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Factors Affecting the Purchasing Intention of Filipino Gen Zs in the Greater Metro Manila Area when Purchasing Sustainable Products on E-commerce Platforms

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Abstract

Generation Z, digitally proficient and progressive in their stance on social and environmental issues (Gomes et al., 2023), are emerging as influential consumers. In the Philippines, 77.2 % of them made online purchases (Kemp, 2021), spending an average of 246 US dollars annually (PCMI, 2024). Notably, 7 in 10 online shoppers fall within the 18 to 24 demographic (Pan, 2023). Despite their awareness, studies reveal an attitude–behavior gap, where Gen Zs' concern for the environment does not consistently reflect in their purchasing choices (Islam et al., 2023). Fashion items are the most purchased products by Filipino Gen Z on e-commerce platforms, contributing to 92 million tonnes of textile waste annually, much of which ends up in landfills (Crumbie, 2024). This is just one of the leading product types purchased online by this generation. As the Philippines, a climate-vulnerable developing nation (World Risk Report, 2017), faces mounting environmental and economic challenges, Gen Z's consumption habits have serious implications for sustainability. This study examined factors affecting their intention to purchase sustainable products using Structural Equation Modeling in WarpPLS. Findings showed that Price Sensitivity (0.02), Social Influence (0.01), Marketing and Communication (0.01), and Availability (0.01) significantly impact purchasing intentions. To foster sustainable consumption, businesses should improve affordability, accessibility, and marketing, ensure clear labeling, and leverage technology and policy support. Public education and further research on cultural and digital trends are also essential. These strategies support market sustainability and contribute to achieving UN Sustainable Development Goal 12: Responsible Consumption and Production by 2030.

Keywords
Filipino Gen Zs, E-commerce platforms, Sustainable Products, SEM-WarpPLS, SDG 12

1. Introduction

As the digital generation, Filipino Generation Z (born 1997–2012) is not only tech-savvy but also highly engaged in online consumption through e-commerce platforms like Shopee and Lazada (Kymäläinen et al., 2021; The Fourth Wall, 2024). With 3 out of 4 Gen Zs preferring online shopping and 7 out of 10 e-commerce users aged 18–24 (Pan, 2024), their consumption habits have significant environmental and social implications. While this generation is perceived to be environmentally conscious, a growing body of literature identifies an "attitude-behavior gap"—a

disconnect between Gen Z's sustainable values and their actual purchasing behavior (Islam et al., 2023; Gomes et al., 2023).

This gap is evident in the continued dominance of unsustainable product choices such as fast fashion, electronics, and beauty items—products that heavily contribute to e-waste, plastic pollution, and carbon emissions (WHO, 2024; Gutierrez, 2023). E-commerce has exacerbated this behavior by offering instant gratification and low-cost, trendy products, encouraging overconsumption and waste (Zuo, 2024; Utomo et al., 2023). Despite sustainability efforts from platforms like Lazada and Shopee, their initiatives have been criticized as insufficient or even misleading (Hicks, 2023), further complicating the ability of consumers to make informed, sustainable choices.

These contradictions raise critical questions about why the purchasing intentions of Filipino Gen Z consumers often fail to align with their sustainability awareness, and how the current practices of e-commerce platforms and businesses may be contributing to this inconsistency. This research is crucial in addressing how businesses can influence Gen Z's purchasing decisions toward sustainable products in the Philippine e-commerce context by examining the factors that hinder or promote environmentally responsible consumption among this influential demographic, contributing to the broader goal of achieving the United Nations' Sustainable Development Goal 12: Responsible Consumption and Production by 2030.

1.1 Objectives

This study aims to determine all-inclusive factors affecting the purchasing intention of Filipino Generation Z in purchasing sustainable products in e-commerce platforms, which has far-reaching consequences for society, the economy, the environment, and individual health, asserting the necessity to consider sustainability in their practices.

1. Investigate the factors affecting the purchasing intention of Filipino Generation Z when purchasing sustainable products on e-commerce platforms in the Philippines.

2. Utilize Structural Equation Modeling to evaluate the interrelationship of the factors affecting the purchasing intention.

