

## Eco-Labeling Strategies and Customers Purchase Intention for Non-Alcoholic Beverages in South-South Nigeria

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### Abstract

*The study examined the effect of eco-labelling strategies on customers purchase intention for non-alcoholic beverages in South-South Nigeria. The research design method that was adopted is the cross sectional survey research design. The population for the study consists of customers of non-alcoholic beverages in South-South Nigeria. The sample size was 384 customers of non-alcoholic beverages. The study employed the stratified sampling technique. The research instrument that was used is the structured questionnaire whose response format is in the five-point Likert scale form. To establish the reliability of the instrument test retest reliability was used. Data collected were analyzed using descriptive statistics and multiple regressions. Findings showed that message framing, sponsorship trust, green washing, eco-label control system and fair-trade depiction had significant positive effect on customers purchase intention for non-alcoholic beverages in South-South Nigeria. The study concluded that eco-labelling strategies had significant positive effect on customers purchase intention for non-alcoholic beverages in South-South Nigeria. The study recommended amongst others that non-alcoholic beverage firms should carefully design eco-labels to resonate with their target audience and convey the environmental benefits of their non-alcoholic beverages in a clear and appealing manner.*

**Keywords:** Eco-Labeling Strategies, Customers Purchase Intention, Non-Alcoholic Beverages

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### Introduction

Increased global consumption, spurred by the strong economic expansion of the past decades, had a negative impact on the environment. The natural environment is predicted to degrade more if the economy expands at its current rate and if reckless consumption and production practises are continued (Taufique et al., 2014). Developing foreground information on product quality with the aim of decreasing the volume of resources utilised throughout the product life cycle is of fundamental importance due to the rising negative impact of mass manufacturing and consumption (Van Der Werf & Salou, 2015). The greatest difficulty lies in creating a mechanism that allows both consumers and manufacturers to share information about the benefits of their products and the environmental impact they have over the course of their entire life cycle (Wojnarowska et al., 2021). Labelling things as "eco-friendly" is one way to inform buyers about their impact on the environment (Bertrandias, et al. 2017; Di Martino, et al. 2019).

More and more people are considering how their purchases may affect the environment before making a purchase. Many major food and drink manufacturers have responded to this trend by releasing environmentally friendly variants of their products, enhancing their existing green credentials, or completely overhauling their conventional offerings. A new sort of environmentally conscious customer has emerged as a result of rising environmental awareness in modern society (Ott& Kaiser, 2014). These days, buyers are more likely to think about how their purchases will affect them long after they have made them (Taufique, et al. 2017). Sharma and Kushwaha (2019) posited eco-labels are widely used to provide consumers with knowledge about the product's green aspects. Consumers must rely on ecolabels, or environmental product labels, to check the validity of promises made by manufacturers of "green" items.

Producers can lose credibility and the trust of consumers when they fail to disclose all relevant information required by ecolabels (Drexler, et al. 2018; Georgakarakou, et al. 2020). As a result, they cast doubt on the reliability of ecolabels. Due to the nature of this debate, the importance of ecolabel credibility in green marketing and consumer research has been highlighted. Until recently, eco-labelling was understood to be a one-way form of communication informing buyers about a product's effect on the environment. No study has been done on the potential benefits to businesses. The benefits that eco-labelling may provide to businesses and customers have contributed to its rising popularity over the years (Wang, et al. 2015). Eco-labels, or environmental product labels, have emerged as a prominent marketing tool in recent years (Song, et al. 2019). Companies and groups have recognised their usefulness in identifying organic products and raising customers' attention to them (Joshi & Rahman, 2015). Eco-labels are seen as beneficial to businesses since they increase awareness of and demand for organic products. Eco-labels are meant to assist consumers make informed decisions about which items are best for the environment over the course of their whole product life cycle by providing information about each product's environmental impact up front. The current research therefore assumes that eco-labeling has a significant role in achieving both sustainable production and sustainable consumption. A product's environmental impact throughout its entire life cycle—from manufacturing to retail to end-of-life recycling—can be communicated with the help of an eco-label, a "new" type of environmental policy instrument (Fan, et al. 2019).

Industrialization has helped shed light on formerly dark corners of the globe. However, industrialization is mostly to blame for environmental degradation, including risks to biodiversity, global warming, and climate change, among other things. There are two main categories of companies: those that focus on production, and those that focus on providing a service. Manufacturing organisations, including the food and beverage industry, have an indirect effect on the environment as a result of their daily activities. Production methods across all sectors, including the food and beverage, textile, leather, etc., sectors all contribute to this impact by creating negative externalities from the beginning of the production process to the end of the product's life.

Consumers' health concerns typically mirror their concerns about the environment. Companies can capitalise on the growing market for environmentally friendly products thanks to rising consumer demand for such items. By providing customers with accurate information, eco-labels encourage people to take responsibility for their impact on the environment and to invest in sustainable goods (Yokessa&Marette, 2019). Ecolabelling is practised for a variety of reasons, although studies have found that business benefits and green philosophy are the most common (Dunk, et al. 2016; Yilmaz, et al. 2019). However, in the context of Nigeria, most manufacturers do not worry about the effects of packaging after consumers use the products or any other scrap portions of the products, and consumers do not realise their responsibility.

