

The impact of green marketing on customer purchasing behavior in the cosmetic industry in Vietnam

Hoa Tran

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Description



Hoa Tran

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Abstract

The growing relevance of environmental challenges compels cosmetic businesses in Vietnam to increase emphasis on the adoption of environmentally friendly marketing strategies. Two key goals will be emphasized throughout the thesis. Firstly, it would examine the connection between green marketing and customer purchasing behavior. Secondly, determining Vietnamese Millennials and Gen Z consumers' perspectives, related to green cosmetics.

Concepts from the theoretical literature are related to green marketing, green purchasing behavior, and green cosmetics. Besides, the empirical section utilized primarily quantitative research methods, which were conducted through an online survey. The survey illustrates the degree of green marketing strategy (4Ps) impact on consumer purchasing behavior as well as the relationships between the demography and psychological factors with environmentally conscious consumer behavior.

As a result, there is no significant difference between Millennials and Gen Z in their green buying behavior. Because of greater consumer knowledge and a desire to buy items that align with their ideals and values, the demand for green cosmetics has grown. Although the price is important, most purchasers would pay more for environmentally friendly cosmetics provided they match their needs for branding, quality, and advantages. Besides, green promotion could also influence Vietnamese customers by raising environmental awareness and encouraging purchases. This study may assist marketers in the cosmetic industry in Vietnam in gaining a deeper understanding of green customers and continuously enhancing their products in the future.

Keywords/tags

Green marketing, green buying behavior, green cosmetics, Vietnam.

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1 Introduction

1.1 Background

Industrialization and modernization are intensively employed in the modern world. The environment is subjected to a considerable amount of stress. The level of environmental stress has been increasing due to the number of automobiles, the use of chemical substances and waste products, and the spread of various types of pollution. Under such circumstances, many Vietnamese industries, particularly cosmetic companies conduct green marketing on their cosmetics for consistency with green consumers as well as environmental responsibility.

Green marketing differs from other marketing methods as it emphasizes benefits to people and the environment. Moreover, it is a response to environmental problems of the world and is concerned with the social responsibility of organizations. Following Le (2021) that many industries concentrating on the marketing channel, particularly green marketing could be considered one of the most creative and effective methods of attracting customers by enhancing their view of the company and influencing their purchasing choice. Green marketing would be successful in altering consumer behaviors and customer attitudes toward the preservation of mental well-being and the global environment.

According to Nguyen et al. (2021), the cosmetics business has a very negative reputation for utilizing animals in test procedures. Modern customers are more aware and knowledgeable in this setting. In addition to the practical advantages the items provide, customers are often concerned about the impact their purchases have on the environment and animals. Because of the pervasiveness of these green initiative trends, producers in this business are obliged to spend on product innovation to adapt to this new craze with immensely promising prospects. Besides, natural extracts and ecologically friendly produced products have been more popular in the beauty industry, especially in skincare products, in recent years.

Similarly, according to Le (2021) that Vietnam, like many nations throughout the globe, is becoming more interested in green consumerism. Increasingly crucial is the promotion of green consumption and boosting the consumer perspective associated with green consumption. Consumers in Vietnam are recently concerned about the environment. Thus, they would likely boost their consumption of

green goods and meals. However, the perception of Vietnamese consumers related to green goods remains restricted since it is difficult for them to comprehend and identify the eco-labeling of green items. Hence, it is vital to encourage more communication and education to improve environmental consciousness and green consumerism among the populace. Besides, boosting the number of clients who purchase eco-friendly goods, companies should have more accessible marketing channels.

Together these studies provide important insights into the objective of green marketing which could be regarded as enhancing human life satisfaction, and plants as well. There are several ways to achieve this goal, including producing eco-friendly products, using environmentally friendly production techniques, and encouraging environmentally friendly corporate policies and practices. Moreover, green marketing not only aims for a more lastingly pleasant corporate environment but also helps businesses get the recognition and trust of consumers who care about environmental issues. It might be considered as the agreement between businesses selling sustainable goods and the people who purchase these goods. As stated before, businesses might demonstrate their corporate social responsibility by integrating green marketing into their strategic management and community activities. Consequently, through eco-friendly marketing, businesses may establish a series of unique competitive advantage, which unquestionably contributes to the development of customer confidence.

1.2 Objective and Motivation of study

While there is a wealth of literature on the topic, no research has dived into the impact of green marketing on consumer behavior in Vietnamese cosmetics industries. Therefore, to deeply understand the connection of green marketing strategy with customer behavior in the Vietnamese cosmetics industries, research was conducted. This research determines the characteristics that motivate Vietnamese consumers to buy green cosmetics. Firstly, this study illustrates the connection between green marketing and Vietnamese consumer buying behavior, particularly Millennials and Gen Z. Secondly, the thesis would provide data on whether the customers in a Vietnamese market are eager to acquire and consume eco-friendly cosmetics by analyzing their purchasing behavior. Similarly, with individuals who are unaware of green practices, it is also vital to determine whether they are willing to alter their purchasing habits in favor of sustainable practices. Because of the significance of ecological challenges in modern civilization, businesses

need to examine their consumer perspectives and effort to maintain a green living environment.

After, an appropriate green marketing strategy may be developed to interact with them.

Additionally, environmentally aware attitudes, green perceptions, and individual consumption of green cosmetics are explored in this thesis as they relate to green marketing in Vietnam. Moreover, the principle of a green marketing mix is provided for greater clarity and comprehension of the subject matter. Besides, it could be seen that the independent variables of the theoretical framework in the study as green cosmetics, green price, green promotion, and the dependent variables as customer behavior and Figure 1 illustrate their relationship:

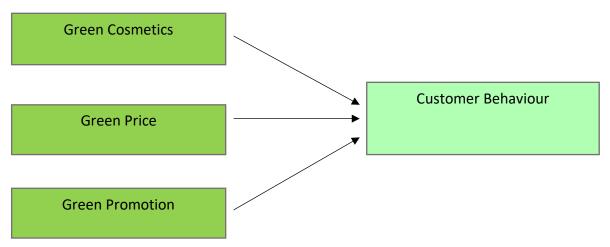


Figure 1 Hypothesis Model of study

1.3 Methodology

The research methodology and the sources of the information used in the construction of the whole thesis are discussed in this chapter. The chapter dedicated to the methodology aims to provide a concise and thorough description of the procedure used in this thesis. It offers the crucial moments connected to the quality of the research in addition to describing the connection that exists between the theoretical and empirical chapters.

1.3.1 Research method

The collection of data that the researcher has deemed worthy of study is the core of any research activity. Primary data and secondary data are two crucial research tools that would be employed to accomplish the goals of the research. Besides, following to Bell (2022) that the transcripts from

interviews, questionnaires from surveys, and other similar items are examples of primary data. Primary data is data that was developed specifically for the objectives of a research endeavor. Besides, it is important to recognize that primary data can be derived from secondary data. As Blaxter et al. (2001) describe that secondary data are publicly accessible information that a researcher may acquire and evaluate. This information could be found through a variety of sources like scientific articles, several books, working papers, theses, and previous publications, in addition to credible Internet sources. In the study, primary data for this thesis will come from the quantitative method, with secondary data drawn from supplementary literature as mentioned before, which means both quantitative research and a review of the relevant literature were used as techniques of research.

In addition, this literature study will be utilized to illustrate the theoretical ideas related to the thesis subject, which includes green marketing, green cosmetics, and green customer purchasing behaviors. Besides, the literature contributes to the evolution of the theoretical model and empirical study because the study should relate to prior research to be regarded as legitimate.

For primary data, a quantitative approach is recommended for the study since it speeds up the data collection process while maintaining its accuracy. It could be identified by Kothari (2004) as a research approach that functions based on the quantity or amount measurement, and it is relevant to the study of phenomena that may be characterized quantitatively. A questionnaire, that would be sent to prospective customers to collect information regarding, for example, green marketing strategy toward green cosmetic items and environmental awareness, might give a basis for determining customer purchasing behavior. Besides, according to the main research topic, the study result will be presented in graphs, statistical form, and tables. Besides, a survey could be created with a total of 17 questions and the following three primary divisions such as demographic background, individual perspective, and individual consumption.

In summary, the principle of a green marketing mix is provided for greater clarity and comprehension of the subject matter. Similarly, the research examines the following issues to evaluate by the hypotheses testing. Results from the study will be analyzed to see how much influence green marketing strategy has on purchasing of consumers' choices.

1.3.2 Questionnaire Design

Google Forms was used to create a questionnaire for a diverse sample of Vietnamese potential customers of varying genders, generations, incomes, and places of residence in Vietnam. The survey is prepared in both English and Vietnamese to accommodate the study situation and the questions were modified to the identity of the respondents could remain anonymous. The survey, which was distributed mostly to acquaintances, family, and friends, was conducted by email, or social media like Facebook, and Instagram. In addition, the survey was accessible for 1 week and collected 256 replies, but 251 hundred legitimate replies were received.

There were 17 questions in the survey, which were presented in several format types, consisting of those using a Likert scale, dichotomous, and checkbox questions. Moreover, it was divided into 3 sections as follows demography, individual perspective, and individual consumption. For the first section, questions 1 to 4 collected backgrounds or demographic data of respondents consisting of gender, generation, place of residence, and income. In the second section, individual perspective was collected from questions 5 to 15. To be more specific, questions 5 to 6 asked about the purchasing of green cosmetics of respondents and their purchasing knowledge related to the environment. Additionally, questions 7 to 9 asked the thinking of respondents involve in eco-labels, eco-brands, and environmental advertisement. The questions from 10 to 13 were Likert scale questions, which asked what level of the four main aspects related to green marketing mix 4P's affected purchasing decisions of respondents. Moreover, questions 14 to 15 asked where the respondents prefer purchasing their cosmetics and getting information about them. In the third section, questions from 16 to 17 collected individual consumption data of respondents such as their willingness to pay extra for green cosmetics and their suggestions for green cosmetics for their family, friends, and relatives.

In addition, the questions from 10 to 13 in the individual perspective part, were constructed ratings on a Likert scale (with 1 strongly disagree to 5 strongly agree), which enabled respondents to express views of respondents regarding each statement in a manner that was kept strictly confidential. The variables that were used in the survey that were used to support the hypotheses are shown in Table

Section	Variables
Individual perspective	Green cosmetics are more beneficial to the skin.
involved in green	Green cosmetics are more beneficial to the skin.
cosmetics	
	Green cosmetics include non-harmful components.
	Green cosmetics are friendly to the environment
	,
Individual perspective	Green cosmetics' price is fair
involved in green price	·
	Geen cosmetics' price is proportional to their quality.
	The price of green and non-green cosmetics is the same.
Individual perspective	Environmental awareness may be raised effectively via green
involved in the green	promotion.
promotion	
	Individuals are inspired to purchase green promotions.
	The green promotion offers more successful strategies for green
	cosmetics.
Consumer behavior	
	I am confident using eco-friendly items instead of conventional ones.
	I did not want cosmetics that were tested on animals.
	I like green cosmetics that are environmentally friendly.

Table 1 Section and Variables of Survey

1.3.3 Sample

Pilot research was conducted in advance of the initial assessment to evaluate the clarity, presentation, comprehensiveness, and relevance of the questionnaire and 47 Vietnamese individuals who had bought or planned to buy green cosmetics participated in the pilot research. At this point, the phrasing of several considered issues would be undergone a few small adjustments. After the test, the results illustrate that the Millennials and Gen Z have more significantly positive concerns about the environment than other generations, and more focus on green products, specifically green cosmetics. Therefore, the research would focus on Vietnamese Millennials and Gen Z consumers.

After a pilot method, 256 individuals were provided with questionnaires and between October 20th and 27th 2022, Vietnamese respondents who came from different locations in Vietnam completed the survey. These 251 samples were utilized for further examination after the incomplete and useless surveys were eliminated. In this project, using Excel and SPSS with version 28.0.1.1 for Windows to conduct statistical analysis on data gathered in the social sciences.

1.4 Structure of study

There are a total of five sections to this thesis such as introduction; literature review including, hypothesis development, green marketing, green consumer purchasing behavior, green cosmetics; analysis of empirical data, and conclusions.

