European Journal of Business and Innovation Research
Vol.9, No.1, pp. 1-30, 2021
Print ISSN: 2053-4019(Print),
Online ISSN: 2053-4027(Online)

GREEN MARKETING AND SUSTAINABILITY OF BREWERIES IN NIGERIA

Alabo, Rachael Lolo
Department of Marketing
Chukwuemeka Odumegwu Ojukwu University, Nigeria

Anyasor, Okwuchukwu Marcus
Department of Marketing
Chukwuemeka Odumegwu Ojukwu University, Nigeria

ABSTRACT: *This study appraised the effect of green marketing on sustainability of brewery firms in Nigeria using the South-East geo-political zone of Nigeria as the study area. Specifically, it sought to ascertain the extent green product; green price; green placement; and green promotion on the sustainability of breweries. The study was hinged on diffusion of innovation theory. Descriptive survey design using a sample size of 324 was adopted. Primary data used for the study were sourced with structured questionnaire, and analyzed in frequency tables and percentages, and multiple regression analysis for testing the hypotheses. The study found all the constructs of the study: green product, green price, green place (distribution), and green promotion to be significantly and positively related to sustainability of breweries in South-East of Nigeria. It concluded that green marketing significant positive effect on sustainability of breweries in South East of Nigeria. The study recommended that breweries in South-East Nigeria, and the broader Nigeria should sustain their environmental responsibilities and pay more attention to related issues so as to maintain their company sustainability.*

KEYWORDS: Green marketing, sustainability, brewery firms, South-East, Nigeria.

Citation: Rachael Lolo Alabo and Okwuchukwu Marcus Anyasor (2020), Green Marketing and Sustainability of Breweries in Nigeria, *European Journal of Business and Innovation Research*, Vol.8, No.8, pp. 19-48

INTRODUCTION

Today's environment awareness of consumers has increased considerably throughout the world. In line with this, Anyasor (2015) opined that societies are increasingly getting more serious about issues of healthy natural environment, businesses on their part are tuning in by modifying their activities to sync with this global concern. Thus, environmental issues including pollution and its resultant global warming have become global issues and both marketers and consumers are becoming more sensitive to the need for a switch to a more safe green products and services

Conceptually, green marketing is the production and marketing of products and services in an environmentally friendly manner to meet the needs and desires of the consumers; and satisfy organizational goal. Rex and Baumann (2007) sees it as the process and activities taken by firms through providing the environmentally friendly goods or services to satisfy customers. Hawkin,

Best, Coney, and Mookerjee (2004) cited in Anyasor (2015) posited that green marketing involves a wide range of activities which include producing products whose production, use or disposal is less harmful to the environment, developing products that are environmental friendly, ensuring environmental friendly product modification, production process, packaging as well as advertising. It is also applicable to the development and improvement of pricing, promotion and distribution of products that do not harm the environment (Pride & Ferrell, 2005).

Green marketing has become increasingly significant to the modern marketing as result firms re-think about all the activities pertaining to their products, whether it is the process or advertising. However, implementing green marketing involves the analysis of several conditions as consumer awareness, costs and profit issues, awareness of the issues and competitive pressures (Singh & Pandey, 2012). Sustainability on its part is "the ability to meet the needs of present customers, while taking into consideration the needs of future generations" (Ford, 2012). Sustainable business model encompass practices that strive for the long-term survival, health, enhancement, and performance of firm's financial, environmental factors and social resources.

Around the mid-90s, greater population of consumers in the developed countries appear to have risen into reckoning on green movement matters as they demand firms to be held responsible for environmental issues arising from their business practices. The result is that most customers started to avoid products of companies which create so much pollution, products that endanger customers' health, and products that damage the environment. Thus, firms including breweries are now faced with new challenges especially in meeting the needs of green conscious customers. As businesses had to keep up with the constant evolution in technologies, some of their practices contributed to the degradation of the ecosystems due to toxic contaminations, deforestation, soil erosion and the loss of some species thereby raising key sustainability question on being eco-friendly for the generation thus pushing consumers to start engaging in actions to protect the environment.

Significant number of empirical studies that covered green marketing examined it mainly in relation to consumer purchase intention (Thoria, 2018; Ya-Hui, Ssu-Ting & Nai-Ning, 2016); consumer purchase behaviour (Jeevarathnam & Tushya, 2016); consumer purchasing patterns (Aditi, 2016); consumer decision making (Aditi, 2016; Joana, 2015); brand equity (Rahadian & Rofiaty, 2015); customer loyalty (Rahadian & Rofiaty, 2015); sales volume (Bilal, Kalsom, Zainon & Tareq, 2016); firm's performance (Bilal, et al. 2016); market share increase (Mehdi, Faranak, Ali & Atefeh, 2013); customer satisfaction (Macharia, Kibera, Munyoki & Kinoti, 2017) but substantially ignoring firm sustainability. Also no recent empirical studies covered the topical issue of the present study in South-East, Nigeria. Hence, this study is hypothesized to fill this gap.

Consequent on the foregoing therefore, the study seeks to determine the effect of green product, green price, green place (distribution), and green promotion on sustainability of breweries in the South-East geo-political zone of Nigeria made up of five states: Abia, Anambra, Ebonyi, Enugu, and Imo. Hence, the subject scope is delimited to green marketing and sustainability. While green product, green pricing, green promotion and green place (distribution) are the green

marketing explanatory variables, sustainability is the dependent variable of the study covering the period from 2010 to 2018.

REVIEW OF RELATED LITERATURE

Conceptual Review

Green Marketing

Green marketing is the production and sales of products to those consumers who are mindful of environmental protection to meet their needs. It is the process and activities that involve providing the environmentally friendly goods or services to satisfy customers by the firm (Rex & Baumann, 2007). Kotler and Armstrong (2008) contended that such products must meet the acceptable environmental standards consisting of recyclable and reusable packaging, enhanced pollution control methods and energy efficiency in operations.

Green marketing relates to business practice which advocates sustainable development. It involves marketing of goods and services that are seen to be eco-friendly and promote environmental preservation in a sustainable manner. Diglel and Yazdanifard (2014) noted that it comprises a range of activities which involves the modification of the production process, alteration of product lines and improvement in packaging, as well as transforming advertising. Ottman (2011) characterized the concept as an integration of ecological concerns into business aspects such as production, promotion, distribution and packaging as well as marketing communications. Prakash (2002) regards green marketing as an environmentally considered tactic that consists of revealing information to consumers at different levels like industry, firm and product level.

Welford (2000) described green marketing as a management process of recognizing, anticipating and satisfying consumers' needs and wants while being sustainable as well as profitable. Grant (2008) noted that marketing refers to planning, development and promotion of goods or services which satisfy consumers' needs without negatively affecting the environment and by means that preserve natural raw materials and reduce energy usage. Cheah and Phau (2005) summarized the concept as all activities created by firms to satisfy human needs and demands which have less destructive effects on the environment. Green marketing also helps to shape brand image (Coddington, 2003); strengthen firm's green image (Schoell & Guiltinan, 2003).

The demand for eco-friendly products compatible with the environment is due to the increased awareness of environmental issues by the customers. Enterprises that recognize the impact of environmental variables on green and sustainable consumption of consumers make commensurate effort to be more sustainable and responsive to challenges of the modern era of green marketing in the best possible manner by taking cognizance of the rights of future generations (Charter & Clark, 2007).

Green marketing is applied to the development and improvement on product production process, pricing, promotion and distribution of the products that do not damage the environment. In line

with this, Jeevarathnam and Tushya (2016) noted that green marketing relates to business practice which advocates sustainable development comprising the marketing of goods and services that are considered to be eco-friendly and promoting the preservation of the environment in a sustainable way. Green marketing is similar to traditional marketing, the only difference is that it incorporates marketing activities that entail producing, pricing, distributing and promoting goods or services which are environmentally safe and are able to satisfy consumers' environmental needs (Ansar, 2013).

In the present material times, green marketing philosophy has been shown to be key to both consumer and business activities. As a result, marketers have been driven to developing strategic green activities and promote these activities in order to gain competitive advantages. This changes the perception of the customers towards green products and draws their attention toward using environmentally friendly products (Mendleson, 1994). Firms in contemporary business environment are making efforts to preserve the environment by delivering products that are eco-friendly. For this purpose, products and production process are becoming greener than ever before. Hence, green marketing provides opportunity for innovative ways that will assist a firm to make profits, maintain its sustainability and, still remain environmentally friendly at the same time through conscious environmental friendly sustainable operations.

Green Product

The words like green products and eco-friendly products have often been used interchangeably by marketers. Environmentally friendly product refers to products or services that are not harmful to use by the consumer, and to the natural eco-system/environment. Product is the most essential part of whole green marketing strategy, and the heart of green marketing-mix (Fan & Zeng, 2011) thus indicating the environmental friendliness of all the elements of the product, such as the materials used in its production, the production process, the package of the product, etc.

