

# Examining the Determinant of Purchase Intention and Purchase Decision for Green Product: SEM Analysis

Isbandriyati Mutmainah<sup>1</sup>, Eha Hasni Wahidhani<sup>2</sup>

Faculty of Economics and Business, Nusa Bangsa University, Bogor, Indonesia

Author Email: [isbandriyati@gmail.com](mailto:isbandriyati@gmail.com)<sup>1</sup>, [ehahasni\\_wahidhani@yahoo.com](mailto:ehahasni_wahidhani@yahoo.com)<sup>2</sup>

**Abstract.** A climate change and global warming have an impact on increasing public awareness of environmental problems. Consumers are becoming more aware that their consumption habits have a direct impact on the environment and are taking on greater responsibility for environmental sustainability. Based on this phenomenon, this study's purpose is to explore the influence of green marketing strategy, green product knowledge, green purchasing behavior toward purchasing intention and decision for green products, among non-member Tupperware consumers. The Structural Equation Modeling analysis method was used for 225 selected respondents were collected through quota sampling and accidental sampling, and submitted online using the google form which were submitted via social media and Whatsapp groups. The finding showed that green purchasing intention directly affects purchasing decision. Green marketing strategies, product knowledge and green purchasing behavior indirectly affects green purchasing decision through mediation of green purchasing intention, with green marketing strategies providing the greatest influence. These results provide information to management with insights into the contribution of green marketing strategy, consumer knowledge of green products, and consumer purchasing behavior in increasing the intention and the decision to buy green products, and encourages stakeholders to improve the green marketing strategy through pro-environment product innovation and promotion to increase the consumers' intent for buy green product.

**Keywords:** Green marketing strategy, green knowledge, green consumer behaviour, green purchasing intention, green purchasing decision

## 1 Introduction

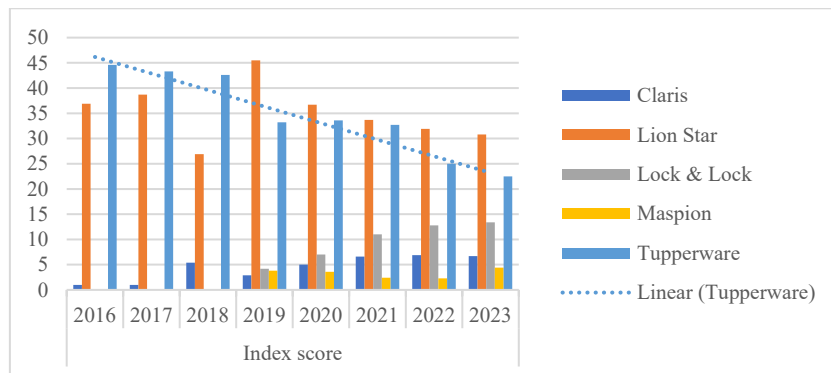
Global warming has an impact on increasing public awareness of environmental issues over the last few decades [1]. This influences consumer decisions to choose safer and friendlier products [2], and encourages consumers to adopt eco-friendly products as a reflection of a healthy lifestyle, thereby protecting the natural environment. The phenomenon of green consumer behavior has changed the marketing model, and green marketing strategies have emerged and become a global issue as a medium to size and win the attention of customers in the market. So, green marketing is no longer an option, it is a requirement. Green marketing, as part of a company's strategy, is concerned with ensuring long-term customer satisfaction through integrated efforts to increase the social and environmental responsibility of organisations, products, services, and communications [3]. Green marketing is an effective method for promoting products, services, and business ideas, by highlighting their contributions to environmental conservation [4], and is an alternative strategy for enhancing not only a company's image but also its business value. Consumer demands for green products have finally forced companies to concentrate more on environmental issues in their production [5].

Green purchasing and marketing concepts are gradually gaining popularity, including at the research [6]. Many research has indicated that not only do consumers prefer eco-friendly products, but they also respond positively to companies that adopt environmentally friendly practices [7]. They are becoming more attentive to environmental sustainability and understand that both the production processes of companies and their consumption activities will have a direct impact on the environment, so they are starting to demand eco-friendly products [1]. Many green purchasing and marketing research have been conducted to investigate the consumer reasons for purchasing a green product, such as [8], who claims that consumer awareness, consumption trends, reference groups, government policies, demand for green products, and economic factors are determinants of consumer intention to purchase a green product in Vietnam. According to [9], interpersonal influence, altruistic values, and environmental attitude are other determinants of intention to purchase green products.

Tupperware, is a popular brand of household products in the form of food and beverage storage and serving equipment made from plastic that is flexible, strong, non-greasy, clear, safe, light and odorless

([www.tupperware.co.id](http://www.tupperware.co.id)). Tupperware-forming plastics are bioplastics, a mixture of vegetables and fruits that are tested as safe for food, for health and environmentally friendly, of the highest quality, which comply with FDA, EFSA and JFC requirements. In addition to being safe for multiple uses with food and beverages and environmentally friendly, Tupperware brand products are also hygienic and eco-designed. Unusable Tupperware products can be recycled into other items such as trash cans, plastic benches, plant pots, and more. With a Tupperware party sales system and a lifetime warranty facility, Tupperware products are well known and used by the public and are marketed to more than 100 countries around the world, including Indonesia.

