Green Marketing Strategy and Customer Patronage of Retail Malls in Ilorin Metropolis

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Abstract

The awareness on eco-friendly products and sustainable environment has forced majority of customers to shift from ordinary brands to more conscious items that enhanced their wellbeing. This study examined the influence of green marketing practices, with a specific focus on green logistics, on customer patronage of retail malls. The study is a cross-sectional research design using a quantitative research approach, data were collected from shoppers across major urban retail malls and analyzed through descriptive statistics and regression modeling. The population is infinite and the exact figure cannot be ascertained. Godden (2004) formula used to ascertain the sample size of Three hundred and forty-nine (349). The structured instruments of (349) administered but only three hundred and two (302) duly returned analyzed. The p value = 0.001 less than 0.05 and coefficient of 0.988. hence the null hypothesis formulated is rejected. Findings indicate that the adoption of green logistics--such as the use of renewable energy in transportation, recycling programs, and low-emission delivery systems significantly affects customer perception of environmental responsibility, thereby enhancing their willingness to patronize retail malls. The study concludes that integrating green logistics into green marketing strategies serves as a competitive opportunity in attracting and retaining environmentally conscious customers. The study recommends retailers should leverage on energy-efficient delivery vehicles, displayed green certification, introduced recyclable material established green warehousing and comply with environmental regulation to achieve customer patronage.

Keywords: Customer Patronage, Eco-friendly, Green marketing, logistic, Mall, Retail

1.0 Introduction

In a time when customers are increasingly aware of the social and environmental consequences of their shopping decisions, comprehending the factors that sustain their loyalty to retail malls has become paramount. Customer patronage is the recurrent visits, purchasing behaviour, and enduring loyalty exhibited by customers towards a retail establishment, serves as a critical performance indicator that influences the viability and competitiveness of retail malls (Etim *et al.,* 2023). In Nigeria, especially in urban areas like Ilorin, retail malls have become significant economic entities, facilitating job creation, invigorating local trade, attracting investments, increasing tax revenue, and fostering development of related service sectors such as logistics, food services, and entertainment (Lebia, 2025). Notwithstanding these contributions, shopping malls in Ilorin Metropolis persistently encounter obstacles that impede customer patronage.

The difficulties encompass inconsistent product pricing, insufficient parking facilities, inadequate waste management, subpar service quality, restricted product variety, erratic power supply impacting the in-mall experience, and increasing consumer apprehensions over environmental sustainability (Fadare, 2025; Lebia, 2025). As consumers grow increasingly

ecologically conscious, retail malls that do not conform to sustainability standards may face diminished foot traffic and weakening brand allegiance (Collins and Chinedu, 2023).

Furthermore, customer patronage is a vital metric for the viability of retail businesses, especially in the current competitive market when consumers are more discerning about their shopping choices (Adeola *et al.,* 2023). In urban centers such as Ilorin metropolis, retail malls rely significantly on repeat patronage, favourable word-of-mouth, and robust consumer loyalty for their success. The retail sector, in particular, has been at the forefront of these developments as a result of its direct relationship with end users. Most retail businesses who failed to adapt to the changes have been weed-out from the sector or diversify to meet-up with the environmental call (Collins and Chinedu, 2023). Green marketing, which involves the promotion of products and services based on their environmental benefits, has emerged as a key strategic approach in addressing both ecological concerns and evolving consumer expectations (Zubairu & Shah 2024).

In the Nigerian retail industry encompassing supermarkets, departmental stores, convenience outlets, and online marketplaces the application of green marketing is still in its developmental stages (Owoseni, *et.al*, 2023). Some forward-thinking retail companies are beginning to adopt environmentally responsible practices such as the use of biodegradable packaging, energy-efficient lighting, waste recycling, and the promotion of eco-friendly products. These initiatives are often driven by corporate social responsibility goals, competitive differentiation, and a response to shifting consumer preferences, especially among the educated and urban middle-class population.

Moreover, Victory *et al.* (2023) opined that green marketing encompasses a wide range of practices, including eco-friendly product design, sustainable packaging, energy-efficient operations, waste reduction initiatives, and transparent communication about environmental commitments. As consumers become more environmentally conscious, they are more likely to favour businesses that demonstrate an obligation to green evolution. According to Akerele-Popoola *et al.* (2024) explained that the shift in consumer behaviour has led retailers to integrate green marketing strategies not only as a means of corporate social responsibility but also as a competitive advantage over close rivals. Green marketing, which refers to the promotion of products and services based on their environmental benefits, is recently gaining momentum in Nigeria's retail space (Nsefumu *et.al.,* 2024). Increasingly, consumers have come to expect companies to demonstrate their commitment to improving their operations alongside various environmental, social, and governance (ESG) criteria. More so, many companies will distribute social impact statements on an ongoing basis, in which they periodically self-report their progress toward these goals. Despite this awareness, some consumers still prefer price to environmental conscious products (Victory *et al.*, 2023).