Eco-labels are becoming an increasingly important topic in the study of environmental management (Testa, et al. 2013). Marketing strategies and policies are increasingly taking into account environmentally conscious consumer behaviour (Lin & Hsu, 2013). Eco-friendly purchasing behaviour is boosted when consumers are provided with standardised, detailed, and easy-to-understand environmental information labels (Vlaeminck, et al. 2014). Eco-labels encourage recycling and minimise the time and money people spend searching for

information. Other than the demand and/or purchase of eco-labelled products, there is a notable lack of exploration of the problems and prospects of eco-label practises to promote environmentally conscious consumer behaviour among the public. Ecolabels were created to encourage not only the purchase of eco-labeled goods, but also more sustainable lifestyle choices. Despite widespread support for eco-friendly goods, businesses often struggle to convince customers to make green product purchases or adopt other eco-friendly habits. To solve this issue, the research will look into how eco-labeling influences consumers' decisions to buy.

### **Statement of the Problem**

Many times, customers do not have enough information to make educated decisions about the environmental impact of their purchases, and they cannot "internalise" environmental externalities that are difficult to predict (Wojnarowska, et al. 2021). In the dark or influenced by unchecked signals and rumours, they make decisions (Yilmaz, et al. 2019). Environmental traits, which correspond to credibility features, cannot be examined before the purchase or evaluated through the experience of consuming a good. Failure of the market due to a lack of reliable signals results in a dearth of superior goods (Vlaeminck, et al. 2014). Therefore, it is important to know what customers want and how they feel about eco-friendly practises before devising a plan to deliver. For marketing purposes, some beverage manufacturers use misleading eco-labels in an effort to draw in customers who may otherwise be put off by less than ideal ecological posts (Darian, et al. 2015). The use of environmental labels has been criticised. The development of strategies for real, actionable solutions to improve the issue has hit roadblocks in practise (Zhuang, et al. 2021).

The customer's natural inclination towards eco-friendly goods makes eco-labeling an effective tool for steering them in the right direction; however, if customers begin to lose faith in eco-labels as a result of misleading information or companies improperly using the labels, the strategy could backfire. Confusion is exacerbated by the blurring of lines between marketing and environmental labelling (Zhang, et al. 2021). Another major issue is that it is not always obvious from an eco-label's requirements whether or not a product actually meets those standards for sustainability. There is a risk that labels and certification programmes will fail to demonstrate compliance with a variety of criteria established by organisations concerned with sustainability and label effectiveness, making them appear less credible to consumers (Wang, et al. 2015). Global warming, depleting natural resources, pollution management, and rising consumer demand for eco-friendly products are just some of the issues that businesses throughout the world are facing today (Wojnarowska, et al. 2021).

However, eco-labels can sometimes be straightforward, and additional research may be necessary before they may be of any benefit to the user (Taufique, et al. 2017). Some customers even find that different eco-labels compete with one another, as well as with other decision-making factors related to food, such as price or flavour (Song, et al. 2019). Customers are already feeling confused by the vast selection of labels available (Sharma &Kushwaha, 2019). Some certifications may be too expensive for small-scale enterprises, which could cause harm from labels that are intended to please a subset of consumers (or producers) and operate as trade barriers (Umamaheswari, 2019). The criteria and processes used to award eco-labels have been met with some scepticism in the past (Global CAD, 2019). Specifically for non-alcoholic beverages, there are scanty research on whether or not eco-labels influence consumers' decision to make a purchase, hence this research aim to fill this gap in knowledge.

### **Objectives of the Study**

The general objective of the study is to examine the effect of eco-labelling strategies on customer purchase intentions for non-alcoholic beverages in South-South Nigeria. The specific objectives are to:

1. Evaluate the effect of message framing on customers purchase intention for non-alcoholic beverages in South-South Nigeria.
2. Ascertain the effect of sponsorship trust on customers purchase intentions for non-alcoholic beverages in South-South Nigeria.
3. Determine the effect of green washing on customers purchase intentions for non-alcoholic beverages in South-South Nigeria
4. Determine the effect of eco-label control system on customers purchase intention for non-alcoholic beverages in South-South Nigeria
5. Ascertain the effect of fair-trade depiction on customers purchase intention for non-alcoholic beverages in South-South Nigeria
- 6.

### **Hypotheses**

**H<sub>1</sub>:**Message framing had significant positive effect on customers purchase intention for non-alcoholic beverages in South-South Nigeria.

**H<sub>2</sub>:** Sponsorship trust had significant positive effect on customers purchase intention for non-alcoholic beverages in South-South Nigeria.

**H<sub>3</sub>:**Green washing had significant positive effect on customers purchase intention for non-alcoholic beverages in South-South Nigeria.

**H<sub>4</sub>:**Eco-label control systems had significant positive effect on customers purchase intention for non-alcoholic beverages in South-South Nigeria.

**H<sub>5</sub>:**Fair-trade depiction had significant positive effect on customers purchase intention for non-alcoholic beverages in South-South Nigeria.

