



RESEARCH ARTICLE

Contribution Of Green Product And Consumer Repurchase Intention

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Abstract

Samsung is a well-known global trademark, its products are used all over the world. In the midst of global environmental pollution issues, it is interesting to research this product because Samsung declares its products to be environmentally friendly. Worrying environmental conditions also occur in Indonesia, so it is necessary to research the role of this product in preserving the environment in Indonesia with the topic of consumer behavior, namely interest in repurchasing Samsung products. There are five hypotheses in this research, namely, Product Quality has a positive influence on Repurchase Intention, Product Quality has a positive influence on Consumer Satisfaction, Green Product has a positive influence on Consumer Satisfaction, Green Product has a positive influence on Repurchase Intention, Consumer Satisfaction has a positive influence on Repurchase Intention. The method used in this research is quantitative with structural equation modeling (SEM) analysis tools. The results obtained in this research are that improving product quality will increase consumer satisfaction and Samsung needs to do this to increase purchasing interest in its products.

Keyword: Green Product, Consumer Satisfaction, Repurchase Intention, Product Quality

Introduction

Environmental pollution worldwide has become a serious problem threatening the sustainability of life on Earth. Pollution can occur in various forms, involving air, water, and soil. Several major causes of environmental pollution are due to unsustainable human activities and a lack of awareness of their impacts. There are several aspects of environmental pollution that are of global concern, including air pollution, water contamination, soil contamination, noise pollution, loss of biodiversity, and environmental disasters.

Air pollution, for instance, leads to the emission of greenhouse gases, human activities such as the use of fossil fuels contribute to the greenhouse effect, resulting in the release of carbon dioxide (CO₂) which causes global warming. Additionally, urban air pollution, motor vehicles, industries, and waste incineration can release air pollutants such as nitrogen dioxide (NO₂) and fine particles that are harmful to human health (WHO, 2024). Water pollution is also a global concern caused by industrial waste disposal. Improperly treated industrial waste can pollute rivers and lakes, containing hazardous chemicals and heavy metals. Plastic waste pollution dumped into rivers and oceans causes damage to aquatic ecosystems and threatens marine life (UNEP, 2024). Soil pollution is caused by the use of pesticides and agricultural chemicals. Excessive use of pesticides and agricultural chemicals can contaminate soil, damaging fertility and ecosystem balance. Improperly managed waste disposal, especially containing hazardous substances, can pollute soil and groundwater (FAO, 2014). Noise pollution is caused by urban noise pollution from industrial activities, vehicle traffic, and construction, which can harm human health and disrupt ecosystems. Loss of biodiversity

is caused by deforestation, leading to habitat loss and reduced biodiversity, as well as releasing carbon stored in trees. Overfishing threatens fish populations and marine ecosystems. Environmental disasters, such as oil spills at sea, can cause damage to marine ecosystems and endanger marine fauna. Nuclear disasters, such as Chernobyl and Fukushima, leave long-lasting environmental impacts (NASA, 2024). Public understanding and awareness of the environmental pollution impacts, along with efforts for environmental protection and sustainable policies, are key to addressing these challenges and preserving the natural balance.

Meanwhile, the Ministry of Environment and Forestry (KLHK) in the 'Environment and Feasible Development' motivation thing event explained that the Indonesian Government has made efforts to maintain Environmental Sustainability and Sustainable Development. Indonesia has taken action to combat plastic waste and environmental pollution, according to the statement by the Director General of Environmental Equipment Standardization and Forestry (KLHK). The goal of Indonesia's National Action Plan for Marine Plastic Debris Reduction is to reduce marine litter by 70% by 2024. Indonesia also emphasizes several critical issues that need to be addressed. These include defining plastic as pollution, the plastic life cycle, basic plastics, and composite plastics made from chemicals and polymers, as well as their usage.

