GREEN MARKETING AND SUSTAINABLE DEVELOPMENT: AN EMPIRICAL STUDY OF LOCAL GOVERNMENT AREAS IN RIVERS OF NIGERIA

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Abstract:

This paper investigates the influence of green marketing on sustainable development. The data collection instrument used was a questionnaire which was administered to a total sample of 200 management Staff of four Local Government Areas (Port-Harcourt, Obio-Akpor, Emohua and Ikwerre) in Rivers State of Nigeria. Sample selection was based on the purposive sampling technique. The demographic data was analyzed using mean, and standard deviation. The analysis involved statistical methods such as reliability and validity tests and regression test between independent and dependent variables. The research findings supported the hypotheses that green marketing significantly affect economic sustainability, green marketing significantly affect environmental sustainability and green marketing significantly affect social sustainability. The study recommends that Local government administrators should adopt green marketing practices that will enhance economic, environmental and social sustainability to enable them achieve sustainable development.

Keywords: Green Marketing, Local Government, River State, Sustainable Development

I INTRODUCTION

In recent times green marketing has become popular as society becomes increasingly aware of environmental pollution and unethical business practices, leading to sophisticated concern about the natural environment. Businesses have awakened to modify their business practices in an attempt to contend with society's "new" concerns ([1]. As environmental consciousness spreads globally organizations have been driven to embrace green consciousness, and intensify their efforts in developing green marketing practices capable of reducing pollution and hazards ([2],[3], [4]). .

Previous studies on green marketing centered on impact of green marketing strategy on

firms' performance (eg.,[5],[6],[8]). Similarly, some recent scholarly enquires on the importance of green marketing have accumulated. For example, FuiYeng and Yazdanifard [2] studied the influence of green marketing on consumers' buying behavior in relation to green products, Katsikeas, Leonidou and Zeriti [3] studied eco-friendly product development strategy: antecedents, outcomes, and contingent effects. Saravanaraj and Pillai [9], examined green product attributes that entices green purchasing.. Ward [10] examined the impact of environmentally friendly packaging on customer satisfaction.

These studies did not address the impact of green marketing on sustainable development nor took their bearing from the Local Government Areas. In fact, there is a scarcity of scholarly enquires that simultaneously investigated the effect of green marketing on such sustainable development metrics as: economic sustainability, environmental sustainability and social sustainability. To fill this gap in the existing literature, this study investigates the impact of green marketing on sustainable development in Rivers State.

Statement of the Problem

 Past and recent studies in Nigeria and the rest of the world have made it clear that environmental pollution and unethical business practices affects the natural environment, and businesses should awaken with sophisticated concern about their operations effect on

the natural environment and modify their business practices in an attempt to contend with society's contemporary interest ([5], [8],[7],[9],[10],[4]). Furthermore, the volatility and complexity of the environmental landscape as a result of adverse business operations, has made sustainable development difficult. Many businesses therefore spend enormous time and resources reacting to unexpected changes in the environment instead of anticipating and preparing for these changes through a proper green marketing practice.

 The Local Government Areas constitute the third-tier of government and is thus not excluded from maintaining sustainable development through economic, environment and social sustainability. Hence, green marketing will also be a primary facet of the L.G.As. However, much is not known about the green marketing practices of L.G.As in Rivers State, if they were able to adopt green marketing concept in their daily business operations effectively, and how such practices leads to sustainable development. Therefore, in the light of the aforementioned, this paper seeks to examine the effect of green marketing on sustainable development of L.G.As in Rivers State.

II. LITERATURE REVIEW AND HYPOTHESES

Concept of Green Marketing

Green marketing is the promotional exercise intended at taking benefits of shaping consumer behavior towards a brand. These adjustments are progressively being affected by a firm's practices and policies that influence the characteristic of the environment and indicate the standard of its concern for the community [11].