Firstly, the introductory section provides the background, the research objectives, the research methods, and the structure of the thesis. This section presents an overarching perspective on the significance of the thesis subject and necessary methods which describes the entire questionnaire design, and data-gathering procedure.

Secondly, several theoretical research connected to hypothesis development of this study, green marketing, green purchasing behavior, and green cosmetics are explored in depth in the approach literature review. In addition, the models described in this chapter are crucial prerequisites for developing the questionnaire for the empirical investigation.

Thirdly, Analysis of Empirical Research focuses on processing empirical data collected via an online survey and analyzing the result of the data and indicating the reliability and validity of the research. Moreover, the outcomes of data gathering will be reviewed in this chapter to assess the hypotheses.

Finally, the conclusion section, would discuss the key findings, and criticize the research including reliability, validity, limitation, and purpose of the study. Besides, suggestions for research in the future, highlight the significance of green marketing in the industry of underdeveloped nations, particularly, Vietnam.

2 Hypothesis Development

To better serve the objective of this thesis, it is important to first identify the previous hypotheses with the same context. At this point, the author will construct a study hypothesis based on the availability of prior hypotheses.

2.1 Green purchasing behavior

As a result of Alkhayyat and Stita (2021), consumers are increasingly aware of the environment and ecologically friendly items. Before making a purchase, environmentally conscientious consumers must consider the product's production materials and whether they are eco-friendly. According to Noel (2009, p. 12-14), consumer purchase behavior describes the process of searching for, selecting, acquiring, and utilizing a product following the demands of the consumer. A comprehension of consumer behavior may provide answers to the basic questions of "how" and "why" consumers purchase. Firms spend a great deal of money and time analyzing this issue because knowing customer behavior increases profits and leads to success. Consumer behavior is a process that relates to participants at various phases of the purchasing procedure. A person who is environmentally concerned and favorably active in environmental goods has a greater inclination to buy a product with green credits (Suki, 2016). For instance, if a person is aware of the threat to the world and believes in recycling in their everyday lives, they would purchase more environmentally friendly items.

In the conceptual model of Chan (2001), the emphasis was on the influence of cultural and psychological factors on Chinese consumers' behavior to buy environmentally friendly products. In

the study, participants green buying patterns, which were represented as a unidimensional variable, were evaluated using three questions. Besides, as part of the investigation into what drives Australian customers to buy ecologically responsible products, D'Souza et al. (2006) developed a seven-variable hypothesized model. Using price and quality as measurements, the study identified two-dimensional factors for green buying behavior. In addition, Samiya (2019) has developed a concept to identify the relationship between green marketing and customer buying behavior by investigating factors of consumerism, eco-label, eco-brand, environment advertisement, and demography. Besides, Nguyen (2021) found the degree of green marketing mix components 4P's influence customers' purchasing behavior through demographic and psychological factors of customers. Hence, to determine the purpose of the study, green customer purchasing behavior plays a dependent variable of the study.

2.2 Factors affect green purchasing behavior

2.2.1 Green cosmetics

Firstly, according to Yaacob and Zakaria (2011), consumers are interested in green products since they contribute to environmental improvement. Samiya (2019) found that green products have a significant relationship with green buying behavior, as the effect of green labels on the items has a substantial impact on the participants' final purchase decisions, as they may regard them as synonymous with trust and quality. Besides, Alkhayyat and Stita (2021) explored the link between green cosmetics and green purchasing behavior in Sweden, focusing on eco-awareness, experience, and social influence. By contrast, several studies have revealed conflicting results, despite widespread acknowledgment of the major influence of green goods and their values or advantages on customers' green buying behavior. Nguyen (2021) found that consumers do not see any advantages to purchasing items created using environmentally sustainable practices, and they are skeptical of the promises made by environmental sustainability groups. The application of such environmental regulations on food also comes at a high cost, making these items more costly than their conventional counterparts. The production of environmentally friendly goods has traditionally been more expensive, making them more expensive for customers to buy (Sonderskov and Daugbjerg, 2011). Therefore, Salo (2014) recommended that businesses create goods, specifically green cosmetics with both environmentally friendly and high-quality characteristics. They further stated that boosting consumer perceived value regarding green

cosmetics may lessen customer suspicion about green items and increase consumer purchasing decisions. This contributed to establishing the first hypothesis for the investigation that H1: Green cosmetics significantly affect customer purchasing behavior.

2.2.2 Green price

According to Nguyen (2021), those seeking to lessen their environmental effect may welcome the lower price tag that emerges from manufacturing efficiency. If people are willing to pay less for a product, the company will profit more by reducing the price. When the price of the product is held constant, the environmental benefits of the product may be used as a competitive advantage. If the price will be greater, there must be clients ready to pay more and an emphasis on marketing a differentiated green product. The price point is essential in this case.

In June 2009, Grail Research surveyed 520 US Green consumers. According to this survey, people who have never purchased green goods do not do so because they believe them to be excessively pricey. People often do not buy environmentally friendly products due to their high prices (Grail Research, 2011). Consequently, it shapes the second hypothesis of the study that H2: Green prices significantly affect customer purchasing behavior.

2.2.3 Green promotion

Shrum et al. (1995) investigated 3,690 individuals. According to this research, both green purchasing characteristics are positively linked with the perception that advertising is insulting and the propensity to change the channel during the advertising, showing that women who prefer to purchase green are more dubious of advertising than women who do not. In contrast, men's advertising skepticism is unrelated to their green purchasing behavior.

The results of Carlson et al. (1993) revealed a rise in environmental advertising with increased consumer concern for the environment. Recyclable, ozone-safe, eco-friendly, and biodegradable are a few terms that often occur in green promotion, while some of the themes which expose customers may be regarded with resistance. Additionally, according to Mathur and Mathur (2000), customers are more inclined to see advertisements with environmental themes if they deem them

credible. Thus, this study hypothesizes that H3 Green promotions significantly affect customer purchasing behavior.

3 Green Marketing

3.1 Definition of green marketing

Green marketing generally referred to as sustainability marketing or ecological marketing, applies to both industrial and customers using products as well as services. According to Polonsky (1994) green marketing involves some actions like alterations to the product, adjustments to the manufacturing process, the packaging, and the advertising.

Similarly, Prakash (2002) found that "green marketing" has two dimensions. One is marketing products with moral assertions about their qualities or related to the techniques of businesses, policies, and procedures for producing or distributing them. The other is the promotion of environmental benefits utilizing environmental management systems or technologies. Moreover, as research by Charter & Polonsky (2017), the marketing viewpoint of green firms undergoes a major transition. In addition to demonstrating a company's commitment to social responsibility, green marketing may be used as a teaching tool to persuade consumers to urge customers to adopt more environmentally friendly viewpoints. The study might determine the extent to which customers pay attention to this problem; as a result, businesses can start appropriate green marketing initiatives to educate and enhance the impressions of the public related to an eco-friendly lifestyle. In addition, commenting on green marketing, Keller & Swaminathan (2020, p. 462) argues that it refers to the method of promoting items with their environmental advantages in mind. The objective is to make the items more appealing from the perspective of customers by stressing their eco-friendliness. In this regard, the consumer would be able to find out what are the advantages of purchasing these items, and which products have been manufactured in an environmentally friendly manner.

Additionally, in an analysis of green marketing, Grant (2007, p. 32) concluded that it should be seen as a whole strategy for doing business, to influence on views of customers, their lifestyles, and readiness to become green. He has compiled the following list of actions to alter views related to green goods and lifestyles such as educating customers via marketing, normalizing green as opposed to advertising it as a specialized field, making eco-friendly activities the norm rather than the

exception, making them accessible to people of all socioeconomic backgrounds, adapting them to the cultural norms of other countries.

On the other hand, as the research of Polonsky (1994) illustrates that there are several applications of the word "green", including environmental sustainability – sustainability is utilizing natural resources without harming future generations or the environment. Environmental sustainability focuses on the quality of life on the Earth and involves environmental preservation, climate change, biodiversity, pollution control, and land management. Environmental sustainability also refers to the need to balance the demands of human society with the needs of nature.

Relating to sustainability, Danciu (2013) argues as the major objective of green marketing is to secure the sustainability of businesses, because of the industry's growing interest in ecosystems and associated concerns, businesses should design and execute green campaigns to disseminate their ideas and philosophies. Consequently, corporations are the primary entities that examine the effects of ecologically friendly marketing on purchasing decisions of customers. By conducting research into the subject, they could examine the market in great depth. Hence, based on these evaluations, innovative and sustainable logistics management, and marketing management provide value for customers.

Considering all these evidence, it seems that green marketing describes companies that promote their goods and services by promoting environmental benefits. It is the idea of promoting goods or services that have a less detrimental effect on the natural environment, and it is growing in popularity as more people are becoming environmentally conscious and making choices based on their values and beliefs.

3.1.1 The role of marketing

In recent years, protecting the environment is a top issue, and many businesses are engaging in ecofriendly marketing initiatives. The most effective method is to choose items and services with minimal environmental effects. According to Choudhary & Gokarn (2013), it could be considered as the limited resources available on Earth, which are not enough for the insatiable desires of humanity to satisfy. Although it is essential to consider if these desires are acceptable or realizable, in freechoice market systems, both organizations and people have the right to own their needs. Therefore, marketers should consider how marketing efforts employ these limited resources to meet client requirements and fulfill the sales objectives of the business, and green marketing is s an essential and appropriate option for the situation.

Besides, environmental awareness can be increased using green marketing strategies. Additionally, environmental issues are no longer a sensational subject since governments and cultures in practically every nation have grown more aware of these issues. Hence, green marketing become more popular day by day. Considering the significance of green marketing in the daily lives of humans, green marketing may be concluded is indispensable (Choudhary & Gokarn, 2013).

3.1.2 The tools of green marketing

Companies are realizing that their customers want to be associated with the company. They are aware that they need to carry out these actions in a manner that is both natural and environmentally friendly, and green marketing could be considered as tools to assist them including eco-label, eco-brand, and environmental advertisements. The use of these policy measures plays a vital function in influencing the shopping habits of consumers to prioritize green items, reducing the harmful effects of manufactured goods on the natural world.

Eco-Labelling:

Research by D'Souza (2006) reported that eco-label on green products is an important green marketing method. As a result of environmental labeling used in advertising, green goods may be more readily identifiable to customers. Besides, Sammer & Wüstenhagen (2006) point out that the eco-label is a vital tool for reducing knowledge disparities between vendors and purchasers.

In such a circumstance, according to Rex and Baumann (2007), "eco-labeling is a method that helps customers pick eco-friendly products and educates them about the production process". As Armstrong et al. (2014) argue that "Labels" vary from little pieces of paper to extremely intricate schematics that are used in the packing of items. Labels may carry just the brand name or a variety of other information. In certain instances, the provider may prefer a more succinct "Label", but they may be compelled to provide further details.

Moreover, Delmas et al. (2013) developed a methodology for the evaluation of eco-labels in response to the expansion of the consumer buying process, including payment readiness, consumer confidence, consumer perception, and comprehension. Firstly, marketers must examine and decide on eco-labels that are clear and easily understood. Then, it is vital to pick eco-labels that effectively connect with customers. To restate, customers would be able to perceive the eco-friendly qualities of products if these labels were used. Furthermore, companies should pursue multi-sectoral and multi-criteria certifications. The rationale for that these eco-labels have a more distinguishable role than those just used for a certain product category. The last phase is selecting the labels that have been endorsed by authoritative bodies like governments and corporations.

Moving on to the customer confidence process, Delmas et al. (2013) highlighted the necessity for enterprises to evaluate eco-label organizations with many partners. The presence of several equivalents greatly facilitates the balancing of diverse perspectives about ecological issues. Second, the authors emphasized the need of examining the credibility of these partners, since only a credible organization could guarantee the trustworthiness of eco-labels. The subsequent key issue is preventing interest-related disputes throughout the verification process. The fourth element addresses the selection of a prominent eco-labeling agency. Specifically, marketers should confirm with their eco-label partners that they are prepared to share certification method details. Fifth, businesses should do an internal evaluation of the eco-friendliness of their products. To be more explicit, even if a firm partner with an environmentally conscious supplier, it must nevertheless do its material evaluation to guarantee that both parties reach the same conclusion; otherwise, even a little error might undermine buyer confidence. Enterprises are responsible for ensuring the continuity of the supply chain to consistently satisfy client needs.

