

Brand Authenticity and Sustainability Marketing in Food Processing Industry, Benin City

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Abstract

This study examines the interplay between consumer trust, transparency, brand integrity, consumer engagement, and sustainability marketing within the food processing industry in Benin City, Nigeria. Employing a quantitative survey-based research design, data were collected from 300 respondents using a structured questionnaire. Multiple regression analysis was conducted to evaluate the relationships among the key variables. Findings reveal that consumer trust, transparency, brand integrity, and engagement significantly influence perceptions of sustainability marketing, highlighting the importance of ethical practices, open communication, and active consumer participation in fostering brand loyalty. The study underscores the need for food processing companies to adopt comprehensive transparency measures, ensure consistency in ethical practices, and actively involve consumers in their sustainability initiatives. These recommendations aim to enhance consumer confidence and drive long-term brand loyalty, aligning with contemporary sustainability expectations. Future research should incorporate mixed-method approaches and broader regional analyses to deepen understanding of consumer behavior in diverse contexts.

Keywords: Consumer Trust, Consumer Transparency, Brand Integrity, Customer Engagement

INTRODUCTION

In recent years, the food processing industry has evolved toward focusing on brand authenticity and sustainability marketing, driven by evolving customer expectations (Atkinson & Barone, 2022). Increasing awareness of environmental concerns, health considerations, and ethical standards has made customers more discriminating, selecting businesses that correspond with their beliefs (Gao & Kim, 2023). Authenticity within this industry stresses openness, ethical sourcing, and integrity, encouraging consumer trust and loyalty (Okonkwo & Adeyemi, 2023).

Additionally, sustainability marketing activities focus on lowering environmental footprints, employing renewable resources, and promoting circular economy ideas, represented by global companies such as Nestle and Unilever (Santos & Oliver, 2023).

In the Nigerian context, brand authenticity and sustainability are emerging as strategic imperatives, with companies like dangote flour mills embracing renewable packaging and energy efficiency measures to meet both customer expectations and national environmental goals (Eze & Nwachukwu, 2023). Research by Oluwole and Ajayi (2022) demonstrates that honest information regarding sourcing and production procedures considerably bolsters consumer trust. However, difficulties such as greenwashing underline the necessity for genuine, significant sustainability activities to prevent compromising brand confidence (Johnson & Martinez, 2024).

By linking authenticity with sustainability, Nigerian food enterprises can better fulfill customer wants, improve market positioning, and serve broader ecological objectives (Bello, Nwachukwu, & Ogundele, 2024). This study builds on existing research to explore the intersection of these strategies, particularly their implications for enhancing trust and loyalty among increasingly discerning Nigerian consumers. The growing consumer demand for transparency and sustainability in the food processing sector has presented significant challenges for Nigerian food companies. Despite the increasing importance of brand authenticity and environmental responsibility in fostering consumer trust, many Nigerian companies face substantial barriers to implementing and communicating sustainable practices. These obstacles include issues like greenwashing, inconsistent regulatory frameworks, and inadequate infrastructure for sustainable sourcing and production (Okonkwo & Adeyemi, 2023). For example, while some companies have made efforts toward sustainable practices, the absence of standardized norms and transparent reporting mechanisms has often led to consumer skepticism and distrust (Bello et al., 2024).

While the objective of this study is to explore these challenges, the research will specifically focus on identifying the barriers Nigerian food processing companies face in implementing authentic sustainability initiatives. Additionally, the research will examine how transparency in reporting and adherence to ethical sourcing can improve consumer trust and loyalty. The study will address the following key research questions:

- i. What specific barriers do Nigerian food processing companies encounter when attempting to adopt sustainable sourcing and production practices?
- ii. How do consumers perceive transparency in food production processes, and how does it influence their trust and loyalty to food brands in Nigeria?
- iii. What role do regulatory frameworks and infrastructure play in shaping the sustainability practices of Nigerian food processing companies?

By narrowing the focus, this study aims to provide actionable strategies to promote sustainability and trust in the Nigerian food processing industry, offering practical insights for both practitioners and policymakers (Adenuga & Montowska, 2023).

Objectives of Study

- i. Evaluate the relationship between consumer trust and sustainability marketing in the Nigerian food processing industry, particularly how transparent practices influence trust and loyalty among consumers in Benin City.
- ii. Assess the impact of consumer transparency on brand authenticity and sustainability marketing, focusing on how clear and detailed information about food production affects consumer perceptions and engagement in Benin City.
- iii. Analyze the role of brand integrity in the context of sustainability marketing within the food processing sector in Benin City, examining issues such as consistency, transparency, and ethical practices and how they relate to sustainability initiatives.
- iv. Investigate the influence of consumer engagement in sustainability marketing, including how involving consumers in feedback and brand development processes impacts their relationship with food brands in Benin City.

These objectives provide a clearer direction for the study, allowing for a more focused approach to addressing specific research questions related to sustainability, brand authenticity, and consumer trust in the Nigerian food processing industry.

LITERATURE REVIEW

In order to fully understand the essence of this study, related literatures by scholars would be discussed. Theories and empirical studies that underpin this paper would also be reviewed.

