Environment. Technology. Resources. Rezekne, Latvia
Proceedings of the 14th International Scientific and Practical Conference. Volume 1, 240-246

The Factors of Green Marketing Affecting Consumer Purchase Intention in Latvia

Velga Vevere
EKA University of Applied Sciences
Riga, Latvia
velga.vevere@gmail.com

Inga Shina
EKA University of Applied Sciences
Riga, Latvia
inga.shina@gmail.com

Abstract. **Remarkably, the percentage of environmentally friendly practices used in marketing is growing. The understanding of how to use environmentally friendly practices is the primary cause for this high grade. The vast majority of customers have a good understanding of green technology and the beneficial influence that they have on the environment. According to the findings of a recent research, customers' awareness of environmental concerns may be increased via eco-friendly marketing strategies. Consumers in Latvia have placed a considerably greater emphasis on environmentally responsible practices as a means of marketing. Research goal: to identify the factors of green marketing affecting consumer purchase intention in Riga, Latvia. Research method: a survey. For the purpose of processing the data in the SPSS environment, the following methods were utilized: descriptive statistical analysis, analysis of reliability, analysis of factors, analysis of regression. Main findings: due to the very fluid and complicated nature of the current business climate, this study investigates the facts and realities surrounding green customers.**

Keywords: Green marketing, green purchase, consumer purchase intention, consumer attitude.

I. INTRODUCTION

Things need to be consumed, destroyed, replaced, and rendered obsolete at various phases where the link between man and nature has unleashed a paradox of the depletion of the ozone layer and the cause of degeneration. Since the beginning of the 21st century, environmental challenges such as global warming, the depletion of natural resources, pollution, and shifting climate patterns have emerged as critical problems that threaten the continued existence of society. The government and environmentalists have raised a significant problem that, as a responsible member of society, you are obligated to work toward resolving. Every individual society is responsible for making it their primary mission to bring about significant social change. There will be no progress made in greening the economy unless or until there is a shift in the attitude that people have about the environment. It is no longer possible to tackle the world's environmental problems just via technological advancement; rather, this challenge calls for a sea change in attitudes, business patterns, consumption patterns, perceptions and behaviors, marketing specialists, and business strategies.

The process of designing goods and services and advertising them in order to fulfill the requirements and wishes of customers at a reasonable price and with a low effect on the environment is referred to as "green marketing." Given that there are only so many resources available and an infinite number of things that people desire, it is essential for the marketing department to make effective use of those resources while minimizing waste and working toward the overall goal of the firm. Therefore, one should predict the rise of green marketing. In the end, green marketing examines how marketing operations make use of these constrained resources, all while meeting customer demands, both on an individual and industry level, and working toward the achievement of the organization's primary goal. As a result of the current state of the market, a greater number of businesses than ever before are making an effort to launch their strategic activities in a socially responsible way, putting a focus on environmentally friendly items to make green consumption easier. To be more specific, the need for this study is to identify and explore the factors influencing green marketing in Latvia and its impact on green purchase intentions, with the end goal of estimating the structural relationship between green marketing strategies, consumer attitudes, and purchase intentions of customers. The goal of the current research is to identify the factors of green marketing affecting consumer purchase intention in Riga, Latvia. To attain this goal the following research

Print ISSN 1691-5402
Online ISSN 2256-070X
https://doi.org/10.17770/etr2023vol1.7210

tasks were set: (1) to analyze theoretical background of green marketing and customer purchase patterns; (2) to create an empirical research instrument (questionnaire); (3) to perform a survey and interpret results.

II. MATERIALS AND METHODS

Business organizations have changed their practices toward the creation and use of environmentally friendly goods, along with consumer behavior globally. Academics have also shown a great deal of interest in environmental concerns. Numerous researchers have discovered that customers have changed their patterns of purchase and now prefer environmentally friendly items over conventional ones [1]. In order to properly create and deploy market solutions to meet those objectives, marketing professionals and academics are now working to identify and understand green customers and their wants. Green goods, which are thought to have a minimally negative influence on the environment, are now required of businesses. In order to safeguard the environment by minimizing the negative effects of product usage on the environment, marketers are marketing these green goods and pushing people to buy them instead of traditional items. In addition to using more stringent emission controls and obtaining raw materials in an environmentally responsible manner, these techniques entail the manufacture of goods using organic ingredient [2].

