



Effect of Sustainable Marketing on Brand Equity in Telecommunication Industry: A Case of MTN Nigeria in Lagos State

Olanrewaju Isiaka Anafi

Institute Of Finance and Management Studies, Kwara State Polytechnic, Ilorin

***Corresponding Author Email:** olanrewajuanaafi01@gmail.com

Abstract

This study examines the effect of sustainable marketing on brand equity in the telecommunication industry, focusing on MTN Nigeria in Lagos State. This study adopted a quantitative research methodology with a cross-sectional survey design. Using a structured questionnaire, data were collected from 400 MTN Nigeria subscribers in Lagos State, selected through simple random and convenience sampling techniques. The collected data were analysed using multiple linear regression to assess the impact of environmental sustainability, CSR initiatives, and green marketing on brand equity. The key findings indicate that environmental sustainability practices have a strong positive effect on brand equity, as consumers increasingly associate eco-friendly initiatives with brand credibility, CSR initiatives also significantly enhance brand equity, reinforcing the importance of ethical corporate engagement and green marketing strategies positively influence brand equity. The study recommends that MTN Nigeria embrace transparency in its sustainability communications, align CSR initiatives with local community needs, and adopt verifiable green marketing strategies to strengthen consumer trust. These findings contribute to the discourse on sustainability-driven brand equity, emphasising the need for telecommunication firms to integrate credible sustainability practices into their branding strategies.

Keywords: *Sustainable marketing, brand equity, environmental sustainability, corporate social responsibility, green marketing*

1. Introduction

2. Background to the Study

Sustainable marketing is a strategic approach that integrates environmental, social, and ethical considerations into business practices to create long-term value for companies and consumers. Unlike traditional marketing, which focuses primarily on profit maximisation, sustainable marketing seeks to align business objectives with societal well-being and ecological preservation (Aaker & Joachimsthaler, 2014; Kotler et al., 2017). In an era where corporate social responsibility (CSR) has become a determining factor in consumer preferences, businesses that adopt sustainability-driven marketing strategies enhance their competitive advantage by fostering consumer trust and loyalty (Eresimadu & Okeke, 2023; Sun & Kim, 2023). The increasing awareness of environmental degradation, climate change, and ethical business practices has made



sustainability a key determinant of brand differentiation and long-term success (Martin & Schouten, 2012; Gordon et al., 2011).

Brand equity is a fundamental aspect of marketing that represents the value that consumers associate with a brand. It comprises four key dimensions: brand awareness, perceived quality, brand associations, and brand loyalty (Heck & Xiao, 2013; Sudirjo et al., 2024). Companies with high brand equity enjoy several advantages, including greater customer retention, premium pricing power, and enhanced market positioning. Sustainable marketing significantly influences brand equity by strengthening consumer perceptions of a brand's ethical and environmental commitments (Aaker & Joachimsthaler, 2014; Kotler et al., 2017). Empirical studies indicate that consumers are more likely to engage with brands that demonstrate a genuine commitment to sustainability, leading to stronger brand loyalty and positive associations (Eresimadu & Okeke, 2023; Sun & Kim, 2023). Furthermore, businesses that integrate sustainability into their brand identity experience increased customer advocacy and positive word-of-mouth, further reinforcing their market position (Martin & Schouten, 2012; Gordon et al., 2011).

Industries across various sectors have recognised the impact of sustainable marketing on brand equity. Companies that implement green marketing initiatives—such as reducing carbon footprints, adopting circular economy models, and promoting eco-friendly packaging—are perceived as sustainability leaders (Heck & Xiao, 2013; Sudirjo et al., 2024). This perception directly enhances brand equity, as consumers increasingly prioritise ethical and environmentally responsible brands in their purchasing decisions (Eresimadu & Okeke, 2023; Sun & Kim, 2023). Corporate social responsibility initiatives, including fair labour practices, community engagement, and ethical sourcing, further contribute to building positive brand associations and credibility (Aaker & Joachimsthaler, 2014; Kotler et al., 2017). Research suggests that companies that engage in transparent and measurable sustainability efforts benefit from higher brand awareness and consumer trust, ultimately leading to a competitive advantage (Martin & Schouten, 2012; Gordon et al., 2011).

Despite the evident benefits of sustainable marketing, its implementation faces several challenges. Consumer skepticism regarding corporate sustainability claims, labelled as greenwashing, poses a significant barrier to brand credibility (Eresimadu & Okeke, 2023; Sun & Kim, 2023). When companies exaggerate or misrepresent their sustainability initiatives, consumer trust erodes, negatively impacting brand equity (Heck & Xiao, 2013; Sudirjo et al., 2024). To address this issue, businesses need to prioritise transparency by obtaining third-party certifications, publishing sustainability reports, and engaging in open communication with stakeholders (Aaker & Joachimsthaler, 2014; Kotler et al., 2017). Additionally, the high costs associated with implementing sustainable marketing strategies, such as investments in renewable energy, sustainable supply chains, and ethical labour practices, can deter firms, particularly small and medium-sized enterprises (Martin & Schouten, 2012; Gordon et al., 2011). However, research indicates that long-term benefits, including enhanced brand reputation, customer loyalty, and operational efficiency, often outweigh the initial financial constraints (Eresimadu & Okeke, 2023; Sun & Kim, 2023).

Empirical findings from multiple industries reveal the effectiveness of sustainable marketing in enhancing brand equity. For example, studies on the cosmetics sector have demonstrated a strong correlation between perceived sustainability and increased consumer loyalty (Heck & Xiao, 2013;



Sudirjo et al., 2024). Similarly, in the fashion, automotive, and technology sectors, companies that integrate sustainability into their marketing strategies experience greater customer retention and advocacy (Eresimadu & Okeke, 2023; Sun & Kim, 2023). Brands such as Patagonia, Tesla, and Unilever have successfully leveraged sustainability as a brand-building tool, leading to strong consumer engagement and competitive differentiation (Aaker & Joachimsthaler, 2014; Kotler et al., 2017). These findings reinforce the argument that sustainable marketing is not merely an ethical obligation but a strategic asset that drives brand growth and long-term success (Martin & Schouten, 2012; Gordon et al., 2011).