Obviously, many concerned green marketing proponents including Tseng and Hung (2013), Singh and Pandey (2012), Kumar and Ghodeswar (2015), Diglel and Yazdanifard (2014), Eneizan and Wahab (2016) among a host of others are unanimous that green products are ecologically safe products that facilitate the long term objective of protecting and preserving the natural habitat and minimize the adverse environmental impacts; protect or boost the natural environment by conserving energy and/or resources and reducing or eliminating use of noxious agents or toxic-free ingredients, pollution, and wastes during product design and actual production, and certified as such by an acknowledged organization. Green products come in various forms; some are recycled from former goods and then reused such that they are considered efficient - they save water, energy or gasoline, and money. They are 'green' packaged and have certified green evidence labels.

Green Price

The price is the cost paid by the customer to obtain a particular product/services. Of the other elements of marketing-mix, it is only price creates an ideal link between sales returns and profit, while others create costs (Awan, 2011). At its most basic definition, price pertains to a group of

monetary values that are replaced by the benefits and the possession or use of products or services. In this regard, customers use their monetary power to benefit from the product or service, and those consumers who desire green products shoulder higher prices emanating from the additional costs of the production process (Al-Salaymeh, 2013).

Literatures show that most of the consumers can afford to pay only a premium if there is an added additional product value. Sharma (2011) posits that this value may be enhanced function, performance, design, taste or visual appeal. Environmental benefits are usually a plus but will often be the deciding factor between products of equal value and quality (Singh, 2013). Accordingly, Hashem and Al-Rifai (2011) conceptualize green pricing as the price particularly in the light of company's policies with regard to environmental consideration imposed by rules and corporation instructions or its initiatives in this regard.

The process of going green is expensive in terms of installing new technology and equipment, absorbing external costs, converting waste into recycled products and training employees. These costs are inevitably added into the product price. Green price is therefore a premium price, which further increases with other additional costs. The practices of green pricing consider both the economic and environmental costs of production and marketing, while simultaneously providing value for customers and a fair profit for the company. Tactical pricing options of firms may include but not exclusive to considering rebates for returning recyclable packaging and charging higher price for eco-unfriendly product (Arseculeratne & Yazdanifard, 2014).

Green pricing takes into consideration the host environment, its inhabitants and profit in such manner that it takes cognizance of the health of employees and host communities and ensures efficient productivity. Price in some cases can be higher than the prices of the normal alternatives. A higher price compared to the alternative can be formative factor for some customers verifying the accurateness of the product’s green features. Others do not consider the price at all but choose the environmental friendly alternative (Solvalier, 2010).

Given the importance that consumers give to price, marketers offer additional values that enhance the various aspects of the products such as performance, function, design, and visual appeal on the ground that when consumers perceive the extra values derivable from the product they tend to pay the premium price. This is not to say that the readiness of the consumers to pay premium prices for green products is undying as, Larashati, Hudrasyah and Chandra (2012) has already observed that the price of these products decrease the moment the product life-cycle is considered.

The existence of a segment of customers who are enthusiastic to paying premium prices for green products allows the prevalence of green marketing approaches. Additionally, the potential gains from this customer segment provide companies with the motivation and rationale for developing green products and engaging in green operations and marketing practices, such as recycling, reusing materials, and forming alliances with green supply chains. However, the recent global economic downturn has challenged the fundamental premise of paying premium

prices for environmentally friendly products, as consumers cut back on their green product purchases and opted to patronize traditional low-priced goods (Sharma & Iyer, 2012).

Green Place

Place represents the location from where a product can be purchased. It can mean physical as well as virtual stores. This element of the marketing mix is dealt as 'how-to-handle-distance' (Awan, 2011). Pertinent to this study is green placement or distribution defined as the selection of channels in such a way that it reduces damages to the environment. Product distribution should be of the satisfactory channels, and clearly and correctly placed at environmentally safe place where there is no contamination whatever. Place is not a significant cost generator factor; it contains numerous features that can create revenue and certain outcome. Logistics is another part of the correlation, because it approaches procurement, material handling, distribution, storage, material revival and disposition. Most damages to the environment arise in the course of transporting raw materials and finished goods. Hence, marketers must implement safety measures in the course of product delivery. Working with channel partners to develop product, reuse or disposal arrangements and ensuring that customers are able to return recyclable materials are two tactical initiatives that firms could undertake in their pursuit of green distribution.

Green place is also about effective logistics management that reduces emissions arising from the movement of raw materials and finished products, which are suitable for customers, in terms of facilitating their delivery, and to secure cycling procedures conducting inside environmental conditions and requirements (Hashem & Al-Rifai, 2011). This entails that green firms should also ensure that their distributors take cognizance of the harmful effects of their activities on the environment and institute a green distribution strategy to reduces these effects.

The choice of where and when to make a product obtainable by organization, have significant impact on the customers considering that very few customers will ordinarily go out of their way to look for green products to buy merely for the sake of it. Green distribution is therefore a very delicately complicated that customers must be assured of the extent the product is ecologically safe (Sharma, 2011). The delicate nature of green distribution arises from steady regulation of green environment which demands firms' high level of compliance as they perform their green products distribution operations (Yazdanifard & Mercy, 2011).

Distribution is an essential activity in the marketing process and so, one of the pillars of the marketing-mix. Retailers and distributors serve their interests by strengthening their relationship with their clients; a two-way distribution system that is underlined by the green marketing philosophy ensures the relevance and permanence of this relationship. The recycling process underpins the two-way distribution system, which entails the recycling of the remnants of materials used (i.e., empty containers, plastic bags) to their places of production, or point of sale. Many countries adopt this system in distinct ways. For instance, specialized organizations in the United States re-collect plastic and glass containers; they have a contractual relationship with trademark-owning organizations to whom they send the pre-sorted empty containers in exchange for a certain amount. (Al-Salaymeh, 2013).

Green Promotion

Promotion is a vital element of the main green marketing mix; it refers to the communication process employed by an organization to build a relationship with its customers by informing, reminding, persuading and, reinforcing them to purchase green products as well as transferring actual environmental information to those consumers who are involved in a company's activities Green promotion refers to providing genuine information about the products in a way that does not harm the materialistic and moral interests of the customers (Hashem & Al-Rifai, 2011). Moreover, this strategy seeks to connect the firm with its customers and transfer its orientations and environmental image to them via product- or service-related marketing messages. The tool consists of a group of integrated elements including environmental advertisements and posters, sales and public relations promotional activities, personal sale, and packaging which facilitate the success of the promotional process (Al-Salaymeh, 2013).

Green promotion involves aligning promotional tools - advertising, public relations, marketing materials, signage, sales promotions, direct marketing and on-site promotions, video presentations etc. - by maintaining a balance between the firm's profit desire, the interest of the target audience and, the natural of the host communities (Fan & Zeng, 2011; Shil, 2012). Green advertising for instance, tries to appeal to the wants and desires of environmentally conscious consumers (Ankit & Mayur, 2013), with the aim of influencing the consumers' purchase behaviour by encouraging them to buy products that do not hurt the environment and to direct their interest to the positive consequences of their purchase behaviour especially to the environment (Rahbar & Abdul, 2011). Engaging in green promotion enhances the likelihood that companies' claims about is products and production process are precisely monitored and evaluated in terms of its environmental friendliness (Lao, 2014). Overall, companies' commitment to protecting the natural environment is purposed to attract the target consumers (Shirsavar and Fashkhamy, 2013). Hence, genuine commitment and claims to environmental commitment are being integrated into product packaging aimed to communicate the company's environmental efforts.

Sustainability

Contextually, sustainability refers to achieving business goal or success in the present but not to the detriment of future needs (Boudreau & Ramstad, 2005). This view aligns with that of United Nation's Brundtland Commission (1987) which captured sustainability to mean balancing the needs of present and future generations in such a manner that the former will not compromise the latter. The Ford Charter of Sustainability Committee (Ford, 2012) focuses on sustainable growth, and thus defined sustainability as the ability to meet the needs of present customers while taking into account the needs of future generations (Ford, 2012).

The inducement of firms to actually pursue sustainability goal, however, differs. Some of the primary sustainability dimensions that, when managed well, will achieve the goal include strategic sustainability, product and programme sustainability, personnel sustainability and

financial sustainability (Carter, 2016). Eccles, Ioannou and Serafeim (2011) posit that research evidence suggests that organizations are not adopting sustainability policies purely for public relations reasons, but rather for considerable shift in business processes noting that outstanding sustainability firms appreciably outperform their counterparts in terms of stock shares and financial performance over a long-term. Agreeing, Nidumolu, Prahalad and Rangaswami (2009) stressing that there is no shortcut to sustainable development, claim that entrepreneurs lay the solid foundation to becoming future market leader by equating innovation with sustainability.

Ballinger (2011), announcing the launch of a Business Sustainability Research project by the Chartered Institute of Personnel and Development, identifies the reasons for the drive for a more sustainable approach to business as including: the pressures of globalization; global economic crisis; and calls for greater scrutiny of business by external stakeholders. Kielstra (2008) supports this view, noting that "The most powerful business case for adopting a responsible and sustainable approach to business would appear to be the emergence of globalization, which has considerably changed the roles and relationships of business, governments and other key stakeholders".

A sustainable approach to business may be identified by evidence of the alignment of the organization's social, environmental and financial objectives through a "triple-bottom-line" measure of overall performance. In reality, many organizations find achieving this alignment to be problematic, perhaps because it necessitates a focus on a range of non-financial outcomes, when organizations have become so used to measuring everything in financial terms. There has always, of course, been a body of opinion amongst business operators as well as economists that adopting environmental and social policies will basically reduce returns for shareholders. But, Eccles, Ioannou and Serafeim (2011) explain that this perspective identifies sustainability as just another type of overhead that favours managers with private benefits from embedding environmental and social policies in the company, but which consequentially has negative financial implications.