John Grant, in his well-known work "The Green Marketing Manifesto", built a model for the transition to a "true" green business [3]. The author identifies the following levels of eco-logicalization:

- Eco-friendly (first level): a set of new standards. This level is implemented through communication.

- Greener (second level): sharing responsibility. Implemented through collaboration.

- The most eco-friendly (third, highest level): support for innovation.

Thus, Green Market includes a wide range of activities, including product modification processes, changes in production, packaging, and advertising [4].

Green marketing" is a method for promoting a product by highlighting the environmentally friendly nature of the business that makes or sells the product. Ecological advertising should be at the core of each business's strategy. It not only manages the four Ps of marketing (product, place, price, and promotion), but also applies public policy procedures without limits. Ecological marketing is inextricably intertwined with the study of material and energy flows in industrial systems, as well as other aspects of ecological sustainability such full producer accountability, life-cycle analysis, resource and material fluxes, and eco-efficiency. As a result, "green marketing" is a vast field that provides invaluable insights into business tactics and regulatory mandates. From a managerial or organizational standpoint, environmental considerations must be baked into every stage of the marketing process, from product development to consumer usage through final disposal. Green marketing postulates that customers will shift their purchasing habits toward companies that demonstrate a commitment to social and environmental responsibility. Green marketing, which has traditionally focused on environmental concerns, has lately prompted businesses to expand their marketing efforts to include a sustainability component. The predominant focus is now on the societal, economic, and environmental factors. Despite the fact that the "green market" is just a subset of the overall market [3]. Because of this, Green Marketing is presently operating in the Green industry, where it has helped to create a fair number of jobs and contribute significantly to the economy. In the business sector, products that save energy and resources while reducing or eliminating the usage of hazardous agents and waste are often referred to as "green" or "eco-friendly," despite the fact that no one customer can be said to have zero influence on the environment.

As per green, sustainability is a growing management principle that prioritizes strategies that both protect the planet and boost bottom line results for businesses. It's a lofty but difficult social goal, and many businesses are responding by taking steps to better secure and protect the environment. green marketing's strategic potential is expanded. "a complete and responsible strategic management strategy that identifies, forecasts, fulfills, and meets stakeholder requests for an appropriate reward that does not adversely influence human or natural environmental well-being." This rationale emphasizes the value of a long view and the significance of non-customer stakeholders in the success of ecological marketing [5]. There has to be more thought put into environmental marketing than just using an ecological marketing plan or selling "green" products. The term "ecological" should be used to describe both the finished product and the manufacturing process. Research and development needs need a close inspection of the ecological marketing idea. Taking first place in the Green Marketing competition is a chance for consumers to have a positive impact on the world and give their businesses a leg up in the face of intense competition.

P. Baldwin also found that, in response to growing global concern about the environment, many companies are promoting their products using eco-friendly advertisements. By emphasizing the benefits of ecologically preferable products, green advertising hopes to convince customers to buy them. It has been shown that advertising that emphasizes environmental concerns may change consumers' attitudes and encourage them to buy greener products [6].

According to F. Rubik and others [7], the international efforts to implement environmental labels are only getting started. There is debate about whether or not ecolabels really help businesses. Eco-labels may benefit shoppers, but they may also lead to a market for products with more damage than is socially optimal. make the switch. Eco-labels can help consumers to make an educated choice and find all necessary information faster. are an informative decision support tool for consumers

Numerous studies have revealed no association between customers' attitudes and their environmental

behavior and have concluded that consumers' attitudes are influenced by their knowledge and personal experiences. However, there are discrepancies in the mentality of consumers and their conduct when it comes to green consumerism. Consumers' knowledge of the environment and environmental consciousness are key components of their green purchasing behavior. They suggested a model in which personality characteristics, cognitive factors, and situational factors were connected with environmentally responsible behavior and further revealed that motivation to act toward the preservation of the environment is directly linked with consumer personality components. They suggested the following factors as being correlated with environmentally conscious behavior: personality traits like perception, environmental attitude, environmental responsibility, values, and commitment; cognitive traits like knowledge and awareness; demographic traits like age, gender, income, and educational attainment; and external traits like influence from outside or situational factors, group dynamics [8] – [9] – [10] – [11].

It has been discovered that customer demand and perception for green goods are unequal. The buying habits of customers may be influenced by a number of variables. These factors include consumer values, attitudes toward the environment, knowledge of environmental issues, willingness of consumers to take action to protect the environment, availability of green products, prices of green products [12], perceptions of the efficacy of green products, perceptions of environmental performance, and firm commitment, among others. The motivations behind customer purchases and outside influences have a role as well.

