RESEARCH CONDUCTED ON THE PERCEPTION OF CUSTOMERS ON SUSTAINABLE PACKAGING

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**Abstract**

In today’s environmentally conscious marketplace, customers are increasingly prioritizing sustainability in their purchasing decisions. This shift is significantly impacting the packaging industry, as consumers demand greater environmental responsibility from brands. The intention behind customer preference for sustainable packaging is rooted in a desire to mitigate the adverse effects of traditional packaging materials, which contribute to environmental degradation and waste.

Sustainable packaging encompasses a range of practices designed to reduce environmental impact, including the use of recyclable materials, biodegradable options, and minimalistic designs that reduce excess waste. As awareness of climate change and ecological issues grows, customers are not just passively accepting the status quo; they are actively seeking out products that align with their values.

Understanding customer intention in this area involves exploring the motivations driving their preferences. These include a heightened awareness of environmental issues, a desire to support companies that demonstrate social responsibility, and an increasing demand for transparency regarding the sustainability of product packaging. As customers become more informed and engaged, their expectations for sustainable packaging continue to evolve, pushing brands to innovate and adapt.

By examining these customer intentions, businesses can better align their packaging

strategies with consumer values, ultimately fostering stronger brand loyalty and contributing to broader environmental goals. In essence, the focus on sustainable packaging reflects a larger movement toward responsible consumption and a collective effort to protect the planet for future generations.

KEYWORDS:Ecofriendly;packaging;Sustainability;Indian;Youth,;Consumers;Perception.

**PROBLEM STATEMENT OF THE RESEARCH**

The increasing environmental challenges, such as plastic pollution and resource depletion, have led to a heightened focus on sustainable packaging solutions across industries. Despite growing consumer awareness regarding sustainability, there remains a significant gap between consumers’ expressed preferences for sustainable packaging and their actual purchasing behaviours.

This research aims to investigate the intentions of consumers towards sustainable packaging, examining the key factors that influence their decisions, such as perceived value, environmental concern, brand loyalty, and accessibility. By identifying the barriers and motivators that shape consumer intentions, this study seeks to provide insights that can help businesses better align their packaging strategies with consumer expectations, ultimately contributing to more sustainable practices in the market. Understanding these dynamics is crucial for fostering a transition towards environmentally friendly packaging solutions and addressing the pressing environmental issues of our time.

**NEED FOR STUDY:**

The need for studying customer intentions regarding sustainable packaging is increasingly critical as environmental concerns rise and demand for eco-friendly products grows. With consumers becoming more aware of issues like climate change and plastic pollution, understanding their motivations is essential for businesses aiming to align their practices with these values. Additionally, regulatory pressures are compelling companies to adopt sustainable solutions, making it crucial to gauge customer preferences for compliance and competitive positioning.

Insights into consumer behaviour not only inform branding strategies but also drive innovation in packaging solutions, allowing businesses to develop offerings that resonate with environmentally conscious shoppers. Furthermore, understanding customers’ willingness to pay for sustainable options can guide pricing strategies and enhance economic feasibility.

Overall, this research is vital for companies looking to enhance their sustainability initiatives, build customer loyalty, and achieve long-term success in an increasingly eco-aware marketplace, ultimately contributing to a more sustainable future.

## **CONCEPTUAL FRAMEWORK:**

Purchasing Power:

**Customer's Intention to Purchase Sustainable Packaging**

Social Consciousness

Product Knowledge

Customizability of Packaging

**OBJECTIVE OF THE STUDY:**

The scope of this study on customer intentions regarding sustainable packaging encompasses several key areas. Geographically, it focuses on urban and suburban regions across North America, Europe, and Asia, considering how cultural differences impact consumer perceptions. Demographically, the study analyzes various age groups, income levels, and educational backgrounds to understand how these factors influence awareness and willingness to pay for sustainable packaging. It covers a range of product categories, including food, beverages, cosmetics, and household goods, and explores different types of sustainable packaging such as biodegradable and recyclable options.

The timeframe of the research primarily addresses current trends while also considering potential shifts in consumer behaviour over the next 5 to 10 years. It examines the decision-making process behind purchases, assessing the role of awareness and education in shaping consumer intentions. Additionally, the study investigates how brand loyalty and effective marketing strategies influence preferences for sustainable packaging. Finally, it includes an exploration of consumer perceptions of environmental impact, while acknowledging limitations related to sample diversity and the rapidly evolving landscape of sustainability. This comprehensive approach aims to provide valuable insights for brands seeking to align their strategies with consumer values and environmental goals.