In the context of the telecommunication industry, understanding the impact of sustainable marketing on brand equity is significant for companies aiming to enhance their market positioning while addressing ethical and environmental responsibilities. As consumer awareness of corporate sustainability initiatives grows, telecommunication firms such as MTN Nigeria need to align their marketing strategies with evolving expectations to sustain competitiveness and relevance (Eresimadu & Okeke, 2023; Sun & Kim, 2023). The increasing access to digital information has further amplified the importance of sustainability, as consumers can now scrutinise corporate practices in real time, making transparency and authenticity vital for maintaining brand trust and loyalty (Heck & Xiao, 2013; Sudirjo et al., 2024). This paper critically examines how sustainable marketing influences brand equity in the telecommunication industry, with a specific focus on MTN Nigeria in Lagos State. By analysing the role of sustainability-driven marketing initiatives in shaping consumer perception, brand differentiation, and long-term loyalty, the study provides valuable insights for companies seeking to leverage sustainability as a strategic asset.

2.1. Statement of the Problem

Despite increasing corporate adoption of sustainability strategies, their direct impact on brand equity remains unclear, especially in the Nigerian telecommunication sector (Heck & Xiao, 2013; Sudirjo et al., 2024). Studies highlight the role of sustainable marketing in enhancing consumer trust and competitive advantage, there is limited empirical findings examining how environmental sustainability, corporate social responsibility (CSR), and green marketing affect brand equity in Nigeria's telecommunication industry. MTN Nigeria is a leading telecom provider in Lagos State and has implemented various sustainability initiatives, including renewable energy adoption, digital inclusion, and responsible waste management. However, the extent to which these efforts influence consumer perception and enhance brand equity remains uncertain. Greenwashing—where companies exaggerate their sustainability efforts, has further intensified consumer skepticism, potentially undermining trust and brand credibility (Eresimadu & Okeke, 2023; Sun & Kim, 2023). Despite CSR initiatives aimed at community development, the link between these efforts and brand equity remains underexplored (Heck & Xiao, 2013; Sudirjo et al., 2024). Furthermore, while green marketing is widely adopted to promote eco-friendly services, its effectiveness in influencing consumer behaviour and strengthening brand positioning is not well-documented in Nigeria (Aaker & Joachimsthaler, 2014; Kotler et al., 2017). This paper seeks to examine how environmental sustainability, CSR initiatives, and green marketing strategies impact brand equity in MTN Nigeria, providing insights into the effectiveness of sustainable marketing in the Nigerian telecommunication industry.



2.2. Objectives of the study

This paper aimed to examine how sustainable marketing influences brand equity, offering insights into optimising sustainability-driven branding strategies for long-term competitiveness. The specific objectives are to:

- i. examine the effect of environmental sustainability practices on brand equity of MTN Nigeria in Lagos State;
- ii. analyse the impact of corporate social responsibility (CSR) initiatives on brand equity of MTN Nigeria in Lagos State; and
- iii. evaluate the influence of green marketing strategies on brand equity of MTN Nigeria in Lagos State.

2.3. Research Questions

This paper answered the following research question.

- i. How do environmental sustainability practices affect the brand equity of MTN Nigeria in Lagos State?
- ii. What is the impact of corporate social responsibility (CSR) initiatives on the brand equity of MTN Nigeria in Lagos State?
- iii. To what extent do green marketing strategies influence the brand equity of MTN Nigeria in Lagos State?

2.4. Hypothesis Formulated

This paper's research hypotheses were tested to achieve its objectives.

- a. **Ha₁**: Environmental sustainability practices have a significant effect on the brand equity of MTN Nigeria in Lagos State.
- b. **Ha₂**: CSR initiatives have a significant impact on the brand equity of MTN Nigeria in Lagos State.
- c. **Ha₃**: Green marketing strategies significantly influence the brand equity of MTN Nigeria in Lagos State.

3. Literature Reviews

3.1. Sustainable Marketing

Sustainable marketing is an approach that integrates social, environmental, and economic considerations into marketing strategies to ensure long-term consumer and societal benefits (Belz & Peattie, 2012; Martin & Schouten, 2014). It extends beyond traditional marketing by focusing on ethical consumerism, green marketing, and corporate social responsibility (Kotler, Kartajaya, & Sertiawan, 2017; Öztürk, Nart, & Altunısık, 2019). Studies have shown that companies that embrace sustainability-oriented marketing gain a competitive advantage through enhanced brand equity, as consumers increasingly favor brands that align with environmental and ethical values (Gordon, Carrigan, & Hastings, 2011; Hawken, 1993). Research highlights that sustainable



marketing enhances perceived quality and brand loyalty, as consumers tend to associate sustainability with superior product attributes (Aaker & Joachimsthaler, 2014; Bhattacharya, 2017). Additionally, social identity theory suggests that consumers engage more with brands that reflect their values, further strengthening brand equity (He, Li, & Harris, 2012).

Empirical findings indicate that sustainability marketing significantly influences consumer perceptions and purchase decisions. For instance, brands implementing eco-labeling and green advertising strategies tend to witness positive brand associations and higher credibility (Chen et al., 2020; Kang & Hur, 2011). Moreover, integrating sustainability into brand narratives has been linked to increased customer engagement and loyalty, particularly in industries where ethical considerations play a critical role, such as cosmetics and fashion (Lucic, 2020; Nkamnebe, 2011). However, challenges persist, particularly in emerging markets, where external factors like poverty and weak institutions hinder the full adoption of sustainable marketing (Nkamnebe, 2011; Pooja, Shirin, & Sujata, 2022). Despite these barriers, sustainable marketing is projected to become a dominant strategy, with businesses prioritising long-term environmental and social impact over short-term financial gains (Fuller, 1999; Fisk, 2001). This shift is essential for fostering corporate reputation, consumer trust, and sustained market relevance.