It is discovered that there are still significant obstacles in the way of more environmentally friendly purchasing patterns spreading. According to D`Souza and others, Alwitt & Pitts, Syal and others, consumers' concern for the environment has an indirect impact on their purchasing decisions regarding green products. This effect is mediated by consumers' attitudes toward the green features of the individual products and their perceptions of the effects using those products will have on the environment. Low association between consumer attitudes and environmentally friendly behavior was reported by Alwitt. Consumers are always found to place the most value on a product's or service's price, which is one of the most important factors in determining whether or not to make a purchase [13]-[14]-[15].

As a quantitative approach to determining the interrelations and dependencies between green marketing and consumer purchase intentions in Latvia, this portion of the research will use a survey technique with a standard questionnaire preparation to ensure reliability and validity.

Survey research has been the most accepted due to numerous restrictions including time constraints and convenience involved in the technique, particularly in the domain of psychological research. The researcher also has the advantage of learning about the respondent's cognitive process, which is not feasible with the observation approach. In addition to the study, the researcher has thought about manufacturing sectors and their environmentally friendly goods.

Through the use of green marketing variables, the questionnaire aims to identify the most significant consumer group's attitudes and green purchasing intentions toward green goods (Green Innovation, Green Promotion, Green Packaging, Green Pricing and Eco Labeling).

Scale validation- Likert scaling of the summarized rating was used for the questionnaire's scale validation. The Likert scale, which ranges from Strongly Agree to Strongly Disagree, is used. Customers must choose one of five replies that best describes their position on each item. For positive things, the response options are 1 = Strongly Agree, 2 = Agree, 3 = Neutral, 4 = Disagree, and 5 = strongly Disagree; for negative items, the response options are inverted.

Study population- Riga, which has a notable attitude toward green goods, is included in the study's population. Urban communities and those that prioritize environmental concerns and eco-friendly goods are both included in these states. This study's emphasis on Riga has proved useful in evaluating consumers' purchasing intentions and attitudes toward environmentally friendly items.

Through the use of green marketing variables, the questionnaire aims to identify the most significant consumer group's attitudes and green purchasing intentions toward green goods (Green Innovation, Green Promotion, Green Packaging, Green Pricing and Eco Labeling). Scale validation- Likert scaling of the summarized rating was used for the questionnaire's scale validation. The Likert scale, which ranges from Strongly Agree to Strongly Disagree, is used. Customers must choose one of five replies that best describes their position on each item. For positive things, the response options are 1 = Strongly Agree, 2 = Agree, 3 = Neutral, 4 = Disagree, and 5 = strongly Disagree; for negative items, the response options are inverted.

Study population- Riga, which has a notable attitude toward green goods, is included in the study's population. Urban communities and those that prioritize environmental concerns and eco-friendly goods are both included in these states. This study's emphasis on Riga has proved useful in evaluating consumers' purchasing intentions and attitudes toward environmentally friendly items.

Selection of the sample- A sample is taken from a sampling frame. A sampling frame is the predetermined population that has been identified in the research from which a sample must be drawn, and sampling units are the components taken into account or chosen from a population sample. It was observed that the sample matched the population parameter of the research variable's population variance and expected degree of error. The sample size was determined based on each answer, assuming an expected level of 5% error in the

estimates of the means using the variance information from the pilot research. The sample size is thus set at 113, while the number of sample consumers was 152.

TABLE 1 STRUCTURE OF THE QUESTIONNAIRE

I section: Respondent Demographic question		
Q1	Gender of respondents	Closed: 2 alternatives
Q2	Age of respondents	Closed: 4 alternatives
Q3	Education qualification	Closed: 3 alternatives
Q4	Preference in terms of support green method	Closed: 2 alternatives
II section: General questions		
Block 1	Green motivation	3 statements 5-7
Block 2	Green promotion	3 statements 8-11
Block 3	Green packaging	3 statements 12-14
Block 4	Green pricing	3 statements 15-17
Block 5	Eco labels	4 statements 18-21
Block 6	Consumer attitude	4 statements 22-25
Block 7	Purchase intentions	3 statements 26-28

Table 2 represents the construction of survey variables.

