durability ($\alpha = 0.815$).

Product Reliability exhibited the lowest coefficient ($\alpha = 0.706$), although it still met the acceptable criterion. These findings confirm that all measurement scales demonstrate satisfactory reliability and are suitable for subsequent factor analyses.

Table 1
Cronbach's Alpha results of the scales

Factor	Code	Cronbach's Alpha	Note
Product performance (PF)	PF1–PF4	$0.878 \geq 0.7$	Acceptable
Product features (FT)	FT1–FT4	$0.747 \geq 0.7$	Acceptable
Product durability (DU)	DU1–DU4	$0.815 \geq 0.7$	Acceptable
Product reliability (RL)	RL1–RL4	$0.706 \geq 0.7$	Acceptable
Health safety (SA)	SA1–SA4	$0.792 \geq 0.7$	Acceptable
Eco-friendliness (EF)	EF1–EF4	$0.740 \geq 0.7$	Acceptable
Conformance to standards (CS)	CS1–CS4	$0.818 \geq 0.7$	Acceptable
Green technology consumption behavior (GCB)	GCB1–GCB4	$0.734 \geq 0.7$	Acceptable

Source: SPSS output by author (2026)

Next, Exploratory Factor Analysis (EFA) was performed to evaluate the dimensionality of the constructs and examine the convergent and discriminant validity of the measurement scales.

The total explained variance reached 63.038%, indicating that the extracted factors explain a substantial proportion of the variance in the dataset. Moreover, all observed variables achieved factor loadings above the recommended threshold of 0.50, ranging from 0.622 to 0.857. No observed variables were eliminated during the analysis process. These results indicate that the observed variables adequately represent their respective latent constructs and support the construct validity of the measurement scales.

Among the constructs, Product Performance demonstrated the strongest factor loadings, suggesting that consumers place considerable emphasis on the operational effectiveness and efficiency of green technology products. In contrast, Product Reliability and Product Features reported relatively lower factor loadings, although they still remained within acceptable levels.

Table 2
Results of Exploratory Factor Analysis

Factor	Observed variables	Factor loading
PF	PF1, PF2, PF3, PF4	0.818 – 0.857
FT	FT1, FT2, FT3, FT4	0.681 – 0.786
DU	DU1, DU2, DU3, DU4	0.757 – 0.795
RL	RL1, RL2, RL3, RL4	0.622 – 0.754
SA	SA1, SA2, SA3, SA4	0.746 – 0.796
EF	EF1, EF2, EF3, EF4	0.693 – 0.766
CS	CS1, CS2, CS3, CS4	0.746 – 0.796
GCB	GCB1, GCB2, GCB3, GCB4	0.696 – 0.795

Source: SPSS output by the authors

Then, CFA was subsequently employed to validate the measurement model and assess the goodness-of-fit between the proposed model and the empirical data. The CFA results demonstrate that the measurement model achieved an acceptable level of fit. Specifically, the Chi-square statistic was 645.195 with 329 degrees of freedom ($p < 0.001$). Given the sensitivity of the Chi-square statistic to sample size, the relative Chi-square (χ^2/df) was also considered and reached 1.961, which is below the recommended threshold of 3.0.

Other goodness-of-fit indices further support the adequacy of the measurement model. CFI was 0.904, exceeding the recommended threshold of 0.90, while RMSEA was 0.052, indicating a good approximation between the model and the observed data. Although the GFI = 0.881 and TLI = 0.890 were slightly below the conventional threshold of 0.90, these values are still considered acceptable for empirical studies involving relatively complex models with multiple observed variables. Therefore, the overall measurement model can be regarded as adequately fitted to the survey data.

Regarding convergent validity, all standardized factor loadings exceeded 0.70 and were statistically significant at $p < 0.001$, indicating that the observed variables strongly represent their corresponding latent constructs. These findings confirm that the measurement model satisfies the requirements of reliability, convergent validity, and discriminant validity, thereby providing a strong foundation for testing the structural model using SEM.

2.1.2 Structural Equation Modeling (SEM) and Hypothesis Testing

After validating the measurement model, Structural Equation Modeling (SEM) was conducted to test the proposed hypotheses and examine the relationships between product quality factors and green technology product consumption behaviour. The SEM results indicate that the structural model achieved a satisfactory fit with the empirical data. The Chi-square statistic was $\chi^2 = 773.584$ with 436 degrees of freedom ($p < 0.001$), while the relative Chi-square (χ^2/df) reached 1.774, which is below the recommended threshold of 3.0.

Additional goodness-of-fit indices also support the adequacy of the structural model. Specifically, CFI reached 0.907, exceeding the threshold of 0.90, and RMSEA was 0.047, indicating an excellent model fit. Although GFI = 0.878 and TLI = 0.894 were slightly below the recommended value of 0.90, these indices are still considered acceptable for complex SEM models. Overall, the findings demonstrate that the structural model is appropriate for hypothesis testing.