3.2. Brand Equity

Brand equity is the intangible value that a brand holds in consumers' minds, encompassing brand awareness, perceived quality, brand associations, and brand loyalty (Aaker & Joachimsthaler, 2014; He, Li, & Harris, 2012). This plays a pivotal role in influencing purchasing decisions, shaping customer perceptions, and driving competitive advantage (Bhattacharya, 2017; Kang & Hur, 2011). Notably, brand equity is strengthened by sustainability marketing strategies, which integrate social and environmental responsibility into brand narratives, fostering consumer trust and long-term brand affinity (Belz & Peattie, 2012; Gordon, Carrigan, & Hastings, 2011). Studies suggest that sustainability efforts, such as eco-friendly packaging, corporate social responsibility (CSR) initiatives, and ethical production processes, positively influence perceived quality and consumer engagement (Chen et al., 2020; Nkamnebe, 2011). Empirical findings indicate that customers increasingly associate sustainability with superior brand credibility, which reinforces the importance of aligning brand messaging with sustainability principles (Borak, 2019; Pooja, Shirin, & Sujata, 2022).

Additionally, brand identity elements, including colour, social positioning, and symbolic messaging, significantly impact brand equity (Labrecque & Milne, 2013; Lieven, Grohmann, & Herrmann, 2014). Aaker (2014) emphasises that brand personality dimensions, such as sincerity and competence, are heightened when sustainability is embedded into the brand image, leading to stronger consumer-brand relationships. However, challenges remain, as brands with strong feminine or masculine identities need to navigate sustainability without disrupting their core visual identity and positioning (Bhattacharya & Kaursar, 2016; Abril, Olazábal, & Cava, 2009). Furthermore, research suggests that consumers in emerging markets exhibit varied responses to sustainability marketing due to external economic and institutional factors (Nkamnebe, 2011). Despite these complexities, integrating sustainability into branding strategies has become essential for maintaining market relevance and fostering consumer loyalty.



3.3. Empirical Studies

These empirical studies explore the connection between sustainable marketing and brand equity in many settings, including Nigeria, and other countries.

Sudirjo et al. (2024) examined the impact of sustainable marketing strategies on customer loyalty in the manufacturing industry. Using Structural Equation Modeling (SEM-PLS) on data from 250 manufacturing firms, the study found that sustainable marketing positively affects brand image, customer satisfaction, and loyalty. The study concluded that integrating sustainability into business strategies enhances competitive positioning and long-term customer relationships.

Eresimadu and Okeke (2023) analyzed how sustainable marketing influences brand equity in the cosmetics industry. A cross-sectional survey with 107 respondents was conducted using Ordinary Least Squares (OLS) regression analysis. The findings revealed that perceived sustainability, social identity, and social transformations significantly impact brand equity. The study concluded that companies should incorporate sustainability-driven branding to enhance consumer trust and competitive advantage.

Sun and Kim (2023) explored the moderating effects of brand color and gender on sustainability branding. A process macro analysis was conducted on an international sample of over 400 participants. The results indicated that while green color priming enhances brand equity, its effectiveness depends on brand gender, with feminine brands benefiting more from iconic colors. The study concluded that brand color strategies must align with brand identity for successful sustainability branding.

Gong et al. (2023) studied the moderating role of corporate social responsibility in the relationship between sustainability marketing and brand equity. A survey-based approach was used to assess consumer engagement and purchase intention. The study found that CSR amplifies sustainability's positive effect on customer engagement and purchase behavior. The conclusion drawn was that CSR-driven sustainability marketing enhances trust and strengthens brand-consumer relationships.

Khan and Fatma (2023) examined the effect of perceived sustainability on customer responses, with customer engagement as a mediator. Through survey-based research, the study found that sustainability initiatives significantly enhance consumer loyalty and brand equity. The study concluded that firms should incorporate sustainability into their core brand values to strengthen customer relationships.

Pooja, Shirin, and Sujata (2022) conducted a cross-national survey to examine how global consumers perceive sustainability marketing. The study found that ethical and environmentally responsible brands receive higher consumer trust and preference. It was concluded that firms must integrate sustainability narratives into their branding strategies to maintain market relevance and consumer loyalty in an evolving marketplace.

Sander et al. (2021) analyzed the impact of sustainability advertising on brand personality, credibility, and attitude. Using a mixed-methods approach, the study assessed consumer responses to sustainability messaging. The results showed that authentic sustainability messaging improves



brand trust and reduces skepticism. It was concluded that companies must ensure credibility in sustainability claims to avoid greenwashing and maintain consumer confidence.

Alamsyah et al. (2021) explored eco-labeling's impact on brand equity, utilizing survey data to analyze consumer perception of eco-certified products. The study found that eco-labels enhance perceived quality, credibility, and consumer trust in sustainable brands. The study concluded that brands that incorporate eco-certifications into their sustainability marketing efforts are more likely to achieve consumer loyalty and a competitive advantage.

Amatulli et al. (2021) examined consumer perceptions of sustainable luxury products using an experimental research approach. The study assessed how sustainability-focused brand communication influences brand perception and value. The findings indicated that sustainability messaging enhances brand equity while maintaining luxury appeal. The study concluded that luxury brands must balance sustainability messaging with their high-end positioning to maintain consumer engagement.

Chen et al. (2020) investigated perceived sustainability's influence on customer engagement in online shopping. The study employed a survey-based quantitative approach to assess consumer responses to sustainable brands. The findings indicated that brands perceived as sustainable enjoy higher customer engagement, trust, and purchase intention. The study concluded that companies emphasizing sustainability in their online branding strategies can significantly enhance consumer perception and long-term brand loyalty.