TABLE 2 STRUCTURE OF THE QUESTIONNAIRE

Block number	**Block theme**	**Survey variables**
1	Green motivation	3
2	Green promotion	3
3	Green packaging	3
4	Green pricing	3
5	Eco labels	4
6	Consumer attitude	4
7	Purchase intentions	3
Total		27

The method used for data processing was factor analysis.

This survey comprised 152 respondents in total, and a sample of 152 was selected to ensure that the study was completed as planned, implying 152 respondents from the city of Riga. The population of the research includes Riga, which has a significant attitude toward green products. These states include both urban populations and those that stress environmental issues and eco-friendly items. The focus of this research on Riga has been beneficial in assessing customers' purchase intentions and attitudes toward ecologically friendly goods. These include both normal IT employees and employers. Entrepreneurs were chosen because they are acquainted with the organization's objective, vision, and neutrality of green marketing, as well as their ability to forecast the organization's future. The author sent a link to a Google form to responses through LinkedIn.

Socio-demographic characteristic of the research sample: gender, age, and education were used to examine survey participants' demographics. The survey participants' demographics were assessed based on their gender, age, education and work position. Out of 152 responders, 56.58% were male and 43.42% were female. It is apparent that male workers outnumber female employees in Riga's information technology industry. The most number of respondents fall in age group of 26-35 and which is 52.63%. Further, followed by age group 19-25 and which is 30.26% and further it is followed by age group 36-49 and above 50. 38.16% of respondents were IT specialists, with the remaining 30.92% being data managers. Following that were 17.31% of technicians and 13.82% of IT personnel. 57.89% of participants have undergraduate degree, 32.89% of participants have postgraduate degree and 9.21% of participants have diploma.

III. RESULTS AND DISCUSSION

The authors analyzed descriptive statistics according to the sections in survey questions; those are green motivation, green promotion, green packaging, green pricing, eco labels, and consumer attitude and purchase intentions (see Table 3).

TABLE 3 KMO BARTLETT'S TEST

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.949
Bartlett's Test of Sphericity	Approx. Chi-Square	2668.293
	df	210
	Sig.	.000

The approved value of KMO is 0.500, and here it is 0.949, indicating that the goods were adequate. The next step is to undertake factor analysis since it fulfills more than the necessary adequacy. Factor analysis entails multiple techniques and sophisticated tabular representations, which are all described here (see Table 4).

TABLE 4 TOTAL VARIANCE EXPLAINED

	Initial Eigenvalues			Extraction Sums of Squared Loadings		
Component	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	12.505	59.549	59.549	12.505	59.549	59.549
2	1.418	6.751	66.300	1.418	6.751	66.300
3	.875	4.167	70.468			
4	.666	3.170	73.638			

5	.639	3.041	76.679			
6	.577	2.746	79.425			
7	.535	2.546	81.971			
8	.485	2.309	84.280			
9	.385	1.832	86.112			
10	.366	1.742	87.854			
11	.337	1.607	89.460			
12	.325	1.549	91.009			
13	.312	1.485	92.494			
14	.288	1.370	93.864			
15	.265	1.260	95.124			
16	.227	1.080	96.204			
17	.190	.907	97.111			
18	.176	.837	97.948			
19	.158	.753	98.701			
20	.144	.686	99.387			
21	.129	.613	100.000			
Extraction Method: Principal Component Analysis.						

Table 4 shows the total variance that was accounted for via examination of the essential components. The eigenvalue, which is the amount of change in the starting variables accounted for by each individual element, may be found in the Total column. This number is included in the table. The column labeled "percent of Variance" represents the amount of variation that can be ascribed to each component as a percentage of the overall variance across all variables. The beginning starting point for the number of factors in a factor analysis is the same as the first starting point for the number of variables. We will not, however, make the assumption that all 21 variables are always the same. Only the first two variables will be maintained in this situation. Consider the Eigenvalues, which may be seen as the initial variances of the variables. The variables are standardized since the author performed the component analysis using a correlation matrix. This means that each variable has a variation of one, and the total variance equals the number of variables used in the research, which in this case is 29. The study's author used a correlation matrix. The key pieces that comprise this column may be identified. Following the first component, this explains as much of the remaining variation as possible, follows the second component, which also explains as much of the remaining variation as possible, and so on. The first element always explains the greatest amount of variation (and hence has the highest eigenvalue). As a result, each consecutive component will be responsible for a gradually less share of the overall variation. This column shows the contribution of each component to the overall variance as a percentage of the total variation. The next column shows the total percentage of difference that can be accounted for by the current variable as well as all variables that came before it. The eigenvalues are shown in the next column, Extraction Sums of Squared Loadings. The first component, which always explains the most variation (and hence has the highest eigenvalue), is followed by the second component, which explains as much of the remaining variance as is realistically feasible, and so on. As a result, each subsequent component will account for a decreasing proportion of the variance. This column displays the variation that may be assigned to each individual component of the whole as a percentage of the overall variance. This column displays the total percentage of difference that may be ascribed to the current variable as well as any previous variables. Because the major purpose of component analysis is to explain the inter-correlation that occurs between the variables rather than to discover the factors, assessing variance and covariance is significantly more important than comparing the mean. To do a factor analysis, the software program SPSS was utilized; as a result, all twenty-one questions have a common variance estimated by SPSS software; nevertheless, each question has its own variance as well as its own error variance. From total of 21 variables two factors have been classified: factor 1 - green motivation, green promotion, green pricing; factor 2 – green packaging, eco labels.