**SCOPE OF THE STUDY:**

The scope of this study on customer intentions toward sustainable packaging includes exploring key factors influencing consumer behaviour, such as environmental awareness, social influence, and price sensitivity. It aims to examine the attitudes, perceptions, and decision-making processes of consumers regarding sustainable packaging options. This research also investigates how demographic factors like age, income, and education impact consumer preferences. Additionally, it will evaluate the effectiveness of eco-labelling, corporate sustainability efforts, and the role of convenience in shaping purchasing intentions. The study will use a combination of quantitative (surveys) and qualitative (focus groups) methodologies to gather comprehensive insights, providing businesses with actionable strategies for promoting sustainable packaging solutions.

## **REVIEW OF LITERATURE**

**Pedro Miguel Pereira da Rocha (2021)**

This study investigates the factors influencing Portuguese consumers' intentions to purchase products with sustainable packaging, using the Theory of Planned Behaviour. It explores variables like environmental concern, attitude, knowledge, subjective norm, perceived behavioural control, and willingness to pay. The research aims to clarify how these factors impact consumer behaviour regarding sustainable packaging. Data was collected via online questionnaires and analysed using IBM SPSS and AMOS, which included exploratory and confirmatory factor analyses. Results showed a strong correlation between environmental concern and attitude.

Source-<https://www.proquest.com/openview/1a2798f803da246462136ea60a5a065f/1?pq-origsite=gscholar&cbl=2026366&diss=y>

**Martinho, Graça, Ana Pires, Etal (2015)**

This study explores how sustainable packaging impacts consumer behaviour, focusing on both purchasing and recycling stages. An online survey of 215 respondents in Portugal was conducted to test hypotheses comparing two consumer groups: those who prioritize eco-friendly packaging and those who do not. The research identified key factors that differentiate these groups, including gender, environmental awareness, societal concerns, attitudes towards green purchasing, and perceptions of consumer impact. The results underscore the importance of integrating price considerations to influence consumer behaviour effectively.

**SOURCE**-<https://www.sciencedirect.com/science/article/abs/pii/S0921344915300446>

**Virpi Korhonen, Etal (2020)**

The study examines the evolving concepts of sustainable packaging amid challenges like plastic pollution and declining environmental quality. It highlights barriers to implementing sustainable packaging, such as value chain complexities and negative consumer attitudes influenced by economic, social, and environmental factors. To advance sustainable solutions, understanding consumer dynamics—such as preferences for ecological materials, willingness to pay, and recycling behaviours—is crucial. The objectives include exploring sustainable packaging definitions, its impact on the value chain, and consumer behaviour theories; reviewing current practices and consumer testing methods

**SOURCE**- <https://www.mdpi.com/2071-1050/12/6/2192>

**Anca Francisca Cruceru (2018)**

The paper analyses the Romanian consumer’s behaviour concerning sustainable packaging through quantitative research among 268 consumers. The aim of the study is to determine the perception of the Romanian consumer regarding the role of eco-packaging in the formation of sustainable behaviour. The research has as main objectives: assessing consumer preferences for the types of ecological packaging, knowing the reasons for purchasing green packaging, and the role of the information about eco-packaging in promoting sustainability.

**SOURCE**- <https://www.mdpi.com/2071-1050/10/6/1787>

**Dr. Anurag Pahuja (2014)**

The study addresses the urgent global environmental issues such as pollution, deforestation, health problems, natural disasters, and climate change, emphasizing their impact on the planet's sustainability. In response, there is a growing need for Indian youth to adopt environmentally friendly practices, including eco-friendly packaging. The study explores how young consumers in India—both urban and rural—perceive and engage with sustainable packaging optionsThe primary aim of the research is to identify the factors that shape the attitudes of these young consumers toward eco-friendly packaging and to understand what drives their sustainable consumption behaviours.

**SOURCE** <https://www.researchgate.net/profile/DrNayyar/publication/352933821_Sustainable_Packaging_An_Exploration_of_Green_Indian_Consumers/links/60e0210f458515d6fbf74efb/Sustainable-Packaging-An-Exploration-of-Green-Indian-Consumers.pdf>

**Aline Carla Petkowicz ,Etal (2024)**

The study investigates Brazilian consumers' intentions to purchase products with sustainable packaging by applying an enhanced Theory of Planned Behavior. This theory is expanded to include factors such as environmental concern, knowledge, willingness to pay more, and trust. Data were collected from 509 participants via an online questionnaire, utilizing convenience sampling. The survey, based on validated scales, assessed attitudes toward purchasing, subjective norms, perceived behavioural control, environmental variables, and purchase intentions. Descriptive analysis revealed a strong emphasis on environmental concern, positive attitudes towards sustainable purchasing, and high purchase intentions.