Kapferer and Michaut-Denizeau (2020) examined generational differences in sustainable luxury consumption using a comparative international study. The findings indicated that millennials are significantly more influenced by sustainability branding than older consumers. The study concluded that luxury brands must tailor sustainability messaging to younger, environmentally conscious audiences to stay competitive.

Lucic (2020) explored the dimensions of sustainable marketing orientation (SMO) through an exploratory factor analysis of data collected from 174 respondents. The study identified strategic integration, societal engagement, and ethical capabilities as core SMO dimensions influencing brand equity. It was concluded that firms should align sustainability initiatives with their core branding efforts to achieve long-term consumer trust and competitive advantage.

Bhattacharya (2017) examined the relationship between corporate social responsibility (CSR) and brand equity, focusing on how CSR initiatives enhance consumer perceptions. The study applied structural equation modeling to analyze data from 386 respondents. It was found that CSR significantly strengthens social identity, brand associations, and consumer engagement, ultimately enhancing brand equity. The study concluded that brands leveraging CSR effectively in their marketing strategies foster long-term loyalty and brand equity growth.

3.4. Research Gap

The literature on sustainable marketing and brand equity has significantly expanded, highlighting the role of sustainability strategies in enhancing consumer trust, brand loyalty, and competitive advantage (Sudirjo et al., 2024; Eresimadu & Okeke, 2023; Khan & Fatma, 2023; Gong et al.,



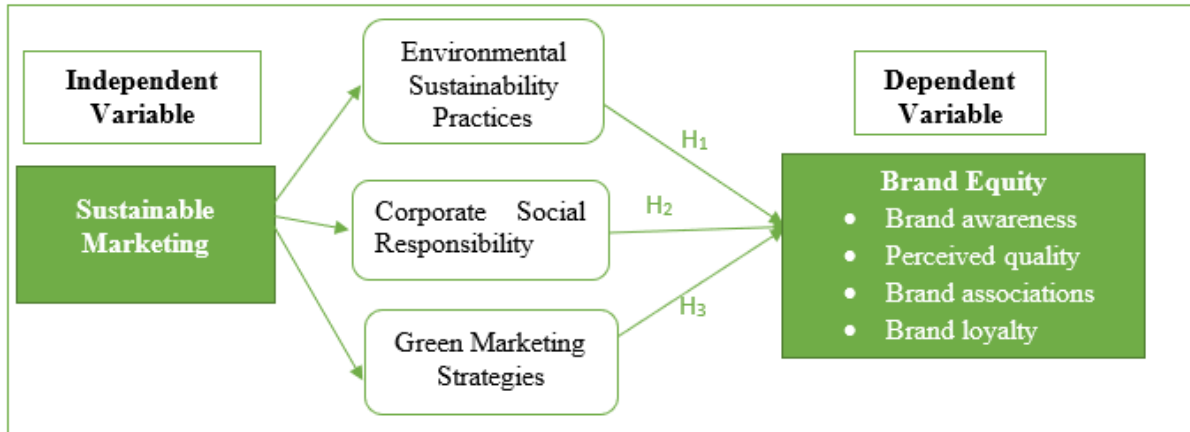
2023). However, despite the growing body of research, critical gaps persist. One major limitation is the geographical gap—there is little to no empirical research focusing on the telecommunication sector, particularly MTN Nigeria, despite its commitment to sustainable marketing. Existing studies have largely examined manufacturing (Sudirjo et al., 2024) and cosmetics (Eresimadu & Okeke, 2023) sectors, neglecting industries like telecommunications, which play a crucial role in economic sustainability and consumer engagement. This gap underscores the need for research tailored to the unique market dynamics of MTN Nigeria, where sustainability efforts must align with digital transformation and infrastructure development.

Additionally, inconsistencies in findings across different studies create ambiguity regarding the effectiveness of sustainability marketing on brand equity. While some research indicates a direct positive impact of sustainable marketing on consumer engagement and trust (Khan & Fatma, 2023; Gong et al., 2023; Pooja et al., 2022; Sun & Kim, 2023), others suggest that this relationship is conditional, moderated by variables like corporate social responsibility (Gong et al., 2023) or brand color strategies (Sun & Kim, 2023). This suggests that sustainability marketing does not always yield uniform results across industries and consumer segments. For example, in the luxury market, Kapferer and Michaut-Denizeau (2020) found that sustainability branding is more effective among millennials, while in online shopping, Chen et al. (2020) highlighted perceived sustainability as a key driver of customer engagement. The variability in these results calls for a sector-specific investigation into how sustainability marketing influences brand equity in the telecommunication industry, particularly in Nigeria's competitive and evolving market.

Furthermore, there is a scarcity of studies specifically examining sustainable marketing in Africa, where socio-economic and infrastructural realities may influence its effectiveness. While research has explored CSR's impact on brand equity globally (Bhattacharya, 2017; Gong et al., 2023), studies specific to Nigerian telecommunication firms remain scarce. This research will address this gap by analyzing how MTN Nigeria integrates sustainability in its marketing strategy and how this affects consumer perceptions of brand equity. By doing so, this study will contribute to the broader discourse on sustainable branding, providing empirical evidence from an underexplored geographical and industry context (Sudirjo et al., 2024; Eresimadu & Okeke, 2023; Gong et al., 2023; Khan & Fatma, 2023).

4. Conceptual Framework

Based on the above conceptual reviews, the Conceptual framework developed for this paper is shown in figure 1 below



Source: Authors Construction

Figure 1: Conceptual Framework Diagram

4.1. Theoretical Framework

This study adopted the triple bottom line theory and brand equity theory.