Organizations pursuing sustainable business strategy may be seen as incurring higher costs, for example, because they pay above market rates; investing in environmental protection beyond regulatory requirements; by missing out on market opportunities they see as being in conflict with their values; or by losing customers who are unwilling to pay for higher priced products or services.

Theoretical Framework

This research work is anchored on diffusion of innovation theory developed by Rogers Everett in 1962. Theory seeks to explain how an idea or product can gain momentum and spreads through a social system. It considers about the product quality and time it takes for an idea or product to spread in a market. The diffusion concept is that people who are referred as part of social system adopt any new idea, behaviour or product. Adoption on the other hand referred to the behaviour of a person, and what that person does differently than what they had previously. This behaviour can be anything like purchase of new product, or exhibiting new behaviour towards existing products. Diffusion is possible when there is adoption of ideas, behaviour or product as

something new or innovative by that person. Person pass through certain stages during adoption process of innovation before diffusion can be achieved. This starts with awareness of need for an innovation, followed by decision to adopt or reject that innovation, test of the initial use of the innovation, eventually leading to continued use of the innovation.

Many studies proved that people act differently to new ideas and products indicating that adoption of innovation is at different level by different people. There are five adopter categories, which applies different strategies to appeal to public in these different categories. Firstly are the innovators - people who are first movers. They are the first ones to try out all the innovations; are interested in new ideas and are willing to take risk of trying something before knowing fully about it. Not just trying something, they are also ready to develop something new, like any trend. Very little effort is made to attract this population and are self-attracted by any new concept.

Secondly are the early adopters – the class of people who are represented as opinion leaders. They act as leaders and can change any opportunity. They keep all the knowledge about world and in need of change, are able to change and adopt new ideas and products easily, and are comfortable with new ideas. Manuals and information sheets on implementation are some strategies used to appeal to this type of population. They are self-convinced; need no information to change their behaviour. Thirdly, early majority are people who are not part of leaders group but are ready to adopt new ideas before the rest of the world. They need security before adopting any new idea, which encourages them to adopt. This type of people is attracted by success stories and evidence of that new idea or product. Fourthly is the late majority. Belonging to this group are people who are skeptical of change. They believe in trying something new after a large population has become part of that innovation. They are mostly convinced by promotions, needed to be shown how many people that have tried the innovation and found that it is successful in and around the world. Lastly is the laggards - people who believe in old traditions and are very conservative. They are the hardest group to convince and bring to board. Marketers apply fear appeals and pressure from people of other groups to persuade them.

This theory was adopted because it provides evidence of the relationship of green marketing strategy elements and diffusion of innovation characteristics which invariably leads to organizational sustainability. The current study adopted green marketing strategy which includes green product, green price, green place (distribution) and green promotion; and this can be related to five diffusion of innovation characteristics (relative advantage, compatibility, observability, complexity, and trialability). Greater relative advantage, higher compatibility of the product to existing consumer values and behaviour, greater observability of the innovation, low product complexity, and easy trialability all lead to faster and more effective diffusion and product adoption. Production and product design strategies for a number of green consumer product firms were associated mainly with the diffusion characteristics of relative advantage, (low) complexity. Promotion for green consumer product firms in the sample includes traditional and non-traditional marketing communications tools and media. Promotion strategy is associated with diffusion characteristics of observability and compatibility. Pricing strategy was mainly related to trialability, and also may be associated with observability, compatibility and relative advantage. Green distribution strategy success is associated with diffusion characteristics of

compatibility, (low) complexity, observability and easy trialability (all of which can contribute to organizational sustainability).

THEORETICAL EXPOSITION

Green Product and Business Sustainability

Ecological concerns have purpose to design and produce products that decrease consumption of resources and pollution and increase preservation of resources.

Green products are not only efficient, they can provide other benefits, for example, the Light Emitting Diodes (LED) lightening bulb (that has no toxic chemicals in the composition, and lasts longer), is the most power saving alternative when compared to the traditional. General, green products are characterized by being produced from recycled materials, products which can be recycled or reused, organic products, products which meet environmental responsible packaging or other environmental criteria (Joana, 2015). Tomasin, Pereira, Borchardt and Sellitto (2013) noted that green products are best in both resolving problems such as wastage, noise and common harms to environment and serving as an opportunity to generate beneficial products. Today organizations are highly concerned with green products which are lucrative for them because they provide the economic gains to organizations.

Production is one of the meaningful areas in which efficient and sustainable practices can be implemented especially in relation to methods or standards chosen when producing brewery products. Sustainable production practices provides financial and intrinsic benefits especially in the area of increased profit and decreased waste (Muster-Slawitsch, Weiss, Schnitzer & Brunner, 2011). When producing what is referred to as a “clean” beer, meaning a temperature controlled fermentation with specifically isolated yeast strains, the entire process from grain to bottle is more energy intensive. The constituent ingredients require a greater cost and more energy, which once brewed, require their fermentation space to be completely sanitized in order to prevent lingering bacteria from infecting the beer and producing off-flavors. After utilizing more energy and water to sanitize the tanks, the beer content must be kept at under constant refrigeration in order to allow the yeast to ferment at a controlled rate (New Belgium Brewing Company, 2014). While these production methods produce a very consistent product for sale, they require more water and energy intensity than traditional brewing methods (Muster-Slawitsch et. al. 2011).

In comparison to the abundance of “clean” beers found across most store shelves, many breweries are beginning to utilize old-world fermentation techniques to produce more traditional and complex styles. Absent of commercially available yeast, through the method of spontaneous fermentation, brewers are able to inoculate their beer with wild yeast and bacteria through contact with the air of the local environment (Lambic.Info, 2016). This technique not only eliminates the energy and water required to grow and refrigerate isolated yeasts, but creates a unique expression of the local environment within the bottle. Yeast cultures from a laboratory produce a consistent product to ensure that every consumer will receive the same experience; however, similar to winemaking, spontaneously fermented also results in product variation dependent on production date, local seasonality, and climatic conditions (Lambic.Info, 2016).

Regardless of the production method that a brewer chooses to utilize, it is undeniable that brewing produces a large amount of solid waste. After steeping grain and hops in boiling water to extract their sugars and aromas, un-fermented, non-alcoholic, beer is produced (Brewers Association, 2015). The un-fermented beer, filtered and separated from the initial grain in the mash, now begins fermenting with the addition of yeast (Brewers Association, 2015). As these yeast cultures begin to feed on the sugar in-solution the byproduct of their reaction is alcohol, which defines the finished beverage (Brewers Association, 2015). The remainder of this process is the spent grain and hops, also known as solid organic waste. Brewing waste can be disposed through donation, recycling, and compost. Because the spent grain has value as animal feed breweries arrange to donate their organic waste to local farms, both eliminating the cost of feed for the farmer and providing animals with a healthy diet.

A good number of studies have shown significant increase in consumer demand for green enterprises - green products and services, as well as the readiness to patronize firms that are dedicated to societal efforts towards positive environmental impact. Thus explaining the primary motivation behind pursuit of green marketing practices by firms. Manget, Roche and Münnich (2009), in support, found that consumers greatly value the benefits of green products such as superior freshness and taste, the promise of safety and health and savings on energy costs.

Green Price and Business Sustainability

Price refers to the money value the consumer is ready to pay for a bundle of value capable of solving his/her identified needs. It is rightly expected that prices of eco-friendly products will be comparatively higher that the prices of traditional products in view of extra costs incurred in the production process. This main help to reinforce Bukhari (2011) who explains why consumers choose not to buy green products. However, Anvar and Venter (2014) point that younger generation of consumers, demanding green products have greater spending power and are ready to buy at the price.

It is indeed a fact that going green is expensive in respect of new technology installation and equipment, personnel training, absorbing external costs, waste conversion into products recycling. However, we find these costs added in the final product.

Green Place (Distribution) and Business Sustainability Distribution is an essential external aspect of placement activities in the marketing process of a firm's goods and services from production point to consumption point. In this respect intermediaries their interests by strengthening their relationship with their clients in which a two-way distribution system underlined by the green marketing philosophy ensures the relevance and permanence of this relationship. The recycling process underpins the two-way distribution system, which entails the recycling of the remnants of materials used (i.e., empty containers, plastic bags etc.) to their places of production, or point of sale. This system are being applied many developed countries, but in distinct ways. In the United States for instance, specialized organizations re-collect used plastic and glass containers and send them to trademark-owning organizations with whom they have a contractual relationship in exchange for a specified sum of money (Al-Salaymeh, 2013).

By external aspect, however, we mean places for offering the product offerings that have the least harm on the environment (Vlosky, Richard, Ozanne, & Fontenot, 2009).

Energy consumption for delivering the products to customers constitutes a fundamental environmental challenge for most businesses. High cost on this consumption in other to contain the desired environmental impact may drive firms to stick to use of local distribution channels instead of company distribution system.