## **Review of Related Literature**

### **Eco-labelling**

Eco-labelling is a system designed to provide consumers with information regarding the environmental impact of products throughout their entire life cycle (Wojnarowska, et al. 2021). These labels adhere to a predetermined graphic format and serve as evidence that a producer has met specific standards. Consequently, the labelling of organic products cannot be done arbitrarily or at the producer's discretion. While eco-labels are not mandatory, they can only be used if they comply with the regulations associated with a particular label (Schumacher, 2010). Therefore, an eco-label serves as a distinctive form of labelling that informs consumers that a particular product has a reduced environmental impact compared to other products with similar characteristics. The emphasis is placed on comparing the usability of products, with particular attention given to ecological quality as the primary criterion for assigning and evaluating eco-labels. It is worth noting that certain eco-labels may have a wider scope, as they may consider social concerns in addition to ecological ones (Gutierrez, et al. 2020). Consequently, eco-labels serve as a significant means of enhancing consumer trust in environmentally friendly products and services.

Eco-labelling encompasses any recognisable symbol attached to a product or its packaging, indicating that a company or product has achieved a certain level of environmental friendliness in terms of effectiveness and efficiency (Mufidah et al., 2018). An eco-label serves as a means of identifying products or services that have been demonstrated to be environmentally preferable either in a general sense or within a specific product or service category. This information is indicative of the extent to which these goods have a reduced impact on the environment (Russel&Robidas, 2019). An eco-label is a visual representation, such as a seal, symbol, or logo, that conveys information about a product's adherence to a comprehensive set of environmental performance criteria and standards throughout its lifecycle. The development of eco-labels typically involves collaboration between government entities, manufacturers, and third-party organisations or companies.

Consequently, an eco-label serves as a visual communication tool that signifies the environmental preferability of products, services, or companies based on established standards or criteria. Taufiqueet al. (2014) expressed the view that the purpose of eco-labelling is to identify the factors that contribute to consumers' evaluation of eco-labels.

An eco-label is a designation given to a product that meets a wide range of environmental performance criteria or standards. According to Taufiqueet al. (2016), eco-labels serve as a means of environmental communication, providing consumers with information about both general environmental knowledge and eco-label knowledge. The authors argue that both types of knowledge have a significant positive impact on consumer behaviour that is ecologically conscious. Eco-labeling is influential due to the messages conveyed on labels, such as "environment-friendly," "ozone-friendly," "earth-friendly," "degradable," "recycled," "renewable," "reusable," or "biodegradable" (Russel&Robidas, 2019). While consumers may consider various decision criteria when making choices, product labels serve as a valuable source of information for decision-making. Environmental labels serve as a valuable tool for consumers in making informed decisions regarding the selection of products that align with environmentally friendly practises.

According to the International Standards Organisation (ISO) (2019), ecolabels are defined as labels that offer information regarding the comprehensive environmental advantages of a product or service. This information may include details about the recyclability of its packaging or the absence of harmful substances. They serve as a marketing instrument that not only imparts information to consumers but also promotes environmentally friendly products (Testa, et al. 2015). According to Taufique et al. (2019), the implementation of ecolabeling enhances the way consumers perceive a brand by associating it with ecological consciousness and green marketing.

### **Customers Purchase Intention**

The term "purchase intention" is used to describe a customer's mindset and level of commitment to a planned purchase. Consumers need to have an interest in making a purchase before they are motivated to make a buy (Zhuang et al. 2021). In order to predict consumers' actions, several research look at their intentions. For instance, Chen and Chang (2012) define "green purchase intention" as the likelihood that consumers would like to buy environmentally friendly products. For environmental reasons, consumers are increasingly opting to purchase "green" goods (Brian et al., 2001). Customers' propensity to make future purchases of green or environmentally friendly products can be gauged by their level of green purchase intent. It is useful for gauging consumer interest in eco-friendly products (Zhuang et al., 2021). The term "purchase intention" is used to describe a consumer's propensity to make an impending purchase of a good or service. Because it can foretell whether or not a person will really make a purchase, it is a crucial notion in marketing. There are several aspects that go into determining a consumer's intent to make a purchase, such as product features, brand reputation, advertising, cost, value, and context. Consumers' intentions to buy a product are closely tied to their actions, thoughts, and feelings (Sebjan&Tominc, 2015).

### **Message Framing**

According to the study conducted by Tong et al. (2021), companies employ positive framing messages to emphasise the potential environmental advantages associated with the acquisition of green products. On the other hand, firms employ positive framing messages to underscore the adverse ecological repercussions that result from consumers' failure to procure sustainable products. Dijkstra et al., (2011) in a study found that positive frames exhibit greater efficacy in fostering risk aversion and preventive behaviours. Prior studies have indicated that the primary impact of various framing messages on individuals is not a durable cognitive effect, such as increased alertness or severity judgements. Instead, it primarily elicits an instantaneous emotional response (McElroy & Seta, 2004). This affective state, although not inherently enduring and

occasionally concealed (Sun et al., 2020), exerts an immediate and more substantial influence on consumers' inclination to engage in purchasing behaviour. De Martino et al. (2006), however, posit that the "framing effect" elicits an emotional message, serving as an emotional heuristic. Positive framing involves describing outcomes that are perceived as good and desirable, while negative framing involves describing outcomes that are perceived as unwanted. These framing techniques are characterised by their ability to elicit different evaluations based on the congruence between the described goals and the individual's preferences.