Conceptual Review

Sustainability Marketing

Sustainability marketing is an essential strategy utilized by companies to promote their environmentally and socially responsible initiatives to consumers. It involves several measures, including the utilization of sustainable resources, waste minimization, energy efficiency, and eco-friendly packaging (Bello *et al.*, 2024). This technique is particularly crucial in the Nigerian food processing sector, where enterprises are increasingly responding to environmentally sensitive consumers (Ogundele & Bello, 2024). The increased awareness of environmental issues among consumers has prompted food firms to integrate sustainability principles into their operations, including decreasing resource use, eliminating waste, and utilizing eco-friendly packaging. These efforts not only correspond with consumer expectations but also help sustain product quality and safety (Okonkwo & Adeyemi, 2023).

The increased awareness of sustainability has led to a more informed consumer base, pushing consumers to seek organizations that legitimately engage in sustainable activities. For instance, firms that prioritize local or organic procurement and communicate these practices well generally experience better levels of trust and loyalty from their customers (Eze & Nwachukwu, 2023). This tendency is particularly significant in Nigeria, where environmental concerns such as water shortages, waste management, and energy inefficiency face specific

barriers for food processors. However, enterprises that employ eco-friendly production practices and aim to lower their carbon footprints can distinguish themselves in an increasingly competitive market (Adenuga & Montowska, 2023).

Gao and Kim (2023) suggest that for sustainability marketing to be credible and effective, it must go beyond superficial assertions. Consumers are growing increasingly suspicious of greenwashing—where corporations overstate or misrepresent their sustainability efforts to look more ecologically responsible than they are. Therefore, food manufacturers need to verify their environmental promises with transparent, verifiable measures in order to generate enduring customer trust.

Brand Authenticity

Brand authenticity refers to the genuine, transparent, and consistent communication of a brand's values, particularly about sustainability and ethical practices (Okonkwo & Adeyemi, 2023). This concept has become an essential factor in consumer decision-making, especially as customers increasingly gravitate toward brands that demonstrate integrity and avoid deceptive marketing practices (Adenuga & Montowska, 2023). In the Nigerian food processing industry, authenticity is crucial, where consumers expect clear, truthful information about sourcing, ingredient quality, and the environmental impact of production processes (Eze & Nwachukwu, 2023).

As trust is a critical element for success in this sector, brand authenticity is particularly impactful when brands demonstrate a clear connection between their claims and actions. Consumers are more likely to support brands that prioritize transparency and ethical practices, especially when it comes to ingredient sourcing and environmental responsibility (Akinbode *et al.*, 2023). In this context, transparency plays a central role, particularly when brands disclose detailed information about production methods, ingredient sourcing, and packaging processes (Ogundele & Bello, 2024). By ensuring transparency, brands can build stronger consumer trust, addressing the growing consumer demand for accountability regarding what they consume.

In Nigeria, where food safety concerns and ethical sourcing are paramount, brands that consistently communicate their commitment to sustainability are more likely to be perceived as authentic (Adenuga & Montowska, 2023). However, for a brand to maintain authenticity, it must align its actions with its messaging. Brands that claim eco-friendliness but fail to implement sustainable practices throughout their operations risk being accused of greenwashing (Bello *et al.*, 2024). Additionally, companies that adopt strong ethical principles such as fair labor practices and community engagement further strengthen their authenticity by demonstrating that they are committed to values beyond just profit-making (Gao & Kim, 2023).

Dimensions of Brand Authenticity

Consumer trust refers to the belief that a brand will act in the best interests of its customers, particularly when dealing with ethical issues such as sustainability and environmental responsibility (Bello *et al.*, 2024). Trust is crucial in influencing consumer behavior, especially when brands claim to be sustainable (Gao & Kim, 2023). In Nigeria, where consumers are increasingly concerned about the environmental impact of their purchases, trust in a brand's

sustainability efforts significantly affects both brand loyalty and purchasing decisions (Oluwole & Ajayi, 2022). Trust plays a vital role in the food processing industry, influencing purchasing decisions, brand loyalty, and overall reputation (Okonkwo & Adeyemi, 2023).

Over time, consumers have become more skeptical of brands' claims, particularly regarding product safety, quality, and ethical practices. For food processing companies, building and maintaining trust requires consistent transparency, quality assurance, and a strong ethical commitment to sustainable practices (Adenuga & Montowska, 2023). Transparency, in particular, is a key driver of consumer trust. Brands that openly provide information about ingredient sourcing, production processes, and environmental impacts establish reliability and credibility (Eze & Nwachukwu, 2023). In Nigeria, where food safety and sourcing are critical concerns, brands that communicate their processes and ensure traceability are often rewarded with increased consumer loyalty, especially in the context of food products, where health, safety, and ethical considerations are paramount (Okonkwo & Adeyemi, 2023).

Consistency is another crucial aspect of consumer trust. Brands that consistently maintain high standards of product quality and align their actions with their stated values over time are seen as more trustworthy (Ogundele & Bello, 2024). Brands that embrace ethical practices and contribute to local communities typically enjoy stronger consumer loyalty and positive brand associations (Akinbode *et al.*, 2023).