On the other hand, it can be recognized as the promotion of environmentally-secure or advantageous goods [2]. is doing it right the first time. Green marketing concept emerges from societal marketing [12], hence it is an attempt to characterize a product as being environmental friendly or eco-friendly. The American Marketing Association (AMA) defines green marketing as marketing of products that are believed to be environment-friendly, which organizes into various activities such as product adjustment, modification

of production processes, packaging, labeling, advertising strategies as well as increases awareness on compliance marketing amongst industries [2].

Green marketing comprises product modification, changes to the production method and process, packaging and modifying advertising [14]. It also encompasses a broad range of activities, including product modification, changes to the

production process, packaging changes, remodeling and stylizing as well as modifying advertising.

In general, green marketing can be applied to much broader concept; consumer goods, industrial goods and services [13]. Green Marketing" refers to holistic marketing concept wherein the production, marketing, consumption and disposal of products

and services happen to be in a manner that is less detrimental to the environment. Thus, green marketing incorporates abroad range of activities, including product modification, changes to the production process, packaging changes, labelling, as well as modifying advertising. Other similar terms used are environmental marketing and ecological marketing ([4],[3]). The current study attempts to highlight the importance of ecological marketing being a true corporate commitment towards protecting the environment –in other words that ecological awareness should be one of the values determining organizational success . This implies that green marketing as a whole is not to be solely understood as an activity, but also as a philosophy.

Sustainable Development

The World Council of Environment and Development [16] defined sustainability as "the development that meets the needs of the present generation without compromising the ability of the future generations to meet their own needs" [16].. The application of sustainability in recent times is a necessary

 means of solving current environmental crisis that may ensures that production does not decompose resources beyond point of renewal [16]. Sustainability has economic sustainability, environmental sustainability and social sustainability as its dimensions.

Economic Sustainability

Tsai etal. [observed that economic stability do not transform to economic or social degradation, but acts as favourable returns on investment and enhancer of organizations actions. Dyllick and Heckerts [18] State "Economically sustainable companies guarantee at anytime cash flow sufficient to ensure liquidity while producing a persistent above returns to their shareholders" Therefore, economic sustainability concerns the application of resources in a genuine way in order to establish lasting significant impact through reduction in the adverse consequences of resource exploitation.

Environmental Sustainability

Walker and Jones [15] posit that from time immemorial, the environment has experienced increased devastations The necessity for sustainability springs from the manner natural resources is arbitrarily used [19]. The contemporary business world rely on the degree at which companies adopts the aspects of environment in their supply chains for their corporate survival [20].

Social Sustainability

 Socially responsible companies are the ones that fuse their operational activities, social ethnics and environmental interests more prominent than those proscribed by law [18] and whose consequence may lead to an improved quality of life for most corporate stakeholders ([21], [22]).

Brown and Bessnat [19] notes that social sustainability coordinates the relationship between human rights and human development, corporate power and environmental justice, global poverty and citizen action, responsible global citizenship in an envelope component of what may at first sighting appear to be easy matters of personal consumer or moral choice. Essentially, the environmental performance in this study refers to the environmental influence minimization, subject to the implementation of sustainable supply chain management practices.

Based on the review of literature, the following hypotheses were raised:

H1: Green marketing significantly influences economic sustainability.

H2: Green marketing significantly influences environmental sustainability

H3: Green marketing significantly influences social sustainability

III. RESEARCH METHODOLOGY

Population of the Study

The target population constitutes the management staff of four selected L.G.As (Port-Harcourt, Obio-Akpor, Emohua and Ikwerre) in Rivers State. The four L.G.As were selected among the twenty-three L.G.As in Rivers State due to their proximity to the researchers and for timely delivery of the study outcomes. Each of the selected .G.As have over one hundred and fifty (150) staff at the top to the supervisory level. The researchers accessed 50 management staff in each selected L.G.As from the top level to the supervisory level making a total of two hundred (200) staff at the top, middle and supervisory levels.