In Brewery Industry, Weger (2017) noted that the initial delivery of raw ingredients to the facility, and the final distribution of packaged products to the retailer are most important aspects. When considering that the feasibility of running a brewery demands delivery and distribution services, it is important to consider how waste can be reduced from transmission. Similar to any commercial or agricultural industry, a large portion of a product's cost and carbon footprint comes from the process of shipping and receiving orders. Here lies the challenge, i.e. on how to eliminate or, at least, reduce the environmental contamination occasioned by these activities.

Aside the traditional transportation and distribution methods that large breweries utilize to maintain quality and brand presence across the globe, many smaller breweries have begun to utilize a highly efficient method of on-site sales. Rather than distributing product to market, small breweries are defined by selling the majority of production exclusively through the tap room. By requiring customers to visit the facility to enjoy draft selections, as well as bottled beers to-go, this inspires a greater sense of community while drawing more business directly to the site of production (Brewers Association, 2012).

Wholesaling to retailers requires a discounted price as selling products directly to the consumer provides the greatest cost-to benefit for both parties. On-site sales ensure quality control and provide the freshest product available to the consumer, while reducing the overall carbon emission from traditional distribution (Brewers Association, 2012). The intrinsic benefits ontwithstanding, on-site sales also provides extrinsic reward by bringing in more customers who will likely spend more money on drafts, food, and bottles rather than simply purchasing a product from the shelf of their local store. While the environmental impact that individuals create by traveling to the brewery must be considered, eliminating transportation and distribution from the associated cost of brewing causes a direct improvement in operation efficiency.

Kontic (2010) believes that the location of, and accessibility to goods or services have an impact on customers, as most customers are not willing to travel far to purchase a green product, but will rather choose closer alternatives. Therefore, green product marketers aiming to promote their products successfully should position them broadly in the marketplace. Gittell, Magnusson and Mirenda (2015) believe that supermarkets make it convenient for consumers to obtain green products. When green products are easily accessible, green purchasing is encouraged thereby ensuring business sustainability.

Green Promotion and Business Sustainability

Green marketing likewise involves promoting the offerings and corporate image of a business. Sales promotions, direct marketing, public relations, and advertising are some of the means of conveying to the customers the core message of greenness; the latter two approaches are the most extensively used platforms for projecting the green outlook of a firm as per products/services, price, placement, company green orientation. Going green promotions which aims to bridge the business and the community gap, can sometimes require a major public relations initiative. Arseculeratne and Yazdanifard (2014) believe that publicizing products and rationalizing their features and prices could be actualized through green advertising. Firms also inform their stakeholders about the company's environmental preservation commitment attainments through effective green promotional campaigns (Belz and Peattie, 2009; Dahlstrom, 2011).

Green advertising must be legal and consistent with the environment regulation. Nyilasy, Gangadharbatla and Paladino. (2013) suggest that green advertising/marketing must be ethical. Ethical green promotions that are consistent with environmental regulations are believed to be beneficial to achieving company goals**.**

Ansar (2013) believes that advertising is very effective in enhancing the knowledge of the target audience enable them make informed decisions about the products they purchase, consume or dispose, and the impacts of these actions and the product on the environment. Therefore, environmental advertisements can help to enhance motivation towards buying green products. These promotional tactics, if implemented, will attract consumers and will, most likely, influence green purchase decisions by consumers thereby increasing business sustainability.

Empirical Literature

Thoria (2018) investigated the influence of green marketing-mix on consumer purchase intention in Sudan. The study adopted descriptive and quantitative research design in which postgraduate (MBA) students in all the universities in Khartoum State was targeted. 417 Postgraduate students were sampled. Multiple regression analysis was employed in analyzing the data. The study found a significant relationship between green marketing-mix elements - product, pricing, distribution and promotion - and consumer's purchase intention.

Devakumar, Sunil, Sunil, Supeel, Kiran, Bharath, Akshay and Pooja (2016) carried out an empirical study on green marketing strategies for market sustainability with respect to organic products in Malleswaram, Bangalore city, India. In this study, green product, green pricing, green distribution, green promotion were employed as the independent variables while, market sustainability was employed as the dependent variable. Two hundred and fifty nine respondents were sampled. Primary data were sourced with the questionnaire which were analyzed in descriptive statistics and chi-square. The findings of the indicated that green product, green pricing, green distribution and green promotion have significant influence on market sustainability of organic products.

Macharia, Kibera, Munyoki and Kinoti (2017) study attempted to ascertain the extent green marketing practices relates to satisfaction of consumers of soft drinks in Nairobi, Kenya. A total of 180 trade customers and 162 soft drink firms were sampled for the study. Structured questionnaire was used for data collection. Descriptive statistics, correlation, analysis of variance and regression analysis were employed in analyzing the data. The study found a statistically significant positive linear relationship between green marketing practices and customer satisfaction.

Mehdi, Faranak, Ali and Atefeh (2013) studied the effect of green marketing-mix on market share increase in the manufacturing industry of Iran. The study adopted survey research design sourcing primary data with the aid of structured questionnaire. 159 and fifty nine respondents were sampled for the study. Descriptive statistics and Spearman's rank correlation were used to analyze the data. The results revealed green marketing-mix (green product, green pricing, green distribution, green promotion) and market share increase are significantly and positively co-relation and, confirming all the hypotheses.

Bilal, Kalsom, Zainon and Tareq (2016) study carried in Jordan investigated the effects of green marketing strategies on sales turnover of green cars. The study adopted survey research design sampling 332 car dealers. Descriptive statistics and structural equation model were employed in analyzing the data gathered with structured questionnaire. The results showed that while green product, promotion, and green process are positive related to sales growth of green cars, green pricing, green physical evidence, green people and green distribution have negative effect on sales growth of green cars indicating that adopting green marketing strategy may likely lead significant increase in the sales volume of green cars in Jordan.

Rahadian and Rofiaty (2015) study aimed to ascertain the extent to which green marketing and corporate social responsibility influence customer loyalty via brand in Indonesia. A total of 160 respondents were sampled for the study. Data were collected with the questionnaire and analyzed with Structural Equation Models. Results of the study showed that green marketing, and corporate social responsibility effects on brand equity is significantly positive.

Delafrooz, Taleghani and Nouri (2014) examined the influence of green marketing on consumer purchase behaviour in Iran using green marketing proxies - eco-label, eco-brand, and eco-advertising as the measuring constructs. Cluster sampling was employed to derive a sample size of 384 respondents. Spearman correlation test and multiple regression analysis were employed in analyzing the data. The findings indicate that green marketing tools used in the study has significant positive effect on the consumers' purchase behaviour. The results further show that environmental advertisement had the highest significant effect on consumer purchasing behaviour, while eco-brand had the least effect.

Ya-Hui, Ssu-Ting and Nai-Ning (2016) carried out an empirical study investigation of green marketing effect on purchase intention of consumers of green restaurants in Taiwan. In this study green marketing was employed as the independent variable while, green cognition, brand image and purchase intention were employed as the dependent variable. The study adopted survey

research design. 550 patrons were sampled for the study and; structured questionnaire was employed to collect the data (only 508 usable questionnaires were analyzed). Descriptive statistics, confirmatory factor analysis and structural equation modeling were employed in analyzing the data. The results indicate (i) both direct and indirect effects of green marketing through green cognition, on brand-image; (ii) both direct and indirect effects of green marketing through brand-image, on purchase intention. Further, green cognition was not only found to have a direct effect on purchase intention, but also an indirect effect on purchase intention through brand image.

Novela, Novita and Scherly (2018) carried out an empirical investigation of green marketing-mix effect on customer satisfaction with eco-friendly products in Jakarta, Indonesia using 7p approach, focusing on beauty and body treatment products; and sampling 101 residents of Jakarta. Multiple linear regressions were employed in the data analyses. The results of this study indicate significant relationship between customer satisfaction and product, price, promotion proxies of green marketing –mix. Little or partial significant relationship was found to exist between people, and physical evidence proxies of green marketing and customer satisfaction. Among the marketing-mix study constructs, place was found with the weakest influence on customer satisfaction.

Hamdani (2015) investigated the influence of green marketing innovation on purchase intention of Bangladesh consumers using a sample of sixty organic vegetables customers of Yogya Riau Junction Department Store in Bandung. Results of data gathered with the questionnaire and analyzed in descriptive statistics and regression analysis showed that green marketing has significant influence on consumers' purchasing intention of organics vegetables. The study also found that green innovation influence consumers' organics vegetables purchasing intention.

Aditi (2016) investigated the impact of green marketing on consumer purchasing patterns and decision-making in Telangana, India. Data were collected from 231 respondents with the questionnaire and analyzed using descriptive, regression analysis and correlations. The study findings indicate that green packaging branding, and premium green pricing significantly and positively impact consumer behaviour and consequently, green purchases. Place of residence and some environmental belief factors were found to be associated. Eco-labelling, green branding and green pricing were found to be correlated with environmental behaviour of consumers.

Jeevarathnam and Tushya (2016) conducted similar study on South African in which a hundred respondents were surveyed with the questionnaire. Descriptive analyses of the data indicate that South African citizens have high knowledge levels pertaining to and are favourably disposed to environmental issues. Findings indicate that green promotions raise the consumers' awareness which drive positive consumption behavioural change resulting in preference of green products to traditional alternatives, and general predisposition to patronize socially responsible retailers by a large proportion of the respondents. Further, the consumers' purchase decisions are found to be largely affected by their price sensitiveness, although no significant difference between low and high income earners as pertains to price sensitivity was found. Overall, differences found in the knowledge/awareness of environmental issues among lower and higher qualified respondents was not significant enough.

