

BUSINESS MODELS AND ECONOMIC SUSTAINABILITY OF PAINT MANUFACTURING FIRMS IN ENUGU STATE, NIGERIA

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ABSTRACT

The aim of this study explores business models and economic sustainability of paint manufacturing firms in Enugu State, Nigeria. This study adopted the survey research design in which four (4) paint manufacturing firms in Enugu, Nigeria were studied. Copies of questionnaire were distributed to these firms for relevant data collection. The population of the study was 934 and the sample size was calculated to be 273 using the trek formula. Linear regression was used in the hypotheses testing. This was done with the aid of Statistical Package for Social Sciences (SPSS) software ver.22. The study revealed that green product innovation has a positive significant effect on the market share of manufacturing firms. The statistical results is given as; (Green product innovation $\beta = .230$; $t=4.272$; $p>000.05$). The study revealed that social sustainability has a positive effect on the reputation of manufacturing firms. The statistical results is given as; (Green managerial innovation $\beta = .230$; $t=2.459$; $p=.015<05$). The work concludes that eco-design and eco-innovation activities frame the business model of sustainability as drivers of value creation at the three levels of sustainable development: for the economy, the people who work in and interact with (social) and the world in which everyone works and develops (social and environmental). Based on the findings, the study recommended that manufacturing firms should make more efforts to understand customer needs and expectations in order to better anticipate their changing preferences and align green product innovation initiatives with consumer values to promptly satisfy market demand, thus gain competitive advantage.

Keywords: Business models, Economic sustainability, Green product innovation, Competitive advantage, Market share.

INTRODUCTION

Before 1914, fast industrialization and urbanization in Western nations caused a quick loss of regular assets, and this went on until 1945, the post-The Second Great War period, leading to worries about pollution, personal satisfaction, and environmental injury. To propose the thought of advancement, depicting inventiveness as far as an expansion of private enterprise and its capacity to control the indigenous habitat. It was uniquely during the 1960s that the connection between inventiveness and sustainability began to draw worldwide consideration. In the mid-60s, financial backers understood that the undertakings they embraced were influencing the environment, assets, natural substances, and individuals somehow. By the way, because of the developing environmental development of the 1960s, a few countries started making strides inside their boundaries to safeguard the environment. This was, as numerous state run administrations understood, in light of the fact that pollution had not halted inside their lines. To resolve the whole world's environmental issues, peaceful accord and participation were required, which prompted the June 1972 Joined Countries Gathering on Human Environment in

Stockholm, Sweden. The next "Rio Meeting," or "Earth Culmination," of 1992 was held in Brazil. Stress that the Earth Culmination offered an interesting opportunity for worldwide pioneers to deal with the environment and how the public authorities could cooperate to protect the environment.

However, the activities of manufacturing organisations are believed to have contributed essentially and straightforwardly to air and water pollution, as well as damage and aggravation to the environment. Juan (2011) noticed that the logical inconsistencies between high energy use and financial development as well as environmental debasement are presently an issue for the entire world. Additionally noticed that one of the issues of this period is the manner in which to arrive at an environmentally sustainable way of life. Environmental tensions do exist when sustainability business models are implemented. Reason that sustainability business models assume a vital part in the impacts of the organization's environmental presentation and a methodical comprehension of environmental sustainability. Concentrates on showing that corporate associations follow sustainable business models that empower them to fuse the three elements of sustainability: environmental, social, and financial (Olive, 2017).

Consequently, any organisation that participates in environmentally amicable or green practises is a sustainable business to guarantee that all cycles, products, and manufacturing exercises settle current environmental issues while supporting a benefit. All in all, it's an organisation that *"suits the requirements of the present [world] without subverting people in the future's capacity to address their own issues"*. Notwithstanding, in business models for sustainability, these items, gear, or frameworks appear to fulfil the accompanying measures: a) they limit the corruption of the environment; b) they discharge zero or low ozone depleting substance (GHG) outflows, so they are alright for use and advance a sound and improved environment for all types of life; c) they preserve the utilisation of power and normal assets; and d) they advance the utilisation of inexhaustible assets. The note that *"natural advancement"* (environmental development, green development, or sustainable advancement) is frequently used to describe improvements that lead to a sustainable environment through environmental upgrades. The eco development as applications that comprise new or changed cycles, methods, practices, frameworks, and items to stay away from or diminish environmental damage.

