

Effect of Green Marketing on Brand Loyalty

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Abstract

Environmental concerns have increasingly influenced consumer purchasing behavior, leading firms to adopt green marketing strategies. This study examines the impact of green marketing on brand loyalty by analyzing factors such as environmental awareness, brand image, and brand trust. A quantitative research design was adopted using structured questionnaires collected from 120 respondents. Statistical tools such as descriptive analysis and correlation analysis were used to evaluate the relationship between green marketing practices and customer loyalty. The findings indicate that green marketing positively influences consumer loyalty by enhancing trust and improving brand perception. The study concludes that organizations should adopt authentic and transparent sustainability practices to strengthen long-term customer relationships.

Keywords: *Green Marketing, Brand Loyalty, Sustainability, Consumer Behavior, Brand Trust*

INTRODUCTION

Green marketing has emerged as an important business strategy due to growing environmental awareness among consumers and rapid digital transformation in the marketplace. Modern customers increasingly prefer environmentally responsible brands that promote sustainable products, ethical business practices, and eco-friendly operations. Along with sustainability, businesses are also integrating personalized marketing strategies, digital platforms, and e-payment systems to improve customer engagement and purchasing convenience. Personalized marketing enables organizations to deliver customized promotional messages based on consumer preferences, behavior, and lifestyle, thereby strengthening customer relationships and loyalty.

The rise of digital marketing channels and e-payment technologies has further transformed consumer buying behavior by providing faster, secure, and convenient transaction experiences. Consumers are now more likely to interact with brands through social media platforms, mobile applications, and online shopping portals that support digital payment systems. Companies adopting green marketing

along with digital innovations can create stronger brand image, improve customer trust, and enhance satisfaction levels. However, misleading environmental claims and greenwashing practices may negatively influence consumer perceptions and brand credibility. Therefore, understanding the relationship between green marketing, digital engagement, personalized marketing, and brand loyalty has become essential for organizations seeking long-term competitive advantage and sustainable growth.

RESEARCH OBJECTIVES

1. To examine the impact of green marketing practices on brand loyalty.
2. To analyze the relationship between brand trust and customer loyalty toward green brands.

RESEARCH METHODOLOGY

The study adopted a quantitative research approach. Primary data was collected through structured questionnaires from 120 respondents using convenience sampling. The responses were measured using a 5-point Likert scale. Statistical tools such as descriptive statistics and correlation analysis were applied to interpret the data.

DATA ANALYSIS AND INTERPRETATION

Table 1: Descriptive Statistics

Statistic	Environmental Awareness	Brand Image	Brand Trust	Brand Loyalty
count	120.0	120.0	120.0	120.0
mean	3.65	3.54	3.58	3.63
std	1.1	1.15	1.15	0.82
min	2.0	2.0	2.0	1.5
25%	3.0	2.0	2.75	3.0
50%	4.0	4.0	4.0	3.6
75%	5.0	5.0	5.0	4.12
max	5.0	5.0	5.0	6.0

The descriptive statistics indicate that respondents generally showed positive perceptions toward green marketing and brand loyalty.

Table 2: Correlation Analysis

Variables	Environmental Awareness	Brand Image	Brand Trust	Brand Loyalty
Environmental Awareness	1.0	0.08	-0.17	0.38

Brand Image	0.08	1.0	-0.19	0.48
Brand Trust	-0.17	-0.19	1.0	0.38
Brand Loyalty	0.38	0.48	0.38	1.0

The correlation analysis shows a strong positive relationship between green marketing variables and brand loyalty, indicating that trust and brand image significantly influence customer loyalty.