### **Sponsorship Trust**

According to the research conducted by Darnal et al. (2016), it was suggested that the presence of trust and distrust towards sponsors of ecolabels plays a significant role in shaping consumers' perceptions of the legitimacy of such labels. Additionally, the study proposed that the use of third-party certification potentially assist sponsors who are deemed untrustworthy in mitigating consumer distrust. Consumers' trust triggers a passive mode of information evaluation, ultimately resulting in the purchase of ecolabel products, irrespective of whether the ecolabel possesses third-party certification. In contrast, the presence of distrust triggers a cognitive process of evaluative assessment, which in turn influences the decision to purchase a product with an ecolabel. This decision is more likely to occur when an untrustworthy sponsor collaborates with an independent third-party entity that certifies the compliance of ecolabeled products with specific environmental standards. This collaboration serves as an informational cue, enhancing the perceived legitimacy of the ecolabel. The comprehension of these associations can assist sponsors in the development of ecolabels that possess enhanced credibility among consumers. Consequently, this can stimulate increased product differentiation and widespread adoption of ecolabels, potentially leading to improvements in environmental quality.

### **Green washing**

Greenwashing refers to the deliberate practise of creating a deceptive perception or disseminating misleading information regarding a company's products, with the aim of falsely portraying them as being more environmentally friendly (Nguyen et al. 2021). The phenomenon of greenwashing can be situated at the convergence of two corporate attributes, namely subpar environmental practises and favourable communication regarding environmental performance (Nguyen et al. 2019). Lyon and Montgomery (2015) opined that greenwash encompassed any form of communication that deceives individuals into developing excessively optimistic beliefs about an organization's environmental performance, practises, or products. Torelli et al. (2020) investigated greenwashing across two primary dimensions: the organisational level and the product level. At the organisational level, greenwashing is linked to a distorted communication of environmental concerns that impact the entirety of the company. At the level of the product, greenwashing refers to a deliberate strategy employed by companies to promote the environmental attributes of a particular product or service in a deceptive and misleading manner (Delmas & Burbano, 2011).

### **Control Systems**

The control systems employed in eco-labeling are encompassed within the various dimensions of environmental governance. Control systems play a prominent role in marketing strategies, particularly in terms of gaining a competitive advantage and sustaining market share. The categorization of control systems can also be elucidated through the framework of eco-labeling. The certification programme facilitates the transition from organisational opportunities to factors of determination. The present system elucidates the process of standardisation for ecolabeling, wherein the methods that are available are classified into two categories: voluntary and compulsory. The voluntary eco-labeling system control encompasses measures pertaining to environmental preservation, consumer welfare, and equitable trade within society, which are



undertaken without external compulsion. In the majority of instances, organisations partake in it as a strategic approach and driven by a motivation to surpass their rivals (Azizan&Suki, 2014). The implementation of mandatory eco-labeling strategies is influenced by various entities, including governmental bodies and other relevant environmental authorities. The implementation of control systems has enhanced aspects of entrepreneurial democracy and the autonomy of consumer decision-making.

### Fair-Trade Depiction

The concept of fair trade centres on the principles of business ethics and prioritises the well-being of individuals. Within the framework of fair trade, individuals such as farmers who serve as suppliers of raw materials are provided with enhanced arrangements and increased access to mentorship opportunities, which they can utilise to foster their future growth, development, and investment prospects (Hainmueller et al., 2015). Bernard et al. (2015) asserted that the principles and practises associated with fair trade have a positive impact on both consumer well-being and the overall efficiency and sustainable development of the community. The concept of fair trade is closely linked to the certification of raw materials as organic. The certification aims to enhance the well-being of the suppliers of raw materials (Azizan&Suki, 2014). Similarly, fair trade certification entails the abstention from employing chemicals, hormones, and the commitment to utilising natural methods for cultivating raw materials (Singh & Khan, 2014). One of the advantages associated with fair-trade certification is the guarantee that the raw materials in question were acquired and processed in a regulated setting, enabling them to undergo natural growth and development (Bratt, 2014).