4.1.1. The Triple Bottom Line (TBL) Theory

The Triple Bottom Line (TBL) Theory, developed by John Elkington in 1997, expands traditional business performance metrics by integrating three dimensions: economic, social, and environmental sustainability. Elkington (1997) argued that businesses should measure success beyond financial profit, incorporating social responsibility and ecological impact to ensure long-term value creation. This theory has since gained prominence in corporate sustainability strategies. TBL assumes that sustainable business practices contribute to financial performance, stakeholder satisfaction, and environmental well-being (Elkington, 1997). It posits that firms embracing sustainability experience competitive advantages, enhanced brand loyalty, and improved stakeholder trust. The model suggests that integrating social responsibility and environmental consciousness into corporate strategies fosters long-term economic resilience (Slaper & Hall, 2011). Additionally, TBL assumes that organizations prioritizing sustainability can mitigate regulatory risks, enhance corporate reputation, and align with evolving consumer preferences. However, critics argue that the framework lacks standardized measurement criteria, making quantification and implementation inconsistent across industries (Norman & MacDonald, 2004).

Despite its limitations, TBL remains a valuable strategic tool by emphasizing the interconnectedness of sustainability and business success. Companies adopting TBL can improve risk management, foster innovation, and strengthen their market position (Slaper & Hall, 2011). Although implementation challenges exist, aligning corporate objectives with environmental and social goals enhances long-term stakeholder relationships and competitive advantage.

In this study, TBL applies to MTN Nigeria by assessing how environmental sustainability (e.g., renewable energy adoption), social responsibility (CSR initiatives), and green marketing influence brand equity. By integrating TBL principles, the study examines how MTN Nigeria's sustainability



efforts shape consumer perceptions, trust, and loyalty, reinforcing the strategic importance of sustainability-driven marketing in the telecommunications sector.

4.1.2. Brand Equity Theory

Brand Equity Theory, developed by David Aaker in 1991, conceptualises brand value through four key dimensions: brand awareness, perceived quality, brand associations, and brand loyalty. Aaker (1991) posits that strong brand equity enhances consumer preference, trust, and financial performance, providing firms with competitive advantages in dynamic markets. The theory assumes that consumers make purchase decisions based on brand perceptions rather than just product attributes (Aaker, 1991). It suggests that positive brand associations and perceived quality strengthen customer loyalty, leading to increased market share and premium pricing power (Keller, 1993). Additionally, firms that invest in brand-building activities, such as sustainable marketing, foster long-term customer engagement and differentiation from competitors (Hoeffler & Keller, 2002). However, brand equity is not static; it requires continuous investment and adaptation to evolving consumer expectations, particularly in sustainability-conscious markets.

A limitation of the theory is its emphasis on consumer perception while overlooking external factors such as economic fluctuations and regulatory changes (Christodoulides & De Chernatony, 2010). Additionally, quantifying brand equity remains challenging due to its subjective and multidimensional nature. Despite these limitations, Brand Equity Theory remains relevant in analyzing how firms build and sustain competitive advantages. Companies that integrate sustainability into brand strategy enhance trust, credibility, and differentiation (Hoeffler & Keller, 2002). Sustainable marketing reinforces emotional connections with consumers, ensuring long-term loyalty despite market uncertainties.

Applying this theory to MTN Nigeria, the study examines how environmental sustainability, CSR initiatives, and green marketing shape brand awareness, perceived quality, and customer loyalty. MTN's sustainability-driven branding strategy enhances its market positioning and consumer trust, reinforcing the role of sustainable marketing in strengthening brand equity within Nigeria's competitive telecommunication industry.

5. Methodology

This study employed a quantitative research methodology, utilising a structured questionnaire for data collection and statistical analysis. A cross-sectional survey research design was adopted, as data were gathered within a specific timeframe, from January 6 to January 31, 2025. The target population comprised MTN subscribers in Lagos Metropolis, with questionnaires distributed at event centers, motor parks, prominent shops, and malls to ensure a diverse representation. The sampling approach combined simple random and convenience sampling techniques. Simple random sampling enhances representativeness by giving each MTN subscriber an equal chance of selection, while convenience sampling allows practical data collection in high-traffic locations, improving response rates and study feasibility.

The study focused on three predictor variables: environmental sustainability practices, CSR initiatives, and green marketing strategies, with brand equity as the dependent variable. Each



predictor variable was assessed using multiple items on a five-point Likert scale ranging from strongly agree to strongly disagree. Additionally, four socio-demographic variables—gender, age, education, and occupation—were included. The total population of MTN subscribers in Lagos State is 7,417,313 (National Bureau of Statistics, 2024), and the sample size of 400 respondents was determined using Taro Yamane’s (1964) formula as shown below.

$$n = \frac{N}{1 + e^2 (N)}$$

Where, N= Population; n= Sample size; e= Level of significance (0.05)

$$n = \frac{7,417,313}{1+0.052(7,417,313)} = \frac{7,417,313}{1+0.0025(7,417,313)} = \frac{7,417,313}{1+18,543.2825} = \frac{7,417,313}{18,544.2825}$$

n = 399.9784300093573= 400 MTN Subscribers.

The research instrument is questionnaire. It was developed by the researcher based on the literature review. The questionnaire was administered using an intercept method, where potential respondents were approached randomly, and participation was voluntary. Reliability was assessed using Cronbach’s alpha to ensure internal consistency as shown below.

5.1. Reliability Analysis

Variables	No of Items	Cronbach Alpha
Environmental Sustainability Practices	3	0.917
CSR Initiatives	3	0.901
Green Marketing Strategies	3	0.934
Brand Equity	6	0.948

Cronbach’s alpha was used to assess the internal reliability and consistency of the construct items. The results exceeded the 0.6 threshold, indicating strong internal consistency. This confirms the instrument’s reliability, ensuring all items are suitable for further analysis without elimination. The collected data were analysed using multiple linear regression, a parametric statistical technique, with the assistance of the Statistical Package for Social Sciences (SPSS).