3. Provide recommendations on how businesses catering in the Philippines can effectively integrate sustainable initiatives into their e-commerce operations to influence the purchasing intentions of Filipino Gen Z consumers, promote environmental stewardship and social responsibility, and encourage long-term behavioral change toward more sustainable consumption.

2. Literature Review

The intention to purchase sustainable products globally is influenced by multiple interconnected factors, ranging from knowledge and personal values to pricing and infrastructure. Awareness of environmental benefits and accessible information on product life cycles enhances consumer interest in green products (Te Liu & Tsaur, 2020; Dangelico & Vocalelli, 2017). However, internal and external barriers, especially in industries like fashion, continue to hinder this intention (Hur et al., 2019). Personal environmental values, ethics, and moral obligations play a strong role in shaping green attitudes (Akthar, 2021), yet price sensitivity remains a persistent challenge. Even among environmentally conscious consumers, high costs often deter sustainable choices, as 41% report cost as the main obstacle (Euromonitor, 2023; Fench et al., 2024). Generation Z, despite being environmentally aware, is particularly price-sensitive and more likely to prioritize quality and positive consumption experiences when justifying the higher cost of green products (Gomes et al., 2023; Lina et al., 2022; Tezer et al., 2019). In the Philippines, a study found that many Gen Z consumers shop online because of a "deserve ko 'to" (i deserve this) mindset, driven by self-reward and affirmation (Mioten, 2024). This can shift their focus from ethical reasons to personal gratification when buying sustainable products. Brand reputation also carries weight, consumers increasingly align with brands reflecting their values, though misleading "greenwashing" practices can erode trust (Zhang, 2024; Torelli et al., 2019; Islam et al., 2023). Social influence, especially peer behavior and norms, significantly impacts green purchasing, particularly in developing regions (Mod, 2019). Cultural factors further shape purchasing intention: when companies respect cultural diversity and align strategies with local norms, consumer familiarity and trust increase. Use of local influencers and government-led awareness campaigns can also drive behavior (Lidelöw et al., 2019; Khan et al., 2024). Additionally, policy incentives and support for reducing sustainable product costs can enhance consumer accessibility.

Marketing strategies, such as social media campaigns, eco-labeling, and celebrity endorsements, play a critical role in shaping perceived consumer effectiveness (PCE) and encouraging sustainable purchasing (Sun & Wang, 2020; Schmidt et al., 2017). The physical availability of green products in retail spaces also affects behavior, signage, product placement, and informed personnel enhance visibility and consumer confidence (Bălan, 2020). Platforms like Vinted cater to Gen Z's sustainability interests in fashion, though a behavior-attitude gap remains, where style and price still outweigh sustainability (Berthem et al., 2022). Infrastructure is a long-term enabler: policies like carbon taxes and Extended Producer Responsibility (EPR) laws, seen in countries like Norway and Singapore, create systemic change and hold businesses accountable (Koroschetz et al., 2019; ClimateTrade, 2023). Industry-specific insights, such as in PSM and appliances, reveal the need for sustainability competencies and better consumer touchpoints via web interfaces and product design to promote informed decision-making (Schulze et al., 2020; Xia et al., 2021). On the other hand, unsustainable purchasing leads to alarming environmental and societal costs—rising waste, ecological degradation, and labor exploitation—particularly driven by fast fashion and overconsumption (Armutcu & Tan, 2023; Vega, 2024; Webster, 2023). Businesses operating under a "grow now, clean up later" mindset face escalating remediation costs and long-term reputational risks (Ekins & Zenghelis, 2021; Comerford, 2024). As Gen Z gains influence in the market, especially in the Philippines, there is a crucial research gap in understanding their sustainable purchasing behavior within local e-commerce contexts—offering an opportunity to design culturally relevant, cost-effective, and trust-driven strategies that bridge the intention-behavior divide.