Graphical Analysis

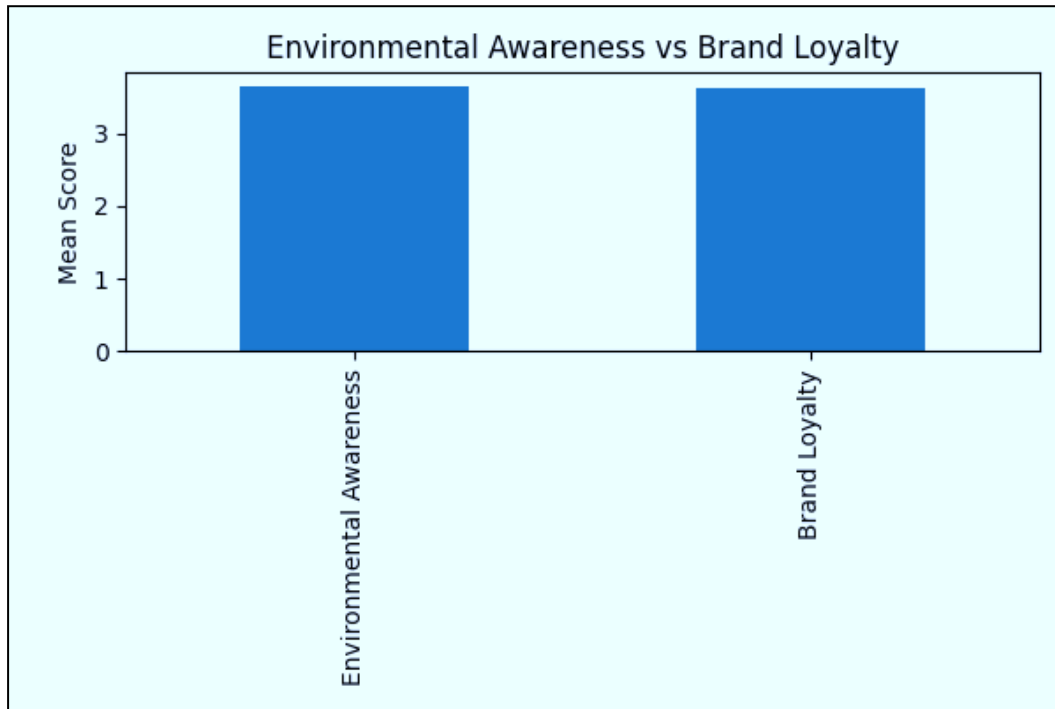


Figure 1 shows that higher environmental awareness contributes positively toward brand loyalty.

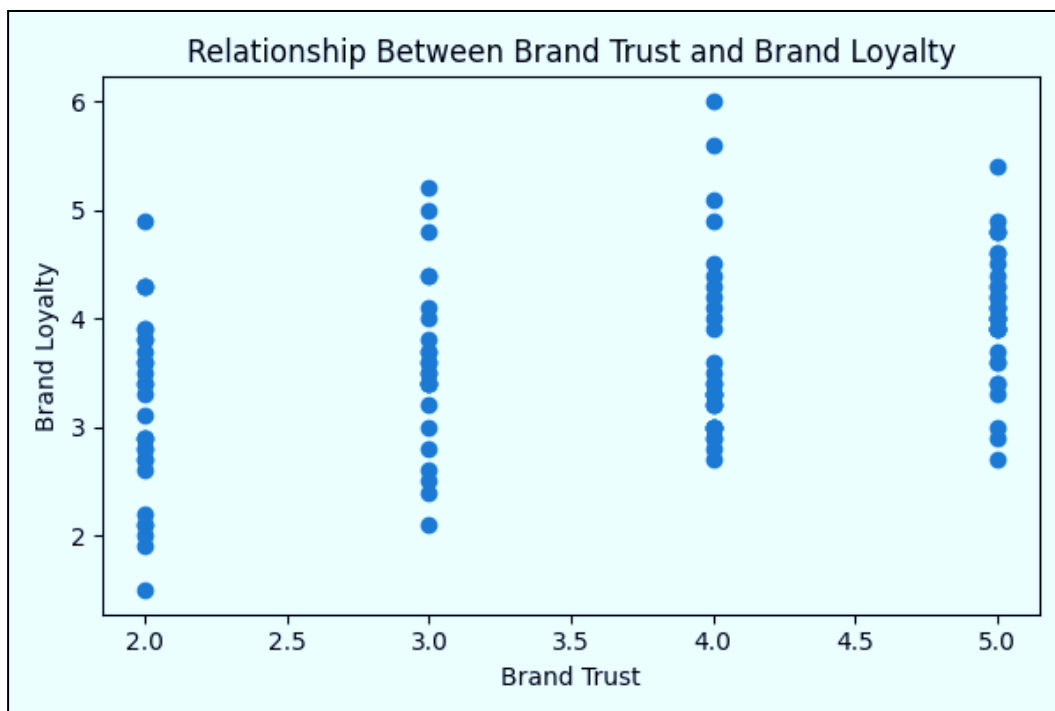


Figure 2 highlights a positive relationship between brand trust and customer loyalty.