### Conceptual Framework for the Study

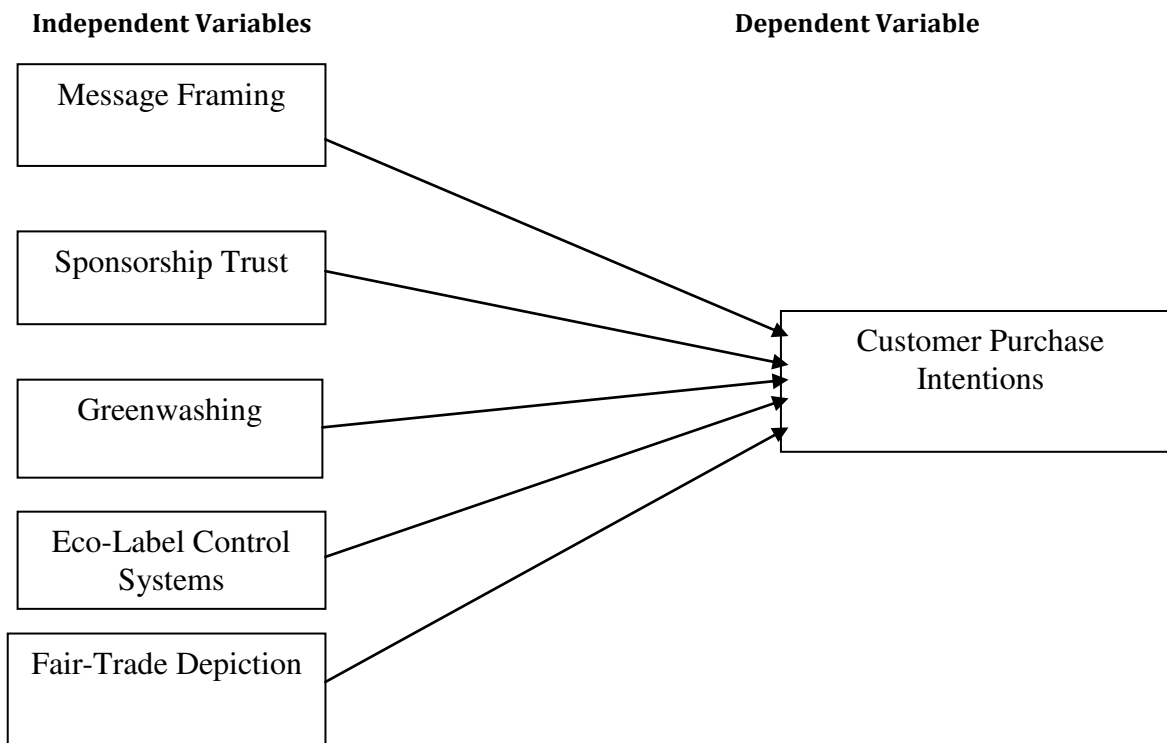


Figure 2.1: Conceptual framework for the study

Figure 2.1 is an illustration of how message framing, sponsorship trust, greenwashing, eco-label control systems, and fair-trade depiction influence customer purchase intentions.

### **Message Framing and Customer Purchase Intentions**

Tong et al. (2021) asserted that the utilisation of various framing messages is employed to manipulate the intentions of customers to engage in environmentally friendly purchases by impacting their emotions, a phenomenon that exhibits a significantly stronger influence compared to the cognitive pathway. Naturally, the impact of the framing effect on individuals' emotions is not consistent; the influence of positive or negative framing on emotions varies depending on the degree of psychological distance, particularly in the spatial dimension. The manner in which eco-label messages are presented can exert a substantial influence on customers' intentions to make a purchase.

### **Sponsorship Trust and Customer Purchase Intentions**

It has been observed that consumers exhibit a higher level of scepticism towards ecolabels that are endorsed by business associations, resulting in a decreased inclination to incorporate them into their purchasing choices. In contrast, it is observed that buyers exhibit a preference for ecolabels that are formulated by sponsors they perceive as more reliable, such as governmental bodies or environmental non-governmental organisations (Darnall et al., 2012). The sponsorship trust of eco-labels has the potential to positively influence customers' intentions to make purchases. When a brand engage in the sponsorship of an eco-label, it effectively communicates to its customer base a strong dedication and adherence to principles of environmental sustainability. Customers who place trust in the eco-label have the potential to extend that trust to the brand that sponsors it, thereby cultivating a positive disposition towards said brand.

### **Greenwashing and Customer Purchase Intentions**

Greenwashing is a strategic tactic employed by companies to gain a competitive edge over their competitors. In light of the emergence of green marketing in recent times, numerous companies have resorted to the practise of "greenwashing" as a means to promote a corporate image that is environmentally friendly, health-conscious, and aligned with green principles (Lyon & Maxwell, 2011). Nevertheless, as a result of customers comprehension of the health and safety advantages linked to environmentally friendly products, the concept of greenwashing engenders a heightened sense of scepticism and mistrust towards the underlying intentions of organisations (Nguyen et al., 2019). Over time, this phenomenon culminates in unfavourable evaluations of products and diminishes consumers' propensity to purchase environmentally friendly products (Nyilasy et al. 2014).

### **Eco-Label Control Systems and Customer Purchase Intentions**

An eco-label is a form of product labelling that is awarded based on the assessment of the comprehensive environmental impact of products throughout their entire life cycle. According to Morrison and Beer (2017), it is imperative for the product to have minimal environmental impact throughout its entire life cycle, encompassing the stages of production, usage, and disposal. Prominent eco-labels offer assurance that a product has a limited impact on the environment. An environmental management system or control system pertains to the operational activities of an enterprise. This pertains to the manner in which a specific organisation should establish, arrange, and manage its operations. The aforementioned study by Berghoef and Dodds (2013) highlights the presence of specific criteria that govern the implementation of procedures and the generation of reports, as well as the manner in which each organisation should strive to consistently diminish its ecological impact. The certification of a product with an eco-label serves as a means of communicating to consumers that the product has undergone a verification process to ensure its compliance



with specific environmental criteria. Azizan and Suki (2014) stated that the implementation of this strategy has the potential to enhance customer confidence in the product and subsequently impact their inclination to make a purchase.