Novera (2013) in a similar research study aimed to determine the factors that drive consumer intentions towards buying green products in Karachi, Pakistan. Green price, eco-advertising and eco-packaging were the independent variable, while green purchase intention was employed as the dependent variable. 384 respondents were sampled. T-test, ANOVA, and correlation analysis were employed in analyzing the data. The results of the study showed that green price, eco-advertising and eco-packaging are positively correlated with consumer green purchase intention.

Fariddeddin, Morteza and Azam (2013) assessed the influence of green marketing on consumer purchase intentions in Iranian retail-sale environment using company image as a mediator. Company's social responsibility, product image and corporate reputation were studied as proxies of corporate image. Data were sourced from 284 respondents in Isfahan province with the aid of questionnaire. Descriptive statistics, structural equation model and t-statistics were used in analyzing the data. The results indicate that green marketing has a significant effect on social responsibility and product image. The effect of green marketing on corporate reputation is not statistically significant and the three proxies of corporate image have a direct effect on intention to purchase. Given the indirect effects among the variables, green marketing is concluded to have a significant effect on intention to purchase.

Zainab, Darakhshan and Kiran (2017) investigated the factors that drive firm's green marketing efforts and consumer purchase intentions in Pakistan's city. Two hundred and fifty students from University of Sargodha in Sargodha City of Pakistan were sampled for the study. Correlation and multiple regression analysis were employed in analyzing the data obtained with the aid of the questionnaire. The study results indicated that consumer satisfaction, environmental protection, consumer awareness and behaviour significantly impact consumers' purchase intention.

Joana (2015) examined the impact of green marketing practices on consumer buying-decision in Lisbon. The study sampled 250 respondents using the questionnaire to collect the primary data which were analyzed in descriptive statistics. Results of the study show that customers tend to be influenced by green marketing practices and are more motivated when abreast of the environmental issues. Findings further indicated that customers are still not very clear about companies' intentions when engaging these green marketing approaches.

Zuhairah and Noor (2015) appraised the extent green-innovation and green-promotion of green marketing strategy impact firm's performance in Malaysia. The study adopted ex post facto research design. Content analysis of the data showed that green innovation and green promotion have a positive effect on the firms' performance.

Back here in Africa, Amegbe, Owino and Nuwasiima (2017) investigated the domain of green marketing orientation on the performance of small- and medium-sized businesses in Ghana. Operators in the cities of Accra and Tema in the Greater Accra region constituted the population of the study. A total of one hundred and twenty eight respondents were sampled for the study. Structural equation modeling was employed in analyzing the data gathered with questionnaire. Results of the study indicate that there exists a strong relationship between green orientations -

employee satisfaction, customer satisfaction, employee retention and company image and performance of the firms. Further, stronger impact of the green marketing dimensions was found to exist on the customer business-to-business satisfaction and employee retention.

Summarily, it is clear from foregoing that the extant empirical studies ignored firm sustainability thereby revealing a knowledge gap. Interestingly, no empirical study that covered the effect of green marketing strategy on sustainability of brewery firms in Nigeria, particularly the South-East geo-political zone which he thrust of the present study could be accessed. Hence, this study is hypothesized to fill this knowledge gap.

METHODOLOGY

This study adopted descriptive survey research design. The study covered South-East of Nigeria consisting of Abia State, Anambra State, Ebonyi State, Enugu State and Imo State. The inhabitants of the geo-political zone are predominantly Igbo. The study area was chosen because of the considerable number of brewery companies located in it – seven. Employees of managerial cadre of these companies constituted the unit of enquiry covering the period, from 2010 to 2018.

Sample and Sampling

The study sample was 324 drawn from a population of 1709 of the specified employee cadre of the companies, using Taro Yamane sampling formula. The sample was further distributed proportionally among the seven breweries. Thereafter, the respondents were randomly selected through balloting technique.

Measuring Instrument

The questionnaire was employed to gather the primary data needed for the study. The questionnaire was a modified Likert rating scale, from 5-point to 4-point; i.e. between 1 and 4 (where, 1=Strongly disagree, 2=Disagree, 3=Agree and 4=Strongly agree). The modification eliminated the mid-point 'no opinion/uncertain' on the ground that a respondent who "strongly disagree" provided meaningfully directional measurable opinion that one that is "not sure".

The instrument was face, content and construct validated by competent marketing academics while, its reliability was ensured through a test re-test pilot testing that produced an overall Cronbach Alpha coefficient value of 0.761 which falls above the acceptable threshold of between 1.0 and 0.70 set by Nunnally (1978).

Method of Data Analysis

The collected study data the questionnaires were analyzed in percentages; frequency tables; and multiple regression analysis (particularly for hypotheses testing) using the Statistical Package for Social Science (SPSS) version 23 (2015). The regression model is functionally specified thus:

SUS = f(GPRO, GPRI, GPLA, GPR)
where:
SUS = Sustainability

GPRO = Green Product
GPRI = Green Price
GPLA = Green Place
GPR = Green Promotion

The functional model is presented in econometric form as:
$SUS = \alpha + \beta_1 GPRO + \beta_2 GPRI + \beta_3 GPLA + \beta_4 GPR + ę$
where:

A = Constant term
B = Beta coefficients
$\beta_1 - \beta_4$ = Independent variables
ę = Error term

Various tests were used to evaluate the multiple regression analysis which includes T-statistics, R-squared, F-statistics, Durbin Watson statistics:

The Coefficient of Determination (R^2)/Adjusted R^2: The square of the coefficient of determination R^2 or the measure of goodness of fit is used to judge the explanatory power of the explanatory variables on the dependent variables. The R^2 denotes the percentage of variations in the dependent variable accounted for by the variations in the independent variables. Thus, the higher the R^2, the more the model is able to explain the changes in the dependent variable. Hence, the better the regression based on OLS technique, and this is why the R^2 is called the co-efficient of determination as it shows the amount of variation in the dependent variable explained by explanatory variables. However, if R^2 equals one, it implies that there is 100% explanation of the variation in the dependent variable by the independent variable and this indicates a perfect fit of regression line. While, where R^2 equals zero, it indicates that the explanatory variables could not explain any of the changes in the dependent variable. Therefore, the higher and closer the R^2 is to 1, the better the model fits the data. Note that the above explanation goes for the adjusted R^2.

The F-test: The F-statistics is used to test whether or not, there is a significant impact between the dependent and the independent variables. In the regression equation, if calculated F is greater than the F table value at the chosen level of significance, then there is a significant impact between the dependent and the independent variables in the regression equation.

Durbin-Watson (DW) Test: The Durbin-Watson (DW) test is appropriate for the test of second-order auto-correlation and it has the following criteria.

1. If d* is approximately equal to 2 (d* =2), we accept that there is no auto-correlation in the function.
2. If d*= 0, there exist perfect positive auto-correlation. In this case, if 0<d*< 2, i.e. if d* is less than two but greater than zero, denoting that there is some degree of positive auto-correlation, which is stronger the closer d* is to zero.

3. If d* is equal to 4 (d*=4), there exist a perfect negative auto-correlation, while if d* is less than four but greater than two (2<d*< 4); it means that there exist some degree of negative auto-correlation, which is stronger the higher the value of d*.

T-statistics: The t-statistics test tells if there is an existence of any significance relationship between the dependent variable and the explanatory variables. The t-test was conducted at 0.05 or 5% level of significance. **Decision rule**: Reject H_0 if $t_{cal} > t_{\alpha/2}$, (n-k). Otherwise, we accept.

RESULTS AND FINDINGS

The primary data collected for the study with the aid of questionnaire were presented and analyzed in the tables shown below. 324 copies of the questionnaire were administered to the respondents; 316 copies were returned, while 313 copies properly filled and found usable were analyzed. This gave a response rate of 96.6 percent.

Respondents' Demographics

Table 1: Distribution of Respondents by Gender

	Frequency	Percent	Valid %	Cumulative %
Male	210	67.1	67.1	67.1
Female	103	32.9	32.9	100.0
Total	**313**	**100.0**	**100.0**	

Table 1 above showing gender distribution of the respondents indicates that there are more male respondents than female. While 210 respondents representing 67.1% were male, the remaining 103 respondents accounting for 32.9% were female. This indicates that there are more male respondents than female.

Table 2: Distribution of Respondents by Chronological Age

	Frequency	Percent	Valid %	Cumulative %
20 - 30 years	96	30.7	30.7	30.7
31 - 40 years	137	43.8	43.8	74.4
41 - 50 years	59	18.8	18.8	93.3
51 years & above	21	6.7	6.7	100.0
Total	**313**	**100.0**	**100.0**	

The age distribution of the respondents indicates that 96(30.7%) respondents fall within the age bracket of 20 to 30 years, and 137(43.8%) respondents fall within the age bracket of 31 to 40 years. While 59 respondents representing 18.8% fall within the age bracket of between 41 to 50 years, 21 respondents accounting for 6.7% fall within the age bracket of 51 years and above.