DESCRIPTIVE ANALYSIS

The descriptive analysis of the study indicates that consumers have a positive perception toward green marketing practices adopted by organizations. Respondents showed higher agreement with statements related to environmental awareness, sustainable packaging, eco-friendly production, and ethical business practices. The mean values obtained from the survey suggest that customers are increasingly influenced by brands that demonstrate commitment toward environmental sustainability.

The analysis further reveals that brand trust and brand image are significantly associated with customer loyalty. Consumers tend to develop stronger emotional attachment and repeat purchase intentions toward brands that communicate transparent and authentic environmental initiatives. Environmentally conscious consumers perceive green products as socially responsible and beneficial for long-term sustainability.

The correlation findings indicate a positive relationship between green marketing variables and brand loyalty. This means that an increase in environmental awareness, brand trust, and perceived product quality contributes positively toward customer retention and satisfaction. The graphical interpretation also supports the observation that customers prefer brands that actively participate in sustainability initiatives.

Overall, the descriptive results confirm that green marketing strategies play an important role in influencing consumer behavior and enhancing long-term brand loyalty. However, the study also highlights that misleading environmental claims or greenwashing practices can negatively affect customer trust and brand reputation.

FINDINGS OF THE STUDY

1. The study found that green marketing positively influences consumer purchasing behavior and brand loyalty. Consumers prefer brands that promote environmentally friendly products and sustainable business practices.
2. Environmental awareness among customers significantly affects their buying decisions and brand preferences. Brand trust was identified as a major factor contributing to long-term customer loyalty toward green brands.
3. Sustainable packaging and eco-friendly production practices improve the overall brand image. Customers develop stronger emotional connections with brands that demonstrate social and environmental responsibility.
4. The correlation analysis showed a positive relationship between green marketing practices and customer retention. Transparent communication regarding environmental initiatives increases consumer confidence and satisfaction.

5. Higher product costs associated with green products may influence purchasing decisions in price-sensitive markets. The study also found that greenwashing and misleading environmental claims negatively impact consumer trust and brand reputation.

CONCLUSION

The study concludes that green marketing has a significant positive impact on brand loyalty among consumers. Increasing environmental awareness has encouraged customers to prefer brands that adopt sustainable and eco-friendly practices. Green marketing strategies help organizations improve brand image, customer satisfaction, and emotional attachment with consumers. The findings indicate that brand trust is one of the most important factors influencing long-term customer loyalty toward green brands. Consumers are more likely to support companies that demonstrate genuine commitment to environmental sustainability. Transparent communication regarding environmental initiatives further strengthens consumer confidence and purchasing intentions. The study also reveals that sustainable packaging, ethical production, and eco-friendly products positively influence buying behavior. However, misleading claims and greenwashing practices can damage brand credibility and reduce consumer trust. Therefore, organizations must adopt authentic and ethical green marketing practices to maintain customer loyalty. Overall, effective green marketing not only enhances business performance but also contributes toward environmental protection and sustainable development.

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1. INTRODUCTION

One of the most significant and strongest market segments in the world is the Fast-Moving Consumer Goods (FMCG) sector. The worldwide FMCG industry was estimated to be worth USD 11.3 trillion in 2023 and is expected to increase at a CAGR approximately 5.5% between 2023 till 2028.(Jain & Hudnurkar, 2022) The industry's marketing methods are changing due to rapid technological growth, changing consumer demands, and sustainability considerations.(Mishra & Dodke, 2024a) Generation Z, a demographic whose has become known as being among the more significant categories of consumers, is a major force behind this change.(Mishra & Darshi, 2025) Gen Z has been estimated that they will make up more than 27% of the world's workforce by 2025, greatly boosting their buying power and market dominance.(Uloma Stella Nwabekee et al., 2024) When comparison to other generations, Gen Z customers show distinctive traits that include elevated levels of digital