### **Fair-Trade Depiction and Customer Purchase Intentions**

Azizan and Suki (2014) stated that the incorporation of manufacturers and traders, along with the exclusion of chemicals in the production process, enhances the potential for trade. The implementation of fair trade initiatives serves to mitigate the injustices stemming from inequitable competition and market bias. The portrayal of fair-trade practises has the potential to influence consumer purchase intentions through various mechanisms. To begin with, it is worth noting that fair-trade labels have the potential to serve as indicators to consumers that a particular brand demonstrates social responsibility and exhibits concern for the well-being of workers and manufacturers (Hainmueller et al., 2015). This phenomenon has the potential to enhance customer's favourable perceptions of the brand and their inclination to demonstrate support by making purchases. Additionally, fair-trade labels can function as a mechanism for ensuring quality, thereby mitigating the perceived risk associated with product purchase (Vande, 2012).

### **Theoretical Review**

The study was anchored on the theory of reasoned action.

#### **Theory of Reasoned Action (TRA)**

The Theory of Reasoned Action (TRA) was formulated by Martin Fishbein and Icek Ajzen in 1975. The purpose of this response is to provide an explanation of customer behavioural intentions. The customer behavioural intentions refer to the psychological predispositions and inclinations of customers towards engaging in certain behaviours or actions in relation to Fishbein et al. (1980) identified intentions as the most robust indicator of human behaviour, emphasising the ability of individuals to employ available information in a logical and organised manner. The Theory of Reasoned Action (TRA) has been widely employed in the field of green marketing to forecast intentions related to various environmentally friendly behaviours, including energy conservation, recycling behaviours (Davies et al. 2002), and green purchase behaviours (Ha & Janda, 2012). The theory posits that human behaviour is influenced by individual cognitive constructs, including beliefs, attitudes, and intentions. The Theory of Reasoned Action (TRA) offers a valuable conceptual framework for comprehending consumer intentions to purchase products associated with eco-labels. The proposition posits that in order to incentivize consumers to select eco-labeled products, endeavours should be undertaken to foster favourable attitudes towards environmental preservation and sustainability, alongside the establishment of social norms that endorse environmentally conscientious conduct.

### **Methodology**

#### **Research Design**

The chosen research design for this study was the cross-sectional survey research design. The adoption of this approach is justified as it facilitated the researcher in evaluating public opinion through the utilisation of questionnaire at a specific moment in time.

#### **Population of the Study**

The target population for this study encompassed individuals who are customers of non-alcoholic beverage companies located in South-South Nigeria. The total number of customers who engage in the purchase of non-alcoholic beverages in South-South Nigeria is unknown.

**Sample Size Determination**

The formula proposed by Cochran (1977) is widely used to estimate the appropriate sample size for studies where the population size is unknown. The process entails formulating assumptions regarding the necessary degree of precision, the intended level of confidence, and an estimated proportion of the population exhibiting a specific characteristic or behaviour. The formula for the Cochran sample size calculation is as follows:

$$n = z^2pq / e^2$$

where:

n = sample size

z = z-score corresponding to the desired level of confidence

p = estimated proportion of the population with the characteristic or behavior of interest

q = 1 - p

e = level of precision desired (margin of error)

$$n = \frac{Z^2PQ}{e^2}$$

$$n = \frac{(1.96)^2 \times 0.5 \times 0.5}{0.05^2}$$

$$n = \frac{3.8416 \times 0.5 \times 0.5}{0.025}$$

$$n = 384$$

**Sampling Technique**

The research used the stratified sampling technique. The use of stratified sampling technique is justified by the principle that a randomly drawn sample is unbiased, ensuring that each member of the population has an equal probability of being selected. The use of stratified sampling technique facilitated the accurate representation of both the entire population and specific subgroups within it, particularly those comprising small minority groups.

**Research Instrument**

The research instrument used in this study is a structured questionnaire employing a response format based on the five-point Likert scale. The questions were adapted from the studies conducted by Kim et al (2018), Brown et al. (2021)Johnson et al. (2019)Lee and Chang (2018), Brown et al (2020).The survey was partitioned into two distinct sections, namely Section A and Section B. Section A encompassed the demographic information of the participants, while Section B comprised the questionnaire designed to assess the effect of eco-labelling components on customers' intention to make a purchase. The respondents were provided with copies of the questionnaire for a duration of one week, after which the questionnaire were collected for subsequent analysis.

**Validity of Instrument**

The study ensured content validity through the involvement of a panel of marketing experts. These experts reviewed and evaluated the instrument's items for their relevance and representativeness. The participants employed rating scales, such as the Likert scale or a binary scale (yes/no), to express their level of agreement with the representation of the construct for each item.All suggested corrections made were effected.

**Reliability of Instrument**

In order to ascertain the instrument's reliability, test retest reliability was adopted. The Cronbach Alpha Index was employed to estimate the questionnaire's reliability. Hair et al.(2006) asserted that the minimum threshold for acceptability in quantitative research falls within the range of 0.60 to 0.70. According to the findings presented in Table 1, the Cronbach's alpha coefficients were computed within the range of 0.712 to 0.725. These values surpass the recommended threshold of 0.7 for Cronbach's alpha, indicating that the instrument reliability can be considered acceptable.