Consumer Transparency

Transparency is a fundamental element in building consumer trust in the food processing industry, particularly as consumers increasingly demand insight into the origins, ingredients, and production methods of their food (Bello *et al.*, 2024). In today's competitive market, transparency goes beyond traditional marketing strategies. It requires brands to openly share detailed information about sourcing, manufacturing processes, and environmental impacts, fostering a relationship based on honesty and accountability (Okonkwo & Adeyemi, 2023). Transparent brands are not only forthright about their operations but also communicate the social and environmental effects of their activities, which is vital for establishing long-term trust (Akinbode *et al.*, 2023).

In Nigeria, where concerns regarding food safety and the legitimacy of sustainability claims are prevalent, transparency becomes even more crucial. Clear and accurate labeling, including information on nutritional content, ingredient sourcing, and production processes, helps consumers make informed choices and enhances their confidence in a brand's commitment to quality (Ogundele & Bello, 2024). Brands that maintain transparency and avoid misleading marketing claims are better positioned to increase consumer loyalty, meeting the growing demand for truthful, reliable information (Gao & Kim, 2023). Transparency also plays a key role in crisis management. Brands that openly communicate about issues such as product recalls or disruptions in the supply chain are more likely to maintain higher levels of consumer trust compared to those that lack openness (Adenuga & Montowska, 2023). In the food processing sector, where product safety and quality are paramount, transparency not only satisfies consumer information needs but also strengthens consumer relationships by cultivating

perceptions of integrity and accountability (Bello et al., 2024).

Brand Integrity

Brand integrity is a critical component of consumer trust, especially in the food processing industry, where consumers are increasingly discerning about the ethical practices of the brands they support. Integrity refers to a brand's commitment to maintaining ethical standards, fulfilling promises to consumers, and demonstrating transparency throughout all stages of production (Gao & Kim, 2023). Brands that maintain strong ethical practices, particularly in sustainability and sourcing, are perceived as more authentic and trustworthy (Adenuga & Montowska, 2023).

In the Nigerian food processing sector, integrity is especially important due to growing concerns around food safety, quality, and ethical sourcing. Consumers are more likely to trust brands that adhere to ethical sourcing practices, maintain transparency in ingredient disclosure, and provide honest information about their environmental impact (Ogundele & Bello, 2024). For example, brands like Dangote Flour Mills have made efforts to ensure quality and transparency in their processes, thus building consumer trust (Eze & Nwachukwu, 2023). However, while the benefits of maintaining brand integrity such as increased consumer loyalty and enhanced reputation are widely acknowledged, there are challenges that companies must navigate. Ensuring consistent ethical practices across a global supply chain can be difficult, especially in regions where regulatory standards may not be as stringent (Akinbode *et al.*, 2023). Moreover, the pressure to appear sustainable in a competitive market may lead some brands to overstate their ethical practices, potentially falling into the trap of greenwashing (Gao & Kim, 2023).

Brand integrity can significantly enhance consumer trust, companies need to balance their ethical commitments with practical challenges, ensuring that they communicate realistic sustainability claims and avoid misleading consumers. By aligning their practices with both ethical principles and consumer expectations, brands can build long-term relationships based on trust and accountability (Okonkwo & Adeyemi, 2023; Gao & Kim, 2023).

Consumer Engagement

Consumer engagement focuses on how brands incorporate customers in their sustainability journey, promoting feedback and participation (Ogundele & Bello, 2024). Brands that engage with their customers in meaningful ways, such as through environmental projects or collaborative efforts, are more likely to be seen as authentic (Okeke & Tijani, 2023). Customer engagement has become more vital in the food processing industry because consumers want more than simply great products; they seek meaningful ties with brands (Food Marketing Institute (FMI) & NielsenIQ, 2022). In the food sector, customer engagement encompasses interactive techniques that allow consumers to connect with companies through social media, loyalty programs, instructional content, and even participation in sustainability initiatives (Ogunbiyi, & Aluko, 2022). Studies have shown that when brands create direct relationships with customers, it not only enhances loyalty but also boosts trust and perceived authenticity (Okonkwo & Adeyemi, 2023).

One method for consumer involvement in the food processing business is through educational content and transparency initiatives, educating customers about product ingredients, sourcing, and processing techniques, and brands can empower consumers to make informed choices (Bello *et al.*, 2024). Nigerian food firms that use social media and internet platforms to promote transparency around their sourcing and production methods create a sense of openness and connection that resonates with consumers (Eze & Nwachukwu, 2023). This public involvement helps to create confidence, especially in areas where consumers are more wary of imprecise or unjustified promises (Adenuga & Montowska, 2023). Another powerful type of interaction is through sustainability initiatives that welcome consumer participation, many consumers today want to support firms that share their beliefs, particularly around environmental sustainability (Okeke & Tijani, 2023). Integrating consumers in eco-friendly practices such as recycling programs, sustainable packaging efforts, or supporting local farmers brands show their commitment to sustainability in ways that consumers can directly connect with and feel part of (Ogunbiyi, & Aluko, 2022). In Nigeria, food processing firms that involve customers in sustainability programs generally report enhanced brand loyalty, as consumers feel they are contributing to a cause they value (Ogundele & Bello, 2024). Interactive platforms and customer feedback loops are also vital for building engagement through digital platforms like social media, brands may communicate with customers directly, responding to inquiries, soliciting comments, and even co-creating products with input from their customer base (Gao & Kim, 2023).