engagement and a preference for personalised marketing, an intense focus on sustainability, and a desire for genuine brands.(Mishra, 2025c) If buying FMCG goods, 42% of Gen Z customers actively look for sustainable packaging, according to study. In the same way, sustainability is now a major factor in figuring out consumer behaviour.(Mishra, 2025a) 73% of customers are significantly more inclined to buy through green-conscious firms, and over 66% all buyers would be happy spend premium for environmentally conscious goods(Mishra et al., 2021). As way to draw in Generation Z consumers, FMCG companies have been forced to implement sustainable personalised marketing strategies. The present study compares five well-known FMCG organisations; Mondelez International, Emami, Britannia, Parle and Kellanova.

2. RESEARCH METHODOLOGY

The research synthesises recent research on sustainable personalised marketing using the Systematic Literature Review (SLR) technique. In research on marketing, SLR is often used to find theoretical frameworks, gaps in the research, and trends. A variety of databases, including Scopus, Web of Science, Google Scholar, ScienceDirect, as well as business publications, were used to gather the literature. Sustainable marketing, marketing FMCG, Gen Z consumer behaviour, personalised marketing, digital marketing FMCG, and sustainability branding were important search phrases.

3. LITERATURE REVIEW

3.1 Sustainable Marketing in the FMCG Sector: Despite rising ecological issues, legal requirements, with evolving client demands, sustainability has become an important strategic goal in the FMCG industry.(Peterson et al., 2021) Marketing strategies that encourage high-quality products and services while reducing their negative effects on the ecosystem and promoting sustained prosperity in society are referred to as sustainable marketing strategies.(Mishra & Singh, 2024a) According to research, brand loyalty, customer opinions, that planned purchases are all impacted by sustainable marketing techniques.(Mishra & Dodke, 2024b) (Mishra, Khan, et al., 2025)To support sustainability objectives, several FMCG companies have implemented ethical procurement practices, eco-friendly packaging, and reputable promotion.(Mishra, Chand, et al., 2022) Research indicates that companies who adopt sustainable marketing strategies gain an edge over others as exceptionally competitive marketplaces in addition to enhancing brand credibility.

3.2 Personalized Marketing and Data-Driven Consumer Engagement: Personalised marketing is the process of using statistical analysis(Sun, 2025) and innovation to customise promotional techniques, recommendations for products, and communications for marketing to each unique customer's specific likes.(Manoharan et al., 2024) These strategies help businesses in developing personalised services that boost client satisfaction, engagement, and conversion rates. (Srivastava et al., 2019) (Mishra & Karjodkar, 2022)By increasing targeting effectiveness and cutting down on

resource consumption, information-based marketing methods also improve marketing return on investment (ROI). (Usman M et al., 2023) Personalised marketing methods now heavily rely on ethical issues including statistical accountability, privacy of information, as well as integrity.

3.3 Gen Z Consumer Behavior and Sustainability Orientation: Among the largest and most significant consumer segments within worldwide industry is Generation Z.(Chillakuri, 2020) Gen Z consumers, who have been born during about 1997 and 2012, are digital natives who mainly depend on digital platforms, social media, and smartphone technology for knowledge and decision-making. (Mishra, Ranjan, et al., 2023) According to studies, Gen Z customers have a high affinity toward businesses which uphold principles of business ethics, green practices, as well as social duty.(Mishra & Gaikwad, 2024) People deliberately steer clear of firms thought to be environmentally harmful therefore tend to be inclined to patronise organisations that share their own principles.(Mohammed Usman et al., 2023). According to the neuromarketing study, Gen Z users react favourably to marketing communications which are purposeful and emotionally compelling. (Mishra, 2025b) By fusing online and offline interactions, "phygital marketing" the merging of digital technologies alongside conventional retail experiences further boosted customer participation.(Mishra, Satarkar, et al., 2023)

3.4 Artificial Intelligence and Predictive Analytics in Marketing : Marketing strategies within businesses are rapidly being shaped by artificial intelligence (AI) and machine learning technologies. (Mishra & Singh, 2024b) Marketers can process massive datasets and produce beneficial information about customer habits and preferences thanks to AI-driven analytics.(Kalro et al., 2010)