3. Methods

3.1 Research Design

The researchers used the data to analyze the behavioral patterns of Filipino Generation Z consumers and develop a quantitative assessment of the relationship between influencing factors and their intention to purchase sustainable products through e-commerce platforms. The goal is to formulate insights that can support digital retailers, sustainability advocates, and policymakers in encouraging more sustainable consumption behavior among this demographic in the Philippines. In the survey, the researchers gathered the independent variables such as (Table 1):

Table 1. Relationship of Variables

Variables	Definition of Variable and Description of Relationship
Knowledge and Awareness	Environmental awareness, coupled with accessible and transparent product information, significantly enhances sustainable purchase intentions (Te Liu & Tsaur, 2020; Dangelico & Vocalelli, 2017). In the fashion sector, this is challenged by limited design knowledge, aesthetic trade-offs, and misalignment with current trends (Hur, 2019).
Perceived Value	Gen Z's perception of sustainable products is often influenced by what they're already familiar with, such as typical pricing or quality standards. Although they are price-sensitive and may favor non-sustainable options, positive experiences and perceived quality can shift their willingness to buy (Gomes et al., 2023; Shen et al., 2020; Tezer et al., 2019).
Brand Reputation	Companies and brands play a vital role in shaping consumer trust and purchase intentions by investing in sustainable practices and transparent communication. Strong corporate social responsibility and green brand image enhance brand reputation, which in turn drives consumer attraction and willingness to pay for sustainable products (Nguyen-Viet et al., 2024). Conversely, brand missteps like greenwashing can significantly damage stakeholder trust and consumer behavior (Torelli et al., 2019).
Price Sensitivity	High costs remain a major barrier, with green products often priced higher than traditional alternatives. Price continues to be a decisive factor in Gen Z's sustainable purchasing decisions (Fenech et al., 2024).
Personal	Ethical beliefs, environmental attitudes, and personal values strongly predict sustainable

Values	consumption behavior, highlighting the role of internal motivations (Akhtar et al., 2021).
Social Influence	Peer influence plays a critical role in shaping green purchasing behavior, with stronger social encouragement directly correlating to increased sustainable consumption (Mohd Suki, 2019).
Cultural Factor	Cultural exposure to sustainability impacts green behavior. Differences in regional values (e.g., Italy vs. Russia) affect willingness to pay and prioritize sustainability (Lidelöw et al., 2019; Khan et al., 2024).
Marketing and Communication	Effective social media marketing, eco-labeling, and celebrity endorsements enhance consumer awareness and drive positive attitudes toward sustainable products (Sun & Wang, 2020; Schmidt et al., 2017).
Availability	Gen Z's motivation to purchase sustainably increases when products are easily accessible. Despite good intentions, preferences for style, affordability, and convenience often outweigh sustainability (Dominguez et al., 2023; Berthem et al., 2022). Retail design and employee knowledge also contribute significantly (Bălan, 2020).
Infrastructures	The integration of supportive infrastructure, both material and institutional, is essential for shifting consumption norms and enabling the widespread adoption of sustainable practices. (Koroschetz et al., 2019).

3.2 Subjects and Study Site

The respondents for this study are Filipino Generation Z individuals aged 15 to 28, residing in the Greater Manila Area of the Philippines, with a minimum monthly income or allowance of ₱4,000 and averaging six online purchases per month**.** Data were gathered through a Google Forms questionnaire designed to capture their digital purchasing behavior. Gen Z was chosen due to their strong e-commerce preference and growing market influence, representing 38% of the Philippine population**.** The Greater Metro Manila Area was chosen as the study site because it is the country's main economic and digital hub, with peak online shopping activity and consumers who influence e-commerce trends (Desiderio, 2024). Although this focus limits nationwide generalization, it provides valuable insights into the most active and sustainability-aware online shoppers, offering a solid base for future research.

The researchers utilized an A-priori Sample Size Calculator for Structural Equation Models (SEM) to determine the required minimum sample size, which is 195 respondents. The study includes one dependent variable representing purchasing intention, measured against multiple independent variables drawn from behavioral, social, and contextual factors.