5.2. Results

The study’s sample size comprised 400 respondents, out of which 348 completed and returned the questionnaire, yielding a response rate of approximately 87%. This high response rate is suitable for a study of this nature and can be attributed to the researcher’s chosen distribution approach,



the intercept method, which facilitated direct engagement with participants and increased the likelihood of obtaining completed responses.

5.3. Test of Hypotheses

- i. **Ha₁:** Environmental sustainability practices have a significant effect on the brand equity of MTN Nigeria in Lagos State.
- ii. **Ha₂:** CSR initiatives have a significant impact on the brand equity of MTN Nigeria in Lagos State.
- iii. **Ha₃:** Green marketing strategies significantly influence the brand equity of MTN Nigeria in Lagos State.

Table 1: Model Summary of Sustainable Marketing and Bran Equity of MTN Nigeria in Lagos State

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.878	.771	.766	.28182

Source: Field Survey, 2025.

Table 1 shows the model summary assessing the relationship between sustainable marketing and brand equity for MTN Nigeria in Lagos State. The R value of 0.878 indicates a strong positive correlation between the predictor variables and brand equity. The R Square (0.771) suggests that 77.1% of the variation in brand equity is explained by environmental sustainability practices, CSR initiatives, and green marketing strategies. The Adjusted R Square (0.766) confirms the model's robustness, accounting for potential predictor adjustments. The standard error of 0.28182 indicates minimal deviation in the regression model's predictions.

Table 2: ANOVA of Sustainable Marketing and Bran Equity of MTN Nigeria in Lagos State

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	34.564	3	11.521	145.068	.000
	Residual	10.245	344	.079		
	Total	44.810	347			

Source: Field Survey, 2025.

Table 2 showed the ANOVA results for the relationship between sustainable marketing and brand equity for MTN Nigeria in Lagos State. The regression sum of squares (34.564) indicates the variation explained by the predictor variables, while the residual sum of squares (10.245) represents unexplained variation. The F-statistic (145.068) is highly significant ($p = 0.000$), confirming that



the model is statistically significant. This implies that environmental sustainability practices, CSR initiatives, and green marketing strategies collectively have a significant impact on brand equity, validating the model's effectiveness in explaining brand equity variations.

Table 3: Coefficients of Sustainable Marketing and Bran Equity of MTN Nigeria in Lagos State

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
1 (Constant)	.113	.224		.505	.005
Environmental Sustainability Practices	.520	.084	.490	6.170	.000
CSR Initiatives	.145	.091	.154	1.590	.004
Green Marketing Strategies	.307	.088	.290	3.489	.001

Source: Field Survey, 2025.

Table 3 revealed the coefficient estimates for the impact of sustainable marketing practices on brand equity in MTN Nigeria, Lagos State. The constant (B = 0.113, p = 0.005) suggests that when all predictor variables are held at zero, brand equity remains positive which is statistically significant (p < 0.05), indicating that brand equity is predominantly driven by the predictor variables.

The unstandardized coefficient for environmental sustainability practices is B = 0.520. This implies that a one-unit increase in environmental sustainability efforts results in a 0.520-unit rise in brand equity, holding all other variables constant. The standardized coefficient of Beta is 0.490, and the effect is statistically significant at (p = 0.000), indicating a strong positive impact. Thus, the null hypothesis is rejected, and the alternative hypothesis is accepted, confirming that environmental sustainability practices significantly enhance brand equity.

CSR initiatives have an unstandardized coefficient of B = 0.145, meaning that a one-unit increase in CSR activities leads to a 0.145-unit rise in brand equity, assuming other variables remain unchanged. The standardized coefficient of Beta is 0.154, and the effect is statistically significant at (p = 0.004), demonstrating a moderate positive influence. Consequently, the null hypothesis is rejected, and the alternative hypothesis is accepted, signifying that CSR initiatives significantly improve brand equity.

Green marketing strategies have an unstandardized coefficient of B = 0.307, meaning that a one-unit increase in green marketing efforts results in a 0.307-unit increase in brand equity, assuming all other variables remain constant. However, the standardized coefficient of Beta is 0.290, and the significance level is (p = 0.001), indicating that the effect is statistically significant. As a result, the null hypothesis is rejected, and the alternative hypothesis is accepted, implying that green marketing strategies have a significant impact on brand equity.



Overall, this paper confirms that environmental sustainability practices and CSR initiatives significantly enhance brand equity and green marketing strategies have a weaker and statistically significant influence. This highlights the need for stronger, more credible green marketing campaigns to reinforce MTN Nigeria's sustainability-driven brand equity.

6. Discussion of Findings

The findings of this study emphasise the significant role of environmental sustainability practices in enhancing brand equity, as reflected in the unstandardised coefficient ($B = 0.520$) and a strong standardised coefficient ($Beta = 0.490$, $p = 0.000$). This aligns with studies such as Eresimadu and Okeke (2023), who found that sustainability branding enhances consumer trust and competitive advantage in the cosmetics industry. Similarly, Khan and Fatma (2023) highlighted that sustainability-driven brand values foster consumer loyalty. These findings reinforce the growing consumer demand for sustainable business practices, where brands integrating environmental sustainability efforts experience substantial brand equity growth. However, while Sudirjo et al. (2024) demonstrated a positive relationship between sustainable marketing and customer loyalty in the manufacturing sector, their study emphasised long-term consumer engagement rather than direct brand equity enhancement. This suggests that while environmental sustainability significantly influences brand positioning, its impact may differ across industries. Furthermore, Sander et al. (2021) warn of greenwashing risks, emphasising the need for authenticity in sustainability claims. Thus, while this study confirms the strong impact of environmental sustainability practices on brand equity, firms need to ensure credibility in their sustainability initiatives to maintain consumer confidence and avoid skepticism.