With the final dimension, marketers should first concentrate on quality enhancement. To serve as an example, businesses must choose eco-labels that stress the value of their products if they want customers to recognize and be ready to pay extra for them. In addition, it's worth noting that the chosen eco-labels provide independent confirmation of health advantages. In conclusion, businesses should make the most of available eco-labels so consumers can quickly and readily recognize their support of environmentally friendly practices when they make purchases or utilize services that bear the label (Delmas et al., 2013)

The research indicates what is known regarding the effect of labels on the decision of customers to purchase green products. Presently, there are several eco-labeling designs accessible around the globe, each of which has chosen and launched its eco-labeling system.

Eco-Branding:

In this regard, the consumer would be able to find out what are the advantages of purchasing these items, and which products have been manufactured in an environmentally friendly manner. The concept of the brand is not new, but it has recently become more popular with customers.

According to Rahbar (2011), the term "eco-brand" refers to a name, design, or symbol that is used on environmentally friendly items. Consumers may find it easier to distinguish eco-brand items from other types of products that are not environmentally friendly if the eco-brand elements are used.

Additionally, following to Hartmann (2005), emotional brand advantages are the most influential element driving people to modify their real purchasing behavior to choose eco-friendly items. They describe many forms of emotional brand advantages, such as a sense of well-being, benefits connected to self-expression via socially visible consumption, and benefits associated with nature. As Aaker (1992) noted that marketers must understand why customers choose certain brands and brand equity describes this impact. Information that may be utilized in several scenarios to determine how consumers will react to marketing activities represents brand equity. To advertise green goods, reputable green brands that typically emphasize the environment should be leveraged.

The marketing plan of a corporation should contain a strategy to promote its green branding. Companies should convey the message that the environment and that they have made changes to ensure that their operations are environmentally friendly and economically viable.

Environmental Advertisement:

As the research of Rahbar (2011) indicates as a means of promoting their goods to environmentally conscious customers, to reach their target audience, most companies now use media and newspaper add to promote their services and products in the context of their local communities.

Green advertisements were developed to urge consumers to buy green goods and to emphasize the advantages of the action.

Moreover, the three-part structure of environmental advertising is explained by Davis (1993). First, advertising opens with a proclamation of environmental consciousness. Second, the advertising highlights how the company altered its practices to showcase its care and commitment to enhancing the environment. Thirdly, the commercial mentions particular environmental efforts or outcomes for which the company is responsible.

In conclusion, the first step in making a successful advertising campaign is to have a clear understanding of what target audience of the business. This is the most important step in creating an effective advertisement, and it should be the first thing businesses think about when designing the advertisement.

3.2 Green Marketing Strategy Mix

Al-Salaymeh (2013) claims that a set of marketing techniques called the "green marketing mix" helps businesses reach their customers and meet their goals without negatively impacting the natural environment. When individuals take an active part in safeguarding the environment, it encourages their friends and family to buy environmentally friendly items, hence increasing sales (Gopalakrishnan and Muruganandam, 2013). Additionally, according to Govender et al. (2016), strategies of green marketing refer to the use of environmentally friendly practices across the marketing process, from product creation and price through promotion and distribution. The theory of a "green marketing mix", which is central to this investigation, is shown in Figure 1:



Figure 2 Concept of the green marketing mix

3.2.1 Green product

It is said that the term "green" may be used for a product if its production method reduces pollution and other environmental damage. Every organization is accountable for minimizing environmental contamination in its industrial processes. Commenting on green products, Peattie & Charter (1992, p. 103) note that from the perspective of customers, a green product should be safe for use and disposal, have a long lifespan and have a low environmental effect.

It could be considered as the characteristics of green goods may be divided into two groups. The first point is that it is possible to understand the consequences that using a product or service has on society and the environment. Several groups include the "five Rs" in their programs to encourage the safe recycling of used things. This category includes activities such as repairing, refurbishing, reusing, recycling and remanufacturing products. The second group of characteristics relates to the production of the product as well as its organizational elements of it (Baker, 2003). For example, gathering raw materials for a product in a way that conserves natural resources is required. Besides, waste management is essential in this respect, the business must develop pollution and risk-minimizing packaging and designs. Product improvements incur considerable sunk costs, but these investments are reasonable since they are expected to increase product sales. Reverse logistics

(where customers recycle their used goods together with their old wrapping and packaging) might have a major impact on preventing waste and pollution (Arseculeratne and Yazdanifard, 2014).

3.2.2 Green price

The green pricing strategy combines brevity and sensitivity. The willingness of buyers to pay extra for a green product is a significant obstacle (Fan & Zeng, 2011). As the research of Arseculeratne and Yazdanifard (2014) points out that installing new technology and equipment, training staff, absorbing external expenses, and producing recycled products are all costly endeavors, transforming sustainability into an expensive task. These expenses will inevitably be included in the ultimate price of a green product. Consequently, green pricing represents a premium that includes additional marketing costs. These mandatory behaviors must be supported by compelling advertising messages. These expenditures must be justified by marketing efforts, and customers must be enticed to pay a premium price. These mandatory behaviors must be supported by compelling advertising messages. Commercials that motivate people to do these things are crucial. However, many businesses have discovered that eliminating packing material might reduce the cost of environmentally friendly products. This is an appealing possibility, especially because packaging costs can add up quickly.

Through the preceding research, enterprises in Vietnam might propose reasonable and fair pricing for green goods, allowing businesses to use more efficient manufacturing procedures following current green legislation.

3.2.3 Green place

The green place is a method that ensures the distribution of the company's products is carried out exactly as intended, to satisfy the expectations of customers involved in less harmful to the environment (Kirgiz, 2016). For instance, a location that is abundant with vegetation, which conveys to the sight of the primary objective of consumers, namely satisfying their requirements, stores using the green place idea will unquestionably attract customers with an environment-conscious ambiance. Besides, with the findings of Abzari et al. (2013), one of the primary objectives of green place is to guarantee that all customers can easily get access to the products they purchase, regardless of their environmental preferences, and following the research of Arseculeratne and

Yazdanifard (2014), green distribution refers to the choice of routes that minimize the impact on the environment. The majority of environmental damage happens during product transport. Hence, businesses are suggested to employ safeguards during product distribution. In addition, Baker (2003) notes that industrialized commodities have major environmental impacts, therefore environmental issues affect the transportation fuels and materials created. The implementation of carbon prices will have a significant impact on profit allocation. It will facilitate the substitution of production and logistical networks by firms. Taken together, as part of their separate marketing responsibilities, to safeguard their strategic interests, companies may institute rules requiring suppliers and wholesalers to comply with environmental safeguards. Eco-alliances are created when businesses and their suppliers join to lessen their environmental impact via measures like logistical consolidation.

3.2.4 Green promotion

Arseculeratne and Yazdanifard (2014) emphasize the significance of direct marketing, sales promotions, advertising, and public relations in informing customers about the necessity of being environmentally conscious. These channels all use advertising tactics that do not jeopardize the monetary or spiritual well-being of their clients. Two methods are the most popular venues for conveying a green image of the company. Going green, which attempts to bridge the gap between the firm and the community, may often need an intensive public relations campaign. Green advertising might accomplish both the promotion of items and the rationalization of their features and costs. Additionally, Ansar (2013) demonstrated that advertising is a successful method for enhancing consumer environmental consciousness, providing individuals with the knowledge required to purchase items with the lowest environmental effect. Moreover, with the use of green promotion, incentives to buy eco-friendly goods might be expanded. When green goods are effectively marketed to consumers, they will have a big influence on consumers.

Overall, these studies indicate that green promotion is employed as an effective method for attracting and satisfying the interests of customers. The primary objective of green advertising seems to be to affect consumer buying behavior in response to their concern for the environmental advantages of goods and to encourage the purchase of eco-friendly items.

3.3 Effect of green marketing on animal testing

According to Ganatra et al. (2021) confirm that as more individuals become aware of the damage that animal experimentation could cause to the natural world, the demand for cruelty-free cosmetic products increases. In addition, several firms are concentrating their research and development efforts on the introduction of novel vegan and cruelty-free items and concentrating on the production and global distribution of the products. Non-animal testing market approaches are becoming more desirable because of these developments; they are less time-consuming, more cost-effective, and more ethical than those using animals in experiments. Besides, enhancing their brand image and fostering good public relations, businesses will benefit from adopting alternative processes such as using artificial skin and in-vitro toxicity testing of the intended compounds on human cells, which are examples of some of the alternative approaches that are used. To a certain extent, these approaches provide an alternate way for drugs and chemical testing, which are advantageous in terms of time efficiency, manpower requirements, and cost-effectiveness.

As Dopson (2022) discovered that the marketing strategy of the body shop related to animal protection is an additional example. Typically, the firm's mission is to offer items that oppose animal testing. Therefore, to promote its "Forever Against Animal Testing" campaign, the corporation collaborated with notable social media users. The outcome was the collection of 8 million signatures to recommend to the United Nations that animal experimentation be prohibited. Through this campaign, the body shop was able to increase awareness of its ecologically friendly goods and inspire humanistic and environmentally conscious thought.

4 Consumer Buying Behaviour

Customers are the group of individuals who will consume, purchase, or utilize a product or service. Understanding the buying behavior of one's clients is vital for every firm. There are various ways to define the term "consumer behavior". According to Bennett (1995), the dynamic interplay of impact and cognition, behavior, and environmental events through which humans undertake the trade of components of their life is the exchange process. Additionally, Kuester (2012) observes that the study of consumer behavior examines how people and organizations acquire, choose, discard, and utilize the services, goods, and experiences they use to meet their requirements.

4.1 The decision-making process of customers

There are supposedly five phases in the consumer decision-making process, as described by Kotler (2009). It could be seen as all consumers experiencing these stages, whether consciously or subconsciously. This model below may be used to better comprehend the decision-making process.



Figure 3 The process of making a decision (Adapted from Kotler, 2009)

The model starts with the identification of a requirement or problem. Following Arnould et al. (2005), a requirement distinguishes the present state from the ideal state. According to Agrawal (2006), both internal and external stimuli may produce a desire. Internal stimuli include thirst, hunger, and other basic human needs, but external stimuli might be generated via several advertising techniques.

Information search comes next in the model. Before making a purchasing choice, a buyer would likely seek further product-related information after identifying a need. Individuals contribute to the search process in many ways depending on internal information such as product knowledge, experience, or purchases, and external information such as the views of others. Moreover, according to Majumdar (2010), there are five distinct types of information contexts such as experiential, commercial, and personal. Family, friends, and coworkers were listed as examples of those who may have access to the private information of a person. In the quest for knowledge, the influence of one's network of connections and resources is higher than that of any one factor.

The customer makes an educated decision after analyzing and evaluating various choices based on the information obtained in the first step. Here, the consumer examines their requirements and desires, as well as prospective search results and purchases. Typically, a set of criteria based on the value interests of customers is used to evaluate the acceptability of several solutions. Consumers may put a greater emphasis on some attributes of a product or service than others, such as its price, quality, or extra features (Blythe, 1997). Quester et al. (2007) clarified the problem by differentiating price, quality, and features as characteristics of products and it could be considered as the most important element influencing the result of alternative assessment are determining the relative importance of each feature.

At some point, the shopper decides to skip Step 3 (evaluating the evoked set) and go on to Step 4 (making a purchase). After deciding which brand to purchase, the customer must still complete the transaction. Moreover, in the beginning, consumers may indicate an interest in purchasing a product but fail to complete the purchase. Additional factors may include when to purchase, where to purchase, and how much to invest. Frequently, particularly for complex items like personal electronics, vehicles, and consumer durables, there is a lag between the development of a buying decision and the actual purchase. For non-durable goods, which often include products which is low involvement such as commonplace items, the time between making a choice and completing a transaction may be brief. At this stage, it is essential to capture the attention of buyers in terms of purchase intent and delay time. (Stankevich, 2017).