Table 1. Indonesia's Smart Phone Market, Top 5 Company Shipment, Market Share, and YOY Growth, 2Q23 (Shipment in millions)

Company	2Q23 Shipment	2Q23 Market Share	2Q22 Shipment	2Q22 Market Share	YOY Growth
Samsung	1.9	20.80%	1.9	20.20%	-3.40%
OPPO	1.6	17.60%	2	20.60%	-19.80%
Vivo	1.5	16.50%	1.7	17.80%	-13.10%
Xiaomi	1.3	14.70%	1.5	15.60%	-11.80%
Transsion	1.2	13.40%	1.1	11.20%	12.30%
Others	1.5	17%	1.4	14.60%	9.10%

Source: Data Processed (2024)

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Samsung is a renowned brand that dominates the global market with its smartphones, and Indonesia is no exception as it holds a prominent position there as well. Samsung has announced its commitment to continue developing innovations focused on user experience and the implementation of sustainable mobile technology for a better future in its latest products. At the Galaxy Unpacked 2023 product launch in Seoul, South Korea, Samsung announced that it will not only introduce a product line featuring cutting-edge technology but also utilize various environmentally friendly materials. Samsung is indeed committed to environmental preservation through environmental management systems and certifications. Samsung Electronics is certified according to international environmental and energy management standards. In 2021, all Samsung locations were certified with ISO 14001 (Environmental Management System) and ISO 50001 (Energy Management System). The environmental impact of Samsung's products has been certified by various certification programs (such as EPEAT in the United States, Green Technology Korea, and Eco-Label, etc.) that evaluate the environmental aspects of products (Samsung, 2023).

It is interesting to delve deeper into how environmentally friendly products can influence consumer behavior in repurchasing. According to Handayani (2007), environmentally friendly products can be defined as products designed and processed using methods to reduce environmental pollution, both in production, distribution, and consumption. According to Grant (2015), green products have several characteristics: (1) They contain no toxins, (2) They have long durability, (3) They use raw materials from recycled materials, (4) They do not use materials that can harm the environment, (5) They use simple eco-labeled packaging and provide refillable products, and (6) They are not harmful to human and animal health.

Low consumer confidence in a product will impact a decrease in consumer purchase intention. Intention can be described as the condition of consumers who have not yet taken action, which can be used as a basis for predicting their behavior or actions. Intention is a behavior that emerges as a response to an object indicating the customer's desire to make a purchase (Kotler & Kevin, 2016). Customer satisfaction is determined by the quality and price of the desired product, as expressed by Bei and Chiao (2001) that "Consider product quality and price as the basis for building customer satisfaction," while Khan and Ahmed (2012) state that "product quality is a key determinant of customer satisfaction." The concept developed by Bei and Chiao (2001) indicates no influence of product quality and price on customer satisfaction. In previous research (Pastikarani & Astuti, 2016), (Setiomulyono & Tanjung, 2015), (Agustin, Rajardjo, & Farida, 2016), (Oceani & Sutopo, 2017), (Arsyanti & Astuti, 2016), (Pamenang & Soesanto, 2016) related to repurchase intention has not been linked to environmental issues, which differentiates this study from previous ones..

Method

The target audience of this study consists of Indonesian individuals who use Samsung smartphones. Samsung is something you choose to purchase, and it is not something you can give or buy. Due to its large and unlimited population, this research will utilize purposive sampling method that meets the aforementioned criteria. The sample size used is five times the number of parameters or indicators used in the study, according

to Hair et al. in Haryanto (2006); Dianah and Welsa (2017). This study employs 26 indicators in the form of questionnaires, thus the collected sample size is $15 \times 5 = 75$, rounded up to the nearest 100 individuals. Data collection is conducted using online questionnaire method. The Likert scale is used when measuring each variable. This scale includes five levels of response preference ranging from Strongly Disagree (SD): Scale 1 to Strongly Agree (SA): Scale 5. Structural Equation Modeling (SEM) is the data analysis technique used to address the research problem. SEM is a statistical method that allows testing various relatively complex relationships simultaneously.

Results and Discussion

Table 2. Reliability and Validity Testing of Research Instruments

Variable	Product Quality		Green product		Customer Satisfaction		Purchase Intention	
	Loading	Error	Loading	Error	Loading	Error	Loading	Error
KP1	0.86	0.76						
KP2	0.77	0.58						
KP3	0.81	0.65						
KP4	0.87	0.73						
GP1			0.79	0.62				
GP2			0.85	0.72				
GP3			0.84	0.68				
KK1					0.78	0.64		
KK2					0.78	0.65		
KK3					0.82	0.67		
MBU1							0.84	0.69
MBU2							0.78	0.63
MBU3							0.83	0.72
MBU4							0.71	0.54
Sum of std. loadings	3.26		2.46		2.38		3.18	
Sum of measure error		2.62		2.02		1.92		2.54
Reliability	0.81		0.76		0.76		0.81	