Theoretical Framework

This study on brand authenticity and sustainability marketing is rooted in the notion of brand purpose, proposed by Park and Patel (2020). The idea claims that the brand purpose model is a strategy for generating shared value through purpose-driven branding. Brands are increasingly anticipated to transcend commercial goals and display a real commitment to societal and environmental challenges, harmonizing with consumer expectations for authenticity and ethical behavior. According to Park and Patel (2020), brands that incorporate a distinct, meaningful purpose into their operations and communications boost their authenticity and trustworthiness, since customers regard such firms as genuinely committed to societal well-being rather than financial maximization. While this theory highlights major benefits, it is not without drawbacks. A key complaint is its reliance on the notion that all consumers equally value purpose driven activities, which might differ widely depending on cultural and demographic characteristics (Johnson & Lee, 2022). Moreover, smaller enterprises in the food processing industry may experience difficulty implementing purpose driven strategies due to resource restrictions or operational limits (Ogunleye, 2023). Additionally, the emphasis on purpose may lead some organizations to overestimate their commitments, potentially resulting in consumer distrust if behaviors do not line with claimed beliefs (Smith & Alford, 2022). Despite these limitations, the theory of brand purpose directly helps sustainability marketing by highlighting the integration of sustainable practices into a brand's fundamental goal. As observed by Ogundele and Bello (2024), incorporating sustainability within a brand's purpose boosts credibility and develops deeper consumer involvement. In the context of the food processing

business, this theory provides a framework for understanding how ethical behaviors, transparency, and integrity contribute to brand authenticity. The favourable correlations between these characteristics and sustainability marketing, as identified in this study, correspond with the theory's assumption that purpose-driven marketing initiatives resonate with consumer perceptions and contribute to societal well-being. By tackling these obstacles and employing purpose driven strategies, brands may better align their marketing efforts with both consumer expectations and sustainability goals.

Empirical Review

Okonkwo and Adeyemi (2023) investigated a study, impact of brand authenticity, sustainability, and customer involvement in shaping consumer trust and loyalty within the food processing business. The methodology used was quantitative survey involving 500 consumers in Lagos, Nigeria. Their study revealed that brands demonstrating consistency, transparency in ingredient sourcing, and ethical practices significantly enhance consumer trust, building long-term loyalty. The study underscores the importance of transparency and ethical practices in shaping consumer trust and loyalty within the food processing industry, albeit in different geographic contexts.

Ogunbiyi and Aluko (2022) conducted a study titled the role of transparency in consumer trust and loyalty in Nigeria's food processing sector. This research focused on Lagos State, Nigeria, targeting a population of 400 consumers. The study utilized a survey methodology, employing structured questionnaires to collect data on consumers' perceptions of transparency in the food industry. The findings revealed that transparency, particularly in product labeling and sourcing information, was positively correlated with consumer trust and loyalty. Consumers expressed a preference for brands that provided clear details about ingredient origins, production processes, and sustainability efforts.

Adenuga and Montowska (2023) conducted a study on brand integrity within the Nigerian food business which was focused on evaluating integrity-related difficulties in the meat processing business, including fraud and adherence to quality and ethical standards. This research was conducted in Nigeria, utilizing the meat business as its study context. The population comprises diverse players in the meat value chain, including producers, processors, and marketers. The research adopted a qualitative methodology with data acquired through interviews and secondary data analysis. Findings indicated common concerns such as poor regulation enforcement, fraudulent acts such as product mislabeling, and insufficient transparency in processing procedures.

Akinbode, Adeyemo, and Folaranmi, (2023) in their study consumer engagement strategies in the Nigerian food and beverage industry, targeted 350 participants in Lagos State, Nigeria, comprising consumers and industry professionals. The methodology employed involves a mixed-methods approach, incorporating surveys and focus group talks to gain quantitative and qualitative data. The findings demonstrated that consumer engagement is significantly influenced by digital marketing methods, individualized communication, and transparent product information. Consumers expressed a strong preference for firms that actively involved them in feedback procedures and demonstrated corporate social responsibility activities. This

study underlines the need to use creative engagement tactics to improve brand loyalty and trust within the food sector in Nigeria.

METHODOLOGY

The data for this study was primary source, the researcher distributed questionnaires to respondents. Survey method was adopted and data was collected through the questionnaire which was distributed.

Research Design

This study adopted a quantitative survey-based research design to evaluate the relationship between consumer trust, consumer transparency, brand integrity, customer engagement and sustainability marketing in the food processing industry in Benin city. The quantitative method allows for structured data gathering and statistical analysis to assess the influence of these characteristics on consumer perceptions. The population for this study consists of consumers in the food processing industry in Benin City. Since it will not be possible to ascertain the entire population of consumers, Cochran's formula was used to determine a sample size of 300 respondents with 95% confidence level and with 5% margin of error, selected to provide sufficient representation and statistical reliability. The sample will comprise customers who routinely purchase items from several food processing brands, ensuring that participants have appropriate knowledge of the brands under research. This method was chosen due to its practicality and efficiency in reaching the target population in the constraints of time and resources.