In Indonesia, since it was marketed in 1991 until now Tupperware brand products have always been the people’s first choice, and the Top Brand Award places Tupperware products as one of the most sought-after products. After years of being top of mind until 2018, since 2019 there has been a declining trend in brand performance, as illustrated in Figure 1. This decline is not only due to the emergence of competing products but also by the wider public knowledge and information regarding environmentally friendly products from the incessant promotions and mass media articles, so that it becomes a consideration for consumers in making purchasing decisions. If it is not careful and do not innovate, it is possible that the brand’s performance will decrease. Aside from the increasing intensity of competition, there are some of Tupperware’s marketing strategy management mistakes include a lack of product innovation, an inability to adapt to the rapidly evolving digital era, and the selection of an overly narrow target market, namely housewives. Tupperware management failed to keep up with changing consumer trends and preferences, causing the company to lose favour with younger customers. Furthermore, in this digital age, Tupperware continues to rely on traditional marketing methods like home meetings and physical catalogues, whereas competitors have shifted to digital platforms to reach consumers. Tupperware also limits its growth potential and misses opportunities to reach diverse customers by targeting only housewives. Tupperware’s image as a brand associated with housewives makes the product less appealing to millennials and generation Z consumers. Additionally, widespread public awareness and information about eco-friendly products as a result of aggressive promotions and media articles influences consumer purchasing decisions. Adopting a green marketing strategy is a critical innovation that Tupperware must implement. Green marketing is a marketing strategy that raises awareness about the impact of commercial activities on global warming and environmental damage [10]. As a result, marketing orientation must also be able to persuade the public that the marketing mix offered is environmentally sustainable. Given the growing consumer interest in eco-friendly businesses, this strategy is highly relevant.



**Figure 1.** Brand Index Comparison for Household Product Brands (Top Brand Award 2023)

Green product knowledge has an important role in green purchasing decision and is considered a prerequisite variable for eco-friendly purchasing intentions [11],[12]. Green product knowledge refers to consumers’ perceptions of eco-friendly products, including their experiences with the products. A consumer will purchase eco-friendly products if they care about the environment, are aware of environmental issues, or understand that the product they will purchase is eco-friendly [13]. Consumers will feel more comfortable using a product if they are aware of its ingredients or quality, including its impact to environment. Consumer’ green product knowledge also helps in evaluating and measuring the benefits gained from using these products. It also influences consumers’ intentions to make repeat purchases. Understanding consumer knowledge of green products is essential information for company management as it forms the basis for developing strategies to maintain and enhance consumers’ intentions to purchase these products. However, several studies have found that there is a complex relationship between knowledge and purchasing decisions, where knowledge does not always influence decision making [14],[15]. For this reason, there are still questions regarding the existence of other key variables involved in the relationship between eco-friendly product knowledge and eco-friendly purchasing decisions.

The phenomenon of changing consumer behaviour, which prioritises environmental and social values in purchasing decisions, will generate new demand for eco-friendly products and have a significant impact on global marketing models. Companies will respond to changes in consumer behaviour by focusing on innovation and the development of more eco-friendly products, incorporating environmental values into their brands, demonstrating tangible evidence of their positive contributions to society and the environment, and emphasising transparency and clarity about product and business practices. The phenomenon of eco-friendly consumer behaviour will drive businesses to change their marketing strategies, with sustainability becoming one of the key pillars of their business strategies.

Research on consumer behavior toward eco-friendly products is crucial because it has significant implications not only for business decisions but also for the environment and society as a whole. Extensive management knowledge about consumer behavior and preferences for eco-friendly products helps management understand the factors influencing consumers' decisions to purchase eco-friendly products. This understanding enables companies to develop more effective marketing strategies to attract and retain customers, while also supporting and contributing to environmental conservation efforts. Such strategies have the potential to enhance the company's image and have a positive impact on its corporate social responsibility. Given the trend of Tupperware brand performance from year to year, it is necessary to conduct additional research into the purchase decision of Tupperware brand products. In the decision-making process, the purchase decision is the stage where consumers actually buy the Tupperware brand product. Furthermore, it is not just a purchasing activity, but also how the position of the Tupperware brand in the consumers minds, purchasing behavior, and commitment to repurchase. Taking into the increasing public awareness of environmentally friendly products on the one hand, and the declining performance of the Tupperware brand in the last three years, on the other hand, an analysis of purchasing decisions and the factors that influence them is important to do.

Research on the influence of green marketing and consumer knowledge on eco-friendly products is essential as it directly impacts consumers' intention and purchasing decisions. Along with increasing public awareness of health and environmental sustainability, understanding consumer behavior and how companies develop strategies of green marketing to attract potential consumers has been and will continue to be an interesting research topic [5]. The purpose of this research is to investigate and analyze the influence of the green marketing strategy applied by the company and consumer knowledge of environmentally friendly products on purchasing decisions for Tupperware brand products, by mediating purchase behavior and purchasing intention. The results of this research are expected to strengthen previous research both in marketing research as well as in the managerial decision making. At the research level, this study's findings are expected to strengthen previous research about how consumers perceive environmentally friendly products, the positive the impact of green marketing strategy, consumers' green knowledge, and consumers' green purchasing behavior on purchasing decisions of eco-friendly products. The findings of research on the impact of green marketing also help companies better understand their market and consumers, identify the most effective elements of green marketing, and make informed decisions in designing marketing strategies and managing their product portfolios. Research results on the influence of consumer knowledge about eco-friendly products help identify the level of consumer understanding of environmental issues and provide insights into how companies can better educate consumers to enhance their understanding.