In the last, fifth, post-purchase (satisfaction or dissatisfaction) stage, the consumer analyzes and evaluates the product. Was the product appropriate for the intended market? Did their expectations come true? Repeat purchases are more likely if consumers realize that the product met or exceeded their expectations and promises during the second stage of the customer journey. This is because these consumers may become brand ambassadors and inspire other potential customers. The same holds for negative feedback, which, if it appears in stage two, may hinder a potential customer's route to the products of businesses. Throughout the final phase, the moments that matter is those in which client discontent is recognized. If the customer is satisfied, transform him or her into a loyal customer. Aspects of the product, for instance, matched or exceeded client expectations. Additionally, follow-up actions (after a purchase) aid in fostering client loyalty (Stankevich, 2017).

4.2 Factors influence the purchasing behavior of green customers

According to Gajjar (2013), several variables influence consumer purchasing, including cultural, social, personal, and psychological elements.

Social class, subculture, and culture are 3 sub-factors which involve in the cultural factors category. Culture is a fundamental component of any community and influential effect on individual desires and behaviors. Because the effect of culture on customer behavior differs from country to country, marketers must examine the traditions of local communities, demographic groupings, and national marketplaces with great care. Moreover, all civilization has their distinct subcultures, which may be categorized by religion, ethnicity, geography, race, etc. These groupings may be used by marketers to subdivide the marketplace into many smaller sections. Lastly, as members of the same social class tend to make comparable purchases, marketers put a priority on recognizing and comprehending the many social classes that exist in any given culture (Gajjar, 2013).

Social factors can influence consumer purchasing behavior and family, friends, roles, and community all have a significant part in shaping an individual's social environment. It is pointed out that the effect of family members on buyer behavior is significant Gajjar (2013). Thus, marketers are striving to determine the roles and influence of the wife, children, husband, and other members of the family. Second, reference groups could affect the attitude or behavior of an individual. The impact of reference groups varies between brands and products. For example, if the good is makeup tools or green cosmetics in the case of this paper the influence of the reference groups will be significant.

Thirdly, customers' behavior surely received impacted by personal factors such as their way of life, economic status, job, age, and personality. The lifestyle of individuals is determined by their beliefs, actions, and interests, and serves as the foundation for how they normally behave and interact with the environment. In general, the spending patterns of customers would mirror their level of income and savings. Individual location of work is a crucial determinant of their purchasing choices. A company's marketing executive, for example, may strive to stock up on fine suits, while a poor employee may choose durable work attire. Customers who alter their purchases change over time. Therefore, age and life cycle could influence consumer purchasing behavior. Personality varies among individuals, through time and space. Consequently, it may significantly impact the purchasing behavior of clients.

Finally, according to Gajjar (2013) aspects of a psychological nature, include motivation, attitudes, beliefs, and perspective. Every individual has distinct needs or demands and some of which are the most urgent while others are the least urgent. Consequently, a need would become a motivation

when it grows urgent for a person to seek fulfillment. Next, the perception of one would affect their decision toward an event, for example, Gajjar (2013) stated that in the instance of selective distortion, consumers attempt to comprehend the information to reinforce their own beliefs. Meanwhile, customers have beliefs and attitudes regarding different items, which marketers may try to alter by launching targeted campaigns.

Understanding many possible factors which influence the purchasing behavior of consumers shall greatly help marketers when deciding on a campaign.

4.3 Millennials and Gen Z

Following to the Center for Generational Kinetics (2022), a generation consists of individuals born within a given age range. Throughout their lifetimes, members of these groups share similar ideals, habits, traits, and interests. Generations have commonalities in their way of life since they were exposed to and are exposed to the same trends at around the same time and through the same mediums such as telephone, television, etc. At present, there are six generations such as Silent (1928-1945), Boomers (1946-1964), Generation X (1965-1980), Millennials (1981-1996), Generation Z (1997-2012), and Generation Alpha who were born 2013 or younger. The average length of a generation is 15 years. One of the variables impacting the changing of generations is the growth of human communication brought about by technology. As mentioned before, this research would concentrate on Millennials and Generation Z.

Dimock (2019) argues that the term "Millennial" is used to describe people who were born between 1981 and 1996, which is known as generation Y or gen Y. According to Nectar (Jan. 2021), young individuals belong Gen Y have delayed marriage because they entered the world at a period when global fertility rates were declining, and millennials are having fewer children than prior generations. Besides, as the research of David et al. (2021) claims that Millennial generation has been defined as the first global generation and the first to grow up in the Internet age as well as mobile devices, social media use and familiarity are defining characteristics of this generation. Following Paul (31 May 2018) that from the 1990s to the 2010s, the level of education of individuals in developing nations increased, a factor that aided economic development in these countries.

Besides, those who were born between 1997 and 2012 are referred to as generation Z (Gen Z) (Dimock, 2019). Additionally, Giovanni (2022) points out that social media may have been pioneered by millennials, but Gen Z is defining its future. The Millennial generation is the first to be born into a culture where computers and social media are pervasive. They saw the evolution of this technology throughout time. However, Generation Z grew up with all this technology at their fingertips. They seem to be technical professionals who need little supervision. Nonetheless, smartphones and social media distractions have had a considerable influence on this age group, adding to a general lack of concentration.

Moreover, according to Tyson et al. (2021), there are generational differences in the environmental consciousness of the general people. Particularly, the Millennial generation (those between the ages of 26 and 40) and Generation Z (those between the ages of 10 and 25) will experience the most severe consequences of environmental deterioration. Moreover, most individuals have access to social media. Consequently, millennials and the subsequent generation have a far more optimistic attitude toward and need for environmentally friendly items.

4.4 Green Consumers and Green Consumerism

The definition of green consumers fluctuates throughout time but generally shares the following characteristics. The research of Shabani et al. (2013) concludes green customer refers to clients who are environmentally conscious in their buying decisions, consumption patterns, and marketplace activities, and should consider the influence of their actions on the environment. To effectively promote green goods, it is vital to categorize the many eco-conscious customers that are present on the market. Using regional, demographic, psychological, and behavioral characteristics, researchers have classified and identified several patterns of green buyers. Besides, in an analysis of green consumers, Shamdasani (1993) found that a green customer is receptive to environmentally beneficial actions and likes to purchase green products. In their view, it is their responsibility as customers to also participate, due to their expansive perspectives, green clients are ready to adopt green products and procedures.

In addition, Akehurst et al. (2012) claim that a "green customer" seeks to purchase products with minimal environmental effects. Following Smith (1998, p. 89), eco-conscious consumers are prepared to pay a premium for environmentally beneficial products, packaging, and marketing. Addi-

tionally, eco-conscious consumers have greater expectations than just desiring green items (Lu et al. 2013). Besides, Ha (2008) emphasized three essential characteristics of being a green consumer such as being in harmony with nature, practicing environmentally responsible consumption, and encouraging neighbors to live similarly.

According to Smith (1998), green consumerism is the habit of preferring items or services with less of an impact on the natural ecosystems on the Earth. Additionally, the research of Conserve Energy Future (2022) argues that "green consumerism" refers to a situation in which consumers own ecofriendly goods and services that can be recycled without causing damage to the planet or sacrificing quality. One alternate perspective enlarged the concept of green consumerism to encompass product innovation that strikes a balance between ecological and economic considerations. In addition, green consumerism requires a revaluation of the role individual buyer plays in either supporting or altering the basic inequities that define the contemporary global economy. Otherwise, establishing an effective policy approach to encourage more people to adopt eco-friendlier lifestyles would be tough for legislators (Smith, 1998, p. 93). Moreover, green consumerism is stated to have an imprecise definition since many professionals examine it from various aspects. Politicians, for example, would approach it from a political perspective, while marketers would see it as a business opportunity. (Smith, 1998, p. 94). In addition, if green consumerism flourishes, eco-friendly shopping practices, and business profits may find common ground. Green consumerism is a precursor to a framework based on economic, cultural, and civic power because it reflects the shift in focus of the public toward manufacturing processes that are less harmful to the environment and more conducive to creating environmentally friendly goods and services (Conserve Energy Future, 2022).

It is evident that being a green consumer has several advantages for society, businesses, and the environment. Firstly, according to Ha (2008, p. 11-15) on the human side, people may save a substantial amount of money that they would have otherwise spent on utilities such as water, electricity, and gas if they converted to greener products, made more appreciative choices, and led healthier lives. To continue, fewer hazardous chemicals are used in the production of green goods, which benefits both the environment and consumers, ensuring a longer, higher quality of life. From a commercial perspective, one of the greatest benefits of green buying is that it greatly contributes to the financing of for-profit firms. Specifically, revenues are reinvested in sustainable product R&D.

In addition, when consumers purchase environmentally friendly items, they have the option of donating to non-profits that are managed by volunteers and are committed to environmental preservation. Finally, from an ecological standpoint, a more environmentally aware client base increases demand for eco-friendly products, which may result in decreased production of environmentally detrimental goods. By keeping this way, humans could significantly reduce our reliance on nonrenewable energy sources, so freeing up finances for future generations. Since more energy-efficient appliances contribute to environmental sustainability by needing less energy to function, the decline in nonrenewable energy consumption also leads to a reduction in emissions. Customers with a strong concern for animals may do their bit to protect them by choosing items that are not subjected to animal testing or are made with vegan components.

On the other hand, the degree of environmental care of customers is reflected in their attitudes and purchases, and acts as a dividing line between distinct subgroups of the green market (Lu et al. 2013). Consequently, the Roper Organization categorizes five sorts of environmentally conscious customers in the United States. True green clients are the earliest and most ecologically conscious group of consumers. They are keen to participate in environmental activities and to purchase green items from respected, 100 percent green enterprises. Therefore, their influence on the ecosystem may be indisputable.

5 Green cosmetics

5.1 Green cosmetic products

Following McEachern and McClean (2002) green cosmetics aim to maintain a livable world, reduce the influence on the air and make responsible use of limited resources, increase animal and human wellbeing, and conserve species. Similarly, Ambuja Solvex (2021) found that green cosmetics refers to a sector of the cosmetics business that uses ecologically friendly formulas, manufacturing procedures, and packaging techniques. A cosmetic may only be regarded as real "green" if it includes active compounds originating from plants, such as minerals and plants, and not identical active substances synthesized in a laboratory and if it is created in an ecologically friendly manner. This means "Green Cosmetics" are eco-friendly cosmetics manufactured with formulations and components that are biodegradable, with low toxicity and clear production processes, drawn from renewable plant and bacterial sources (Ambuja Solvex, 2021).

Moreover, green cosmetics are composed of plant extracts and oils, minerals found in nature, non-toxic colors, and natural components. On the other hand, organic cosmetics are not only organic in their ingredients, but also in their packaging, which is constructed from recyclable and biodegradable materials (Ambuja Solvex, 2021)

Collectively, these studies outline a critical role for the environment through green cosmetics. As society moves into a new era, it is anticipated that cosmetic and personal care products would play a significant part in human existence, thus the growing demand for cosmetics must be balanced with environmental concerns. The use of green cosmetics could be seen as respecting self-care and the environment. The development of new and environmentally friendly cosmetic products is a pressing need.

5.2 The difference: natural, organic, and synthetic skincare

On labels of skin care, the phrases "Natural", "Organic", and "Green" are prevalent. These words indicate that the products contain ingredients from nature, which are supposed to be safer, more natural, and healthier for consumers. Nerveless, following Prato (2022) that there has different identification between natural and organic cosmetics.

5.2.1 Natural skincare

The phrase "natural skincare" refers to products that include natural substances derived from plants, herbs, flowers, essential oils, minerals, etc. However, these components are not necessarily derived from organic sources. Natural skincare generally consists of nature-derived or botanical ingredients because they include less harsh chemicals than other disposable or commercial items, and natural component products are gaining appeal (Prato, 2022).

5.2.2 Organic skin care

Natural components are used in the production of organic cosmetic products, but they possess an aspect of more purity. Organic cosmetics contain naturally derived or plant-based components cultivated without the use of pesticides (Prato, 2022). In addition, the report of McEachern & McClean (2002) shows that organic cosmetics, like skin care lotion, must be certified USDA NOP standard which is the same as organic foods. These standard demands that 95% of components of

products must be of organic origin, and the provenance of the remaining 5% of substances is stringent controls. Consequently, genuine "organic" skincare comprises elements that are both natural and manufactured organically.