Table 3: Distribution of Respondents by Marital Status

	Frequency	Percent	Valid %	Cumulative %
Single	133	42.5	42.5	42.5
Married	180	57.5	57.5	100.0
Total	**313**	**100.0**	**100.0**	

Table 3 showed the marital status of the respondents. The results indicate that 133 of the respondents accounting for 42.5% were single, while 180 respondents representing 57.5% were married indicating that majority of the respondents are married.

Table 4: Distribution of Respondents by Educational Qualification

	Frequency	Percent	Valid %	Cumulative %
SSSC/GCE	48	15.3	15.3	15.3
OND/NCE	114	36.4	36.4	51.7
B.Sc./HND	123	39.3	39.3	91.0
M.Sc./MBA	25	8.0	8.0	99.0
Ph.D/others	3	1.0	1.0	100.0
Total	**313**	**100.0**	**100.0**	

The above table indicates that 48(15.3%) respondents hold SSCE/GCE certificate; 114(36.4%) respondents have OND/NCE; 123 respondents accounting for 39.3% possess B.Sc./HND; 25 respondents accounting for 8% have M.Sc./MBA; while three respondents accounting for just 1% have PhD/others certificates as their educational qualification. It is clear from the results that majority of the respondents possess higher educational background.

Table 5: Distribution of Respondents by Years of Service

	Frequency	Percent	Valid %	Cumulative %
1 - 10 years	162	51.8	51.8	51.8
11 - 20 years	106	33.9	33.9	85.6
21 - 30 years	36	11.5	11.5	97.1
31 years & above	9	2.9	2.9	100.0
Total	**313**	**100.0**	**100.0**	

The table above indicates that 162 respondents representing 51.8% have been with their organization for between 1 to 10 years, 106(33.9%) have worked for the firm for between 11 and 20 years, 36 respondents accounting for 11.5% have been with the organization for between 21 to 30 years while, the remaining 2.9%(9) of the respondents have been with the organization. This results show that greatest percentage of the respondents have worked with their organization considerable number of years.

From the foregoing results, the responses and opinions expressed by the respondents in this inquiry would be deemed reliable given their background.

Regression Results

The regression results presented in the tables below are the outcome of tests of the hypothesized effect of the independent variables on the dependent variable, and the coefficient of determination (R^2) which is the most common measure used to predict and evaluate the predictive accuracy of a structural model; showing the combined effects of the independent variables on the dependent variable. The R^2 points of 0 to 1 with the higher points is indicative of a higher level of predictive accuracy, which explains the extent to which the variability of a factor can be caused or explained by their relationship with other factors.

The ANOVA examined the main effect of independent variables to dependent variable. The effect size (F^2) further assessed the R^2 for all endogenous constructs to understand the significance of their impact, as well as the substantive influence of the predictor construct on the dependent variable.

Table 6: Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.732[a]	.554	.442	3.068	1.942

a. *Predictors*: (Constant) Green products , Green price , Green promotion , Green place

b. *Dependent variable*: Sustainability

Table 7: ANOVA Results

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	164.820	5	41.205	14.378	.002[a]
	Residual	2899.065	308	9.413		
	Total	3063.885	313			

a. *Predictors*: (Constant) Green products , Green price , Green promotion , Green place

b. *Dependent variable*: Sustainability

Table 6 recorded R square (R^2) value of 0.554 indicating that green product, green pricing, green promotion and green place explains moderately 55.4% of the variations in sustainability of breweries in South-East of Nigeria. The Durbin-Watson statistics value of 1.942 showed that the variables in the model are not auto-correlated and are therefore, reliable for predictions.

The F-statistics value of 14.378 with a probability value of 0.002 in table 7 indicated that the independent variables (green product, green pricing, green promotion and green place) has significant collective effect on the dependent variable (sustainability). This result showed that green product, green pricing, green promotion and green place can collectively account for the variations in sustainability of breweries in South-East of Nigeria.

Test of Hypotheses

The four hypotheses of the study were tested using the t value and probability value in the regression coefficients outcome. The table below shows the results:

Table 8: Coefficient of the Regression Result

Model		Unstandardized Coefficients		Standardized Coefficients		
		B	**Std. Error**	**Beta**	**T**	**Sig.**
1	(Constant)	15.242	2.060		7.400	.000
	Green promotion	.169	.066	.060	2.042	.002
	Green place	.104	.071	.003	2.056	.005
	Green price	.203	.064	.187	3.175	.000
	Green products	.125	.076	.100	2.652	.002

a. *Dependent variable*: Sustainability

Hypothesis one

Ho: Green product has no significant effect on sustainability of breweries in South-East of Nigeria.

Ha: Green product has significant effect on sustainability of breweries in South-East of Nigeria.

Table 8 indicates that green product recorded a t-value of 2.652 with an alpha value of 0.002 which is statistically significant at 5% level of significance. Based on this, the null hypothesis is rejected, while the alternative hypothesis is accepted. Therefore, green product has significant positive effect on sustainability of breweries in South-East of Nigeria.

Hypothesis two

Ho: Green price has no significant effect on sustainability of breweries in South East of Nigeria.

Ha: Green price has significant effect on sustainability of breweries in South East of Nigeria.

As shown by table 8, green price has a t-value of 3.175 with a probability value of 0.000 which is statistically significant at 5% level of significance. Since these values are within the acceptable threshold, we reject the null hypothesis and accept the alternate hypothesis. Hence, green price has significant positive effect on sustainability of breweries in South-East of Nigeria.

Hypothesis three

Ho: Green place (distribution) has no significant effect on sustainability of breweries in South-East of Nigeria.

Ha: Green place (distribution) has significant effect on sustainability of breweries in South-East of Nigeria.

From same table 8, green place (distribution) recorded a t-value of 2.056 at a probability value of 0.005 which is within the acceptable threshold, therefore, we reject the null hypothesis and accept the alternate hypothesis, hence green place (distribution) has significant positive effect on sustainability of breweries in South-East of Nigeria.

Hypothesis four

Ho: Green promotion has no significant effect on sustainability of breweries in South-East of Nigeria.

Ha: Green promotion has significant effect on sustainability of breweries in South-East of Nigeria.

Green promotion recorded a t-value of 2.042 with an alpha value of 0.002 which is highly statistically significant; we reject the null hypothesis and accept the alternate hypothesis which states that green promotion has significant positive effect on sustainability of breweries in South-East of Nigeria.

DISCUSSION OF FINDINGS

From the results it was ascertained that Green product has significant positive effect on sustainability of breweries in South-East of Nigeria. This implies that environmental friendliness of all the elements of the product such as the materials used in its production, the production process and the product packaging influences the sustainability of breweries in South-East of Nigeria. This tallies with the position of Aditi (2016), and Tomasin, Pereira, Borchardt and Sellitto (2013) that green product helps in maintaining and improving on the natural environment conservation of energy resources, and the reduction or elimination use of poisonous materials, pollution and wastes, and the concomitant problems of wastage, noise and common harms to environment.

The study also found green price to have significant positive effect on sustainability of breweries in South-East of Nigeria implying that economic and environmental costs of production and marketing have significant influence on the sustainability of breweries in the study area. The results also align with the findings of Devakumar, et al. (2016) that green pricing has significant influence on market sustainability of organic products.

Further, the study found that green place (distribution) has significant positive effect on sustainability of breweries in South East of Nigeria. This implies that the effective logistics management which take cognizance of environmental conditions and requirements in the movement of raw materials and finished products has influence on the sustainability of breweries in South East Nigeria. This agrees with the findings of Devakumar, et al. (2016) that green distribution has significant influence on market sustainability of organic products.

Finally, green promotion was found to have significant positive effect on sustainability of breweries in South-East of Nigeria. This implies that providing genuine information about the

products in a way that does not harm the materialistic and moral interests of the customers has significant influence on sustainability of breweries in South-East Nigeria. This agrees with the position of Dahlstrom (2011) that green promotion also affords firms to inform their stakeholders about the company's environmental preservation commitment attainments through effective green promotional campaigns. And also collaborates the findings of Devakumar, et al. (2016) that green promotion has significant influence on market sustainability of organic products.

CONCLUSION

Global warming and greenhouse effect is a serious environmental problem facing mankind today, as it also affects the sustainable development of breweries given that most of their inputs come from the environment. With the increasing popularity of society's environmental awareness and consciousness, environmental impact of activities of brewery industry as constituted an issue for concern hence green marketing becomes a business trend in this industry. Based on the findings of this study, therefore, the study concludes that green marketing has significant positive effect on sustainability of brewery firms in South East-Nigeria. This implies that brewery firms implementing green marketing strategy can enhance its sustainability by activating healthy eco-practices that will attract environmentally conscious customers to patronize their products.

RECOMMENDATIONS

The significant positive effect of green-marketing (product, price, promotion and distribution) strategy on sustainability of brewery firms in South-East of Nigeria only suggests that the firms should maintain and further strengthen these their competency areas and so keep abreast of global environmental responsibilities and developments in product manufacturing sustainability.

There is need that recognize the importance of green marketing potential in terms of trends, shaping customers' behaviour, and add value to products and services by keeping abreast of global developments in product manufacturing sustainability.

Getting their prices right is very key. Firms should endeavour to undertake proper price trend analysis to enable place prices on goods can generate commensurate returns, because price influences customer purchase decisions. Customers are fully aware of product attribute bundles and are prepared to pay extra if they need to, but also would back out if they feel they are being short-changed.