Figure 1 depicts a scree plot graph that exhibits the eigenvalues versus the factor number. The scree plot examines the overall value of the first eigenvalues as well as the percentage of variation. The scree plot shows that the line from the second component is flat, indicating that each consecutive factor accounts for less and less of the total variation.

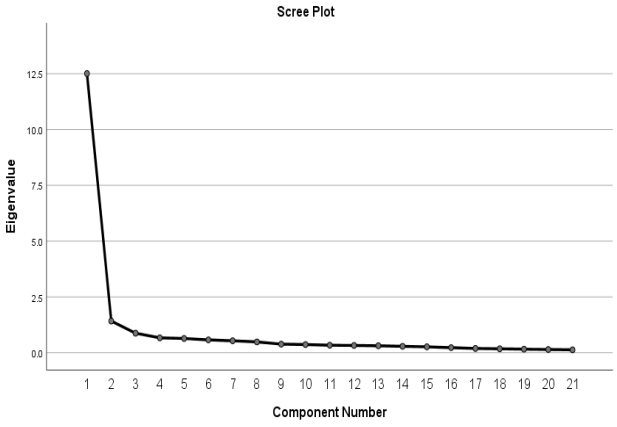

Fig. 1. Scree plot.

Table 5 presents the rotated component matrix.

TABLE 5 ROTATED COMPONENT MATRIX

	Component	
	1	2
eco-labels provide sufficient information regarding products.	.783	
green labels can change my attitude towards green purchase intentions.	.773	
It is good to buy products with recycled and usable packaging on the product.	.768	
ecological products build by positive attitude towards product.	.754	
Eco-labels are eye catching on green products.	.744	
higher price if the eco-friendly gives more health benefits when compared to normal products.	.738	
organic labels on products	.725	
the information on packaging is an important measure.	.702	
to purchase this product because of its environmental concern.	.687	
paying a higher price if the eco-friendly variant performs better than a normal brand.	.685	
eco-labels are easy to read and influence my purchase decision.	.666	
Attractive Ecological Packaging influences my purchase decision	.664	
paying a higher price as buying an ecofriendly brand is better than buying an inexpensive product that harms the environment.	.657	
Biodegradable packaging is an important consideration for me.	.644	.
taking chances in buying new, different and ecological products.		.824
I see an innovative or modified product		.815
designed with the environmental concern.		.753
Green Products is using eco friendly technology.		.746
Green Products is low fuel-using.		.689
Green Products are creative and attractive.		.682
Green Products are healthier & safer.		.662
Extraction Method: Principal Component Analysis. Rotation Method: Varimax with Kaiser Normalization.		
a. Rotation converged in 3 iterations.		

According to the nature of the survey questions, the above table is indicated without the section name. This procedure really aids in comprehending factor reduction. Table 17 illustrates the factor loadings and how all the variables are weighted for each factor, as well as the correlation between the variables and the factor. The author utilized the option to eliminate correlations less than 0.50. This step clarifies the result, and the author assumes that the low correlation value is of no utility. The columns beneath the component option are the extracted rotated factors. According to the SPSS footnote beneath the table, two components were retrieved after three rounds of the varimax rotation algorithm. These are the considerations that researchers are most concerned about. The first point is that eco-labels give enough information about items; green labels may improve my attitude toward green purchasing intentions. It is preferable to purchase items with recyclable and reusable packaging; ecological products are built on a favorable attitude toward the product. Green items with eco-labels stand out. increased cost If the eco-friendly variant performs better than a standard brand, eco-labels are easy to read and influence my purchase decision, Attractive Ecological Packaging influences my purchase decision, paying a higher price as buying organic. We observe a novel or modified product, developed with the environment in mind, Green Products are employing environmentally friendly technologies. Green Products use less fuel and are more inventive and appealing. Green products are healthier and safer to use. It displays the reduced factors of 21 variables. The decreased factor includes the relevance of green marketing as well as the variables that support it. The identified factors are green packaging and green promotion.