**SOURCE**- <https://www.mdpi.com/2071-1050/16/7/2914>

**Raquel Antunes (2022)**

The study focuses on Gen Z consumers and their perceptions of packaging sustainability and ergonomics, exploring how these factors influence their environmental attitudes and purchase intentions. As a key demographic with significant influence over sustainable behaviour and peer attitudes, Gen Z often relies on immediate cues when making purchasing decisions. The research investigates how this generation navigates trade-offs between eco-friendliness and a product's perceived convenience and usability.

By examining these dynamics, the study offers an alternative perspective on the attitude-behaviour gap, where consumers' stated environmental attitudes do not always align with their actual purchasing behaviour

**SOURCE-** <https://www.tandfonline.com/doi/abs/10.1080/0267257X.2022.2083214>

**Pramod Pathak (2017)**

This paper investigates the impact of Eco designed packaging on consumer responses using the Theory of Reasoned Action (TRA) as a theoretical framework. It aims to identify key factors driving Eco designed packaging behaviour and assess their relative importance.

The findings reveal that purchase intentions for eco-friendly packaging are significantly influenced by personal norms, attitudes, environmental concern, and willingness to pay

SOURCE- <https://www.sciencedirect.com/science/article/abs/pii/S0959652616314573>

# RESEARCH METHODOLOGY

A strong study design is essential to the accomplishment of any formal finance research assignment. Problem characterization, particular data collecting and analysis techniques, the amount of time needed for the research endeavors, and an estimate of the costs involved are all qualities of a successful research design. A research design's job is to make sure that the necessary data are efficiently and accurately collected. Simply said, a study design is a framework or plan for data analysis. It is a process that is followed in order to complete a study. It mimics the blueprint (map) an architect would use to build a house.

It could be important to note that a research design is nothing more than the framework for the investigation, which guarantees that the study will be pertinent to the issue at hand and use cost-effective methods.

Claire seltizetal defines Research Design as “Research design is a catalogue of the phases and facts relating to the formulation of a research effort. It is the arrangement of collection and analysis of data in a manner that aims to combine relevant to the research purpose with economy in procedure”

## **RELIABILITY ANALYSIS**

Scale reliability is the ratio of true score variance to observed score variance. If there is less error inherent within the scale, then the scale will yield consistent results across observations and research settings. In other words, the reliability of an instrument is the degree to which it yields a true score of the variable under consideration. Reliability is also defined as the extent to which any measuring instrument yields the same results on repeated trials (Carmines and Zeller, 1990). Several methods of reliability are used to establish the reliability of a measuring instrument. These include test- retest method, equivalent forms, split halves method and internet consistency method. The internal consistency measure is the most preferred one because it requires a single administration and consequently is supposed to be most effective in field studies. Internal consistency is concerned with the homogeneity of the items comparing a scale.

**SUMMARY OF FINDINGS, SUGGESTIONS AND CONCLUSION**

* **Age**: A predominant youth presence, with 52% aged 18-24, suggests significant engagement among younger audiences. Older age groups are underrepresented, presenting an opportunity for more targeted engagement with young adults.
* **Gender**: There’s a marked gender imbalance, with 80.8% male and only 19.2% female. This 4:1 male-to-female ratio may influence any gender-based insights and could suggest a need for more gender-diverse sampling.
* **Income**: The sample shows concentration at both lower (40.8% earning below 20,000) and higher (24.8% earning 80,000 and above) income levels, with middle-income groups less represented. This suggests a divide in income distribution.
* **Education**: The sample is highly educated, with the majority holding advanced degrees (56.8% with a Master’s and 28.8% with a Bachelor’s). Only a small percentage hold Doctorates, high school diplomas, or other qualifications.

**2. Engagement and Behaviour**

* **Activity Engagement**: A majority, 56%, report “Always” engaging in the activity, while 23.2% do so “Often.” This indicates high levels of participation, with most of the sample frequently engaging in the behaviour.
* **Purchasing Willingness**: A total of 62.4% (39.2% “Willing” and 23.2% “Very willing”) show positive attitudes toward purchasing. Only small percentages are “Unwilling” or “Very unwilling,” suggesting overall openness to purchasing.
* **Product Knowledge**: A significant portion reports product knowledge, with 27.2% “Always” knowledgeable and 22.4% knowledgeable “Often.” This indicates moderate to high familiarity with the product among most respondents.
* **Purchase Frequency**: Many respondents purchase regularly, with 26.4% reporting they “Always” buy and 28.8% purchasing “Often.” Only a small percentage (0.8%) report they “Never” purchase.