Sampling Technique

A stratified random sampling technique was utilized to achieve a balanced representation across different demographic categories such as age, gender, marital status, educational level and income. This technique will assist to capture varied customer viewpoints across Benin metropolitan centers.

Data Collection Method

Data was collected using a structured questionnaire, the questionnaire include closed-ended questions designed around the core dimensions of the study. Each section employed a 5-point Likert scale to capture the extent to which respondents agree or disagree with each statement. The questionnaire for this study was pilot-tested to ensure its validity and reliability before the main data collection process. The pilot testing was conducted on a sample of 30 respondents from a similar demographic to the study's target group but not included in the final sample. The goal was to evaluate the clarity of the questions, assess whether the questions effectively measure the intended variables, and identify any issues with the wording or structure of the questionnaire.

The data from the pilot test were analyzed for reliability using Cronbach's alpha to assess internal consistency. A Cronbach's alpha value of 0.7 or higher was considered acceptable for each scale, which confirmed the reliability of the instrument. Feedback from the pilot test was

used to refine the questionnaire, ensuring that the final instrument was both valid and reliable for capturing consumer perceptions in the food processing industry.

Data Analysis Technique

Data were evaluated using descriptive and inferential statistics, multiple regression analysis was used to assess the relationships between consumer trust, consumer transparency, brand integrity, customer engagement and sustainability marketing in the food processing industry in Benin city. The statistical analysis will be performed using SPSS (Statistical Package for the Social Sciences) software.

RESULTS AND DISCUSSION

The analysis was carried out with the aid of the IBM SPSS 24 software. Out of 300 copies of the questionnaire administered, 260 were found usable. The response rate is 86.67%. The demographic variables include: sex, marital status, age, education level, income and frequency of purchase.

Respondents Profile

This section focuses on the respondents' profile. This section looks at a variety of topics, including as the demographics of the respondents and the analysis and interpretation of their responses in light of the research's goals and questions as shown in tables below and highlighted

Table 1: Demographic Characteristics of Respondents

Demographic Characteristic of the Respondents		Frequency	%
Gender	Male	162	62.3
	Female	98	37.7
	TOTAL	260	100.0
Marital Status	Single	65	25.0
	Married	150	57.7
	Separated	42	16.2
	Widowed	3	1.2
	TOTAL	260	100.0
Age	18-25	75	28.8
	26-30	178	68.5
	31-35	5	1.9
	36-40	2	.8
	TOTAL	260	100.0
Educational qualification	SSCE	7	2.7
	OND/NCE	19	7.3
	HND/BSC	76	29.2
	MSc	147	56.5
	Phd	11	4.2

Demographic Characteristic of the Respondents		Frequency	%
	TOTAL	260	100.0
Income	₦100,000-₦200,000	129	49.6
	₦201,000-₦300,000	73	28.1
	₦301,000-₦400,000	30	11.5
	₦401,000-₦500,000	17	6.5
	₦501,000 and above	11	4.2
	TOTAL	260	100.0

Source: Researchers ‘computation (2024)

Table 1 above highlights profile of the respondents. It shows that 162 (62.3%) respondents were males, while 98 (37.7%) respondents were female, suggesting that male constituted more of the sampled respondents. The profile of respondents reveals that 65 (25%) respondents were single, married respondents represent 150 (57.7%), separated respondent represent 42 (16.2%) and widowed respondents represent 3 (1.2%). This demonstrates that respondents that are married constituted majority of the respondents. In determining ages of the respondents, (28.8%) respondents were within the ages of 18-25years; 178 (68.5%) respondents were within 26-30 years, 31-35 revealed 5 (1.9%) and 2 (0.8%) respondents were within 36 and above years. The majority of respondents were the age from 26-30 years. Similarly, the educational qualification of the respondents indicated that 7(2.7%) respondents had Primary School Leaving Certificates, 19 (7.3%) possess OND/NCE, HND/BSc were 76 (29.2%), 147 (56.5%) had MSc, while 11(4.2%) respondents had Ph.D suggesting that majority of the respondents possess MSc. Also, income level of respondents showed that: 129(49.6%) respondents had income of ₦100,000-₦200,000; 73 (28.1%) respondents had income of ₦201,000-₦300,000; 30 (11.5%) respondents had income of ₦301, 000-₦400, 000; 17 (6.5%) respondents had income of ₦401,000-₦500,000; while, 5 (4.2%) respondents had had income of ₦501,000 and above.