## **2 Theoretical Basis**

### **2.1 Green Purchasing Decision**

Environmentally conscious consumers tend to avoid consuming products that are believed to cause severe damage to the environment, both in processing, consumption and waste or waste [16], and will only consume products that have no impact, or at least, have a very small impact on environmental damage. Green consumer behavior in making purchasing decisions is not only caused by the need for these products, but also due to their concern for the sustainability of environment. Green purchasing refers to the activity of buying green products by consumers in an effort to protect the environment and simultaneously save resources and protect the environment [6]. The decision to purchase environmentally friendly products means that consumers are adding environmental impact as a criterion for buying a product [17]. Internal factors and external factors are the two main factors that influence consumers' decisions to buy eco-friendly products. Internal factors are a set of factors associated with consumers, such as psychological factors for responsibility and care for the environment, lifestyle, behavior, attitudes, values and beliefs [18], [19],[6]. While external factors encompass product features such as product quality, efficiency, marketing strategies, as well as ease and economic factors [19]. In line with the description of the influence of green purchasing intention on green purchasing decision, this study develop the following hypothesis:

H1: Green purchasing intention has a significant impact on green purchasing decisions.

## 2.2 Green Purchasing Intention

Purchase intention represents the readiness of consumers to buy a product [20]. Consumer purchase intention describes efforts to buy a product or service after conducting an analysis of the background of buying the product [21], and is a process in which consumers use their knowledge of the product, compare products with other similar products, and this knowledge becomes considerations in making purchasing decisions on the product to be purchased. Green purchasing intention describes how consumers will purchase a product, representing their concern for environmental sustainability and reflecting consumers' willingness to buy from companies they believe as eco-friendly [22] in the future or for a certain period, but however, there is no guarantee that customers will buy products that environmentally friendly [23]. Green purchasing intention is also considered as a consumer's tendency to buy environmentally friendly products, as a reflection of attitudes that express their concern for nature [24]. And in recent years, consumer awareness of purchasing environmentally friendly products has increased [25]. The intention to buy green products is influenced by many factors [26], including attention to green products, dependency on the product, sales promotion, and perceived quality, all of which affect how consumers feel about buying green products [27]. According to the description of the relationship between green purchase intention, green marketing, green purchase behavior and knowledge about green products, this study hypothesizes the following:

H2: green marketing has a significant effect on green purchase intention

H3: green purchase behavior has a significant effect on green purchase intention

H4: green product knowledge has a significant effect on green purchase intention

## 2.3 Green Purchasing Behavior

[28] define consumer purchasing behavior as a combination of consumer attitudes, preferences, intention, and decision in the market. Behavior of consumer in making purchases is essentially to understand why consumers buy or not buy goods or services. In relation to green products, a person who avoids all products that can cause environmental damage is identified as a green consumer [29]. Consumers with a strong environmental awareness try to consider the social effects of their purchasing behavior. In the context of green products, green purchasing behavior refers to consuming products that are beneficial not only for the consumer but also for the environment, demonstrating a positive attitude toward the environment [30]. Likewise, consumer behavior in purchasing eco-friendly products, which can be recycled and are beneficial to the environment, also describes green purchasing behavior [31]. Environmentally friendly purchasing behavior is usually evaluated by consumers' intention and willingness to buy eco-friendly products, and then converted into environmentally friendly purchasing behavior, which ultimately leads customers to purchase those environmentally friendly products [32]. Purchasing behavior is not only influenced by attitudes, but also by green marketing and consumer knowledge of green products [33], [34], [31], [35]. According to the description of the relationship between consumer green buying behavior, green marketing and green product knowledge, this study develop the following hypothesizes:

H5: green marketing has a significant effect on green purchasing behavior

H6: green product knowledge has a significant effect on green purchasing behavior

## 2.4 Green Marketing

A green marketing strategy is a comprehensive management process that is tasked with identifying, anticipating and sustainably responding to customer needs, and describing marketing that recognizes concern to environment as the business development responsibility [36]. Green marketing is not just related to sales and advertising, but consists of all marketing activities combined with various activities that do not have a negative effect on the environment [37], thus providing opportunities for business people to innovate and be creative by inviting consumers to consume eco-friendly products and to be responsible for the environment. Green marketing is eco-friendly marketing that combines many activities such as product modification, manufacturing process, packaging process, advertising strategies, and increasing compliance marketing awareness in various industries [4]. [3] states that four aspects are used as green marketing tools: green product, green price, green location, and green promotion. [38] argued that there is a influence marketing strategy and customers' intentions to purchase environmentally friendly products. Green marketing's success, which marketers use to raise consumer awareness of green brands, influences consumers' decisions to buy green products [39].