Source: Data Processed (2024)

Table 2 shows that each indicator used in the questionnaire to measure the mentioned variables above has a reliability value greater than 0.700, which is the required value. This indicates that the responses from the questionnaire are consistent (reliable) when given back to the same respondents at different times. Furthermore, the loading values indicate that all proposed indicators used to calculate the above variables have loading values greater than 0.700. This indicates that the indicators used truly measure what is intended to be measured (valid).

Hypothesis Testing

Table 3. Standardized Estimated Coefficient

No	Independent variable	Regression	Dependent Variable	Beta	Prob.	Direct Effects	Indirect Effects	Total Effects (Direct Effects + Indirect Effects)
1	Product Quality (x1)	→	Customer Satisfaction (x3)	0,103	0,482	0,082	-	0,082
2	Green Product (x2)	→	Customer Satisfaction (x3)	0,801	****	0,607	-	0,607

3	Product Quality (x1)	→	Repurchase Intention (x4)	0,332	0,008	0,316	-	0,316
4	Green Product (x2)	→	Repurchase Intention (x4)	0,218	0,318	0,207	-	0,207
5	Customer Satisfaction (x3)	→	Repurchase Intention (x4)	0,436	0,039	0,545	-	0,545
Mediation								
6	Product Quality (x1)	→	Customer Satisfaction (x3)			0,317	0,045	0,359
7	Green Product (x2)	→	Customer Satisfaction (x3)			0,208	0,329	0,536

Source: Data Processed (2024)

H1: Product Quality has a positive effect on Repurchase Intention

In this study, this hypothesis has been accepted because the sig.prob = 0.008 is less than 5%. The positive coefficient of 0.332 and the direct effect of 0.316 indicate that repurchase intention will increase by 1 point if product quality increases by 1 point

H2: Product Quality has a positive effect on Customer Satisfaction

In this study, the hypothesis that product quality has a positive effect on customer satisfaction is not supported because sig. prob = 0.482 > 5%.

H3: Green Product has a positive effect on Customer Satisfaction

Because sig. prob is less than 5%, the hypothesis that green product positively impacts customer satisfaction is accepted in this study. The positive coefficient (0.801) and the direct effect of 0.607 indicate that if green product increases by 1 point, customer satisfaction will increase by 0.607 points.

H4: Green Product has a positive effect on Repurchase Intention

The estimation parameter between the green product variable and repurchase intention in this study is rejected because sig. prob = 0.318 > 5%.

H5: Customer Satisfaction has a positive effect on Repurchase Intention

Because sig. prob is less than 5%, the estimation parameter between the customer satisfaction variable and repurchase intention is accepted. The positive coefficient (0.436) and the direct effect of 0.545 indicate that if customer satisfaction increases by one point, repurchase intention will also increase by one point.

Direct Effect, Indirect Effect, and Total Effect

To determine the extent of the influence of exogenous variables on endogenous variables, both directly and indirectly, impact analysis is required. The influence of each exogenous variable on the endogenous variable can be seen directly in the following table: Estimation of Direct and Indirect Effects.

Table 4. Direct Effect, Indirect Effect, and Total Effect

Varlabel Relations hip	Product Quality to Customer Satisfaction	Green Product to Customer Satisfaction	Product Quality to Repurchase Intention	Green Product to Repurchase Intention
Direct Effect	0,11	0,81	0,34	0,23
Indirect Effect	-	-	0,045	0,353
Total	0,11	0,81	0,375	0,573

Source: Data Processed (2024)

From the table above, it can be observed that there is a direct influence of product quality factor on customer satisfaction by

0.11. The direct influence of green product on customer satisfaction is 0.81. The direct influence of product quality on repurchase intention is 0.34. The direct influence of green product on repurchase intention is 0.23, and it can be noted that there is an indirect influence of product quality factor on repurchase intention by 0.045. The indirect influence of green product on repurchase intention is 0.353.

Of all the direct and indirect influences, the green product variable has the greatest influence on customer satisfaction by 0.81, and the greatest influence on repurchase intention by 0.353. Among all influences, the highest value is found in the green product variable on repurchase intention, amounting to 0.572.