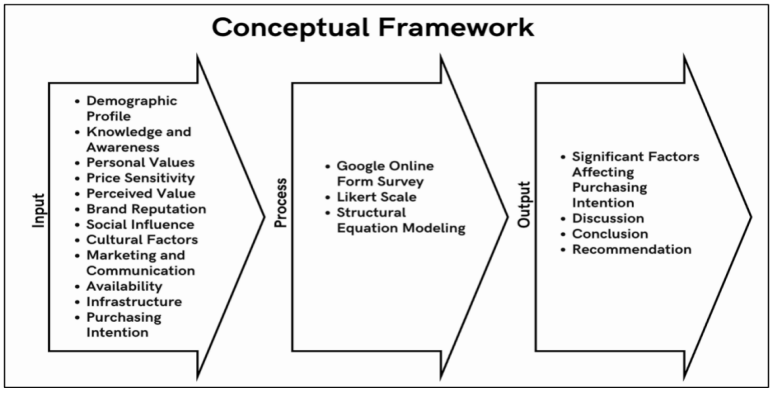

Figure 1. Conceptual Framework

Figure 1 illustrates the various factors influencing Filipino Generation Z's purchasing intention toward sustainable products on e-commerce platforms, represented through interrelated behavioral, cultural, and market-driven variables. Existing literature and preliminary research suggest that while sustainable consumer behavior is well-studied in developed economies, it remains underexplored in the Philippine context, particularly among digital-native Gen Z consumers. This study uses a custom 5-point Likert scale survey and applies Structural Equation Modeling (SEM) to examine the direct and indirect relationships between influencing factors and purchase intention, providing a more context-specific analysis compared to broader sustainability models typically used in Western markets.

4. Data Collection

The researchers targeted Filipino Generation Z aged 15 to 28, residing in the Greater Manila Area of the Philippines, with a minimum monthly allowance of ₱4,000 and an average of six monthly e-commerce purchases. Using a bilingual (Filipino and English) Google Forms survey distributed via social media and peer networks, the questionnaire included sections on introduction, demographic profile, sample reaffirmation, evaluation of factors affecting sustainable purchase intentions, current purchasing practices, and closing remarks assuring confidentiality. Responses in both languages were combined during analysis. After conducting a pilot test to ensure clarity, the survey was widely disseminated, and the collected data were analyzed using Structural Equation Modeling (SEM) with WarpPLS to identify key factors influencing sustainable buying behavior among Filipino Gen Z consumers.

5. Results and Discussion

5.1 Numerical Results

Table 2. Indicator Reliability Values for the First and Last Run

Legend:

Independent Variables (IV)	
Knowledge and Awareness – KA	Social Influence – SI
Personal Value - PV	Cultural Factor – CF
Price Sensitivity - PS	Marketing and Communication – MC
Perceived Value - PDV	Availability – A
Brand Reputation - BR	Infrastructure - I
Current Purchasing Intention – CPI (DV)	

Table 3. Independent Variables

INDICATORS	VALUES	INDICATORS	VALUES	INDICATORS	VALUES	INDICATORS	VALUES	INDICATORS	VALUES
KA1	0.705	PV1	0.674	PS1	0.440	PDV1	0.674	BR1	0.753
KA2	0.797	PV 2	0.726	PS2	0.757	PDV2	0.726	BR2	0.757
KA3	0.745	PV3	0.820	PS3	0.791	PDV3	0.820	BR3	0.703
KA4	0.702	PV4	0.728	PS4	0.788	PDV4	0.728	BR4	0.768
KA5	0.634	PV5	0.638	PS5	0.589	PDV5	0.638	BR5	0.534
INDICATORS	**VALUES**	**INDICATORS**	**VALUES**	**INDICATORS**	**VALUES**	**INDICATORS**	**VALUES**	**INDICATORS**	**VALUES**
SI1	0.771	CF1	0.629	MC1	0.572	A1	0.790	I1	0.650
SI2	0.733	CF2	0.763	MC2	0.679	A2	0.674	I2	0.791
SI3	0.758	CF3	0.647	MC3	0.769	A3	0.760	I3	0.811

SI4	0.756	CF4	0.751	MC4	0.751	A4	0.787	I4	0.782
SI5	0.445	CF5	0.641	MC5	0.709	A5	0.818	I5	0.794

Table 4. Dependent Variable

INDICATORS	VALUES
CPI1	0.748
CPI2	0.728
CPI3	0.744
CPI4	0.783
CPI5	0.749

Table 2 to Table 4 shows that all indicators meet the required reliability thresholds, with loadings above 0.50 and most exceeding 0.708, indicating that over 50% of their variance is explained by the construct. Since no loadings fall below 0.40, no indicators were removed, confirming the reliability and validity of the measurement model.