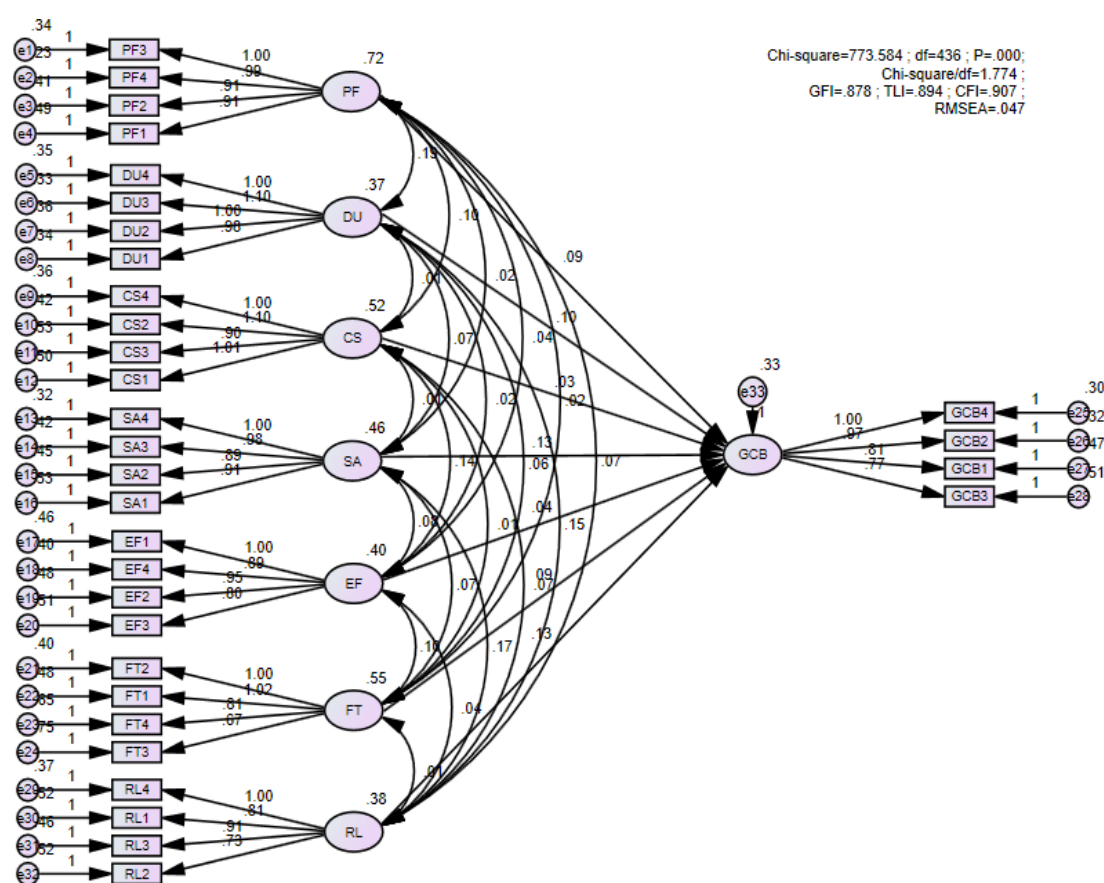


Figure 2. Results of hypothesis testing using SEM
Source: SPSS output by the authors

The hypothesis testing results reveal that all proposed hypotheses (H1–H7) were supported with statistical significance ($p < 0.05$). Product Performance (PF) exerted the strongest positive influence on Green Technology Product Consumption Behavior (GCB) ($\beta = 0.392$, $p = 0.001$), followed by Product Durability (DU) ($\beta = 0.335$, $p = 0.002$) and Conformance to Standards (CS) ($\beta = 0.303$, $p < 0.001$). These findings suggest that urban consumers in Vietnam place considerable importance on the operational efficiency, long-term usability, and certified quality standards of green technology products when making purchasing decisions.

Health Safety (SA) ($\beta = 0.251$, $p < 0.001$) and Eco-friendliness (EF) ($\beta = 0.242$, $p < 0.001$) also demonstrated significant positive effects on green technology product consumption behaviour. This indicates that environmental concerns and health-related considerations are increasingly influential in shaping consumer preferences toward sustainable products. These findings are consistent with prior studies emphasizing the growing environmental awareness and health consciousness among consumers in emerging economies.

Meanwhile, Product Reliability (RL) ($\beta = 0.136$, $p < 0.001$) and Product Features (FT) ($\beta = 0.113$, $p < 0.001$) showed weaker but still statistically significant effects on consumer behaviour. This finding suggests that although technological features and operational stability contribute to consumers' purchase decisions, urban consumers in Vietnam tend to prioritize practical and economic values, such as efficiency, durability, and compliance with standards, over supplementary product attributes.