## 2.5 Green Product Knowledge

Consumer knowledge encompasses all the information that consumers possess about various products and services, particularly those related to such products and services. Consumer knowledge about a product simplifies the decision-making process when it comes to making a purchase, as consumers become more realistic and capable of making informed product choices. Regarding consumer knowledge about environmentally friendly products, 'green product knowledge' refers to an individual's level of understanding of green products and their environmental impacts in comparison to non-green products [12], [40]. Consumers' familiarity with green products increases their tendency toward environmentally friendly purchasing behavior [40]. Green product knowledge is also often associated with consumers' intentions to purchase environmentally friendly items [12], [15]. However, in the realm of research, the impact of knowledge on purchase intention and decisions is still debated and lacks consistency. Studies by [15] [40], [41], and [13] indicate that an individual's knowledge of environmentally friendly products influences consumers' decisions to purchase such products. The higher consumers' knowledge about the environment and how products affect it, the greater their interest in buying environmentally friendly products [42]. In contrast, research by [43] suggests that green product knowledge doesn't directly contribute to purchase intention and decisions unless mediated by trust.

## 2.6 Research Conceptual Framework

Awareness of sustainability makes a change in people's behavior in making purchases, where the attention to environmentally friendly products is getting bigger. Thus, environmental-friendly product issues can become a strategy in capturing consumers. The purpose of this study is to investigate the impact of green marketing strategies and knowledge about green products on environmentally friendly purchasing decisions through green purchasing behaviour and intention. When a more effective green marketing strategy is in place, customers are more likely to behave positively towards eco-friendly products, have higher intention to buy eco-friendly products, and have more opportunities to buy eco-friendly products. Consumers is more likely to act responsibly towards eco-friendly products, have higher intention to buy these products, and have more opportunities to buy these products, when they have more knowledge about eco-friendly products. In simple terms, the following figure illustrates the link between the variables of green marketing, green product knowledge, green purchasing behaviour, green purchasing intention, and green purchasing choice.

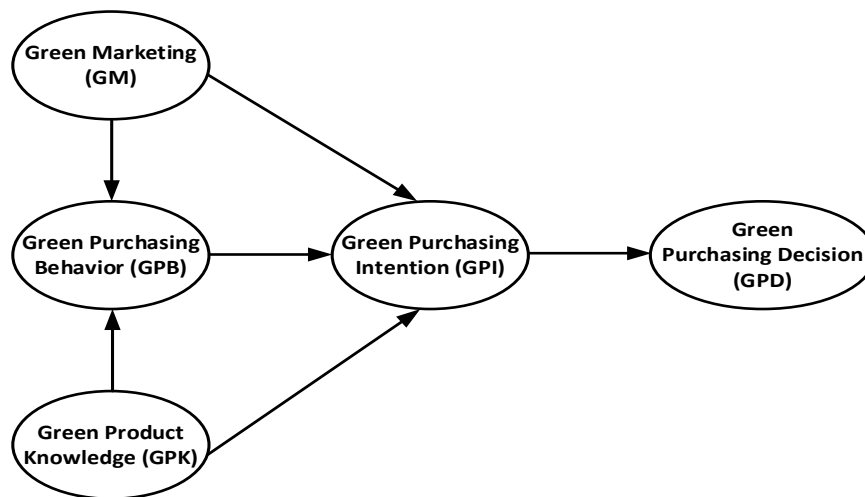


Figure 2. Model of Purchasing Decisions for Environmentally Friendly Products

## 3 Methodology

The purpose of this study is to investigate the impact of green marketing strategy and green product knowledge on purchasing intentions and decisions for eco-friendly products, as well as to validate the developed model of green product purchasing decisions. Because the variables in this study are latent and cannot be directly observed, manifest variables must be used as indicators to measure latent variables. In this study, the indicators for the green marketing variable are based on the concept of the green marketing mix developed by [44 ], and the indicators for green product knowledge are based on the concept of green product knowledge

developed by [40]. The purchasing behaviour indicators are based on the concept of purchasing behaviour developed by [30], the purchase intention indicators are based on the concept of green purchase intention developed by [23], and the green purchasing decisions indicators are based on the concept of green purchasing decisions developed by [6].

This research is a quantitative study, utilizing empirical data to explain phenomena. It is also a confirmatory research, with the aim of confirming the research model established in this study. Primary data were gathered for this study by giving questionnaires to pre-selected respondents. Due to the ongoing COVID-19 pandemic, which has created obstacles for direct communication with potential respondents, the questionnaires will be distributed using Google Forms through social media and WhatsApp groups. A Likert scale with five categories-Strongly Agree/Always (5), Agree/Often (4), Neutral (3), Disagree/Rarely(2), and Strongly Disagree/Never (1)-is used in the design of the surveys.

The population of this study consists of all non-member Tupperware consumers residing in the Jakarta, Bogor, Depok, Tangerang, and Bekasi regions. Non-member consumers were selected with the assumption that in this group, purchasing decisions for Tupperware brand products are made based on physical needs or benefits rather than financial considerations. The sampling method used is a combination of quota sampling and accidental sampling. Quota sampling is employed due to the analysis method used, Structural Equation Modeling, which requires a data size of over 200 to obtain a valid model. Therefore, a minimum sample size of 200 respondents was determined. Accidental sampling is chosen because accurate information about who constitutes non-member Tupperware consumers is not readily available. The survey was carried out over a three-month period, from May to August 2022, with 300 questionnaires distributed. After data cleaning, the valid data used in this study was 225 respondents.