5.2.3 Synthetic skincare

On the other hand, these words such as natural, organic, etc. are indicated on the label of certain synthetic items. The meanings of these phrases should be investigated to identify natural items from synthetic products. These are referred to as "chemical products" and are manufactured utilizing synthetic analogs of natural components. Although synthetic compounds are not "natural" by definition, this does not imply that they are hazardous. Occasionally, natural sub-stances serve as the foundation for these formulations, to which synthetic components are subsequently added. These are synthesized more effectively by chemists and widely accessible for commercial usage, often at substantially reduced prices. However, synthetic cosmetics may include artificial scents, parabens, colors, phthalates, and sulfates, which are hazardous to human health (Prato, 2022).

5.3 The current state of the green market in Vietnam

5.3.1 Status of the polluted environment in Vietnam

Vietnam is one of the developing nations in Southeast Asia. As a result of the impact of industrialization and modernization, along with the unfinished awareness of the people and small businesses, the environmental situation in Vietnam is very alarming. This is causing climate change and environmental problems in Vietnam (Environment and Social, 2020).

Moreover, the natural environment of Vietnam has been severely impacted by wars in the past and continues to have adverse effects from the exploitation and utilization of natural resources. According to HDLL (2021), in 1945, forests covered 43.8% of the surface of Vietnam; now, they cover just over 28%, which is far below the red alert level of 30%; therefore, up to 13.4 million hectares of agriculture have been lost to erosion since 1945. On the other hand, environmental pollution in Vietnam is also increasing because many industrial plants discharge untreated waste into rivers, lakes, ponds, and the sea, contaminating water sources and causing diseases.

It is evident from the preceding analysis that Vietnam has several severe environmental concerns at present. This environmental situation poses a threat to the sustainable development of Vietnam, and "going green" is one of the solutions that individuals and businesses can implement to enhance the quality and level of living for Vietnamese by ensuring the rapid and sustainable growth of the nation.

5.3.2 Status of the green market in Vietnam

In Vietnam, there are a variety of initiatives aimed at promoting sustainable production and consumption, and green consumerism is also gaining popularity. According to Tuoi Tre News (2019), in recent years, as environmental pollution has worsened and climate change has been recognized as a worldwide emergency, a green lifestyle has caught the attention of a growing number of people and is gradually becoming a trend. Vietnamese citizens are becoming more environmentally conscious, so a rise in the need for environmentally friendly goods has been seen in Vietnam, and the population has worked to eliminate single-use plastics. Utilization of sustainable bamboo, glass, and steel goods. Instead of utilizing disposable and plastic items, several beverage businesses and restaurants have opted to employ bagasse boxes to reduce environmental impact.

With the increase in environmental consciousness in cosmetic industries in Vietnam nowadays, organic, and natural cosmetics continue to gain in popularity. Aloe vera, coconut, lemongrass, and jasmine are among the high-quality cosmetic components that may be found in Vietnam due to the tropical climate. There have been cosmetics containing these substances for a long time, but there were few manufacturers, and the costs were disproportionately expensive for the level of quality. In response to growing demand, both the number of cosmetics on the market and the quality of the packaging, graphics, and tales connected with each brand have expanded in complexity. Additionally, the usage of natural ingredients and eco-friendly packaging has become crucial for winning customer acceptance (TNC ASIA Trend Lab, 2022).

5.3.3 Opportunities for green cosmetic products in Vietnam

According to TNC ASIA Trend Lab (2022), in modern times, make-up and skincare are becoming more ingrained in the habits of Asians, especially women; for them, beauty is a method of taking care of their health in addition to eating cleanly and healthily. The rise of digital technology and its effect

on everyday living has significantly altered the Asian way of life. Their level of life is enhanced by the increased infrastructure, convenience, and quick service response time. These developments altered views of Asians on youth and health, as well as their beauty product preferences. Many individuals recognize the significance of eco-friendly goods. Green cosmetics are products that include natural, environmentally and human health-safe components.

According to Pham (2022) people in Vietnam are more health-conscious and attentive to ingredients included in commercially available cosmetics. This has offered fresh opportunities for cosmetics companies seeking to expand their operations or for newcomers who wish to engage in the cosmetics market in Vietnam, especially, producing and distributing organic beauty products domestically for two primary reasons. Firstly, Vietnam offers comparatively inexpensive organic and herbal components for cosmetics. Coconut, which is plentiful in the Mekong Delta area of Vietnam, is a key component of many beauty products. In addition, aloe vera, turmeric, and green tea are three native Vietnamese substances with skin-healing effects.

Therefore, Vietnam is the place for a diverse array of organic ingredients, providing a solid platform for firms seeking to create organic goods on the domestic market. Secondly, the Vietnamese consumer attitude alteration, with an increased emphasis on the quality of personal cosmetic products, particularly among Generation Z. Consequently, the market for natural and herbal cosmetics is projected to have a substantial increase in growth (Pham, 2022).

5.3.4 Challenges of green cosmetic products in Vietnam

Along with the opportunities, the cosmetic market in Vietnam likewise deals with a big challenge that it could be seen that the market is quite youthful and unsteady. Pham (2022) observes that the Korean wave is a significant contributor to the rising demand for cosmetics. However, Korean fashion trends fluctuate dramatically from time to time, making the Vietnamese cosmetics business susceptible to volatility. In addition, endorsements from Korean celebrities have a substantial impact on the cosmetics business, which affects the sales of products and adds to the difficulties of businesses. Besides, the price sensitivity of the market is a further obstacle. As the vast majority of purchasers are young people with modest budgets, they tend to choose lower-priced products over those of higher quality. To stay competitive, cosmetics and personal care businesses need to consider the price of their products as closely as possible to the purchasing capacity of Vietnamese

customers. Moreover, because of consumer preconceptions, Western cosmetics businesses face obstacles in Vietnam's cosmetics market. Due to physical differences, consumers assume that Asianmade goods are more compatible with their skin type than European-made items (Pham, 2022).

Additionally, a report by Tomorrow Marketers (2021) that Vietnam uses 50 billion plastic bags per year, or 10 bags per person per week, making it fourth in the world for marine plastic pollution discharge. A quarter of Vietnamese customers, however, believe recycling to be rather inconvenient. Recognizing this, businesses have implemented green, eco-friendly packaging initiatives, safeguarded the environment and promoted sustainable lifestyles. Instead of bringing their bags to the shop, these initiatives get more objective consumer feedback. It may be mentioned as on Earth Day in 2020, Cocoon may publicize its tree-planting initiative using recycled plastic jars, after almost a month after its release, the first and most popular vegan cosmetic in Vietnam will have handed away 185 used bottles, or 37 goods.

6 Analysis of empirical data

After completing the data collection technique, the data analysis was conducted. Specifically, using SPSS and Excel for data entry, management, illustration, and visualization.

6.1 Result of empirical data

6.1.1 Demographic data

Participant demographics, such as gender, age range, area of residence, and monthly income, are provided in the first section to aid in a more thorough and transparent evaluation of the collected data. Below is a table displaying the respondents' demographic information.

Demographic characteristic	Frequency	Percent
Gender		
Female	167	66,5

Male	84	33,5
Generation		
Millennials	115	45,8
Gen Z	136	54,2
Place of residence		
The South	164	65,3
The North	68	27,1
The Middle	19	7,6
Monthly Income (1 euro ~ 23.500VND Oct 2022)		
< 10.000.000 VND (~425,5 €)	104	41,4
10.000.000 VND - 25.000.000 VND (~425,5€ - 1063,8€)	82	32,7
25.000.000 VND - 45.000.000 VND (~1063,8€ - 1914,89€)	34	13,5
> 45.000.000 VND (> ~1914,89€)	31	12,4

Table 2 Demography of the respondents

To begin with, among the 251 valid responses, the participants were asked for demographic data in questions 1 to 4, which was shown in Table 2. These 167 women responded to the survey, resulting in a 66.5% female response rate, whereas males assigned just 33.5% (84 individuals) of their replies.

Additionally, the figures for both generations were not significantly different, at 54.2% (136 individuals) and 45.8% (115 individuals) for Gen Z and Millennials respectively. Besides, respondents who are from the South of Vietnam take the highest percentage 65,3% or 164 participants. Following this, respondents from the North and the Middle of Vietnam make up 27,1% (68 individuals) and 7,6% (19 individuals) respectively. Finally, in terms of the monthly income of the respondents, the people who earn under 10.000.000 VND ($^{\sim}$ 425,5 \odot) account for the highest proportion, 41,4% (104 individuals), while the percentages of respondents who own their monthly income between 10.000.000 VND and 25.000.000 VND ($^{\sim}$ 425,5 \odot – 1063,8 \odot) is 32,7 (82 individuals). After this, the respondent's own monthly 25.000.000 VND – 45.000.000 VND ($^{\sim}$ 1063,8 \odot – 1914,89 \odot) and larger than 45.000.000 VND ($^{\sim}$ 1914,89 \odot) which represents a small proportion is 13,5% (34 individuals) and 12,4% (31 individuals) respectively.

Additionally, the Independent Samples T-Test was used to compare the means of the two groups. Specifically, to compare two factors including generations variables (Millennials and Gen Z) and customer behavior variables. This method could determine between these two age groups to identify which group has the greater level of environmental concern. The results could be shown in Table 3, and Figures 5, and 6.

Variables		N	Mean
Customer Behavior	Millennials	115	3,7188
	Gen Z	136	3,6789

Table 3 Group Statistics

As can be seen the mean values in Table 3 (Group Statistics) that on average Millennials (3,7188) and Gen Z (3,6789) are not significantly different in terms of environmental purchasing behavior. The issue is whether the similarity between the two means is large enough to exclude the possibility of random mistakes. The t-test comes into play at this point, which is shown in Figure 4 and Figure 5 below.

Independent Samples Test

		Levene's Test f Varian		t-test for E Mea	
		F	Sig.	t	df
Customer behavior	Equal variances assumed	,016	,900	,328	249
	Equal variances not assumed			,328	242,016

Figure 4 Independent Samples Test (a)

As can be seen from Figure 4, the value of sig. in Levene's test is 0,9 which is higher than 0,05. Hence, the assumption that variances are equal is correct. Then the result in the category "Equal variances assumed" shall be used for further analysis.

Independent Samples Test

t-test for Equality of Means Significance One-Sided Two-Sided Mean Std. Error Difference Difference Customer **Equal variances** ,743 .03992 ,12164 ,372 behavior assumed Equal variances not ,743 ,12165 ,372 ,03992 assumed

Figure 5 Independent Samples Test (b)

Figure 5 reports that a 2-sided p-value is 0,743, which is higher than 0,05. Therefore, there is no significant difference between the means of the two variables. In other words, there is no evidence of a variation in the buying behavior of customers between two distinct generations (Millennials and Gen Z).

6.1.2 Individual perspective

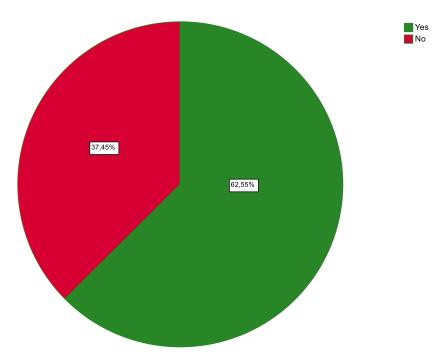


Figure 6 Green cosmetics awareness

Figure 6 illustrates the proportion that Vietnamese respondents purchasing green cosmetics, consumers buying green cosmetics account for significantly higher, 62,55% (157 individuals) than the non-one (37,45%). This is shown the positive awareness of Vietnamese consumers related to green products, particularly green cosmetics.