Overall, the findings highlight the critical role of product quality dimensions in promoting green technology product consumption behaviour in Vietnam. Furthermore, the coefficient of determination (R^2) for Green Technology Product Consumption Behavior was 0.53, indicating that the independent variables explain 53% of the variance in consumers' green technology product consumption behaviour. Although the explanatory power is moderate, this result is considered acceptable in consumer behaviour research, where purchasing decisions are often influenced by multiple psychological, social, and contextual factors beyond product quality dimensions alone.

2.2. Discussion

The findings of this study confirm that all seven product quality dimensions, including product performance, product features, durability,

reliability, health safety, eco-friendliness, and conformance to standards, positively and significantly influence green technology product consumption behaviour among urban consumers in Vietnam. These results reinforce the multidimensional role of product quality in shaping sustainable consumption behaviour and suggest that consumers in emerging markets evaluate green technology products through both functional and environmental perspectives.

Among the examined determinants, product performance emerged as the strongest predictor of green technology product consumption behaviour, consistent with previous studies highlighting the importance of functional effectiveness in green product evaluation (Chen & Chang, 2012; Sharma & Foropon, 2019). In the Vietnamese context, consumers tend to prioritize operational efficiency, energy-saving capability, and economic value because green technology products are often associated with relatively high acquisition costs.

The study also found that product durability and conformance to standards significantly influence green technology product consumption behavior. Durable products are perceived as both environmentally sustainable and economically beneficial because they reduce replacement frequency and maintenance costs. Similarly, certifications, eco-labels, and product traceability strengthen consumer trust and reduce uncertainty regarding environmental claims, which is particularly important in emerging markets where skepticism toward green products remains relatively common.

In addition, health safety, eco-friendliness, reliability, and product features were found to positively affect green technology product consumption behaviour, although their impacts were relatively weaker than those of performance and durability. Urban consumers in Vietnam increasingly value environmental protection and health safety; however, practical and economic considerations continue to play a more dominant role in purchasing decisions. The relatively weaker effects of reliability and product features further suggest that consumers may perceive these attributes as basic expectations rather than distinctive competitive advantages.

These findings also have broader relevance for emerging markets, where consumers often evaluate green technology products through a combination of environmental concerns and practical considerations. The Vietnamese case suggests that green product adoption in such markets may depend less on environmental claims alone and more on whether

green technology products can demonstrate functional efficiency, durability, economic value, and credible certification.

Conclusions

The findings confirm that all seven product quality dimensions positively and significantly influence green technology product consumption behaviour among urban consumers in Vietnam. Product performance has the strongest effect, followed by durability and conformance to standards, indicating that consumers prioritize functional efficiency, long-term value, and credible certification when evaluating green technology products. Health safety, eco-friendliness, reliability, and product features also have positive effects, although their impacts are relatively weaker. Overall, the study suggests that in emerging-market contexts such as Vietnam, consumers increasingly consider environmental and health-related values, but practical and economic benefits remain the key drivers of green technology product consumption. However, the findings should be interpreted within the context of urban consumers, as purchasing behaviour in rural or less developed areas may be shaped by different conditions such as income, product accessibility, infrastructure, and environmental awareness.

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CONTENTS

MANAGEMENT practice

THE IMPACT OF PRODUCT QUALITY ON GREEN TECHNOLOGY PRODUCT CONSUMPTION BEHAVIOUR IN AN EMERGING MARKET: EVIDENCE FROM URBAN CONSUMERS IN VIETNAM Tran Thi Hoa, Nguyen Van Hiep, Nguyen Hai Anh, Nguyen Thi Nga	5
THE EFFECTS OF AI-WASHING ON CONSUMER'S TRUST, ETHICS AND PURCHASE INTENTION Shovan Nasim Haider, Miloslava Chovancova	24
DIGITAL CAPACITY, RULE OF LAW, AND REGULATORY QUALITY AS DETERMINANTS OF GOVERNMENT EFFECTIVENESS: A POOLED OLS INTERACTION MODEL FOR EU MEMBER STATES Pavel Ivanov, Borislav Borissov	49
LIQUIDITY ANALYSIS OF NON-MANUFACTURING ENTERPRISES Krasimir Kulchev.....	67
IS SUSTAINABLE TOURISM VALID FOR THE BALKAN COUNTRIES? EVIDENCE FROM THE ENVIRONMENTAL KUZNETS CURVE HYPOTHESIS Ayberk Seker, Mahmut Kadir Isguven, Taner Ismailov	82
CONTESTS OF HUMAN RESOURCE MANAGEMENT AND PUBLIC ORGANIZATIONS: THE IMPACT OF ECONOMIC, POLITICAL AND ORGANIZATIONAL FACTORS Arsim Gjino vci, Dren Gjino vci.....	114

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