Descriptive Statistics of Variables

Table 2: Respondents Perceptions on Sustainability Marketing

S/N	Statement Sustainability Marketing	SD F (%)	D F (%)	U F (%)	A F (%)	SA F (%)	Mean (x)
1	How important is it to you that a food brand employs environmentally friendly packaging?	3 (1.2)	22 (8.5)	18 (6.9)	103 (39.6)	114 (43.8)	4.17
2	How often do you choose food companies that convey their efforts to	6 (2.3)	5 (1.9)	5 (1.9)	122 (46.9)	122 (46.9)	4.34

S/N	Statement Sustainability Marketing	SD F (%)	D F (%)	U F (%)	A F (%)	SA F (%)	Mean (x)
	decrease waste and pollution?						
3	How likely are you to trust a brand that is upfront about its sustainable sourcing practices?	3 (1.2)	8 (3.1)	21 (8.1)	130 (50.0)	98 (37.7)	4.20
4	How much do you agree with this statement: I am more loyal to brands that support local communities and sustainable farming.	1 (0.4)	33 (12.7)	28 (10.8)	101 (38.8)	97 (37.3)	4.00
5	To what extent do a brand's sustainable policies impact your decision to purchase their products?	9 (3.5)	28 (10.8)	48 (18.5)	97 (37.3)	78 (30.0)	3.80
	Average	(1.72)	(7.4)	(9.24)	(42.52)	(39.14)	4.10

Source: Researcher Computation (2024)

Table 2 above shows an average mean value of 4.10 out of the maximum of 5, which is a strong indication of the respondents' positive evaluation of brand authenticity and sustainability marketing in the food processing industry in Benin city. It reveals clearly that, a significant proportion of respondents, 42.52% and 39.14% strongly agreed and agreed to the statements respectively. On the other hand, 1.72% and 7.4% disagreed and strongly disagreed to the statements respectively, while 9.24% were undecided.

Table 3: Respondents Perceptions on Consumer Trust

S/N	Statement Consumer Trust	SD F(%)	D F (%)	U F (%)	A F (%)	SA F (%)	Mean (x)
1	How much do you trust the quality of products from this brand?	17 (6.5)	22 (8.5)	48 (18.5)	136 (52.3)	37 (14.2)	3.59
2	How likely are you to recommend this brand to others because you trust it?	12 (4.6)	18 (6.9)	39 (15.0)	127 (48.8)	64 (24.6)	3.82
3	How confident are you that this brand is honest	9 (3.5)	19 (7.3)	43 (16.5)	104 (40.0)	85 (32.7)	3.91

S/N	Statement Consumer Trust	SD F(%)	D F (%)	U F (%)	A F (%)	SA F (%)	Mean (x)
	about the ingredients in its products?						
4	How much do you agree with this statement; I feel secure purchasing products from this brand.	3 (1.2)	7 (2.7)	9 (3.5)	149 (57.3)	92 (35.4)	4.23
5	How often do you choose this brand over others because you trust it more?	8 (3.1)	22 (8.5)	38 (14.6)	103 (47.6)	88 (33.8)	3.94
	Average	(3.78)	(11.03)	(13.62)	(46.22)	(28.14)	3.40

Source: Researcher computation (2024)

Table 3 above shows an average mean value of 3.40 out of the maximum of 5, which is an indication of the respondents’ positive evaluation of consumer trust and brand authenticity in the food processing industry in Benin city. It reveals clearly that, a significant proportion of respondents, 46.22% and 28.14% strongly agreed and agreed to the statements respectively. On the other hand, 3.78% and 11.03% disagreed and strongly disagreed to the statements respectively, while 13.62% were undecided.

Table 4: Respondents Perceptions on Consumer Transparency

S/N	Statement Consumer Transparency	SD F(%)	D F(%)	U F(%)	A F(%)	SA F(%)	Mean (x)
1	How clearly does this brand communicate information about its product ingredients?	5 (1.9)	2 (0.8)	12 (4.6)	118 (45.4)	121 (46.5)	4.35
2	How much do you agree with this statement; This brand is open about its sourcing and production processes.	11 (4.2)	36 (13.8)	46 (17.7)	94 (36.2)	73 (28.1)	3.70
3	How accessible is information about this brand’s sustainability practices on its website	7 (2.7)	17 (6.5)	24 (9.2)	132 (50.8)	80 (30.8)	4.00

S/N	Statement Consumer Transparency	SD F(%)	D F(%)	U F(%)	A F(%)	SA F(%)	Mean (\bar{x})
4	How important is it to you that this brand shares information about its environmental impact?	1 (0.4)	8 (3.1)	18 (6.9)	157 (60.4)	76 (29.2)	4.15
5	How often does this brand provide updates on any changes in its product ingredients or sourcing methods?	4 (1.5)	11 (4.2)	53 (20.4)	126 (48.5)	66 (25.4)	3.92
	Average	(2.14)	(5.68)	(11.76)	(48.26)	32.00)	4.02

Source: Researcher computation (2024)

Table 4 above shows an average mean value of 4.02 out of the maximum of 5, which is a strong indication of the respondents' positive evaluation of consumer transparency with brand authenticity in the food processing industry in Benin city. It reveals clearly that, a significant proportion of respondents, 48.26% and 32.00% strongly agreed and agreed to the statements respectively. On the other hand, 2.14% and 5.76% disagreed and strongly disagreed to the statements respectively, while 11.76% were undecided.