The industry operators should implement marketing activities that guard the environment through the entire product life-cycle; produce products that meet the environmental standards; use recyclable in producing packaging, apply acceptable pollution control methods, and operate at energy efficiency level.

Consumers are learning about climatic change and environmental issues through the mass media and advertisements. This presents an opportunity for new and existing businesses to invest more in green promotion in order to enhance their sustainability.

CONTRIBUTION TO KNOWLEDGE

This study contributes to body of knowledge by investigating and validating the relationship between green marketing and sustainability of brewery firms located in the South-East of Nigeria. This study also provided empirical evidence that green marketing mix can lead to sustainability of breweries in South-East, Nigeria. The study certainly closed the gap in the existing literature and the body of knowledge. It hopes to serve as a stimulus for further research into green marketing, an area that has been receiving considerable global attention in recent years.

From the study results, we contributed to this area of knowledge that green product, green pricing, green promotion and green place had a significant positive effect on sustainability of breweries in South-East of Nigeria. This is econometrically expressed thus:

$SUS = \beta o + \beta_1 GPRO\ (0.125\ [0.002]) + \beta_2 GPRI\ (0.203\ [0.000] + \beta_3 GPLA\ (0.104\ [0.005] + \beta_4 GPR\ (0.169\ [0.002])$

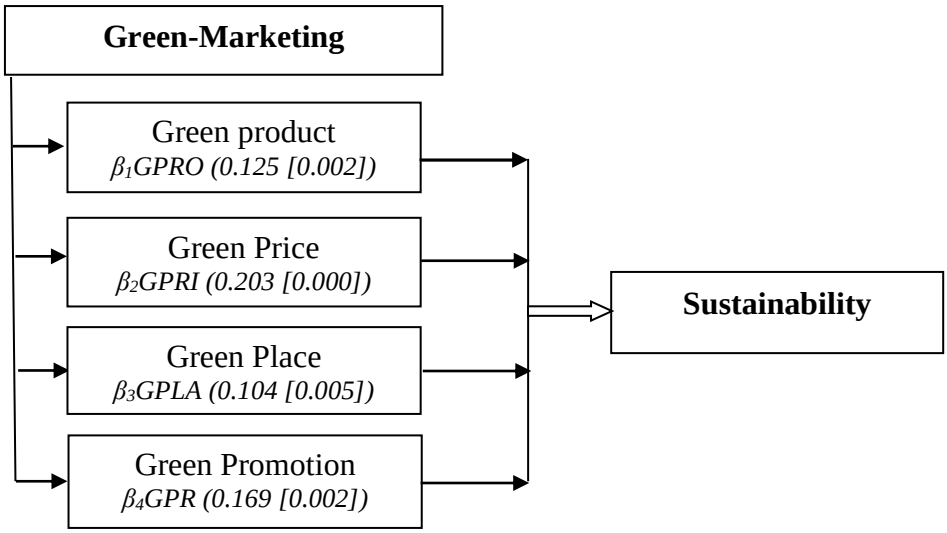

Figure 1*: Graphical representation of contribution to knowledge of green-marketing*

Suggestion for Further Studies

1. Similar studies should be replicated in other industries.
2. Effect of green marketing on consumer behaviour should be examined.
3. Studies could be undertaken to identify the effect of green marketing on environmental behaviour of consumers.

REFERENCES

Abzari, M., Faranak, S.S., Sharbiyani, A.A., & Morad, A.P. (2013). Studying the effect of green marketing on market share increase. *European Journal of Natural and Social Sciences*, 2(3), 641-653.

Aditi, J. (2016). A study of the impact of green marketing on consumer purchasing patterns and decision making in Telangana, India. *MSc Thesis* in Management, National College of Ireland.

Al-Salaymeh, M. (2013). The application of the concept of green marketing in the productive companies from the perspective of workers. *Interdisciplinary Journal of Contemporary Research in Business*, 4, 634-641.

Amegbe, H., Owino, J.O., & Nuwasiima, A. (2017). Green marketing orientation (GMO) and performance of SMEs in Ghana. *American Journal of Management*, 11(1) 99-109.

Ankit, G., & Mayur, R. (2013). Green marketing: Impact of green advertising on consumer purchase intention. Advances in Management, 6(9): 14-17.

Ansar, N. (2013). Impact of green marketing on consumer purchase intention. *Mediterranean Journal of Social Sciences*, 4(11), 650-655.

Anvar, M., & Venter, M. (2014). Attitudes and purchase behaviour of green products among Generation Y Consumers in South Africa. *Mediterranean Journal of Social Sciences* (online), 5(21), 183-194.

Anyasor, O.M. (2015). *Contemporary basic marketing.* Enugu: Gostak Printing and Publishing Co. Ltd.

Arseculeratne, D., & Yazdanifard, R. (2014). How green marketing can create a sustainable competitive advantage for a business. *International Business Research*, 7(1), 130-137. DOI: 10.5539/ibr.v7n1p130. https://www.researchgate.net/publication/260219823HowGreenMarketingCanCreateaSustainableCompetitiveAdvantageforaBusiness

Awan, U. (2011). Green marketing: Marketing strategies for the Swedish energy companies. *International Journal of Industrial Marketing*, 1(2), 1-19.

Ballinger, C. (2011). HR's role in embedding a responsible approach to business. *Impact, Chartered Institute of Personnel and Development, 37, 10-11.*

Belz, F.M., & Peattie, K. (2009). *Sustainability marketing: A global perspective*. Chichester: Wiley.

Bilal, M.E., Kalsom, A.W., Zainon, M.S., & Tareq, F.O. (2016). Effects of green marketing strategies on sales volume of green cars. *Singaporean Journal of Business Economics and Management Studies*, 5(3), 41-54. http://ciscobinary.openh264.org/openh264-win642e1774ab6dc6c43debb0b5b628bdf 122a391d521.zip DOI: 10.12816/0031491

Boudreau, J. W. and Ramstad, P. M. (2005). Talentship, talent segmentation, and sustainability: A new HR decision science paradigm for a new strategy definition. *Human Resource Management, 44(2), 129-136.* DOI: 10.1002/hrm.20054. https://www.researchgate.net/publication/227495151TalentshiptalentsegmentationandsustainabilityAnewHRdecisionscienceparadigmforanewstrategydefinition

Brewers Association (2012). *Brewer's resource directory: Benchmarking and best practices survey results.* Boulder, Colorado: Brewers Publications.

Brewers Association (2015). *Brewer's Association: 2015 sustainability and benchmarking report.* Boulder, Colorado: Brewers Publications.

Bukhari, S.S. (2011). Green marketing and its impact on consumer behaviour. *European Journal of Business and Management* (online), 3(4), 375-383.

Carter, M. (2016) Organizational sustainability. http://managementhelp.org/organizational sustainability/

Charter, M. & Clark, T. (2007). Sustainable Innovation: Key conclusions from Sustainable Innovation Conferences 2003–2006 organized, The Centre for Sustainable Design.

Charter, M. (1991). *Greener marketing: A responsible approach to business.* Sheffield, UK: Greenleaf Publishing.

Cheah, I., & Phau, I. (2005). *Toward a framework of consumers' willingness to environmentally friendly products: A study of antecedents and moderator*, ANZMAC 2005 Conference: Social Not-for-Political Marketing.

Coddington, W. (2003). *Environmental marketing: Positive strategies for reaching the green consumer*. New York: McGraw-Hill Companies.

Dahlstrom, R. (2011). *Green marketing management.* Cengage Learning.

Delafrooz, N., Taleghani, M., & Nouri, B. (2014). Effect of green marketing on consumer purchase behaviour. *QScience Connect: A Qatar Foundation Academic Journal*, 5, 1-9.

Devakumar, G., Sunil, K.B.K., Sunil, P., Supeel, H.S., Kiran, V.E., Bharath, K.B.V., Akshay, V.B., & Pooja, A.B. (2016). An Empirical Study on Green Marketing Strategies for Market Sustainability with Respect to Organic Products. *RUAS -UAS JMC*, 3(2), 33-38.

Diglel, A., & Yazdanifard, R. (2014). Green marketing and its influence on buying behaviour and the attitudes of purchasers towards eco-friendly products. *Global journal of Management and Business Research*, 7(11), 11-18.

Eccles, R., Ioannou, I. & Serafeim, G. (2011). *The Impact of a Corporate Culture of Sustainability on Corporate Behaviour and Performance.* Harvard Business School Working Paper 12-035.

Eneizan, B.M., & Wahab, K.A. (2016). Effects of green marketing strategy on the financial and non-financial performance of Firms: A Conceptual Paper. *Arabian Journal of Business and Management Review*, 6(5), 1-7.

Fan, H., & Zeng, L. (2011). Implementation of green marketing strategy in China: A study of the green food industry. *M.Sc. Thesis*, University of GAVLE, China.

Fariddeddin, A.H., Morteza, R.D., & Azam, Y. (2013). Effect of green marketing on consumer purchase intentions with regard to the company's image as a mediator in the retail setting case study: The Customers of Naghshe-e Jahan Sugar Company. *International Journal of Academic Research in Business and Social Sciences*, 3(11), 442-452.