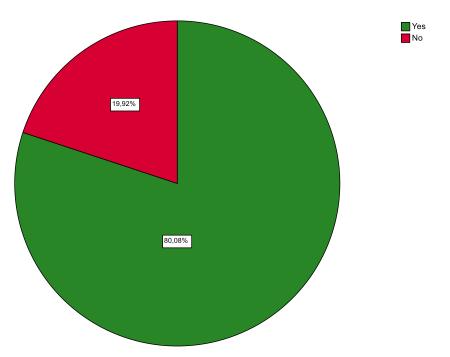


Figure 7 Awareness of consumer's buying behavior related to the environment

The following question which is shown in Figure 7 aimed to determine whether respondents believed that their purchasing habits would have an impact on preventing environmental degradation. In other words, the response to this question determines the perceived effectiveness of the product or service in the customers' minds. Therefore, 80,08 percent (201 individuals) of them consider it persuasive. In addition, approximately 19,92%, or 50 individuals, believe their purchasing habits will not negatively impact environmental protection. One in fifth individuals responding "no" is a relatively small proportion. This demonstrates encouraging findings for the main hypothesis of the study, namely, that Vietnamese consumers are warming up to the idea of green marketing.

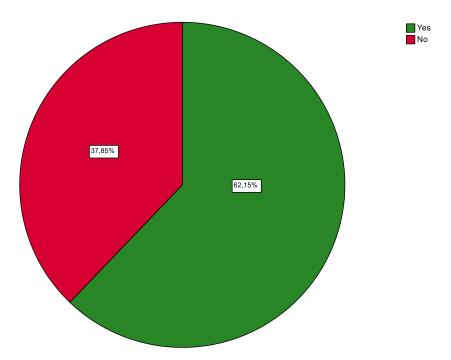


Figure 8 Eco-labelling Awareness

Based on Figure 8, it is observed that the awareness of Vietnamese respondents related to ecolabeling is positive. Because 62,15% (156 individuals) of respondents said that it is easy for them to recognize the eco-labeling of the products they consume. The result may be supported for the main hypothesis of the study.

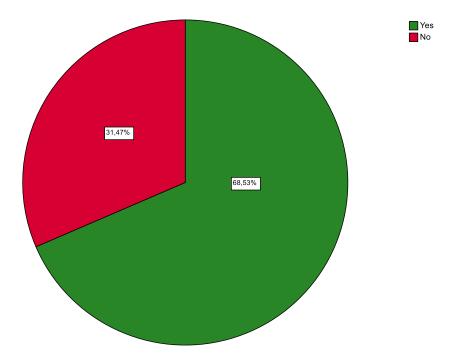


Figure 9 Eco-brand Awareness

Additionally, Figure 9 illustrates the awareness of Vietnamese respondents related to eco-brand is positive. Since 68,53% (172 individuals) of Vietnamese respondents said that they think eco-brand represents a reliable green cosmetic product.

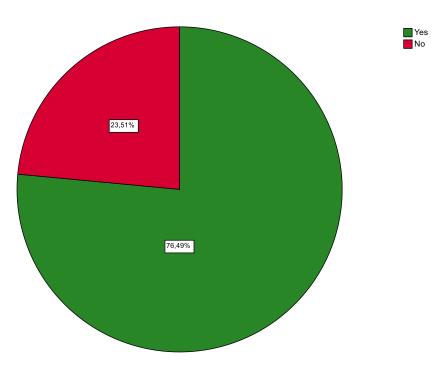


Figure 10 Environmental Advertisement Awareness

Moreover, Figure 10 represents the awareness of environmental advertisements of Vietnamese respondents. As it is observed that 76,49% (192 individuals) of Vietnamese respondents agree with environmental advertisements could improve their perspective of green cosmetic items, while only 23,51% of them say "no". The positive results may be supported for the main hypothesis of the study.

Besides, the study categorized green marketing into three sections, measuring green cosmetics, green prices, and green promotion. In the first part, participants were polled on their familiarity with green cosmetics. In this section, respondents were asked to elaborate on their perspectives regarding green marketing in general. It could be seen as requesting respondents' ratings on a Likert scale (with 1 strongly disagree to 5 strongly agree). By calculating means and standard deviations for relevant variables, descriptive statistics in SPSS can be used to conclude involved in the characteristics of a sample. In addition, Cronbach's alpha was developed to measure the reliability of data, which is shown in Table 4. This information would then be utilized to test hypotheses.

Variables	Mean	Standard	Cronbach's
		Deviation	Alpha
Green Cosmetics			0,818
Green cosmetics are more beneficial to the skin.	3,52	1,100	
Green cosmetics include non-harmful components.	3,69	1,117	
Green cosmetics are friendly to the environment	4,02	1,069	
Green Price			0,745
Green cosmetics' price is fair	3,37	1,078	

Geen cosmetics' price is proportional to their quality.	3,53	1,132	
The price of groon and non-groon cosmotics is the same			
The price of green and non-green cosmetics is the same.			
	3,00	1,313	
Green Promotion			0,871
Environmental awareness may be raised effectively via	3,87	1,041	
green promotion.		,-	
g.cempromotion.			
Individuals are inspired to purchase green promotions.			
	3,68	1,067	
The green promotion offers more successful strategies			
for green cosmetics.	3,82	1,065	
Customer Behavior			0,786
Customer Senation			0,700
I am confident using eco-friendly items instead of	3,67	1,076	
conventional ones.			
I did not want cosmetics that were tested on animals.			
	3,58	1,273	
I like green cosmetics that are environmentally friendly.			
	3,84	1,076	

Table 4 Descriptive statistics

Table 4 shows a Linkert scale of 1 to 5, the mean scores for the constituents of green cosmetics are between 3 and 4, which could be considered as high. The mean score of 4,02 indicates that most respondents agree that green cosmetics are friendly to the environment. Additionally, Cronbach's alpha of the green cosmetics category is 0,818, which is larger than 0,70, indicating that the reliability of the measure is satisfactory because Cronbach's alpha exceeds the minimal value of 0,70 (Taber, 2018). Therefore, green cosmetics have a significant effect on consumer behavior.

Secondly, the mean score of the three variables in the green price category fluctuation around 3 or higher but below 4 on the Likert scale. As the result, most participants agreed with the cost of green cosmetics is proportional to their quality with a mean score of 3,53. Meanwhile, Cronbach's alpha of the green price category is 0,745, which is larger than 0,70, indicating that the reliability of the measure is satisfactory. Consequently, the green price has a minimal impact on consumer behavior.

Thirdly, comparing the three green marketing categories, Cronbach's alpha of green promotion reaches an impressive degree of reliability with 0,871. In Likert scale shows the mean score of three variables (environmental awareness may be raised effectively via green promotion, individuals are inspired to purchase by green promotion, green promotion offers more successful strategies for green cosmetics) had an average of 3 or higher. The mean score of respondents of individuals, who agree with environmental awareness may be raised effectively via green promotion, is 3,87.

Finally, the reliability of the consumer behavior proposition, as measured by Cronbach's alpha, is satisfactory at 0,786. On the Likert scale, three items have a mean score higher than 3 but lower than 4. A large majority of respondents said they changed their purchasing habits because of being environmentally conscious, which has a mean score of 3,84.

Moreover, to test the hypotheses and show a relationship between green marketing and consumer behavior, multiple regression analysis in SPSS was conducted for the main aim of the research. Three inputs are employed in the regression which are the standardized β coefficients, the T-test, and the p-value (significant).

As defined by Glen (2022a), the standardized beta coefficient may be used to evaluate how significantly various factors (independent) affect the dependent one. The standardized coefficient

represents the entire influence of the predictor variables; in theory, the most influential predictors are those that rank highest. It is common practice to use a decimal representation of the p-value (sig.) when conducting hypothesis tests. The lower the p-value, the more convincing the evidence (Glen, 2022b). According to Jain & Chetty (2019), if the p-value (sig.) is less than 0,05, the hypothesis is supported, indicating that the study topic had an effect. Alternatively, a p-value (sig.) greater than 0.05 implies that the hypothesis cannot be supported since there is no impact on the research subject. Table 5 shows the outcomes of the hypothesis tests.

Hypotheses	Standardized β coefficient	Standard error	t - value	p-value (Sig)	Findings
H1: Green Cosmetics	0,409	0,071	5,874	<0,001	Supported
H2: Green Price	0,189	0,062	3,071	0,002	Supported
H3: Green Promotion	0,241	0,068	3,601	<0,001	Supported

Note: Consumer behavior (Dependent variable): R=0,766; Adjusted R square = 0,581

Table 5 Testing of Hypotheses

Table 5 illustrates that using green marketing strategies is correlated with changes in buyer behavior because of R=0,766. Besides, all supported variables explain 58.1% of the variation in consumer behavior, with Adjust R square = 0,581. All the correlations were statistically significant, as was expected. Hence, H1, H2, H3 were accepted because the findings demonstrate that consumer behavior was impacted by the green marketing mix. This means green cosmetics significantly affect customer purchasing behavior (β 1 = 0,409, t = 5,874, p < 0,001), green prices significantly affect customer purchasing behavior (β 2 = 0,189, t = 3,071, p = 0,002), green promotion significantly affect customer purchasing behavior (β 3 = 0,326, t = 3,601, p < 0,001).

		Respo	onses	
		N	Percent	Percent of Cases
Q14 ^a	Social media (YouTube, Facebook, Instagram, TikTok, etc.)	199	37,5 %	79,3%
	Internet	171	32,2%	68,1%
	Conference	13	2,4%	5,2%
	Friends and Family	105	19,8%	41,8%
	Television	25	4,7%	10,0%
	Magazine	18	3,4%	7,2%
Total		531	100,0%	211,6%

Figure 11 Promotional tools

In Question 14 of the survey, which is shown in Figure 11, respondents were asked to name one or more kinds of green promotional tools that they have used. This information will be used to conduct a comprehensive study of the effect of green promotion on consumers. As could be seen that the data of social media and the Internet make up the largest percentage, which is 79,3% (199 individuals) and 68,1% (171 individuals) respectively. Following this, the data of Friends and Family make up 41,8% (105 individuals), while television contributes 10% (25 individuals) of the proportions. After, conferences and magazines allocated the lowest percentage, only 5,2% (13 individuals), and 7,2% (18 individuals) respectively. Therefore, it could be considered as Vietnamese consumers may be the most significantly influenced by social media, the Internet, and friends and family of consumers.

\$Q15 Which countries do you prefer when purchasing green cosmetics?

		Respo	onses	Percent of
		N	Percent	Cases
\$Q15a	Japan	128	22,8%	51,0%
	South Korean	169	30,1%	67,3%
	The EU	112	20,0%	44,6%
	Thaland	16	2,9%	6,4%
	The USA	73	13,0%	29,1%
	Vietnam	63	11,2%	25,1%
Total		561	100,0%	223,5%

Figure 12 The countries prefer cosmetics made in

The question 15, which is illustrated in Figure 12, the participants were asked the countries they prefer when purchasing green cosmetics to determine Vietnamese behavior related to the place where the brand or the products come from. As can be seen South Korean take the highest percentage of consuming cosmetics, which is 67,3% (169 individuals), and they believe for using cosmetics from Japan also comprises a high percentage in Vietnam, which is 51% (128 individuals). Meanwhile, the products from the EU contribute 44,6% (112 individuals) of the proportion using their cosmetics. Following this, Vietnam and The USA represent 25,1% (63 individuals) and 29,1% (73 individuals) respectively. Finally, Thailand, with a proportion of 6,4%, has the lowest percentage (16 individuals). Consequently, it could be obvious that in South Korea and Japan where Vietnamese consumers prefer buying green cosmetics.

6.1.3 Individual consumption

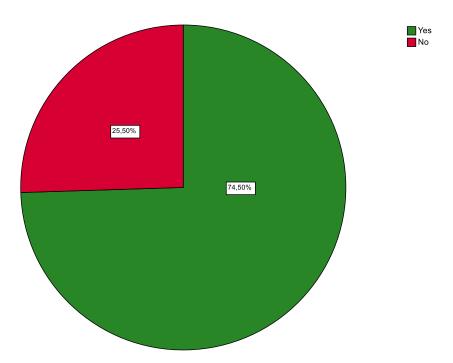


Figure 13 Willingness to pay extra for green cosmetics

Figure 13 illustrates the willingness of Vietnamese consumers to pay extra for green cosmetics, the data illustrates that approximately three-quarters (74,5%) of Vietnamese participants (187 individuals) are willing to pay extra for green cosmetics from the consumption perspective of Vietnamese. In contrast, 25.50%, or 64 people, are part of a group that is unwilling to participate. As the result, it shows the positive individual consumption related to the willingness of Vietnamese customers to pay more for green cosmetics.