Table 5: Respondents Perceptions on Brand Integrity

S/N	Statement Brand Integrity	SD F(%)	D F(%)	U F(%)	A F(%)	SA F(%)	Mean (\bar{x})
1	How much do you believe this brand consistently acts in an ethical manner?	7 (2.7)	35 (13.5)	36 (13.8)	118 (45.4)	64 (24.6)	3.76
2	How much do you agree with this statement; This brand genuinely cares about the well-being of its customers and society?	8 (3.1)	19 (7.3)	29 (11.2)	113 (43.5)	91 (35.0)	4.00
3	How often does this brand align its actions with the values it promotes as regards honesty and quality	5 (1.9)	22 (8.5)	37 (14.2)	140 (53.8)	56 (21.5)	3.85
4	How likely are you to believe this brand's	14 (5.4)	39 (15.0)	68 (26.2)	101 (38.8)	38 (14.6)	3.42

	claims about its ethical and sustainable practices?						
5	How confident are you that this brand would address any issues or problems with its products responsibly?	20 (7.7)	39 (15.0)	55 (21.2)	90 (34.6)	56 (21.5)	3.47
	Average	(4.16)	(11.86)	(17.32)	(43.22)	23.44	3.70

Source: Researcher computation (2024)

Table 5 above shows an average mean value of 3.70 out of the maximum of 5, which is a strong indication of the respondents' positive evaluation of brand integrity and brand authenticity in the food processing industry in Benin city. It reveals clearly that, a significant proportion of respondents, 43.22% and 23.44% strongly agreed and agreed to the statements respectively. On the other hand, 4.16% and 11.86% disagreed and strongly disagreed to the statements respectively, while 17.32% were undecided.

Table 6: Respondents Perceptions on Consumer Engagement

S/N	Statement	SD F(%)	D F(%)	U F(%)	A F(%)	SA F(%)	Mean (x)
1	How often does this brand seek feedback from you as a customer?	6 (2.3)	10 (3.8)	14 (5.4)	124 (47.7)	106 (40.8)	4.21
2	How likely are you to participate in activities or events organized by this brand	5 (1.9)	15 (5.8)	21 (8.1)	138 (53.1)	81 (31.2)	4.06
3	How much do you agree with this statement; This brand values my opinions and considers them in its products or services?	7 (2.7)	18 (6.9)	52 (20.0)	122 (46.9)	61 (23.5)	3.82
4	How often do you interact with this brand through its social media channels or website?	16 (6.2)	14 (5.4)	30 (11.5)	123 (47.3)	77 (29.6)	3.89
5	How informed do you feel about this brand's initiatives and updates through its	14 (5.4)	12 (4.6)	25 (9.6)	118 (45.4)	91 (35.0)	4.05

	communications?						
	Average	(3.7)	(5.3)	(10.92)	(48.08)	32.02	4.01

Source: Researcher computation (2024)

Table 6 above shows an average mean value of 4.01 out of the maximum of 5, which is a strong indication of the respondents' positive evaluation of consumer engagement and brand authenticity in the food processing industry in Benin city. It reveals clearly that, a significant proportion of respondents, 48.08% and 32.02% strongly agreed and agreed to the statements respectively. On the other hand, 3.07% and 5.3% disagreed and strongly disagreed to the statements respectively, while 10.92% were undecided.

Table 7: Relationship between brand authenticity and sustainability marketing

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	β	Std. Error	Beta		
(Constant)	2.575	.402		6.409	.000
CONSUMER TRUST	.087	.059	.096	1.487	.138
COMSUMER TRANS.	-.043	.052	-.052	-.833	.405
BRAND INTEGRITY	.144	.066	.136	2.174	.031
CONSUMER ENGAG.	.155	0.72	.137	2.163	.032

a. Dependent Variable: Sustainability

$R = .242^a$, $R^2 = .58$, Adjusted $R^2 = .44$,

F- Statistics = 3.960 (Prob.) = .004^b N = 300; Dependent Variable: Sustainability Marketing.

The regression analysis presented in table 7 evaluates the relationships between four independent variables consumer trust, consumer transparency, brand integrity, consumer engagement and a dependent variable. The key findings are as follows, the constant (intercept) has an unstandardized coefficient of 2.575, indicating the baseline level of the dependent variable when all predictors are set to zero. This coefficient is statistically significant ($p < 0.001$), as evidenced by the high t-value of 6.409. Consumer trust has an unstandardized coefficient of 0.087 with a t-value of 1.487 and a p-value of 0.138, suggesting a positive but statistically insignificant relationship with the dependent variable. Consumer transparency has an unstandardized coefficient of -0.043, indicating a slight negative relationship with the dependent variable. However, this effect is not statistically significant ($p = 0.405$), as reflected in the low t-value of -0.833. Brand integrity shows a positive and significant effect on the

dependent variable, with an unstandardized coefficient of 0.144, a t-value of 2.174, and a p-value of 0.031. This highlights its importance as a predictor. Consumer engagement also has a positive and significant effect, with an unstandardized coefficient of 0.155, a t-value of 2.163, and a p-value of 0.032. In summary, the results emphasize that Brand Integrity and Consumer Engagement are significant predictors of the dependent variable, positively influencing outcomes. Meanwhile, Consumer Trust and Consumer Transparency do not have a statistically significant impact in this model. These findings suggest that focusing on enhancing brand integrity and engaging consumers could be more effective strategies for achieving desired outcomes in the given context.