IV. CONCLUSIONS

This research has identified different factors of green marketing that affects consumer purchase intention and those are classified in to most value factors and least value factors and most value factors are green packaging and green promotion and whereas the least value factors are green motivation, green pricing and eco labels. Because of the enormous influence that green motivation, green advertising, green packaging, green pricing, and eco labeling have on the customer attitude towards purchasing.

The results prove the idea that green marketing qualities (such as green innovation, green packaging, green pricing, eco labeling, and green promotion) tend to influence consumer preference toward environmentally friendly items.

According to the research the most value load factors are the following : eco-labelling (giving sufficient information); recycled packaging; higher pricing.

Even if environmentally friendly commerce is in its infancy in Latvia, it is possible for a green marketing campaign to be effective in positively influencing consumer attitudes and intentions to make purchases.

REFERENCES

[1] C. Akbay, G.T Tiryaki and A Gui, "Consumer characteristics influencing fast food consumption in Turkey," Food control, 18, pp. 904-913, 2007.

[2] F. Akinlo, "Size and Determinants of Capital Structure in the Greek Manufacturing Sector," International Review ofApplied Economics, 18:2, pp. 247-262, 2004.

[3] J. Grant, The green marketing manifesto. Cornwall: TJ International Ltd., 2007.

[4] M. Lampe and G. M. Gazda, "Green Marketing in Europe and the United States: an Evolving Business and Society Interface," International Business Review, 4: 3, pp. 295- 312, 1995.

[5] J. M. Ginsberg, and P. Bloom, "Choosing the right green marketing strategy," MIT Sloan Management Review, 46(1), pp. 79-84. 2004.

[6] A. Chamorro and T. M. Banegil, "Green Marketing Philosophy: A Study of Spanish Firms with Ecolobels," Environmenatl management, 13, pp. 11-24, 2006.

[7] P. Baldwin, "Advertisers beginning to see green," The Dallas Morning News, J1-J11, 1993.

[8] F. Rubik, F. Iraldo and D. Scheer, "Eco-labelling and product development: potentials and experiences," International Journal of Product Development, 6 (3/4), pp. 393-419, 2008.

[9] P. Benrajesh and A. Johnrajan, "Optimizing the exhaust emission from logistics and packing industries, by means of green logistics," Journal of physics: Conference series, Proceedings of ICAME 2018, 2019 [Online]

https://iopscience.iop.org/article/10.1088/1742-6596/1355/1/012019/pdf [Accessed 25 March, 2023].

[10] L. V. Casaló, J.-J. Escario, "Heterogeneity in the association between environmental attitudes and pro-environmental behavior: A multilevel regression approach," 175, pp. 155-163, 2018.

[11] L. B. Miller, R. E. Rice, A. Gustafson, & M. H. Goldberg, "Relationships Among Environmental Attitudes, Environmental Efficacy, and Pro-Environmental Behaviors Across and Within 11 Countries. Environment and Behavior," 54(7–8), pp. 1063–1096, 2022

[12] M. Félonneau and M. Becker, "Pro-environmental attitudes and behavior: Revealing perceived social desirability," Revue internationale de psychologie sociale, 21, pp. 25-53, 2008.

[13] C. D`Souza, M. Taghian, P. Lamb, and R. Peretiatkos, "Green products and corporate strategy: an empirical investigation," Society and business review," 1(2), pp. 144-157, 2006.

[14] Alwitt, & Pitts. (2010). Predicting Purchase Intention for an Environmentally Sensitive Product. Journal of consumer psycology, 18-21.

[15] S. Siyal, M. J. Ahmed, R. Ahmad, B. S. Khan and C. Xin, "Factors Influencing Green Purchase Intention: Moderating Role of Green Brand Knowledge," Int. J. Environ. Res. Public Health, 18, 2021 [Online] file:///C:/Users/velga/Downloads/Factors_Influencing_Green_Purchase_Intention_Moder.pdf [Accessed 25 March, 2023]