Sample Size and Sampling Technique

The purposive sampling method was used to select 50 respondents each from the selected L.G.As in Rivers State. Therefore, the sample size for the study consists of 200 management staff from Port-Harcourt, Obio-Akpor, Emohua and Ikwerre Local Government Areas of Rivers State. The researchers got the entire target population to fill the questionnaire for the study. This is illustrated in Table 1.

Table 1: The 4 sampled Local Government Areas

S/no	L.G.As	No. of Staff
1,	Port-Harcourt	50
2.	Obio-Akpor	50
3.	Emohua	50
4.	Ikwerre	50
Total		200

Source: Authors Desk Research, 2019

Reliability Analysis

<div align="center">Table 2 Test of Reliability</div>

Scale	Dimension	Items	Reliability
GM	Green Marketing	3	0.752
ECOS	Economic Sustainability	5	0.722
ENVS	Environmental Sustainability	5	0.831
SC	Social Sustainability	3	0.770

Source: SPSS window output, 2019**.**

Table 2 summarizes the reliability test of green marketing and sustainable development, which also embraced the individual item reliability test). Significantly, all items are reliable and are used to investigate green marketing and sustainable development of L.G.As in Rivers State. The extent of the relationship between green marketing and development can be functional using Green Marketing (.752) with 3-items measure; *Economic Sustainability (.722) with a 5-item* measure; Environmental Sustainability (.831) with a 5-item measure, Social Sustainability (.770) with 3-items measure.

IV. DATA PRESENTATION AND ANALYSIS

Data collected were analyzed using regression analysis through the use of SPSS, and the following summarizes the result of the analysis.

Table 4: Effects of Green Marketing on Economic Sustainability

Model Summary

Model	R	R square	Adjusted R .Square	Std error of the estimate	R Square Change	df1	df2	Sig. F Change
1	.633[a]	.401	.395	2 .528	.401	1	199	000

ANOVA[b]

Model		Sum of squares	Df	Mean square	F	Sig.
1	Regression	419.575	1	419.575	65.670b	.000[b]

Residual	626.135	199	6.389	
Total	1045.710	200		

Coefficients[a]

Model		B	Unstandardized Coefficients Coefficients	Standardized	Std. error	Beta	T	Sig.
1	(constant)	4.007	1.390	2.520	.000	.		
	G. M				594	.073	.633	.000

Source: SPSS 22.0 window output (based on 2019 field survey data)

Table 4.Shows the coefficient of determination also called R square as .633. This implies that the combine effect of the predictor variable (Green Marketing) explains 63.3% of the variables in Economic Sustainability of L.G.As in Rivers State. This is demonstrated by a P value of 0.000 which is less than the acceptance critical value of 0.05.

The analysis of variance (ANOVA) on Table 4 shows that the effect of Green Marketing was statistically significant in explaining changes in Economic Sustainability of L.G.As in Rivers State. This is demonstrated by a P value of 0.00 which is less than the acceptance critical value of 0.005.

There is also a standardized coefficient of .594 which is perfect as well as corresponding P value (sig.) of 000 which is less than alpha (0.05). Therefore, the study concludes that there is a significant effect of Green Marketing on the Economic Sustainability of L.G.As in Rivers State.

Table 5: Effects of Green Marketing on Environmental Sustainability Model summary

Model R		R square	Adjusted Square	R std error of the Estimate
1	.864 [a]	.747	.662	.628

ANOVA[b]

	Model	Sum of squares	Df	Mean square	F	Sig.
1	Regression	55.771	1	56.771	221.139	.000
	Residual	29.780	199	.257		
	Total	86.551	200			

Coefficients

Model		Unstandardized Coefficients		Standardized Coefficients		
		B	Std. error	Beta	T	Sig.
1	(constant)	68 218 .	8.10		3.169	.000
	GM	5.721	487	.733		.000

Source: SPSS 22.0 window output (based on 2019 field survey data)

Table 5.Shows the coefficient of determination also called R square as .864. This implies that the combine effect of the predictor variable (Green Marketing) explains 86.4% of the variables in Environmental Sustainability of L.G.As in Rivers State. This is demonstrated by a P value of 0.000 which is less than the acceptance critical value of 0.05.