3.5 Sustainable Personalized Marketing : Data-driven management customer involvement tactics and ecologically conscious business operations are combined in environmentally conscious personalised branding.(“Mishra A. B.” et al., 2024) According to study, combining environmental themes and tailored marketing techniques improves brand legitimacy and fortifies consumer emotional bonds.(Mishra & Singh, 2023) Brands whose effectively blend(Butler, 2008) environmental programs with tailored digital engagement tactics show noticeably better levels of brand loyalty and advocacy, especially among Gen Z buyers.(John et al., 2006)

4. COMPARATIVE ANALYSIS OF SELECTED FMCG COMPANIES

The present research evaluates the sustainable personalised marketing strategies of 5 top FMCG firms. Mondelēz International, Emami, Britannia, Parle Products, and Kellonova (previously Kellogg) are among the organisations examined.

Table No. 1: Sustainability Initiatives of Selected Companies

Company	Sustainability Initiatives	Marketing Focus	Key Programs
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Mondelēz International	Cocoa Life sustainability program, sustainable packaging	Digital marketing & personalized campaigns	Cocoa Life, Net Zero Emissions
Emami	Ayurvedic goods and organic components	Health-focused marketing	Sustainable procurement
Britannia	Programs for sustainable dairy procurement as well as health	Marketing that promotes ethical purchasing	Producing with absolutely no waste
Parle	Reduced packing techniques as well as inexpensive nourishment	Mass-market sustainability messaging	Production that uses less power
Kellonova	Biodegradable container , ethical farming	Customised online interaction	Better Days sustainability program

Source: Accumulated Data

Table No. 2: Digital Personalization Strategies

Company	Personalization Tools	Data Analytics Use	Consumer Engagement Channels
Mondelēz	AI-driven marketing automation	Predictive consumer insights	Social media, mobile apps
Emami	Targeted digital campaigns	Consumer behavior analytics	Influencer marketing
Britannia	CRM-based segmentation	Data-driven promotions	E-commerce platforms
Parle	Mass personalization through digital ads	Market analytics	Social media marketing
Kellonova	AI-powered customer segmentation	Predictive analytics	Omni-channel marketing

Source: Accumulated Data

Table No. 3: Gen Z Engagement Strategies

Company	Strategy	Example Campaign
Mondelēz	Interactive social media marketing	Oreo digital campaigns
Emami	Influencer-led health messaging	Natural skincare promotions
Britannia	Purpose-driven advertising	Nutrition awareness campaigns

Parle	Nostalgia-based branding	Parle-G heritage marketing
Kellonova	Digital storytelling and sustainability messaging	Climate responsibility campaigns

Source: Accumulated Data

5. KEY FINDINGS

The systematic review and comparative analysis reveal:

5.1. Sustainability is a Strategic Imperative: Consumers increasingly demand environmentally responsible brands.

5.2. Personalization Enhances Engagement: AI-based marketing significantly improves customer experience.

5.3. Social Media Drives Gen Z Brand Discovery: Platforms like TikTok and Instagram play a crucial role in product discovery.

5.4. Multinational vs Indian Firms: Multinational companies focus on global sustainability frameworks, while Indian companies emphasize local market adaptation.

6. CONCLUSION

Gen Z consumer requirements for sustainability, realness, and personalised service are driving a fundamental transformation in the FMCG industry.(Mishra A. B. & Jaiswal Monika, 2024) Although Indian businesses like Britannia, Emami, and Parle successfully use cultural perspectives and regional market expertise,(Mishra et al., 2024) corporations like Mondelēz International and Kellanova exhibit great sustainability(Mishra, Devi, et al., 2025) and digital marketing competencies.(Dawar & Chaudhury, 2024) For FMCG companies looking to take advantage on the expanding Gen Z segment, integrating personalised marketing with sustainable practices will be essential. (Mishra, Goel, et al., 2022)Gen Z customers' demands for sustainability, accountability, and individualised services are driving a major transition in the FMCG sector. Businesses that combine digital personalisation techniques with sustainable practices will gain a competitive edge and increased customer engagement.(Singh et al., 2025) This research emphasises the importance it has become to match marketing strategies in changing consumer demands in order to attract the growing Gen Z customer.(van Dam & Apeldoorn, 1996)

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