The study's findings indicate that Corporate Social Responsibility (CSR) initiatives have a moderate but significant impact on brand equity ($B = 0.145$, $Beta = 0.154$, $p = 0.004$), confirming that CSR-driven efforts enhance brand perception. This aligns with Gong et al. (2023), who found that CSR amplifies sustainability's positive effect on customer engagement and purchase behaviour, reinforcing brand trust. Bhattacharya (2017) also established that CSR strengthens brand associations, fostering long-term brand equity growth. However, while this study highlights a significant yet moderate influence of CSR on brand equity, some literature suggests a broader impact. For instance, Pooja, Shirin, and Sujata (2022) argue that ethical and environmentally responsible brands receive higher consumer trust and preference, emphasizing the need for a more holistic integration of CSR and sustainability branding. Additionally, Amatulli et al. (2021) indicate that sustainable luxury branding can maintain consumer engagement while upholding high-end brand positioning. These findings suggest that while CSR initiatives improve brand equity, their impact varies depending on brand positioning and industry context. Furthermore, Lucic (2020) highlights that firms integrating CSR within their strategic branding efforts achieve stronger consumer trust, indicating that CSR's effectiveness is contingent on its alignment with broader corporate values and branding strategies.

The study also finds that green marketing strategies significantly impact brand equity ($B = 0.307$, $Beta = 0.290$, $p = 0.001$), supporting the growing role of sustainability-driven marketing efforts.



This aligns with findings from Alamsyah et al. (2021), who demonstrated that eco-labeling enhances perceived brand credibility and trust, fostering stronger brand equity. Similarly, Chen et al. (2020) found that sustainable branding in online retail significantly improves customer engagement and purchase intention. However, Sun and Kim (2023) introduced a nuanced perspective, showing that sustainability branding effectiveness is moderated by brand color and gender, suggesting that green marketing strategies should align with brand identity for maximum impact. This study confirms the substantial role of green marketing in shaping brand equity, but firms must ensure strategic alignment with broader brand characteristics. Additionally, Kapferer and Michaut-Denizeau (2020) highlight generational differences in sustainability perceptions, noting that younger consumers are more responsive to sustainability branding. This suggests that while green marketing is effective in enhancing brand equity, its impact may be influenced by demographic factors. Overall, this study supports the positive influence of green marketing strategies on brand equity, reinforcing the importance of sustainability-driven branding while emphasizing the need for tailored approaches to different market segments.

7. Conclusion

The findings of this study confirm that sustainable marketing significantly influences brand equity in the telecommunication industry, with environmental sustainability practices, CSR initiatives, and green marketing strategies playing key roles. Environmental sustainability practices had the strongest impact, reinforcing existing literature that highlights consumer preference for brands committed to eco-friendly operations. CSR initiatives also contributed positively to brand equity, aligning with prior research emphasizing the importance of corporate social responsibility in fostering trust and loyalty. Green marketing strategies were found to be statistically significant, demonstrating their relevance in shaping consumer perceptions. However, given concerns about greenwashing, firms must ensure credibility in their sustainability claims. This study fills a critical gap by providing empirical evidence on the effect of sustainable marketing within the Nigerian telecommunication sector, particularly for MTN Nigeria. The findings underscore the importance of integrating sustainability-driven strategies into brand positioning to enhance consumer trust, competitive differentiation, and long-term market relevance in a rapidly evolving industry.

7.1. Recommendations

Based on the study's findings, four key recommendations are proposed. First, MTN Nigeria should strengthen its environmental sustainability initiatives by investing in renewable energy solutions and promoting eco-friendly business practices to enhance its brand equity further. Transparent reporting on these efforts will also improve consumer trust and engagement. Second, the company should enhance its CSR initiatives by aligning them with local community needs, such as digital literacy programs and affordable connectivity for underserved areas. This will ensure that CSR efforts resonate with the Nigerian market, strengthening brand loyalty. Third, MTN should refine its green marketing strategies to avoid consumer skepticism by ensuring that all sustainability claims are verifiable and backed by third-party certifications. This will mitigate the risks of greenwashing and enhance brand credibility. Lastly, the company should adopt a more consumer-



centric approach by integrating sustainability messaging into digital marketing campaigns, leveraging social media and influencer partnerships to engage younger demographics who are more receptive to sustainability-driven branding.