5.2 Graphical Results

Figure 2 presents the initial PLS-SEM model, illustrating the relationship between the dependent variable, Current Purchasing Intention (DV), and ten independent variables: Knowledge and Awareness (KA), Personal Value (PV), Price Sensitivity (PS), Perceived Value (PDV1), Brand Reputation (BR), Social Influence (SI), Cultural Factors (CF), Marketing and Communication (MC), Availability (A), and Infrastructures (I). Each variable was measured through five indicators to generate results using SEM via WarpPLS. The analysis shows that Price Sensitivity (p = 0.02), Social Influence (p = 0.01), Marketing and Communication (p = 0.01), and Availability (p = 0.01) significantly influence purchasing intention, confirming the hypothesized relationships. These results support the idea that specific variables are strongly associated with Filipino Generation Z's intention to purchase sustainable products, aligning with the growing usage, popularity, and expansion of e-commerce platforms.

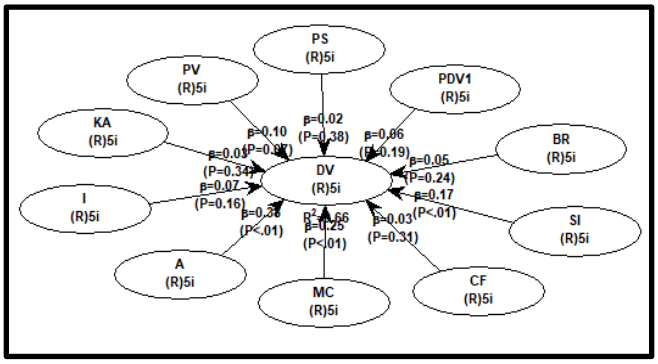

Figure 2. WarpPLS Model for the First and Last Run

5.3 Proposed Improvements

The Structural Equation Modeling (SEM) analysis was performed in a single run that served as both the initial and final iteration, yielding satisfactory results in indicator reliability, composite reliability, discriminant validity, and model fit indices. The cleanliness and consistency of the data and the efficiency of the data gathering procedure ensured that one run was sufficient to meet all established criteria for reliability and validity; thus, further iterations were considered unnecessary. However, to enhance the robustness of future studies, several recommendations for improvement are proposed:

Procedures/Experiments
The researchers propose a comparative study between Generation Z and Millennials to better understand their sustainable purchasing decisions online. The study will include a "Reaffirmation Assessment" to verify legitimate respondents and gather data on e-commerce habits, which will help analyze how digital environments and product types influence sustainable buying behavior.

Variables
Additional variables such as digital literacy, gamification/reward systems, purchase convenience, and eco-friendly packaging should be included to deepen insights into Filipino Gen Z's motivations and barriers in sustainable consumption, helping brands and policymakers tailor their strategies effectively.

Respondents
The study should broaden its target respondents within Generation Z to include diverse socioeconomic backgrounds, locations, and shopping behaviors, ensuring a more accurate and inclusive representation that reveals unique consumption patterns among subgroups.

Sample Size
Increasing the sample size beyond the required 195 respondents will improve the reliability and generalizability of the findings, allowing for more meaningful comparisons across different segments of Generation Z.

Mode of Data Analysis
Researchers recommend exploring advanced data analysis techniques such as linear regression and using tools like SPSS, AMOS, SmartPLS, or Python to gain more comprehensive and efficient insights tailored to the study's complexity.

Equipment
Utilizing in-app or on-platform pop-up surveys within e-commerce sites can provide real-time feedback, while mixed methods like clickstream analysis can reveal actual browsing behaviors versus stated attitudes toward sustainable products.