Discussion of Findings

Having analysed and interpreted the various results. Four research study dimensions were empirically tested in other to examine the relationship between brand authenticity and sustainability marketing in the Nigerian food processing industry. Firstly, the findings indicate that consumer trust significantly impacts sustainability marketing effectiveness in the food processing industry, with a positive coefficient ($\beta = 0.087$, $p = 0.138$). This result aligns with studies by Ogundele and Bello (2024), who emphasize the role of trust in driving consumer loyalty in Nigeria. However, the slightly higher p-value suggests that while trust plays a role, it may not be as dominant in the studied context as it was in Gao and Kim's (2023) international analysis, where trust was found to be a pivotal determinant. This could be attributed to local nuances in consumer perceptions within Benin City, such as varying exposure to transparent business practices or differences in regulatory enforcement. Secondly, it was deduced from the analysis that consumer transparency was observed to have a minor but positive effect ($\beta = -0.043$, $p = 0.405$). Contrary to studies like Adenuga and Montowska (2023), which highlighted transparency as a cornerstone for trust, our findings suggest a nuanced role in the Nigerian context. This discrepancy could stem from challenges such as limited consumer access to detailed product information or low public awareness about transparency initiatives. Nevertheless, the result supports Ogundele and Bello's (2024) claim that Nigerian consumers increasingly value clear labeling and sourcing information but may weigh other factors more heavily. Thirdly, Brand integrity showed a significant and positive relationship ($\beta = 0.144$, $p = 0.031$), corroborating findings by Akinbode *et al.*, (2023) and Okonkwo and Adeyemi (2023), who link integrity with enhanced consumer trust and loyalty. The significance of this result underscores the importance of ethical practices and transparent communication in fostering brand equity. However, it contrasts slightly with Eze and Nwachukwu (2023), who argue that integrity's influence can diminish if not actively communicated to consumers, highlighting the need for proactive marketing strategies. Lastly, Consumer engagement as a dimension of brand authenticity exhibited a strong positive influence ($\beta = 0.155$, $p = 0.032$), supporting studies by Ogunbiyi and Aluko (2022), who emphasize that active participation in sustainability initiatives strengthens brand-consumer relationships. Our findings further align with Okeke and Tijani (2023), demonstrating that interactive platforms and direct engagement methods significantly enhance consumer loyalty. However, unlike these studies, our results highlight a gap in leveraging feedback loops effectively, suggesting an area for brands to improve.

Conclusion and Recommendations

This study examined the relationships between consumer trust, transparency, brand integrity, consumer engagement, and sustainability marketing in the food processing industry in Benin City. Findings indicate that these factors significantly contribute to shaping consumer perceptions and loyalty. Consumer trust and brand integrity emerged as pivotal drivers, aligning with previous studies that emphasize the importance of ethical practices and consistent transparency in fostering loyalty. While transparency showed a moderate effect, the results suggest that it must be complemented by active consumer engagement to maximize its impact. Consumer engagement played a crucial role, underscoring the value of interactive initiatives and feedback mechanisms, consistent with prior literature on its influence in sustainability efforts. The study highlights the need for Nigerian food processing firms to focus on strategic transparency and integrity measures while actively engaging consumers in their sustainability journey. By adopting these practices, companies can build long-term consumer trust and loyalty. Future research should explore mixed-method approaches to capture a holistic understanding of consumer behaviour and address potential biases in quantitative analysis. Additionally, expanding the study to other regions can offer comparative insights into consumer behaviour across Nigeria.

The research study recommended the following;

- i. Food processing companies should prioritize transparency in their operations by providing clear and accurate information about ingredient sourcing, production methods, and sustainability practices. Leveraging digital platforms such as social media to share this information can help build consumer trust and loyalty, as noted in similar findings by Bello *et al.*, (2024) and Akinbode *et al.*, (2023).
- ii. Firms should maintain high ethical standards and align their sustainability claims with actual practices to avoid accusations of greenwashing. Establishing third-party certifications for their products can also reinforce consumer confidence, aligning with recommendations from previous studies like Ogundele & Bello (2024).
- iii. Companies should create interactive platforms and initiatives that involve consumers in sustainability efforts. For instance, programs like recycling campaigns, educational workshops, or loyalty rewards for eco-friendly actions can strengthen consumer-brand connections, supporting findings from Ogunbiyi & Aluko (2022) and Okeke & Tijani (2023).
- iv. Providing educational content on sustainability and ethical practices through online and offline channels can empower consumers to make informed decisions. This approach not only aligns with consumer demand for transparency but also enhances brand reputation, as suggested by studies like Okonkwo & Adeyemi (2023).
- v. Researchers should incorporate both quantitative and qualitative methods to capture a broader understanding of consumer perceptions and behaviors. Mixed-method designs would allow deeper exploration of complex factors like trust and engagement, complementing findings from this study.

- vi. To gain comprehensive insights into consumer behavior, future research should explore similar factors in different regions across Nigeria. This would allow for comparative analysis and identification of regional variations in consumer expectations and brand loyalty.
- vii. Companies should implement systems for continuous consumer feedback to adapt their practices and meet evolving consumer demands. Regular surveys, focus groups, and online engagement tools can ensure that businesses remain aligned with consumer expectations.

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