**3. Values and Preferences**

* **Packaging Customizability**: The majority find customizability important, with 36% rating it as “Important” and 26.4% as “Very important.” This indicates strong preference for customization options in packaging.
* **Social Consciousness**: Respondents show a high level of concern for social issues, with 36.8% “Concerned” and 36% “Very concerned.” A strong majority support social matters, as indicated by 43.2% who “Strongly agree” with such issues.
* **Environmental Awareness**: High levels of environmental awareness are reported, with 36% “Very aware” and 30.4% “Aware.” This suggests that most respondents are conscious of environmental concerns.
* **Price Sensitivity**: A significant portion is sensitive to price changes, with 35.2% “Sensitive” and 24.8% “Very sensitive.” This indicates that respondents are responsive to price fluctuations.

**4. Perceived Self-Ratings**

* **Purchasing Power**: Respondents rate their purchasing power relatively high, with a notable portion (28%) rating it as 9.00.
* **Product Knowledge**: Perceptions of product knowledge are moderate to high, with 23.2% each rating it as 6.00 and 7.00.
* **Social Consciousness**: A substantial 29.6% rate their social consciousness as 10.00, suggesting strong awareness and concern for social issues.
* **Intention to Purchase**: Many respondents express a strong purchase intention, with 17.6% rating it as 9.00.
* **Environmental Awareness**: Most rate themselves as fairly aware, with 36% at a 5.00 awareness level.
* **Price Sensitivity**: Respondents demonstrate moderate sensitivity, with 35.2% rating their sensitivity at 4.00.

**SUGGESTION**

**Diverse Sampling**:

* **Increase Gender Diversity**: Implement strategies to recruit more female participants to address the gender imbalance. This could involve targeted outreach efforts in female-dominated spaces or platforms.
* **Broaden Age Representation**: While the focus on younger audiences is important, consider including older age groups in the sampling to capture a wider range of perspectives and insights.

**Engagement Strategies**:

* **Enhance Participation**: For activities where participation is high, develop campaigns or incentives to encourage even greater involvement, particularly among those who report “Sometimes” or “Rarely” engaging.

**Foster Product Knowledge**: Create educational content or workshops to enhance

**Customization Options**:

* **Expand Customization**: Given the strong preference for packaging customizability, explore more options for personalized packaging or customizable features in products to cater to this demand.

**Address Social and Environmental Concerns**:

* **Engage in Social Responsibility**: Leverage the high levels of social consciousness by promoting initiatives that align with social causes. This could enhance brand loyalty and resonate with respondents' values.
* **Communicate Environmental Efforts**: Share information about sustainable practices and environmental initiatives to further engage environmentally aware respondents and enhance brand perception.

**Price Sensitivity Awareness**:

* **Dynamic Pricing Strategies**: Consider implementing dynamic pricing strategies that account for the varying levels of price sensitivity among respondents. Offering discounts or flexible payment options could be beneficial for those who are price-sensitive.

**Feedback Mechanism**:

* **Conduct Surveys**: Regularly conduct follow-up surveys or feedback sessions to gauge changes in attitudes, preferences, and purchasing power perceptions. This can help tailor future marketing and engagement strategies effectively.

**Messaging**:

* **Segment Communications**: Develop segmented communication strategies that address the distinct characteristics of each demographic group, ensuring that messaging resonates with their specific values and concerns.
* product knowledge among respondents, particularly those reporting lower levels of familiarity.

**Focus on Middle-Income Groups**:

* **Targeted Marketing**: Design specific marketing strategies aimed at middle-income groups, as they are underrepresented in your sample. Understanding their preferences can lead to more balanced engagement.

**CONCLUSION**

By addressing the demographic imbalances, enhancing engagement strategies, and focusing on customization and social responsibility, you can improve overall satisfaction and loyalty among your audience. Tailored approaches that consider the preferences and concerns of various groups will lead to a more inclusive and effective strategy for engagement and growth.

The data reveals a well-educated, mostly male, and predominantly young audience with a mix of low and high-income individuals. There is high engagement in the behaviour, strong social and environmental awareness, and a positive purchasing intent. However, the pronounced gender imbalance and concentration in specific income brackets may impact broader generalizability.

The findings indicate a predominantly young and well-educated demographic, with significant engagement in the activity being studied. The data reveals a strong inclination toward purchasing, social consciousness, and environmental awareness among respondents, alongside a marked gender imbalance and uneven income distribution. The frequency distribution of ratings highlights a favourable perception of the item or experience, particularly among the majority who rated it 9.00 and above, indicating general satisfaction and positive sentiment.

Despite these strengths, the data also points to opportunities for improvement, particularly among the small percentage of respondents who rated their experiences or perceptions lower. Addressing these concerns could lead to enhanced satisfaction across the board and help capture a wider audience.

By addressing these suggestions, it is possible to enhance overall satisfaction and engagement among the target demographic, leveraging the positive trends identified in the data while mitigating any existing concerns.

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