SEM tests and analyses data in two stages: measurement model and structural model testing. The measurement model is tested using CFA to ensure the reliability and validity of the research data [45]. Internal consistency reliability of scales measuring each dimension is assessed by calculating CR with a standard of greater than 0.60, and convergent validity is assessed by calculating the standard factor loading of items that should be greater than 0.50 [45], [46], [47]. A goodness-of-fit test is used to determine whether the sample covariance matrix is consistent with population estimates. There are three types of fit tests: absolute, incremental, and parsimonious fit. The causal relationships between variables - green marketing strategy (GMS), green product knowledge (GPK), green purchasing behaviour (GPB), green purchasing intention (GPI), and green purchasing decision (GPD) - as outlined in the research model, are tested by comparing the t-value to their critical values.

**Tabl3 1.** Goodness of Fit Indices

Fit Indices	Acceptable level of conformity
	Absolute Fit
X <sup>2</sup>	The lower value, the better.
p-value	P-value ≥ 0.05
GFI	GFI ≥ 0.90 indicates good fit; 0.08 ≤ GFI ≤ 0.90 indicates marginal fit
RMSEA	RMSEA ≤ 0.08 indicates good fit; RMSEA ≤ 0.05 indicates close fit
	Incremental Fit
AGFI	GFI ≥ 0.90 indicates good fit; 0.08 ≤ GFI ≤ 0.90 indicates marginal fit
NFI	NFI ≥ 0.90 good fit; 0.80 ≤ NFI < 0.90 is marginal fit
CFI	CFI value ≥ 0.90 indicates good fit; 0.08 ≤ CFI ≤ 0.90 indicates marginal fit
IFI	IFI ≥ 0.90 indicates good fit; 0.08 ≤ IFI ≤ 0.90 indicates marginal fit
	Parsimony Conformity Size
PNFI	PNFI ≥ 0.90 good fit; 0.80 ≤ PNFI < 0.90 is marginal fit

## 4 Results and Discussion

### 4.1 Characteristics of Respondents

The demographic characteristics of the respondents are shown in the table below. Based on the demographic data, 58.67% of the respondents are female, while 41.33% are male, and the majority are between the ages of 20 and 29. The majority of respondents (76.45%) reside in the city and district of Bogor. Regarding employment status, most respondents are students and private sector employees, with income levels varying from below 1.5 million rupiahs to above 5 million rupiahs, with the majority earning below 1.5 million rupiahs.

**Table 2.** Characteristics of research respondents

Dimensions	Frequence	%
Characteristics by gender		
Man	93	41.33
Woman	132	58.67
Characteristics by age (years old)		
<20	13	5.78
20-29	158	70.22
30-39	12	5.33
40-49	29	12.89
>50	13	5.78
Characteristics by place (City)		
DKI Jakarta	17	7.56
Bogor	87	38.67
Bogor District	85	37.78
Depok	10	4.44
Tangerang	11	4.89
Bekasi	7	3.11
Bekasi District	8	3.56
Characteristics by job		
Students	117	52.00
Government Employee	17	7.56
Private Sector Employee	52	23.11
Business Owner	17	7.56
Others	22	9.78
Characteristics by income (IDR)		
<1.500.000	93	41.33
1.500.000 - 2.500.000	32	14.22
2.500.001 - 3.500.000	26	11.56
3.500.001 - 4.500.000	24	10.67
4.500.001 - 5.000.000	10	4.44
>5.000.000	40	17.78

## 4.2 Measurement Model of Green Product Purchasing Decisions

Based on the testing of the measurement model, it is possible to conclude that the data used in this study is valid and reliable. This is evidenced by standardised factor loading coefficients greater than 0.5 and CR coefficients greater than 0.6. Table 3 presents the results in more detail.

**Table 3.** Results of Validity and Reliability Tests for Research Variable Indicators

Latent variabels	Indicators	SFL	t value	CR	Latent variabels	Indicators	SFL	t value	CR
GPD	GPD_1	0.84	14.81	0.87	GMS	GMS_1	0.65	10.48	0.91
	GPD_2	0.67	10.87			GMS_2	0.74	10.54	
	GPD_3	0.88	15.85			GMS_3	0.64	10.40	
	GPD_4	0.76	12.90			GMS_4	0.69	11.34	
GPI	GPI_1	0.76	12.24	0.82	GMS_5	0.57	8.95		
	GPI_2	0.72	11.55		GMS_6	0.62	9.96		
	GPI_3	0.84	13.98		GMS_7	0.68	11.24		
	GPI_4	0.56	8.33		GMS_8	0.56	8.83		
GPB	GPB_1	0.70	10.99	0.83	GMS_9	0.61	9.70		
	GPB_2	0.73	11.66		GMS_10	0.54	8.48		
	GPB_3	0.74	11.97		GMS_11	0.57	8.91		
	GPB_4	0.81	13.26		GMS_12	0.64	10.39		
GPK	GPK_1	0.75	12.34	0.84	GMS_13	0.50	7.76		
	GPK_2	0.90	15.70		GMS_14	0.53	8.14		
	GPK_3	0.68	10.76		GMS_15	0.64	10.29		
	GPK_4	0.62	9.62		GMS_16	0.65	10.55		

### 4.3 Structural Model of Green Product Purchasing Decisions

Table 4 shows that the goodness of fit test results for the entire model indicate that the null hypothesis, where the population covariance matrix equals the sample covariance matrix, is accepted. In other words, the structural model developed in this research can be used to estimate the structure or diversity of the population.