**Table 1 Reliability coefficients of study constructs**

Dimension of study constructs	Items	Cronbach's Alpha
Message framing	5	0.713
Sponsorship trust	5	0.712
Greenwashing	5	0.719
Eco-label control systems	5	0.721
Fair-trade depiction	5	0.725
Customer purchase intentions	5	0.714

**Methods of Data Analyses**

Data collected were analyzed using descriptive statistics and multiple regression analyses. Simple percentages were used to analyze the respondents' background profile. Multiple regression analysis was used to assess the extent to which eco-labelling strategies explained the variations in customer purchase intentions, and to test the statistical significance of relationships among the variables. The analyses were done using the SPSS for Windows software, specifically version 23.

The general equation to predict CPI =  $\beta_0 + \beta_1MF + \beta_2ES + \beta_3GW + \beta_4ELCS + \beta_5FTD + \epsilon \dots$

Where:

CPI = Customer Purchase Intentions

MF = Message Framing

ST = Sponsorship Trust

GW = Greenwashing

ELCS = Eco-Label Control Systems

FTD = Fair-Trade Depiction

**Results and Discussion**

**Table 2 Response Rate**

Pattern focused	Number administered	Number returned	Unused copies	Number used	Response rate
Customers	384	380	4	376	98%

Source: Distributed Questionnaire

Out of the 384 administered copies of the questionnaire, 380 were returned, 4 were incomplete, and 376 were usable. As a result, the analysis in this chapter was based on the 98% usable sample size.

**Table 3: Analysis of Respondents Profile**

S/N	Variables	Frequency	Percentage (%)
1	Gender:		
	Male	164	44
	Female	212	56
	Total	376	100
2	Age Range:		
	18-30	81	22
	31-40	118	31
	41-50	122	32
	Above 50	55	15
	Total	376	100
3	Marital Status:		
	Single	143	38
	Married	193	51
	Divorced	25	7
	Widowed	15	4
	Total	376	100
4	Educational Qualification		
	FSLC	18	5
	School Cert. or O-Level	34	9
	OND/NCE	97	25
	HND/ BSc	192	51
	MSc/MBA	25	7
	Ph.D	10	3
	Total	376	100

Source: Field Survey, 2023.

Table 3 showed that 44% of the sample were males, while 54% were females. The age bracket of the respondents showed that 22% of the respondents were within the age range of 18-30 years; 31% of the respondents' falls within the age bracket of 31-40 years of age, 32% of the respondents' falls within the age bracket of 41-50 years of age, while 15% of the respondents were above 51 years of age. The marital composition of the respondents showed that; 38% of the sample respondents were single, 51% respondents were married, 7% respondents were divorcees, while 4% of the respondents were widowed. On the educational background of the sample, it was indicated that majority 51% of the respondents were HND/B.Sc holders.

**Table 4: Dimensions of Eco-Labeling Strategies and Customers Purchase Intention**

Model	Coefficients <sup>a</sup>		Standardized Coefficients Beta	t	Sig.
	Unstandardized Coefficients B	Std. Error			
1 (Constant)	-2.160	1.560		-1.385	.167
Message Framing	.300	.059	.180	5.073	.000
Sponsorship Trust	.176	.047	.176	3.775	.000
Greenwashing	-.077	.027	-.106	-2.846	.005
Eco-label Control System	.187	.044	.177	4.230	.000
Fair-Trade Depiction	.496	.038	.512	13.052	.000

a. Dependent Variable: Customers Purchase Intention

The statistical model showed the study hypotheses formulation:

$$CPI = \beta_0 + \beta_1MF + \beta_2ST + \beta_3GW + \beta_4ELCS + \beta_5FTD + \varepsilon$$

$$CPI = -2.160 + (0.300 \times MF) + (0.176 \times ST) + (0.077 \times GW) + (0.187 \times ELCS) + (0.496 \times FTD)$$

**Table 5 Fitness of the Study Models**

Model		ANOVA <sup>a</sup>				Sig.
		Sum of Squares	Df	Mean Square	F	
1	Regression	500.277	5	100.055	98.326	.000 <sup>b</sup>
	Residual	376.508	370	1.018		
	Total	876.785	375			

a. Dependent Variable: Customers Purchase Intention

b. Predictors: (Constant), Message Framing, Sponsorship Trust, Greenwashing, Eco-label Control System, Fair-Trade Depiction

In table 5 the *F*-ratio measured how well the regression model fits the data. According to the table, *F*= 98.326, 0.000 < 0.05, the variables of eco-labelling strategies strongly predict customers purchase intention. This implied that the regression model fits the data well and is significant for the research.

**Table 6 Model Summary**

Model	Model Summary			
	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.755 <sup>a</sup>	.571	.565	1.009

a. Predictors: (Constant), Message Framing, Sponsorship Trust, Greenwashing, Eco-label Control System, Fair-Trade Depiction

The Adjusted R Square value in Table 6 indicated how much the dimensions of eco-labelling strategies contributed to changes in customers purchase intention. According to this value, eco-labelling strategies are

responsible for 57% (0.565) of these changes. The Adjusted R Square calculated the percentage of the dependent variable's variance that can be accounted for by changes in the predictor variable.

### Discussion of Results

Table 4 showed that message framing has significant positive effect on customers purchase intention ( $\beta = 0.180$ ,  $p < 0.05$ ). Test of Hypothesis one showed that message framing has significant positive effect on customers purchase intention for non-alcoholic beverages in South-South Nigeria ( $0.000 < 0.05$ ). The result is in agreement with Tong et al. (2021) study findings that companies employ positive framing messages to emphasise the potential environmental advantages associated with the acquisition of green products. The result suggested that the specifics of the eco-label message framing, such as the content, design, and wording of the labels, can all play a role in influencing consumer perceptions and purchase intentions.