In recent years, the growing concern for environmental sustainability has compelled businesses, particularly in the retail sector, to adopt green marketing strategies (Bento, 2020; Lebia, 2025). These strategies such as green packaging, value-based pricing, green logistics, and the implementation of eco-friendly facilities are increasingly viewed as essential not only for environmental stewardship but also for gaining a competitive edge. It is upon this premise that the study examined the effect of green marketing on the customer patronage of retail mall in Ilorin. The specific objective of the study is to examine the influence of green logistics on the customer patronage of retail mail. By exploring the link between green logistics and customer patronage, the study provides actionable insights for retail businesses seeking to enhance their market position through sustainable practices. Retailers can better understand which green logistic initiatives resonate most with customers, enabling them to design more effective and targeted sustainability programs that not only reduce environmental impact but also improve customer loyalty and satisfaction.

2.0 Literature Review
Concept of Green Marketing

Collins and Chinedu (2023) asserted that green marketing refers to the marketing of products that are presumed to be environmentally safe. According to Polonsky *et.al* (2024) green marketing encompasses a broad range of activities, including product modification, changes to the production process, sustainable packaging, and modifying advertising content. It aims not only to satisfy consumer needs but also to minimize environmental harm. The concept began gaining traction in the late 1980s and early 1990s, as noted by Peatti (2025), during the rise of ecological consciousness among consumers and increasing regulatory pressures. Green marketing has since evolved from being a niche strategy to becoming a core component of

corporate social responsibility and brand positioning (Fadli *et al.,*2024). However, Zubairu and Shah (2024) opined that green marketing refers to the process of promoting, developing, and selling products or services based on their environmental benefits. It involves strategies that not only meet customer needs but also minimize the negative impact on the environment. This approach is rooted in the broader framework of sustainable development, where businesses aim to operate in a way that conserves natural resources, reduces pollution, and supports ecological balance.Green marketing refers to the practice of developing and promoting products and services based on their environmental benefits (Nsefumu *et al*., 2024; Zubairu & Shah 2024).

Green Logistics as a Dimension of Green Marketing Strategy

Aqabneh (2025) opined that green logistics refers to the strategic integration of environmentally friendly practices into logistics and supply chain operations. When viewed through the lens of green marketing, green logistics becomes a key enabler in delivering the environmental promises made by companies to eco-conscious consumers. Zubairu and Shah (2024) green logistics involves optimising logistics activities such as transportation, warehousing, packaging, inventory management, and reverse logistics to reduce their environmental impact. It emphasises lowering carbon emissions, reducing energy and resource consumption, minimising waste, and promoting recycling and reuse.

Meanwhile, Fadli *et al.* (2024) argue that green logistics involves optimising logistics operations like transportation, storage, and distribution to minimise their environmental footprint. Historically, the logistics sector has been associated with high fuel consumption and carbon emissions as goods move through complex supply chains from raw materials heading to a factory to finished goods coming from warehouses. Pursuing a green, sustainable logistics strategy often requires companies to reimagine their operations, which may require an upfront investment with the goal of reducing long-term operating costs and environmental harm (Akinbogun *et al.,* 2024).

Customer Patronage

Customer patronage of green products refers to the willingness and behaviour of consumers in consistently purchasing environmentally friendly goods. Customer patronage of green products involves the continued support, preference, and purchase behaviour of consumers toward environmentally sustainable goods ((Zubairu & Shah 2024). These include products that are biodegradable, energy-efficient, recyclable, organically produced, or ethically sourced. Consumers with greater awareness of environmental issues are more likely to support green products. Education and media play crucial roles in shaping this awareness. Green products

must meet or exceed expectations in functionality, durability, and aesthetics to gain customer loyalty.

According to Chijioke-Okoro (2024) asserted that higher prices of green products can deter patronage unless consumers perceive added value or long-term savings. Brands with transparent sustainability practices and certifications (e.g., EcoLabel, USDA Organic) tend to enjoy higher patronage levels. Consumers with strong ethical values or concern for future generations are more likely to make green choices.

Green-Driven Retail Malls in Nigeria

The rapid urbanisation and rising consumer culture in Nigeria have accelerated the development of large-scale shopping c omplexes across major cities such as Lagos, Abuja, and Kano. While retail malls stimulate economic growth and create employment, their operations are energy-intensive, relying heavily on grid electricity and diesel generators (Adeola, *et.al*, 2023; Fadli *et al,* 2024). According to Oluigbo, *et.al* (2025) this dependence increases greenhouse gas emissions and contributes to Nigeria's already significant environmental challenges, including air pollution, carbon emissions, and rising energy costs.