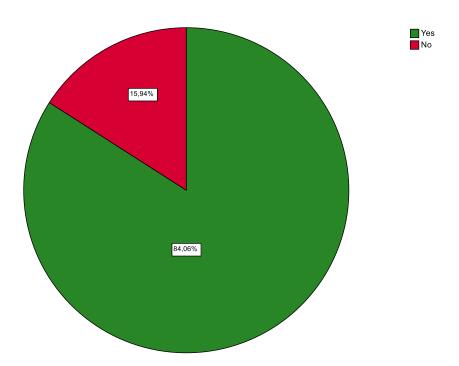


Figure 14 Suggestion green cosmetics

Figure 14 shows the willingness to suggest green cosmetics to others like friends, family, and relative's participants. It could be seen that the percentage of people who are willing to suggest their relationship is significantly high, accounting for 84,06% (211 individuals), while the remaining 15,94% is equivalent to 40 respondents who non-willing. As a result, it demonstrates a positive correlation between recommending green cosmetics to others.

7 Conclusion

Green marketing is significantly important for the environment. The green idea seeks to satisfy customer needs while also safeguarding the environment. If humans do not take immediate action to preserve the environment, the future will be in grave danger. Therefore, it is essential to understand green marketing topics. It is essential to recognize the characteristics associated with eco-friendly buying behavior.

All of the data reported were obtained using survey questions designed as part of the study's primary data collection technique. A total of 251 individuals were polled to see how consumers perceive the effect or influence of green marketing strategies on their tendency for spending. Ethical

considerations have also been made to verify that the used data and procedures are reliable. It is reasonable to state that the whole strategy and its processes were essential for leading the research in the appropriate direction and delivering solid findings. "Green marketing" has evolved as a valuable strategy to maintain our world for future generations. It contributes constructively to environmental security. In response to increased environmental consciousness, a new industry known as the green market has developed. Companies of all sizes have to apply environmentally friendly operations systematically to remain competitive in the current market.

7.1 Research results and Discussion

Many factors, including environmental awareness among participants, consumer demographics, and the impact of green marketing strategies were investigated to determine their green purchasing behavior and to obtain a better insight into customer purchase behavior.

Through the analysis above both Millennials and Gen Z are aware that their purchasing behavior is related to the environment, and there is no significant difference between the two generations. The results are positive showing the number of people who have consumed green cosmetics is higher than the number of non-consumers. Most Vietnamese consumers are aware of their purchasing behavior related to the environment, and they are willing to suggest green cosmetics for their family, friends, or relatives. Moreover, Vietnamese consumers also have high eco-label, eco-brand, and environmental advertisement awareness involved in cosmetic products. On the other hand, South Korea and Japan dominate the cosmetics market in Vietnam, though Vietnam has cheap natural ingredients for producing cosmetic products. This is an important point for Vietnamese cosmetic industries to consider and enhance their products to achieve a position in the Vietnamese cosmetic market.

Besides, numerous theoretical elements of green marketing investigated in the study, such as green cosmetics, green pricing, and green promotion, have been examined to get a better understanding of how these elements impact the buying behaviors of customers within these diverse categories. The absence of green places is due to a lack of data. In the setting of a growing market like Vietnam, the testing of hypotheses reveals an integrated pattern in forecasting consumer purchases of green cosmetics via green prices and green promotion. To achieve the goal of the study, several factors, such as demographic data of consumers, individual perspectives, and individual consumer behavior

on green marketing, were explored. The findings indicate that there is a potential for green marketing in Vietnam, since Vietnamese consumers, particularly Millennials and Generation Z, prefer to shift their purchase behavior toward green consumption. In this context, green promotion, green cosmetics, and green prices have a relationship with consumer purchasing behavior. The findings do not mean that the participants prefer green cosmetics over conventional ones, but they do indicate that green cosmetics, green promotions, and green prices are at least examined before making purchases. The findings of this research on Vietnamese consumers' behavior toward green marketing might provide valuable insight for marketers and policymakers.

According to Figure 14, the total number of people who agreed with the willingness to premium price with green cosmetics is about three times that of those who disagreed. To clarify, this implies that buyers may place a great deal of importance on the selling price of a product. However, the research reveals that really few buyers refuse to pay an extra price for environmentally friendly cosmetics compared to conventional cosmetics in the same category. Instead, people seem to base their decisions on several criteria, such as branding, quality, and benefits. Customers may be inclined to purchase eco-friendly cosmetics if it offers more convincing and prominent features than the average one in the same category.

Additionally, the green promotion has a greater impact on green customer behavior. It may be said that green promotion has some effect on the purchasing decisions of the target audience. Consequently, green promotion assists businesses in recruiting more potential clients and convincing them to consider or buy their green cosmetics. In addition, the author investigates social media, the Internet, and friends and family of customers, the three most popular routes through which people may acquire news about environmentally responsible cosmetics, which indicates gaining greater insight into the influence of green promotion.

The findings indicate that green marketing has a positive relationship with purchase behavior. This finding demonstrates a significant relationship between green cosmetics and green promotion with purchasing decisions and is consistent with Salo's (2014) findings that consumer behavior positively influences the purchase of green cosmetics in Finland. The same context reveals that the pricing of green products has a considerable positive link with consumers' purchasing behavior (Weisstein et al., 2014). Nguyen (2021) said that the promotion of environmentally friendly products would also

have a substantial effect on consumers' purchasing behavior when choosing goods. Ansar (2013) stated that environmental advertising, pricing, and eco-friendly packaging had a significant relationship with green purchasing behavior. All these findings demonstrate that green marketing strategies affect consumer purchasing behavior.

7.2 Research Critique

7.2.1 Reliability, validity, and limitation

The detailed research methodologies, tools, and approaches described above may be condensed into an effective action plan. In line with the research topic, the procedures used in this study are utilized to collect genuine and reliable data. According to Middleton (2019), the concepts of reliability and validity are employed to assess the quality of research. They represent the accuracy of a method, strategy, or test. Validity relates to the accuracy of a measurement, while reliability refers to its consistency. Particularly for quantitative investigations, it is essential to keep reliability and validity in mind while designing a research plan, selecting methodology, and writing up the findings.

The reliability of both primary and secondary sources used in the research could be seen as valued. Particularly, primary data was collected using an online survey designed to find customers' perspectives on green marketing and their purchasing decisions. Specifically, a list of closed-ended questions was created for responders to complete. Using SPSS and Excel, the author meticulously organized and manipulated the collected data; thereupon Cronbach's alpha, which could be considered the most common metric, evaluates the stability of the whole scale as a reliability test. Cronbach's alpha levels are 0,7 or over and are regarded as credible (Taber, 2018). Aside from this, the author obtained secondary data from creditable and current publications like scientific articles, several books, working papers, theses, and previous publications, in addition to credible Internet sources.

On the other hand, research validity will also be assessed. The purpose of the online survey was to collect data on the demographic, individual perspectives of respondents, and their green purchasing behavior, and the relative importance of green marketing on their purchasing. All the problems that came up in the survey helped the authors achieve the aims and answer the research question.

Finally, there is a common limitation that follows the thesis. This involved the methodologies used to describe and sample empirical investigations. According to Dan So (2022) that Vietnam is a highly populated country. Therefore, 251 respondents may not be reflective of the whole public's attitude toward green marketing and green buying patterns.

7.2.2 Research Purpose

Using a variety of definitions from different scholars, as well as a clearly stated green marketing mix as a core basis for the data analysis, this study provides a comprehensive analysis of green marketing strategies and their effect on Vietnamese consumer behavior, particularly Millennials and Gen Z. In addition, a significant understanding of Vietnamese consumers related to green marketing, as well as a willingness to contribute to sustainable living and positive motivation and attitude toward environmental consumption behaviors are displayed.

Since the research objective was limited to determining the link between green marketing and consumer buying behavior, this report also lacks an analysis of any arguments against the green marketing mix.

The author attempts to demonstrate a relationship between green marketing strategy and Vietnamese (millennials and generation Z) consumers' purchases of green cosmetics. In this sense, the study reveals that green products, green price, and green promotion are influenced by purchasing behavior of Vietnamese, which are related to their perspective of the environment.

7.3 Implication and suggestion for future research

The research has shown the validity of the green marketing 4P model. As a result, the green marketing mix 4P model for the cosmetics business was achieved in the research. An extensive study was conducted on the advantage of the model, and its potential applicability in the cosmetics industry was explored. The existing literature evaluation procedure has led to the conclusion that a substantial amount of research has been conducted on the 4P model of the green marketing mix. The research focuses on the effect of green marketing on the purchase behavior of Vietnamese Millennials and Generation Z. However, as stated earlier, the study sample size is limited and may not accurately represent the whole Vietnamese purchasing behavior. Hence, the author suggests

several avenues for further study. Other topics for future study include gathering more empirical data on this business to have a better understanding of the development of the Vietnamese green cosmetics market. Firstly, the model might be improved by analyzing the effect of the environment on the industry, as it influences and alters industrial forces through time. An overview of external influences may be attained by integrating the model with various additional strategic tools, such as eco-labeling, eco-branding, and environmental advertising. Secondly, researchers may focus on one other area of green marketing to conduct a more in-depth study. Suitable themes might include, for example, Vietnamese consumer knowledge of greenwashing, significant cause marketing initiatives in Vietnam, or research on eco-labels, eco-brands, and environmental advertising in Vietnam. In addition, academics may examine the impact of green marketing in other disciplines, such as fashion, technology, and manufacturing. In general, each of the study avenues may be very valuable to the evolution and perfection of green marketing in the industry.

In conclusion, this thesis's study might have practical consequences for managers since it gives a general overview of the industry's status. It was discovered that the power of consumers is especially great in the green cosmetics business and that environmental issues play a large influence; thus, it is crucial for any firm to develop a consumer-focused organization.

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Appendices

Appendix 1. Survey Questionnaire

Q1 Giới tính của bạn là gì?

- o Nam
- o Nữ

Q2 Bạn thuộc thế hệ Millennials hay Gen Z?

- o Millennials (26 41 tuổi)
- o Gen Z (10 25 tuổi)

Q3 Bạn sống ở đâu tại Việt Nam?

- o Miền Nam
- o Miền Bắc
- o Miền Trung

Q4 Thu nhập	của bạn	trong m	iột tháng	là bao	nhiêu?	(1 €	euro ~	23.500VND	tháng	10 năm
2022)										

- o <10.000.000 VND (~ 425,5e)
- o 10.000.000 VND 25.000.000 (~ 425,5e 1063,8e)
- o 25.000.000 VND 45.000.000 (~ 1063,8e 1914,89e)
- o > 45.000.000 (> ~ 1914,89e)

Q5 Bạn đã từng mua mỹ phẩm xanh chưa?

- o Có
- o Không

Q6 Bạn có nghĩ rằng hành vi mua hàng của bạn có liên quan đến môi trường không?

- o Có
- o Không

Q7 Bạn có dễ dàng nhận ra các sản phẩm dán nhãn thân thiện với môi trường không?