Conversion of Intention to Actual Purchase
Future research should focus on understanding the gap between Gen Z's sustainable purchase intentions and actual buying behavior by examining psychological, behavioral, and situational factors, possibly using longitudinal or experimental designs to identify effective strategies to convert intentions into sales.

5.4 Validation

Table 5 presents the composite reliability results (Table 5), showing that all latent variables fall within the satisfactory to good range of 0.70–0.90 (Hair et al., 2021). This indicates strong internal consistency among the indicators, suggesting that the constructs are measured reliably without redundancy (Hamid et al., 2017; Hair et al., 2021) (Table 6).

Table 5. Composite Reliability Values for the First and Last Run

COMPOSITE RELIABILITY	
Knowledge & Awareness	0.842
Personal Value	0.842
Price Sensitivity	0.811
Perceived Value	0.836
Brand Reputation	0.832
Social Influence	0.826

Cultural Factor	0.817
Marketing & Communication	0.826
Availability	0.877
Infrastructures	0.877
Current Purchasing Intention	0.866

Table 6. Discriminant Validity Test Results for the First and Last Run

	KA	PV	PS	PDV	BR	SI	CF	MC	A	I	CPI
KA	**0.719**	0.500	0.484	0.462	0.476	0.184	0.334	0.330	0.336	0.172	0.205
PV	0.500	**0.720**	0.505	0.520	0.542	0.232	0.302	0.367	0.403	0.221	0.327
PS	0.484	0.505	**0.687**	0.547	0.482	0.274	0.373	0.330	0.392	0.354	0.271
PDV	0.462	0.520	0.547	**0.711**	0.639	0.394	0.483	0.544	0.604	0.339	0.469
BR	0.476	0.542	0.482	0.639	**0.708**	0.389	0.470	0.578	0.580	0.255	0.504
SI	0.184	0.232	0.274	0.394	0.389	**0.704**	0.420	0.369	0.355	0.248	0.404
CF	0.334	0.302	0.373	0.483	0.470	0.420	**0.689**	0.384	0.454	0.519	0.388
MC	0.330	0.367	0.330	0.544	0.578	0.369	0.384	**0.699**	0.700	0.384	0.647
A	0.336	0.403	0.392	0.604	0.580	0.355	0.454	0.700	**0.768**	0.346	0.687
I	0.172	0.221	0.354	0.339	0.255	0.248	0.519	0.384	0.346	**0.768**	0.339
CPI	0.205	0.327	0.271	0.469	0.504	0.404	0.388	0.647	0.687	0.339	**0.751**

Table 6 presents the discriminant validity results for all latent variables, which meet the acceptable criteria established by the Fornell and Larcker approach. Values higher than the correlations with other constructs are highlighted to underscore their distinctiveness.

Table 7. Model Fit Test for the First and Last Run

CITATION		VALUE
Standardized Root Mean Squared Residual (SRMSR)		
Goretzko, 2023	Minimum = 0; Maximum = 1	0.11
Tenenhaus Goodness-of-Fit (GoF)		
Masoom and Sarker, 2017	Small GoF >= 0.1, Medium GoF >= 0.25, Large GoF >= 0.36	0.58
R-Squared Contribution Ratio		
Suryanto et al., 2017	Ideally = 1	1.00
Average Block Variance Inflation Factor (AVIF)		
Suryanto et al., 2017	Ideally <= 3.3	1.89
Standardized Mean Absolute Residual		
Kock et al., 2020	Acceptable if <= 0.1	0.11

Table 7 presents the model fit test results used to assess the reliability and validity of the PLS-SEM model. The evaluation included SRMSR, GoF, R-Squared Contribution Ratio, AVIF, and SMAR. According to Goretzko (2023), an SRMSR value close to 0 indicates a good model fit, and GoF values above 0.36 reflect a large fit. The R-Squared Contribution Ratio meets the ideal value of 1 (Suryanto et al., 2017), while the AVIF remains below the recommended threshold of 3.3 (Suryanto et al., 2017), confirming low multicollinearity. Although the SMAR value of 0.11 slightly exceeds the 0.10 threshold, Kock et al. (2020) and Hair et al. (2017) note that slight deviations are acceptable when other indices fall within acceptable ranges. Thus, the overall results confirm a good model fit.