8. References

- Aaker, D. A. (1991). *Managing brand equity*. The Free Press.
- Aaker, D. A., & Joachimsthaler, E. (2014). *Brand leadership*. Free Press.
- Abril, P. S., Olazábal, A. M., & Cava, A. (2009). Marketing and the law. *Journal of the Academy of Marketing Science*, 37, 375–380. <https://doi.org/10.1007/s11747-009-0159-8>
- Alamsyah, D. P., Othman, N. A., Bakri, M. H., Udjaja, Y., & Aryanto, R. (2021). Green awareness through environmental knowledge and perceived quality. *Management Science Letters*, 11, 271–280.
- Amatulli, C., De Angelis, M., & Donato, C. (2021). The atypicality of sustainable luxury products. *Psychology & Marketing*, 38, 1990–2005.
- Belz, F. M., & Peattie, K. (2012). *Sustainability marketing: A global perspective*. John Wiley & Sons.
- Bhattacharya, S. (2017). Does corporate social responsibility contribute to strengthen brand equity? An empirical study. *International Review on Public and Nonprofit Marketing*. <https://doi.org/10.1007/s12208-017-0185-z>
- Bhattacharya, S., & Kaursar, A. (2016). Study on corporate social responsibility as a strategic instrument for creating sustainable corporate brand value: An analysis with structural equation modeling. *Management and Labour Studies*, 41(2), 88–106.
- Borak, A. (2019). Marketing accountability and sustainability: The evolving role of marketers. *Journal of Business Ethics*, 161(2), 235–250.
- Chen, X., Sun, X., Yan, D., & Wen, D. (2020). Perceived sustainability and customer engagement in the online shopping environment: The rational and emotional perspectives. *Sustainability*, 12(2674). <https://doi.org/10.3390/su12072674>
- Christodoulides, G., & De Chernatony, L. (2010). Consumer-based brand equity conceptualisation and measurement: A literature review. *International Journal of Market Research*, 52(1), 43–66. <https://doi.org/10.2501/S1470785310201053>
- Elkington, J. (1997). *Cannibals with forks: The triple bottom line of 21st century business*. Capstone.
- Eresimadu, C. I., & Okeke, T. C. (2023). Effects of sustainable marketing on brand equity in the cosmetic industry in Awka, Anambra State. *Journal of Management Sciences*, 60(4), 100–104.
- Fisk, G. (2001). Reflections of George Fisk: Honorary Chair of the 2001 Macro-marketing Conference. *Journal of Macromarketing*, 21(2), 121–122.
- Fuller, D. A. (1999). *Sustainable marketing: Managerial-ecological issues*. Sage.
- Gong, Y., Xiao, J., Tang, X., & Li, J. (2023). How sustainable marketing influences customer engagement and sustainable purchase intention? The moderating role of corporate social responsibility. *Frontiers in Psychology*, 14, 1128686.
- Gordon, R., Carrigan, M., & Hastings, G. (2011). A framework for sustainable marketing. *Marketing Theory*, 11(2), 143–163. <https://doi.org/10.1177/1470593111403218>
- Hawken, P. (1993). *The ecology of commerce: A declaration of sustainability*. HarperCollins.



- He, H., Li, Y., & Harris, L. (2012). Social identity perspective on brand loyalty. *Journal of Business Research*, 65(5), 648–657. <https://doi.org/10.1016/j.jbusres.2011.03.007>
- Heck, G., & Xiao, Y. (2013). The effects of sustainable marketing on brand equity and consumer behavior: A case study of Cia. Hering. Halmstad University.
- Hoeffler, S., & Keller, K. L. (2002). Building brand equity through corporate societal marketing. *Journal of Public Policy & Marketing*, 21(1), 78–89. <https://doi.org/10.1509/jppm.21.1.78.17600>
- Kang, S., & Hur, W. (2011). Investigating the antecedents of green brand equity: A sustainable development perspective. *Corporate Social Responsibility and Environmental Management*. <https://doi.org/10.1002/csr.281>
- Kapferer, J. N., & Michaut-Denizeau, A. (2020). Are millennials really more sensitive to sustainable luxury? A cross-generational international comparison of sustainability consciousness when buying luxury. *Journal of Brand Management*, 27, 35–47.
- Keller, K. L. (1993). Conceptualizing, measuring, and managing customer-based brand equity. *Journal of Marketing*, 57(1), 1–22. <https://doi.org/10.2307/1252054>
- Khan, I., & Fatma, M. (2023). Does perceived sustainability affect customer responses toward brands? Role of customer engagement as a mediator. *Sustainability*, 15(10), 8259.
- Kotler, P., Kartajaya, H., & Sertiawan, I. (2017). *Marketing 4.0: Moving from traditional to digital*. John Wiley & Sons.
- Labrecque, L. I., Patrick, V. M., & Milne, G. R. (2013). The marketers' prismatic palette: A review of color research and future directions. *Psychology & Marketing*, 30, 187–202.
- Lieven, T., Grohmann, B., Herrmann, A., Landwehr, J. R., & van Tilburg, M. (2014). The effect of brand gender on brand equity. *Psychology & Marketing*, 31, 371–385.
- Lucic, A. (2020). Measuring sustainable marketing orientation—Scale development process. *Sustainability*, 12(1734). <https://doi.org/10.3390/su12051734>
- Martin, D., & Schouten, J. (2012). *Sustainable marketing*. Pearson.
- Nkamnebe, A. D. (2011). Sustainability marketing in the emerging markets: Imperatives, challenges, and agenda setting. *International Journal of Emerging Markets*, 6(3), 217–232.
- Norman, W., & MacDonald, C. (2004). Getting to the bottom of “triple bottom line.” *Business Ethics Quarterly*, 14(2), 243–262. <https://doi.org/10.5840/beq200414211>
- Öztürk, A., Nart, S., & Altunışık, R. (2019). The politics of purchasing: Ethical consumerism in Turkey. In S. Altınbasak-Farina & S. Burnaz (Eds.), *Ethics, social responsibility and sustainability in marketing, accounting, finance, sustainability, governance & fraud: Theory and application* (pp. 1–19). https://doi.org/10.1007/978-981-13-7924-6_1
- Pooja, T., Shirin, A., & Sujata, K. (2022). Sustainability marketing: A literature review from 2001–2022. *Journal of Positive School Psychology*, 6(2s), 131–149.
- Sander, F., Föhl, U., Walter, N., & Demmer, V. (2021). Green or social? An analysis of environmental and social sustainability advertising and its impact on brand personality, credibility, and attitude. *Journal of Brand Management*, 28, 429–445.
- Slaper, T. F., & Hall, T. J. (2011). The triple bottom line: What is it and how does it work? *Indiana Business Review*, 86(1). <http://www.ibrc.indiana.edu/ibr/2011/spring/article2.html>



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- Sudirjo, F., Mu'min, H., Marjuki, & Triyantoro, A. (2024). Analysis of the effect of sustainable marketing strategy, brand image, and customer satisfaction on customer loyalty in the manufacturing industry in Karawang. *West Science Interdisciplinary Studies*, 2(2), 448–457.
- Sun, M., & Kim, J. (2023). Sustainability and brand equity: The moderating role of brand color and brand gender. *Sustainability*, 15(8908). <https://doi.org/10.3390/su15118908>