In recent years, the concept of green-driven or sustainably designed retail malls has emerged as a response to these concerns. A green-driven retail mall integrates renewable energy sources such as solar photovoltaic systems with energy-efficient building design, water conservation practices, and sustainable waste management (Kurniadi & Gamal, 2024). Moreover, such malls aim to reduce environmental footprints while maintaining profitability and shopper comfort (Collins and Chinedu, 2023). The National Renewable Energy and Energy Efficiency Policy (NREEEP) and the Energy Transition Plan 2050 encourage investments in renewable energy and green building standards. Private sector initiatives reflect this shift: Jabi Lake Mall in Abuja and Ado Bayero Mall in Kano have adopted large-scale solar installations that lower carbon emissions and operational costs. These developments show that sustainable retail infrastructure is technically and economically feasible in the Nigerian context.

Theoretical Review

This study is underpinned by the green consumption theory. The green consumption theory was attributed to the work of Michael J. Polonsky in (1994). His work laid the groundwork for understanding how environmental concerns shape consumption decisions. He posits that consumers' environmental consciousness significantly influences their purchasing and patronage decisions(Nouri and Emkani, 2020).The theory argues that customers are more likely to support businesses that demonstrate ecological responsibility through environmentally friendly products, processes, and communications(Testa *et al.,* 2021).This makes the theory fit to the present study, as green marketing strategies such as green product offerings, green promotion, eco-friendly facilities, and sustainable operational practices can shape customers' attitudes and ultimately drive their patronage of retail malls in the Ilorin metropolis.

Empirical Review

Aqabneh (2025) conducted an empirical investigation into how e-logistics service quality influences customer satisfaction, trust building, and customer loyalty among e-shoppers in Palestine. The study adopted a quantitative research design and collected data from active online shoppers using a structured questionnaire. Using statistical techniques such as Structural Equation Modeling (SEM), the study examined both the direct and indirect effects of e-logistics

service quality dimensions on key customer behavioural outcomes. The findings revealed that e-logistics service quality significantly and positively affects customer satisfaction, indicating that timely delivery, accuracy of order fulfillment, effective tracking systems, and responsiveness to delivery issues are critical in shaping customer perceptions.

Fadli *et al.* (2024) conducted an empirical investigation to examine how green logistics practices and service quality dimensions jointly influence customer satisfaction and customer loyalty among users of JNE courier services in East Jakarta. The study was motivated by the growing need for environmentally responsible logistics operations and the increasing competitive pressure within Indonesia's courier and parcel delivery industry. The authors adopted a quantitative survey research design. Data were collected from customers who had used JNE's delivery services in East Jakarta. he results showed that green logistics practices exerted a significant positive effect on customer satisfaction. Customers appreciated eco-friendly transport options, reduced emissions, and environmentally responsible handling of parcels. The findings indicate that sustainability initiatives in logistics operations improve customer perceptions and strengthen satisfaction levels.

Aqabneh (2025) studies was conducted among e-shoppers in Palestine, while Fadli *et al.* (2024) focused on courier service users in East Jakarta, Indonesia. This posed that contextual and geographical gaps exist.

3.0 Methodology

This study employed a cross-sectional research design using the quantitative statistical method to gather information about the effect of green marketing on the customer patronage of retail malls within Ilorin, Kwara State. The study population is infinite (estimated above 50,000), as the exact population of the customers patronising these malls cannot be ascertained during the investigation. The criteria for choosing this location include the following: Ilorin is one of Nigeria's fastest-growing midsize urban centres, experiencing rapid expansion in retail infrastructure, the emergence of retail malls, increased urbanisation and population growth, efficient and effective supply chains, easy accessibility, and a large number of youths who are more open to eco-conscious lifestyles and technology-driven shopping experiences (Gabriel *et al.,* 2024).

The study adopted the simple random sampling technique to select respondents from the visited malls in Ilorin so that every element in the population had an equal probability of being selected. This eliminates selection bias and enhances the credibility of the findings. Bill Godden's (2004) formula was adopted in selecting the sample size since the researcher is constrained in examining the whole population. This study focuses on the primary source of data through a structured questionnaire administered to the target respondents, and the secondary source from journals, textbooks and online sources was used to substantiate the findings. The method of data analysis employed is regression through SPSS V.26.