6. Conclusion

This study examined the factors influencing purchasing intention on e-commerce platforms among Filipino Gen Z consumers. Using PLS-SEM, it identified four key factors—Price Sensitivity, Social Influence, Marketing and Communication, and Availability, as significant drivers of purchasing behavior. These findings emphasize that purchasing decisions are shaped not just by individual preferences but also by social dynamics, pricing, marketing strategies, and ease of product access.

The study contributes to bridging the "Green Gap" by shedding light on how these factors shape sustainable consumption decisions in the Gen Z market, a group that plays a major role in influencing online shopping trends in the Philippines. It also lays the groundwork for future research on other demographics, regions, and additional factors such as payment options, rewards, delivery, and return policies to enhance online shopping experiences. These insights are particularly valuable for policymakers in creating incentives, improving regulatory frameworks, promoting sustainable business practices, and developing educational campaigns to support and encourage sustainable e-commerce growth.

By highlighting the roles of consumers, businesses, and policymakers, this study supports efforts to promote more responsible and environmentally conscious buying behaviors in the evolving digital marketplace. Ultimately, the

persistence of these key factors across different studies underscores their deep roots in consumer behavior and highlights the need for targeted strategies and innovations that specifically address sustainable purchasing intentions.

From a more critical perspective, failing to build a consumer-friendly environment for sustainable products can lead to missed opportunities to reduce environmental impact and address social issues, such as high carbon emissions, waste, and unethical labor practices. Weak demand may also hinder the growth of sustainable production methods, slowing progress toward global sustainability goals, particularly SDG 12 on Responsible Consumption and Production, which wraps up in the year 2030**.**

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Biographies

Annarose Pamela C. Ricaro is an Industrial Engineering student at the University of Santo Tomas, specializing in Production Engineering. She began her professional journey as an intern at ECC International, where she learned project management, ISO standardization, business process mapping, and content development. Later on, as she was eager to build her career, she sought another internship at Focus Global Inc., where she gained experience in processing order entries, inventory management, ERP systems, and e-commerce operations. Drawn to process and people improvement, she is most interested in sustainability, reflecting her genuine care for the environment, society, and animals. She previously served as Executive Associate for External Affairs at the UST Industrial Engineering Circle, and outside academics, she is drawn to music and arts, particularly writing, as creative forms of expression.

Lilyanna F. De Guzman is an Industrial Engineering student at the University of Santo Tomas, specializing in Service Engineering and Analytics. Her academic journey has been shaped by a strong interest in logistics and supply chain management, which inspired her to pursue hands-on experience as a Logistics Operations Intern, where she engaged in various industrial engineering functions that deepened her understanding of operational efficiency and process improvement, and gained practical skills including process documentation, data analysis, and workflow improvement. She is also an active member and former Corporate Associate of the Operations Research Society of the Philippines – UST Chapter, where she honed her collaborative and organizational skills.

Emilio Luis R. Roman is an Industrial Engineering student at the University of Santo Tomas, specializing in Quality Engineering. He recently gained valuable professional experience as an intern at Starbreaker Corporation, where he sharpened his skills in demand and supply planning, data analytics, automation, and workplace collaboration. His hands-on experience strengthened his analytical and problem-solving skills, preparing him for a future in process improvement and operations management. Emilio's leadership roots trace back to his junior high

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Carlos Andrei A. Tesoro is an Industrial Engineering student at the University of Santo Tomas with strong leadership experience, having served as Vice President for Audit and Operations in ORSP-UST and Executive Coordinator for Technical Media in the UST Industrial Engineering Circle. Passionate about solving complex problems, he interned at SM Retail in merchandise planning, honing his skills in analysis, planning, and leadership. A certified Lean Six Sigma Yellow Belt, Carlos is committed to continuous improvement and innovation. He balances his academic pursuits with activities like playing in a band and sports, showcasing his discipline and teamwork abilities.