**Table 4.** Goodness of Fit Indices Model of Green Product Purchasing Decisions

Fit Indices	Value	Result
Absoute fit		
X <sup>2</sup>	935.13	good fit
P-value	0.00	good fit
GFI	0.80	marginal fit
RMSEA	0.07	good fit
Incremental fit		
AGFI	0.74	marginal fit
NFI	0.95	good fit
CFI	0.97	good fit
IFI	0.97	good fit
Parsimony fit		
PNFI	0.80	marginal fit

The analysis of the causal relationships between the identified latent variables is conducted by examining the coefficients of the structural equation as well as the t-value, as depicted in the figure below.



**Figure 3.** Structural model of purchasing decisions for Tupperware brand products

Figure 2 shows a strong relationship pattern in green product purchase decisions based on structural model coefficients, which is mediated by green purchase intention (GPI). Green marketing (GM), green purchasing behavior (GPB), and green product knowledge (GPK) significantly affect green purchasing decisions (GPD) through the mediation of green purchase intention (GPI). The relationship patterns for all latent variables and the extent of each latent variable’s contribution can be viewed in Table 5 and will be discussed sequentially as follows.

**Table 5.** Relationship of Latent Variables in the Purchasing Decision Model

No	Path	Direct effect	Indirect effect
1	GPI → GPD	0.93	
2	GPB → GPI	-0.26	
3	GPB → GPI → GPD		-0.24
4	GMS → GPI	0.84	



No	Path	Direct effect	Indirect effect
5	GMS → GPI → GPD		0.78
6	GMS → GPB	0.27	
7	GMS → GPB → GPI → GPD		-0.06
8	GPK → GPI	0.34	
9	GPK → GPI → GPD		0.31
10	GPK → GPB	0.64	
11	GPK → GPB → GPI → GPD		-0.15

## 4.4 Discussion

### 4.4.1 Green Purchasing Decisions Are Directly Influenced by Green Purchasing Intentions

The structural equation model for green purchasing decisions resulting from this study reveals that the green purchasing intention has a positive, direct and significant influence on green purchasing decisions with a coefficient of 0.93. The greater the consumer’s intent to purchase green products, the greater the opportunity for consumers to make a purchasing decision for environmentally friendly products. Purchase intention, as described by [48], is generally related to consumers’ attitudes and opinions about specific products or services and how willing they are to buy those products in the future. Intention to buy is not always followed by a purchase decision, but the intention generally makes consumers try to make it happen by making a purchase. Purchase intention is the most important determinant in consumers’ purchasing decisions making process. The findings of this research support the results of studies conducted by [49], [35], [50], [21].

The first indicator in describing consumer purchase intentions for Tupperware brand products is that consumers want to buy Tupperware brand products because the products are environmentally friendly. Tupperware is a brand of household equipment consisting of kitchen utensils and various food and beverage containers that are known for being made of high-quality, safe and durable materials as in the catalog descriptions and explanations from Tupperware members. In normal conditions, Tupperware brand products can last for more than 10 years. Therefore, using Tupperware brand products not only ensures user safety but also contributes to environmental sustainability by minimizing plastic waste. With the increasing awareness among the public about the importance of consuming or using environmentally friendly products, consumer intent to purchase environmentally friendly products, including Tupperware, has also increased. And the increase in consumer intention to consume Tupperware brand products will be an incentive for consumers to purchase these products. So that the more interested consumers are in Tupperware brand products, the greater the opportunity to buy these products. The increased intention of consumers to use Tupperware brand products serves as a motivation for them to make a purchase. Thus, the more interested consumers are in Tupperware products, the greater the likelihood of them buying these products.

The second indicator is the willingness of consumers to recommend Tupperware brand products to others. Consumers’ willingness to recommend a product to others indicates that these consumers are already aware of, have gathered information about, or have personal experience using the product. This applies to consumers of Tupperware brand products as well. When consumers of Tupperware brand products are increasingly willing to recommend them to others for purchase, it means that they are also willing to buy Tupperware brand products. The greater their willingness to recommend Tupperware brand products to others, the higher the chance of them making the decision to purchase Tupperware products.

The third indicator is that eco-friendly products, such as Tupperware brand products, are more attractive than others. Household products from Tupperware brand have advantages when compared to other household products. First, Tupperware products are environmentally friendly, both in terms of user safety and their impact on environmental pollution. Second, there is a continuous innovation in Tupperware brand products in terms of utility, design, and colors. The combination of these factors makes Tupperware brand products more attractive compared to other brands. Data from Top Brand 2015-2021 Phase 1 shows that Tupperware brand products have the highest market share. Therefore, the more attractive Tupperware brand products are to consumers, the greater the opportunity that those consumers will make the decision to purchase.