Discussion

Product Quality, Customer Satisfaction to Repurchase Intention

Product Quality in this study does not significantly affect customer satisfaction (direct effects are only 0.081 or 8.1%), but it does influence repurchase intention (direct effects are 0.316 or 31.6%). Meanwhile, customer satisfaction affects repurchase intention (direct effects are 0.545 or 54.5%). The total effect of product quality on repurchase intention through customer satisfaction is 0.359 or 35.9%. The above conditions indirectly illustrate that the product quality efforts made by Samsung support the enhancement of competitive advantage, thus improving business performance.

The insignificance of product quality on customer satisfaction is due to the fact that the research subject, Samsung products, are known for their quality. However, competition with other brands is very tight, especially in terms of features and prices offered. Samsung still lags behind its competitors and is known for its high prices but minimal features. On the other hand, product quality and customer satisfaction influence repurchase intention. Moreover, the total influence of product quality, with the mediation of customer satisfaction variable, provides a greater additional impact on repurchase intention compared to the direct influence of product quality on repurchase intention.

Empirical facts from this study indicate that increasing the level of product quality will lead to increased customer satisfaction; therefore, high-quality products are necessary to form high customer satisfaction. In such a situation, the task faced by Samsung as a global brand becomes more challenging, requiring more collaboration and control. Therefore, to address this situation, Samsung must improve customer satisfaction to increase repurchase intention, which currently remains in the category of moderate interest. Top of Form

Green Product, Customer Satisfaction to Repurchase Intention

In this study, Green Product has a significant effect on customer satisfaction (direct effects are 0.607 or 60.7%), but it does not affect repurchase intention (direct effects are only

0.207 or 20.7%). Meanwhile, customer satisfaction affects repurchase intention (direct effects are 0.545 or 54.5%). The total effects of Green Product on repurchase intention through customer satisfaction are 0.536 or 53.6%. The above conditions indirectly illustrate that the Green Product efforts made by Samsung support the enhancement of customer satisfaction, thus increasing repurchase intention. The insignificance of Green Product on repurchase intention may be because Samsung, as the research subject, lacks a strong green campaign. It is still unknown that the Samsung brand also cares about the environment.

Empirical facts from this study indicate that increased use of green products leads to greater customer satisfaction. In other words, increased use of green products is necessary to achieve greater customer satisfaction. There are two ways to increase repurchase intention: internally and externally. Externally, efforts to increase repurchase intention are made by using a culture-oriented approach to green products, which means understanding market needs, desires, and demands while maintaining environmental sustainability. This must be done to increase repurchase intention in its application. Green products also play a significant role and can enhance consumer desire to repurchase Samsung products. Therefore, to address this situation, Samsung must enhance its commitment to Green Products to increase repurchase intention, as currently, the repurchase intention for the Samsung brand remains in the moderate category.

Limitation Of The Study

This study only analyzed the variables of product quality, green product, product quality, customer satisfaction, and repurchase intention. Additionally, this research only collected data in Indonesia, making it only relevant to conditions in Indonesia, while Samsung is a global brand. Therefore, suggestions for future research could include adding other variables not covered in this study and expanding the scope.

Conclusions and Recommendations

The study found that only one factor significantly impacts customer satisfaction: environmentally friendly products. Among product quality and environmentally friendly products, only environmentally friendly products influence competitive advantage. Besides product quality, environmentally friendly products, and customer satisfaction, only environmentally friendly products do not affect repurchase intention. Customer satisfaction (54.3%) has the most direct influence on repurchase intention compared to product quality (31.5%). Conversely, the magnitude of the indirect influence of the environmentally friendly product variable (through customer satisfaction) on repurchase intention (53.4%) has the greatest overall impact compared to product quality (35.8%).

This situation signals for the Samsung brand to increase repurchase intention. Strategies that can be implemented include prioritizing customer satisfaction, which can stimulate repurchase intention over abandoning products, and enhancing product quality and environmental aspects to achieve increased customer satisfaction. This is to further enhance the role of soft products. With the increasing importance of product quality and environmentally friendly products, customer satisfaction will also increase, thereby increasing their interest in repurchasing the Samsung brand.

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