- o Có
- o Không

Q8 Bạn	n có nghĩ rằng nhãn hiệu sinh thái đại diện cho một mỹ phẩm xanh đáng tin cậy không?
o	Có
o	Không
•	n có nghĩ rằng các quảng cáo liên quan tới môi trường có thể cải thiện quan điểm của các mỹ phẩm xanh không?
o	Có

Không

Các bió	ến	1	2	3	4	5
Q10 M	lỹ phẩm xanh					
	Mỹ phẩm xanh có lợi cho da hơn mỹ phẩm thông thường					
	 Mỹ phẩm xanh bao gồm các thành phần không gây hại. 					
	 Mỹ phẩm xanh thân thiện với môi trường 					
Q11 G	iá xanh					
	 Giá mỹ phẩm xanh là hợp lý Giá thành của mỹ phẩm xanh tỷ lệ thuận với chất lượng của chúng. Giá của mỹ phẩm xanh và mỹ phẩm thông 					
	thường là như nhau.					
Q12 Q	uảng bá xanh					
0	Nhận thức về môi trường có thể được nâng cao một cách hiệu quả thông qua quảng bá xanh. Quảng bá xanh thúc đẩy tôi đưa ra quyết định					
0	mua. Quảng bá xanh giúp tiếp cận hiệu quả hơn với mỹ phẩm xanh.					
Q13 TI	nói quen của người dùng					
0	Tôi tự tin sử dụng những sản phẩm thân thiện với môi trường thay vì những sản phẩm thông					
0	thường. Tôi không muốn sử dụng mỹ phẩm đã được thử nghiệm trên động vật.					
0	Tôi thích mỹ phẩm xanh vì nó thân thiện với môi trường.					

Q14 Bạn lấy thông tin về mỹ phẩm của mình ở đâu? (có thể chọn nhiều lựa chọn)

	Phương tiện truyền thông xã hội (YouTube, Facebook, Instagram, TikTok, v.v.)
	Internet
	Hội nghị
	Bạn bè và Gia đình
	Truyền hình
	Tạp chí
Q15 Bạn thíc	h quốc gia nào khi mua mỹ phẩm? (có thể chọn nhiều lựa chọn)
Q15 Bạn thíc	h quốc gia nào khi mua mỹ phẩm? (có thể chọn nhiều lựa chọn) Nhật Bản
	Nhật Bản
	Nhật Bản Hàn Quốc
	Nhật Bản Hàn Quốc Châu Âu

Q16 Bạ	ın có săn sàng chi trả nhiều hơn để sử dụng mỹ phẩm xanh không?
o	Có
o	Không
Q17 Bạ	ın có gợi ý những sản phẩm xanh cho bạn bè, gia đình, người thân và vv?
0	Có

Không

o

Appendix 2. Output in SPSS

Frequencies

-						
C.	•	28	ïc	•	ic	C
7	LC	26		3 L		

			Statistics		
			Q2 Are you in	Q3 Where do	Q4 What is
		Q1 What is	Millennials or	you live in	your income
		your gender?	Gen Z?	Vietnam?	for a month?
N	Valid	251	251	251	251
	Missing	0	0	0	0

Frequency Table

Q1 What is your gender?

		Frequenc		Valid	Cumulative
		У	Percent	Percent	Percent
Valid	Female	167	66,5	66,5	66,5
	Male	84	33,5	33,5	100,0
	Total	251	100,0	100,0	

Q2 Are you in Millennials or Gen Z?

		Frequenc		Valid	Cumulative
		У	Percent	Percent	Percent
Valid	Millennials	115	45,8	45,8	45,8
	Gen Z	136	54,2	54,2	100,0
	Total	251	100,0	100,0	

Q3 Where do you live in Vietnam?

		Frequenc		Valid	Cumulative
		У	Percent	Percent	Percent
Valid	The South	164	65,3	65,3	65,3
	The North	68	27,1	27,1	92,4
	The Middle	19	7,6	7,6	100,0
	Total	251	100,0	100,0	

Q4 What is your income for a month?

		Frequenc y	Percent	Valid Percent	Cumulative Percent
Valid	< 10.000.000 VND (~425,5e)	104	41,4	41,4	41,4
	10.000.000 VND - 25.000.000 (~425,5e - 1063,8e)	82	32,7	32,7	74,1
	25.000.000 VND - 45.000.000 (~1063,8e - 1914,89e)	34	13,5	13,5	87,6
	> 45.000.000 (> ~1914,89e)	31	12,4	12,4	100,0
	Total	251	100,0	100,0	

Frequencies

Statistics

N	Valid	251	251	251	251	251
	Missing	0	0	0	0	0
		Q5 Have you ever bought green cosmetics?	Q6 Do you think your purchasing behaviour related to environment?	Q7 Is it easy for you to recognize green labelling products?	Q8 Do you think eco- brand represents a reliable green cosmetic product?	Q9 Do you think environmental advertisement could improve your perspective of green cosmetic items?

Frequency Table

Q5 Have you ever bought green cosmetics?

		Frequenc		Valid	Cumulative
		У	Percent	Percent	Percent
Valid	Yes	157	62,5	62,5	62,5
	No	94	37,5	37,5	100,0
	Total	251	100,0	100,0	

Q6 Do you think your purchasing behaviour related to environment?

		Frequenc		Valid	Cumulative
		У	Percent	Percent	Percent
Valid	Yes	201	80,1	80,1	80,1
	No	50	19,9	19,9	100,0
	Total	251	100,0	100,0	

Q7 Is it easy for you to recognize green labelling products?

		Frequenc		Valid	Cumulative
		У	Percent	Percent	Percent
Valid	Yes	156	62,2	62,2	62,2
	No	95	37,8	37,8	100,0
	Total	251	100,0	100,0	

Q8 Do you think eco-brand represents a reliable green cosmetic product?

		Frequenc		Valid	Cumulative
		У	Percent	Percent	Percent
Valid	Yes	172	68,5	68,5	68,5
	No	79	31,5	31,5	100,0
	Total	251	100,0	100,0	

Q9 Do you think environmental advertisement could improve your perspective of green cosmetic items?

		Frequenc		Valid	Cumulative
		У	Percent	Percent	Percent
Valid	Yes	192	76,5	76,5	76,5
	No	59	23,5	23,5	100,0
	Total	251	100,0	100,0	

Descriptives

Descriptive Statistics

	N	Minimum	Maximum	Mean	Std. Deviation
Q10.1 Green cosmetics are more beneficial to the skin	251	1	5	3,52	1,100
Q10.2 G Appendix_heading_2 s include non-harmful components	251	1	5	3,69	1,117
Q10.3 Green cosmetics are friendly with environment	251	1	5	4,02	1,069
Valid N (listwise)	251				

Descriptive Statistics

					Std.
	N	Minimum	Maximum	Mean	Deviation
Q11.1 The price of eco- friendly cosmetics is fair	251	1	5	3,37	1,078
Q11.2 The cost of eco- friendly cosmetics is proportional to their quality.	251	1	5	3,53	1,132
Q11.3 The price of eco- friendly and non-eco- friendly cosmetics is same	251	1	5	3,00	1,313
Valid N (listwise)	251				

Descriptive Statistics

	N	Minimum	Maximum	Mean	Std. Deviation
Q12.1 Environmental awareness may be raised effectively via green promotion	251	1	5	3,87	1,041
Q12.2 Green promotion is driven to make a buying decision.	251	1	5	3,68	1,067
Q12.3 Green promotion provides a more effective approach to green cosmetics	251	1	5	3,82	1,065
Valid N (listwise)	251				

Descriptive Statistics

					Std.
	N	Minimum	Maximum	Mean	Deviation
Q13.1 I am confident using eco-friendly items instead of conventional ones	251	1	5	3,67	1,076
Q13.2 I did not want cosmetics that was tested on animal.	251	1	5	3,58	1,273
Q13.3 I like green cosmetics that is environmentally friendly.	251	1	5	3,84	1,076
Valid N (listwise)	251				

Case Processing Summary

		N	%
Cases	Valid	251	100,0
	Excludeda	0	,0
	Total	251	100,0

a. Listwise deletion based on all variables in the procedure.

Reliability Statistics

	Cronbach's	
115	Alpha	N of Items
	,818,	3

H

item-10tal Otatistics						
	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted		
Q10.1 Green cosmetics are more beneficial to the skin	7,71	3,911	,645	,777		
Q10.2 Green cosmetics include non-harmful components	7,54	3,593	,729	,690		
Q10.3 Green cosmetics are friendly with environment	7,20	4,027	,643	,778		

Case Processing Summary

		N	%
Cases	Valid	251	100,0
	Excludeda	0	,0
	Total	251	100,0

a. Listwise deletion based on all variables in the procedure.

Reliability Statistics

(Cronbach's	
	Alpha	N of Items
	,745	3

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
Q11.1 The price of eco- friendly cosmetics is fair	6,53	4,210	,658	,572
Q11.2 The cost of eco- friendly cosmetics is proportional to their quality.	6,37	4,298	,575	,658
Q11.3 The price of eco- friendly and non-eco- friendly cosmetics is same	6,90	3,941	,502	,760

Case Processing Summary

		N	%
Cases	Valid	251	100,0
	Excluded ^a	0	,0
	Total	251	100,0

a. Listwise deletion based on all variables in the procedure.

Reliability Statistics

Cronbach's	
Alpha	N of Items
,871	3

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
Q12.1 Environmental awareness may be raised effectively via green promotion	7,49	3,923	,726	,841
Q12.2 Green promotion is driven to make a buying decision.	7,69	3,777	,743	,826
Q12.3 Green promotion provides a more effective approach to green cosmetics	7,55	3,657	,788	,785

Case Processing Summary

		N	%
Cases	Valid	251	100,0
	Excluded ^a	0	,0
	Total	251	100,0

a. Listwise deletion based on all variables in the procedure.

Reliability Statistics

Cronbach's	
Alpha	N of Items
,786	3

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
Q13.1 I am confident using eco-friendly items instead of conventional ones	7,42	4,157	,673	,663
Q13.2 I did not want cosmetics that was tested on animal.	7,51	3,851	,560	,797
Q13.3 I like green cosmetics that is environmentally friendly.	7,25	4,197	,660	,676

Correlations

Correlations

		X1	X2	X3	Υ
X1	Pearson Correlation	1	,715**	,766**	,729**
	Sig. (2-tailed)		<,001	<,001	<,001
	N	251	251	251	251
X2	Pearson Correlation	,715**	1	,688**	,648**
	Sig. (2-tailed)	<,001		<,001	<,001
	N	251	251	251	251
X3	Pearson Correlation	,766**	,688**	1	,685**
	Sig. (2-tailed)	<,001	<,001		<,001
	N	251	251	251	251
Υ	Pearson Correlation	,729**	,648**	,685**	1
	Sig. (2-tailed)	<,001	<,001	<,001	
	N	251	251	251	251

^{**.} Correlation is significant at the 0.01 level (2-tailed).

Regression

Variables Entered/Removed^a

	Variables	Variables	
Model	Entered	Removed	Method
1	X3, X2, X1 ^b		Enter

a. Dependent Variable: Y

b. All requested variables entered.

Model Summary^b

			Adjusted R	Std. Error of	Durbin-
Model	R	R Square	Square	the Estimate	Watson
1	,766ª	,586	,581	,62036	1,957

a. Predictors: (Constant), X3, X2, X1

b. Dependent Variable: Y

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	134,599	3	44,866	116,584	<,001b
	Residual	95,056	247	,385		
	Total	229,655	250			

a. Dependent Variable: Y

b. Predictors: (Constant), X3, X2, X1

Coefficients^a

		Unstand Coeffi		Standardized Coefficients			Collinearit y Statistics
Model		В	Std. Error	Beta	t	Sig.	Tolerance
1	(Constant)	,581	,172		3,372	<,001	
	X1	,417	,071	,409	5,874	<,001	,346
	X2	,189	,062	,189	3,071	,002	,441
	X3	,245	,068	,241	3,601	<,001	,373

Coefficients^a

a. Dependent Variable: Y

Collinearity Diagnostics^a

			Eigenvalu	Condition	Variance Proportions			
	Model	Dimension	е	Index	(Constant)	X1	X2	X3
	1	1	3,923	1,000	,00	,00	,00	,00
		2	,042	9,687	,86	,02	,21	,01
		3	,022	13,436	,14	,15	,77	,29
		4	,014	16,990	,00	,83	,02	,70

a. Dependent Variable: Y

Residuals Statistics^a

	Minimum	Maximum	Mean	Std. Deviation	N
Predicted Value	1,4332	4,8414	3,6972	,73375	251
Residual	-1,84135	2,03464	,00000	,61662	251
Std. Predicted Value	-3,086	1,559	,000	1,000	251
Std. Residual	-2,968	3,280	,000	,994	251

a. Dependent Variable: Y