The fourth indicator is that consumers seek information about Tupperware brand products from those who have already used them. Information about a product from consumers who have used or experienced it, or from a reference group, is considered valid information and serves as a reference or point of reference. When consumers inquire about Tupperware brand products from those who have used them, it can be interpreted that they are interested in those products and are seeking further information. The more they seek information and gather comprehensive details, the greater the likelihood of them making a purchase decision.

#### 4.4.2 Green Purchasing Decisions Are Indirectly Influenced by Green Marketing Strategy, Green Purchasing Behavior and Green Product Knowledge

Aside from the directly influence of consumer's green purchasing intention toward green purchasing decisions, the research findings show that there are other latent variables that influence green purchasing decisions indirectly. Green marketing variable influences green purchasing decisions through the mediation of green purchasing behavior and intention. Green purchasing decisions are affected by the green product knowledge variable through the mediation of green purchasing behaviour and intention. As stated in Table 6, of these two pathways, the path green marketing → green purchasing intention → green purchasing decision has the highest coefficient.

**Table 6.** Indirect Influence of Green Marketing, Green Purchasing Behavior, and Green Product Knowledge on Green Purchasing Decisions

No	Path	Coef.
1	GPB → GPI → GPD	-0.24
2	GMS → GPI → GPD	0.78
3	GMS → GPB → GPI → GPD	-0.06
4	GPK → GPI → GPD	0.31
5	GPK → GPB → GPI → GPD	-0.15

The indirect influence of green purchasing behavior toward green purchasing decisions through green purchasing intention mediation is (-0.24). The negative effect coefficient shows that if consumers have higher standards of safe and environmentally friendly products, then purchase intention will decrease if respondents' perceptions of quality and information about Tupperware brand products do not match the standards set, thereby reducing the opportunity for consumers to make purchasing decisions. Purchasing behavior is related to consumer caution towards the product to be purchased related to expectations for the product. Purchasing behavior is done by evaluating the product with the specified ideal standard. Thus, the higher the product standard set, the more careful consumers are towards the product, the lower the purchase intention if the product does not meet the standard of expectation, thus the lower the chance of a purchase decision.

The green marketing influences the decision to buy green product indirectly through the mediation of green purchasing intention, with a coefficient of 0.78. The more effective the green marketing strategy, the greater the consumer's intent to purchase eco-friendly products, thus the greater the opportunity of consumer decision-making to buy these products. This positive influence shows that the 4P strategy implemented (product, price, place and promotion) which is environmentally oriented is able to convince and increase consumer interest in buying so that they make a decision to buy. As stated by [50] that with a green marketing strategy, companies recommend consumers to use eco-friendly products, for example products that can be refilled, are friendly to ozone, safe for health, and can be recycled. And the study's results of this study support that statement. Green marketing strategy includes green product, green price, green location and green promotion strategies. The green product strategy, in which Tupperware brand products are described as safe and environmentally friendly, has succeeded in attracting consumers who have a preference for environmentally friendly products to purchase these products, thereby increasing the chances of making a purchasing decision. The green pricing strategy, which persuades consumers and potential customers that Tupperware product prices are in line with product quality, safety assurance, and environmental friendliness, has successfully enticed consumer interest in purchasing these products, thus increasing their chances of making a purchase decision. The green place strategy, where sales are made using a member system with a large number of members in various regions, makes it easy for consumers or potential consumers to find places to buy Tupperware brand products. The green promotion strategy, where information is readily accessible to consumers through catalogs available on the Tupperware website or provided for free by members, is a special attraction for consumers, because consumers and potential consumers find it easier to choose the products they want.

Green marketing influences green purchasing decisions indirectly through green purchasing mediation behavior and green purchasing intention with a coefficient of (-0.06). The negative influence is due to green marketing's negative impact on green purchasing behaviour. Green marketing strategies are able to change consumer behavior in purchasing products that are increasingly environmentally oriented. On the other hand, this change in behavior actually reduces consumers' interest in buying. Therefore, green marketing will have a negative impact on purchasing decisions if there is a change in consumer evaluation standards for environmentally friendly products.

Consumers' green product knowledge influences green purchasing decisions indirectly via the mediation of green purchasing intention, with a coefficient of 0.31. The more comprehensive the consumer's knowledge of

Tupperware brand products, the greater intention of consumer in purchasing the product, the greater the opportunity of consumer to make a purchasing decision. Consumers who are aware that Tupperware brand products are environmentally friendly will have a higher purchase intention if they are aware of the characteristics of eco-friendly products and products that are harmful to the environment, and they active in preserving the environment and promoting the culture of consuming safe products. As a result, the opportunity of consumers making a purchasing decision increase.

Green product knowledge indirectly affects green purchasing decisions through green purchasing behavior and green purchasing intention mediation, with a coefficient of 0.15. The more comprehensive consumers' knowledge of Tupperware brand products with regard to environmentally friendly products, the more discerning consumers will be when purchasing Tupperware brand products to ensure they consistently meet the environmental standards they set. As their standards become higher, their interest in making a purchase diminishes if the Tupperware brand product does not meet those standards, resulting in a reduced the opportunity of making a purchasing decision.