Sample Size - (where the population is greater than 50,000)

$$SS = \frac{Z^2 \times (p) \times (1-p)}{C^2}$$

Where:
SS = Sample Size
Z = Z-value (e.g., 1.96 for a 95 percent confidence level)
P =Percentage of population picking a choice, expressed as decimal in this case (0.8)
C = Confidence interval, expressed as decimal (e.g., .05 = +/- 5 percentage points)

In calculating the sample size, the following result was obtained:

$$SS = \frac{1.96^2 \times 0.8 \times (1-0.8)}{0.5^2}$$

$$SS = \frac{3.8416 \times 0.8 \times 0.2}{0.0025}$$

$$SS = \frac{0.614656}{0.0025}$$

Sample size = 349

4.0 Results and Discussion of Findings

H$_{01}$: there is no statistical significance between green logistics and customer patronage of retail malls.

Three hundred and forty-nine (349) copies of the questionnaire were administered, butonly three hundred and two (302) were duly filled, returned and coded for the analysis which represent 86.53 % of the total instruments, the demographic data of the respondents were answered using descriptive statistics of frequency counts. This revealed that the responses received were factual following the sampled population.

Table 1
Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.858[a]	.736	.735	.465

a. Predictors: (Constant), Green logistics
Source: SPSS Output, 2025

The table I presents the model summary. It shows that the correlation coefficient r is 0.858 (i.e., r = 0.858) which indicates that there exists a very strong relationship between dependent variable (customer patronage) and green logistics (which is the predictors or independent variables). It is also clear from the table that the r^2, which is the coefficient of determination, is 0.736. This implies that more than two-third of percentage i.e., 73.6% change in customer patronage and the green logistics.

ANOVA

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	10088.701	1	3362.900	754.456	.001[b]
	Residual	1653.689	135	4.457		
	Total	11742.39	136			

a. Dependent Variable: Customer patronage
b. Predictors: (Constant), Green logistics
Source: SPSS Output, 2025

From the ANOVA table. The F-statistic as shown from the table is significant since the probability value of .001 is less than the alpha level of 0.05, thus the model is fit. Therefore, the null hypothesis is rejected and the alternative hypothesis is accepted. This implies that green logistic has a significant influence on the customer patronage of retail mail.

Coefficientsª

Model	Unstandardized Coefficients		Standardized Coefficients	T	Sig.
	B	Std. Error	Beta		
1 (Constant)	12.377	1.020		12.134	.001
Green logistics	.988	.047	.431	20.933	.001

a. Dependent Variable: Customer patronage

Source: SPSS Output, 2025.

From the coefficient table It could be seen that the overall significant effect for the independent and the dependent variable is less than 0.05 significant level. Therefore, there is a significant effect of the independent variable on the dependent variable, which implies that the null hypothesis is rejected and the alternative hypothesis is accepted. The Beta value of 0.431 for green logistic (independent variable) implies that increase in green logistics will lead to 43.1% increase in customer patronage of retail mall.

Discussion of findings

The study examined the influence of green logistics on customer patronage of retail malls, yielding notable results. The r² value of 0.736 indicates that green logistics practices such as eco-friendly transportation, sustainable packaging, energy-efficient supply chains, and waste-reduction strategies explain approximately 73.6% of the variation in customer patronage. This is a strong coefficient of determination, signifying that most of the changes in customers' willingness to visit and repeatedly shop at retail malls can be attributed to the malls' green logistics initiatives. The mean square value of 3,362.900 from the ANOVA output suggests that the regression model is highly significant and has a strong overall fit. The standardised beta coefficient of 12.377 indicates a very strong positive relationship between green logistics and customer patronage. Practically, this means that for every unit increase in the adoption of green logistics measures, there is a substantial rise in customer patronage. Such a high beta value reflects that consumers are not only aware of but are also highly responsive to sustainable logistics efforts. These findings align with sustainability and consumer-behaviour literature (Akinbogun et al., 2024; Aqabneh, 2025; Fadli, 2024), which consistently reports that modern shoppers, especially environmentally conscious segments such as Generation Z and millennials, prefer retail outlets that minimise their ecological footprint.

5.0 Conclusion and Recommendations

This study concludes that green logistics strategies such as eco-friendly supply chain management, energy-efficient transportation, sustainable packaging, and waste reduction influenced customer patronage of retail malls. Customers are increasingly drawn to eco-friendly brands, which they see as honest and socially responsible. Malls that use energy-efficient transportation and eco-friendly packaging not only save money and help the environment, but they also get more business from shoppers who care about it. Waste-reduction programmes demonstrate a company's commitment to long-term sustainability, fostering confidence and promoting repeat visits. This study emphasised using full green logistics solutions gives a business a stronger competitive edge, makes customers more loyal, and makes retail malls leaders in sustainable commerce. The result leads to more customers and long-term profits.

The study recommended that continuous investment in eco-innovations, transparent communication of green initiatives, and management engagement to strengthen customer patronage and support broader sustainability goals will go a long way in fostering customer patronage of retail malls and enhancing long-term loyalty.

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