Table 4 showed that sponsorship trust has significant positive effect on customers purchase intention ( $\beta = 0.176$ ,  $p < 0.05$ ), Test of hypothesis two showed that sponsorship trust has significant positive effect on customers purchase intention for non-alcoholic beverages in South-South Nigeria ( $0.000 < 0.05$ ). According to the research conducted by Darnallet al. (2016), it was suggested that the presence of trust and distrust towards sponsors of ecolabels plays a significant role in shaping consumers' perceptions of the legitimacy of such labels. Azizan and Suki (2014) asserted that companies operate under the assumption that by falsely portraying consumer adherence, they can cultivate trust and enhance consumer loyalty towards their products. This suggested when consumers trust the organizations endorsing or certifying the eco-labels on non-alcoholic beverages, they are more likely to view the environmental claims associated with these products as credible and genuine.

Table 4 showed that greenwashing has negative effect on customers purchase intention ( $\beta = -0.106$ ,  $p < 0.05$ ). Test of hypothesis three showed that greenwashing has significant effect on customers purchase intention for non-alcoholic beverages in South-South Nigeria ( $0.005 < 0.05$ ). Bernard et al. (2015) asserted that the principles and practises associated with fair trade have a positive impact on both consumer well-being and the overall efficiency and sustainable development of the community. The concept of fair trade is closely linked to the certification of raw materials as organic. The certification aims to enhance the well-being of the suppliers of raw materials (Azizan&Suki, 2014). Greenwashing can lead to an erosion of trust between consumers and brands. When customers perceive that a brand is misleading them about its environmental practices, their trust in the brand diminishes. This erosion of trust can have a negative influence on their willingness to purchase products associated with that brand.

Table 4 showed that eco-label control system has significant positive effect on customers purchase intention ( $\beta = 0.177$ ,  $p < 0.05$ ). Test of hypothesis four showed that eco-label control systems have significant positive effect on customers purchase intention for non-alcoholic beverages in South-South Nigeria ( $0.000 < 0.05$ ). The result agreed with Azizan and Suki (2014) assertion that the implementation of eco-label control systems can serve as a viable strategy for brands to enhance customer purchase intentions, particularly among individuals who place a high emphasis on environmental sustainability when making purchasing choices. It is crucial to acknowledge that the correlation between eco-label control systems and customer purchase intentions can potentially be influenced by additional variables, including the perceived value of the product, its price, and the presence of alternative options (Morrison & Beer, 2017). An effective eco-label control system boosts the credibility of the eco-labels attached to non-alcoholic beverages. When customers perceive that an independent and trustworthy system is in place to verify the accuracy of environmental claims, they are more likely to believe in the authenticity of these claims.

Table 4 showed that fair-trade depiction has significant positive effect on customers purchase intention ( $\beta = 0.512$ ,  $p < 0.05$ ). Test of hypothesis five showed that fair-trade depiction has significant positive effect on customers purchase intention for non-alcoholic beverages in South-South Nigeria ( $0.000 < 0.05$ ). Fair-trade



labels have the potential to serve as indicators to consumers that a particular brand demonstrates social responsibility and exhibits concern for the well-being of workers and manufacturers (Hainmueller et al., 2015). Additionally, fair-trade labels can function as a mechanism for ensuring quality, thereby mitigating the perceived risk associated with product purchase (Vande, 2012). Fair-trade depiction enhances a brand's image as socially responsible and empathetic. Consumers tend to view brands positively when they are associated with practices that contribute to the betterment of communities and individuals, fostering a sense of goodwill towards the brand.

### Conclusion

The study concluded that eco-labelling strategies had significant positive effect on customers purchase intention for non-alcoholic beverages in South-South Nigeria. Message framing, sponsorship trust, greenwashing, control systems, and fair-trade depiction had significant positive effect on customers purchase intention for non-alcoholic beverages in South-South Nigeria.

### Recommendations

1. Non-alcoholic beverage firms should carefully design eco-labels to resonate with their target audience and convey the environmental benefits of their non-alcoholic beverages in a clear and appealing manner.
2. Non-alcoholic beverage firms should partner with well-established and reputable certifying organizations that have a track record of assessing and endorsing eco-friendly products. Recognizable labels from trusted organizations can immediately boost consumer confidence in the authenticity of the eco-labels.
3. To counter negative effects of greenwashing, non-alcoholic beverage firms should prioritize transparency, provide evidence of their sustainable practices, and engage in authentic and meaningful environmental initiatives. This will not only attract environmentally-conscious consumers but also foster long-term brand loyalty.
4. Non-alcoholic beverage firms should encourage consumers to provide feedback on their products and the eco-label control system. This can help them to identify areas for improvement and build a community of engaged, environmentally-conscious customers.
5. Non-alcoholic beverage firms should clearly display fair-trade labels on their non-alcoholic beverage products. Use easily recognizable logos and symbols that consumers associate with fair trade. Clear labeling helps consumers quickly identify their commitment to ethical practices.

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