#### 4.4.3 Green Purchasing Intention is Affected by Green Marketing, Green Purchasing Behavior, and Green Knowledge

Intention in buying Tupperware brand products is directly affected by green marketing strategy, green purchasing behavior and green product knowledge of consumers with different coefficients and levels of significance. Of the three variables that directly influence purchase intention, the green marketing strategy has the greatest influence.

**Table 7.** The Effect of Green Marketing Strategy, Green Purchase Behavior, and Green Product Knowledge on Green Purchasing Intention

No	Path	Coefficient
1	GPB → GPI	-0.26
2	GMS → GPI	0.84
3	GPK → GPI	0.34

The green marketing strategy influences directly on green purchasing intention with a coefficient of 0.84. The more effective green marketing strategies are implemented, the more likely consumers are to purchase Tupperware brand products. The green marketing mix is a combination of strategies that can be controlled by the company, incorporating environmentally friendly concepts into every aspect of strategy, including product, price, place, and promotion strategies. Tupperware brand product innovations development go beyond functionality and aesthetics, they also ensure product safety for users and environmental sustainability. These innovations may result in higher prices for Tupperware brand products compared to similar products from different brands. However, by effectively targeting their market, the relatively higher price does not deter consumer interest in purchasing. In terms of place strategy, Tupperware utilizes a membership system to facilitate non-member consumers in obtaining information and products easily. The more members there are, the easier it is for consumers to access the products, increasing consumer interest in buying. Regarding promotion strategy, Tupperware primarily promotes its products through parties. Tupperware members host or attend community events to showcase the use of Tupperware brand products, which can be seen directly, or through direct selling. The more parties conducted, the easier it is for potential consumers to obtain information about Tupperware and the products they need, leading to greater purchasing interest. The study's findings support previous research conducted by [36], [38], and [51].

Green purchasing behavior influences green purchasing intention directly with a coefficient of (-0.26). This means that green purchasing behavior of consumers, which always considers product safety for both consumers and the environment with increasingly higher standards, will reduce interest in purchasing Tupperware products if producers do not make innovations related to product safety for consumers and the environment, both product innovation and promotional media. . In recent years, alternative household products have emerged besides the Tupperware brand which also provide guarantees as environmentally friendly products, with intensive promotional activities. The result is that even though it is still the top brand until 2021, its market share is decreasing. Even for food container products, since 2019 the top brand position has been shifted by the Lion Star brand. The results of this study support research from [52], [53].

Green product knowledge directly influences purchase intention with a coefficient of 0.34. The more consumers who are aware of Tupperware brand products, the more interested they are in purchasing Tupperware products. Product knowledge encompasses all accurate information stored in a consumer's memory about a product, providing them with an understanding and confidence in the product. Knowledge about a product can

arise from consumers’ subjective perceptions, objective evaluations of a product, or their personal experiences when using a product. Therefore, the more information consumers acquire from personal assessments, objective evaluations, or personal experiences regarding the safety of Tupperware products for consumers and the environment, the greater their intention in purchasing Tupperware products. The study’s finding support previous research conducted by [54], [55], [56], [57], and [42].

#### 4.4.4 Green Purchasing Behavior is Affected by Green Marketing Strategy and Green Product Knowledge

Green marketing strategy and knowledge of green products have a direct effect on green purchasing behaviour, with different coefficients and levels of significance. Of the two variables that directly influence green purchasing behavior, the green product knowledge variable has the greatest influence.

**Table 8.** The influence of green marketing and green product knowledge on green purchasing behavior

No	Path	Coefficients
1	GMS → GPB	0.27
2	GPK → GPB	0.64

Green product knowledge directly influences green purchasing behavior with a coefficient of 0.64. The broader and more extensive a consumer’s knowledge is about Tupperware brand products, the more it fosters their confidence in their product choices when they are considering purchasing Tupperware brand products. Green product knowledge encompasses all accurate information stored in a consumer’s memory about a product, providing them with an understanding and confidence in the product. Knowledge about a product can arise from consumers’ subjective perceptions, objective evaluations of a product, or their personal experiences when using a product. The study’s finding support previous research conducted by [31], and [35].

Green marketing directly affects green purchasing behavior with a coefficient of 0.27. The more effectively green marketing strategies are implemented, the more confident consumers become in their product choices when they desire to purchase Tupperware brand products. The study’s finding support previous research conducted by [58] and [33], which found that green marketing strategies have a positive and significant effect on purchasing behaviour.

## 5 Conclusions

This study’s purpose is to investigate the impact of green marketing, green product knowledge, and green purchasing behaviour on Tupperware product green purchasing intention and decision. The study’s findings indicate that the model is fit. Green purchasing decision is significantly affected by green purchasing intention. Green product knowledge, green purchasing behaviour, and green marketing strategies all affect significantly on green purchasing decisions through the mediation of green purchasing intentions. Green marketing strategies and product knowledge have a significant effect on green purchasing behaviour.

Tupperware management must develop a green marketing mix strategy to maintain consumer purchasing intention, given the increasing number of competitors on the market. In a competitive environment, product and promotional strategy innovation through IT optimisation is critical. Generation Z respondents and different types of products can be used in future research to gain a more comprehensive understanding of Generation Z consumption behaviour towards eco-friendly products.

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