The analysis of variance (ANOVA) on Table 5 shows that the effect of Green Marketing was statistically significant in explaining changes in Environmental Sustainability of in Rivers State. This is demonstrated by a P value of 0.00 which is less than the acceptance critical value of 0.005.
There is also a standardized coefficient of .733 which is perfect as well as corresponding P value (sig.) of 000 which is less than alpha (0.05). Therefore, we conclude that there is a significant effect of Green Marketing on the Environmental Sustainability of L.G.As in Rivers State.

Table 6: Effect of Green Marketing on Social Sustainability
Model summary

Model R	R square	Adjusted Square	R std error of the Estimate	Sig.
1 .827[a]	.684	.578	.647	.000

ANOVA[b]

Model		Sum of squares	Df	Mean square	F	Sig.
1	Regression	.063	1	.063	233.264	.000[a]
	Residual	.002	199	.000		
	Total	.066	200			

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients		
		B	Std. error	Beta	T	Sig.
1	(constant)	1.866	.064		28.968	.000
		.367	.024	'933	5.721	.000

Source: SPSS 22.0 window output (based on 2019 field survey data)

Table 6.Shows the coefficient of determination also called R square as .827. This implies that the combine effect of the predictor variable (Green Marketing) explains 82.7% of the variables in Social Sustainability. This is demonstrated by a P value of 0.000 which is less than the acceptance critical value of 0.05.

The analysis of variance (ANOVA) on Table 5 shows that the effect of Green Marketing was statistically significant in explaining changes in Social Sustainability of L.G.As. This is demonstrated by a P value of 0.00 which is less than the acceptance critical value of 0.005.

There is also a standardized coefficient of .367 which is perfect as well as corresponding P value (sig.) of 000 which is less than alpha (0.05). Therefore, we conclude that there is a significant effect of Green Marketing on the Social Sustainability.

V. DISCUSSIONS

Consistent with our expectation aprior, the finding of this study suggests that green marketing significantly impact on economic sustainability. This finding is in line with the findings of Sambu (2016), Eneizan et al (2016) and Abdulrahman (2017) which *portrayed that green product* innovation statistically and significant influence firms' performance.

Further, the study revealed that green marketing significantly influence environmental sustainability. This is evidenced by the results in table 5. It is clear that this finding totally agrees with our apriori expectation. We expected a significant influence of green marketing on environmental sustainability, given that when L.G.As embraces green marketing, they enhance the environmental sustainability of their organizations, thereby increasing sustainable development in those areas. This result is consistent with the findings of Eneizan et al (2016) who found a significant positive relationship between green marketing strategies and sales growth.

Marketing practices that will enhance sustainable development in Rivers State. Based on the foregoing submissions, the study finally concludes that green marketing isa powerful catalyst that can ensure sustainable development in Local Government. The results in Table 6 suggest that green marketing has a significant effect on social sustainability. This led to the acceptance of

hypothesis 3. This result agrees with the results of Abdulrahman (2017) who found a significant influence of green product innovation on firm performance. This implies that green marketing has the potential for improving social sustainability in Rivers State.

VI. CONCUSION AND RECOMMENDATION

The purpose of this study was to empirical examine the impact of green marketing on sustainable development. The findings of the study affirm that green marketing has significant effect on the measures of sustainable development. Overall, this study contributes to knowledge of the role of green marketing and sustainable development in strategic marketing and supply chain management fields as it proposed a theoretical framework that identified green marketing and sustainable development. The study provides a practical and useful tool for green marketing Areas, because the result of the study shows that green marketing has a significant effect on sustainable development. The study recommends that, L.G.As administrators should adopt green marketing practices that will enhance economic, environmental and social sustainability to enable them achieve sustainable development.

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