Ford (2012). http://corporate.ford.com/doc/corpgov_sustainability_committee_ charter.pdf

Gittell, R., Magnusson, M., & Mirenda, M. (2015). *Green marketing strategy and the four P's of marketing*.
http://catalog.flatworldknowledge.com/bookhub/reader/3157?e=gittell1.0ch06*s 02*

Grant, J. (2008). Green marketing. *Strategic Direction*, 24(6), 25-70.

Hamdani, D. (2015). The influence of green marketing and innovation green on purchase intention (Study on consumers' organics vegetables purchasing at Yogya Riau Junction

Department Store in Bandung). First International Conference on Economics and Banking, Published by Atlantis Press.

Hashem, T.N., & Al-Rifai, N.A. (2011). The influence of applying green marketing mix by chemical industries companies in three Arab States in West Asia on consumer's mental image. *International Journal of Business and Social Science*, 2(3), 92-101.

Jeevarathnam P.G., & Tushya, L.G. (2016). The influence of green marketing on consumer purchase behaviour. *Environmental Economics*, 7(2), 77-85.

Joana, C.G.F. (2015). The impact of green marketing practices on consumer buying decision. *Master Dissertation* in Business Administration, University Institute of Lisbon.

Kielstra, P. (2008). *Doing Good: Business and the Sustainability Challenge*. Economist Intelligence Unit Report.

Kontic, I. (2010). Greening the marketing mix: A case study of the Rockwool Group (online). http://www.diva-portal.org/smash/get/diva2:329044/FULLTEXT01.pdf

Kotler, P., & Armstrong, G., (2008) *Principles of Marketing*, seventh edition. Englewood Cliffs, New York: Prentice-Hall.

Kumar, P., & Ghodeswar, B.M. (2015). Factors affecting consumers' green product purchase decisions. *Marketing Intelligence and Planning*, 33(3), 330-347.

Lambic.Info. (2016). *An Overview of Lambic: Brewing Lambic*. http://www.lambic.info/ AnOverviewofLambic

Lao, K. (2014). Research on mechanism of consumer innovativeness influencing green consumption behaviour. *Nankai Business Review International*, 5(2), 211-224.

Larashati, H., Hudrasyah, H., & Chandra, N. (2012). 7Ps of green marketing as factors influencing willingness to buy towards environmentally friendly beauty products. In Proceedings of International Conference on Business Management & IS (No. 1).

Macharia, R.W., Kibera, F.N., Munyoki, J.N., & Kinoti, M.W. (2017). Relationship between green marketing practices and customer satisfaction in the soft drink industry in Nairobi Kenya. *European Journal of Business and Management*, 9(6), 69-81.

Manget, J., Roche, C., & Münnich, F. (2009). *Capturing the Green Advantage for Consumer Companies* (online). Boston: The Boston Consulting Group.

Mark, H. (2016). Building 360 Organizational Sustainability. Ivey Business Journal, Retrieved from http://iveybusinessjournal.com/publication/building-360-organizational - sustainability/

Mehdi, A., Faranak, S.S., Ali, A.A.S., & Atefeh, P.M. (2013). Studying the effect of green marketing mix on market share increase. *European Online Journal of Natural and Social Sciences*, 2(3) 641-653.

Mendleson, N. (1994). Environmental marketing business partnering at AFC-developing strategic alliances. Proceedings of the 1994 Conference (pp. 87-103). Sydney: Environmental Marketing: Critical Success Strategies for Reaching the Green Consumer.

Muster-Slawitsch, B., Weiss, W., Schnitzer, H., & Brunner, C. (2011). The green brewery concept – energy efficiency and the use of renewable energy sources in breweries. *Applied Thermal Engineering*, 31(13), 2123-2134.

New Belgium Brewing Company (2015) *Sustainability and business: A force for good.* 2015 Sustainability Report. New Belgium Sustainability Committee. Fort Collins, Colorado.

Nidumolu, R., Prahalad, C. K. & Rangaswami, M. R. (2009). Why sustainability is now the key driver of innovation, *Harvard Business Review*, 87(9), 56-64.

Novela, S., Novita, E., & Scherly, H. (2018). Analysis of green marketing mix effect on customer satisfaction using 7p approach. *Pertanika Journal of Social Science and Humanities*, 26(T), 131-144.

Novera, A. (2013). Impact of green marketing on consumer purchase intention. *Mediterranean Journal of Social Sciences*, 4(11), 650-655.

Nunnally, J. L. (1978). Psychometric Theory. New York: McGraw Hill Inc.

Nyilasy, G., Gangadharbatla, H., & Paladino, A. (2013). Perceived greenwashing: The interactive effects of green advertising and corporate environmental performance on consumer reactions. *Journal of Business Ethics*, 3(1), 34-44.

Ottman, J. (2011). The new rules of green marketing: Strategies, tools, and inspiration for sustainable branding. Berrett-Koehler Publishers.

Peatti, K, (2001). Golden goose or wild goose: The hunt for the green consumer. *Business Strategy and the Environment*, 10(4), 99-187.

Prakash, A. (2002) Green marketing, public policy and managerial strategies. *Business Strategy and the Environment*, 11(5), 285-297.

Pride, W.M., & Ferrell, O.C. (1995). *Marketing: Concepts and strategies*. Houghton: Mifflin.

Rahadian, Y.D., & Rofiaty, S. (2015). The effect of green marketing, corporate social responsibility on brand equity and customer loyalty. *European Journal of Business and Management*, 7(34), 93-103.

Rahbar, E., & Abdul, W.N. (2011). Investigation of green marketing tools' effect on consumers' purchase behaviour. *Business Strategy Series*, 12(2), 73-83.

Rex, E., & Baumann, H. (2007). Beyond ecolabels: What green marketing can learn from conventional marketing, *Journal of Cleaner Production*, 15(6), 567-576.

Schoell, W.F., & Guiltinan, J.P. (2003). *Marketing essentials.* Boston: Allyn and Bacon.

Sharma, A. & Iyer, G.R. (2012). Resource-constrained product development: Implications for green marketing and green supply chains. *Industrial Marketing Management*, 41, 599-608.

Sharma, Y. (2011). Changing consumer behaviour with respect to green marketing: A case study of consumer durables and retailing. *International Journal of Multidisciplinary Research*, 1(4), 152-162.

Shil, P. (2012). Evolution and future of environmental marketing. *Asia Pacific Journal of Marketing and Management Review*, 1(3), 74-81.

Shirsavar, H.A., & Fashkhamy, F. (2013). Green marketing: a new paradigm to gain competitive advantage in contemporary business. *Trends in Advanced Science and Engineering*, 7(1), 12-18.

Singh, G. (2013). Green: the new colour of marketing in India. *ASCI Journal of Management,* 42(2), 52-72.

Singh, P.B., & Pandey, K.K. (2012). Green marketing: Policies and practices for sustainable development. *Integral Review*, 5(1), 22-30.

Solvalier, I. (2010). Green marketing strategies case study about ICA group AB. *M.Sc. Thesis*, Karlstad University, Karlstad, Sweden.

Thoria, O.M. (2018). Impact of green marketing mix on purchase intention. *International Journal of Advanced and Applied Sciences*, 5(2), 127-135.

Tomasin, L., Pereira, G. M., Borchardt, M., & Sellitto, M. A. (2013). How can the sales of green products in the Brazilian supply chain be increased? *Journal of Cleaner Production, 47, 274-282.*

Tseng, S.C., & Hung, S.W. (2013). A framework identifying the gaps between customers' expectations and their perceptions in green products. *Journal of Cleaner Production*, 59, 174-184.

United Nation's Brundtland Commission (1987). Report of the World Commission on Environment and Development: Our Common Future. https://sustainabledevelopment.un.org/content/documents/5987our-common-future.pdf

Vlosky R., Ozanne, L. K and Fontenot, R. J. (1999). A conceptual model of US consumer willingness to pay for environmental certified wood products. *Journal of Consumer Marketing, 16(2), 122-140.* DOI: 10.1108/07363769910260498. https://www.researchgate.net/publication/247614886AconceptualmodelofUSconsumerwillingnesstopayforenvironmentalcertifiedwoodproducts

Weger, B. (2017). Sustainability in the brewing industry: The greater effect. *Undergraduate Honors Theses*, University of Colorado. https://scholar.colorado.edu/honrtheses/1466

Welford, R. (2000). *Hijacking environmentalism*. London: Earthscan.

Ya-Hui, W., Ssu-Ting C., & Nai-Ning, C. (2016). An empirical study of the effect of green marketing on purchase intention – Evidence from green restaurant. *Advances in Management & Applied Economics,* 6(4), 1-14.

Yazdanifard, R., & Mercy, I.E. (2011). The impact of green marketing on customer satisfaction and environmental safety. In the 2011 International Conference on Computer Communication and Management, IACSIT Press, Singapore, 5, 637-641.

Zainab, A., Darakhshan, K. & Kiran, P. (2017). Factors influence consumer purchase intentions in green marketing. *Global Journal of Human Resource Management*, 5(2), 8-13.

Zuhairah, H., & Noor, A.A. (2015). The impact of green marketing strategy on the firm's performance in Malaysia. *Procedia - Social and Behavioural Sciences,* 172, 463-470.