To keep a specific degree of seriousness, the board creates plan items that exploit what is going on. Through changing customary business models to accomplish sustainable improvement objectives while holding intensity and benefit, the sustainable business model enjoys giving a serious benefit to organisations. Subsequently, a definitive objective of sustainable business models has been to provide an incentive for the triple primary concern, i.e., the economy, culture, and environment. Sustainable business models can potentially integrate sustainability values and coordinate sustainability requirements into large business incentives, value creation, and worthwhile catch activities.

Sustainable business models intend to accomplish sustainability focus by utilising helpful multi-partner boards, imagination, and a drawn out point of view. As a result, sustainable business models have been extremely beneficial in reducing the negative effects of business operations on the environment and society by providing solutions that assist firms in meeting their financial and sustainability objectives at the same time. As a result, the sustainable business model structure has emerged to provide a discussion fusion of sustainability considerations. Roundabout business models are comparable in this manner to sustainable business models. They do, in any case, furnish extra elements. They are basically worried about easing back, escalating, and restricting asset circles.

With all of the environmental worries, the Earth's well-being, an unnatural weather change, and the likelihood that earth-given assets will run out soon, green development is a sweltering issue in Nigeria. Nigeria's administration has embraced different guidelines because of the environmental difficulties, pointing toward diminishing the impacts of these issues somewhere in the range of 1958 and 1992. Ranger Service Act, 1958, Public Environmental Assurance, the Strong and Dangerous Waste Guidelines Board (1991). In 1999, the Government Environmental Insurance Office (FEPA) was established in each of Nigeria's 36 territories, as well as the Bureaucratic Service of Environment and State Services of Environment at the state levels. Organizations perceive the need to follow up on sustainability by embracing business models for financial sustainability as assumptions on corporate obligation increase and straightforwardness becomes more pervasive. This business approach is making long-haul esteem by thinking about how a given association works in the biological, social, and monetary environment. Sustainability is based on the understanding that growing such methodologies encourages an organization's life span monetarily. This paper therefore explores business models and economic sustainability of paint manufacturing firms in Enugu state.

STATEMENT OF PROBLEM

Business models for monetary sustainability are applicable in manufacturing firms due to the role they play in saving the environment from pollution, saving energy, and reusing pointless assets, as well as being thoughtful of the business environment's social well-being. With regards to energy saving, it will save the world from synthetics by utilising elective energy, for example, by utilising gadgets and gear that work by planetary group. Business models are becoming tied up with the idea of environmentally cordial innovation that is utilised to safeguard the environment, ration normal assets, and assist organisations with recuperating from the current tough spot before things go too awful. Sustainability business models improve environmental proficiency by expanding capabilities, shortening response times, lowering energy consumption, reducing waste, avoiding toxic materials, and lowering pollution power.

In many created nations, the exercises have been carried out where a general set of principles, rules, and regulations have been carried out to improve the training. Unfortunately, this isn't true with most agricultural nations, and where just rules and open doors are open, Nigeria is the same. What's more, the vast majority of Nigerian manufacturing organisations' green practises are purposeful by the top administration, reflecting the significance of environmental administration conduct in deciding the level of environmental worry inside the organization.

In Enugu state, Nigeria, less consideration is paid to sustainability business models like green picture, green advancement, green industry, green item development, green cycle advancement, green acquirement, eco-plan and bundling, and green structure and warehousing. This was responsible for air, water, soil, assets, minerals, and power, regular territory and asset debasement, deforestation, and a quick expansion in population development, metropolitan relocation, and waste. This has serious financial ramifications for organizations and adds to huge deferrals in the execution of sustainable arrangements. This study will examine business models and economic sustainability and its impact on the organizational performance. However these studies have been conducted in well-developed and developed countries, very few studies can be found in developing countries. Given the level of business models adoption in Nigeria, this study will try to explore business models and economic sustainability of paint manufacturing firms in Enugu state.

Objectives of the Study

The broad objective of this study is to business models and economic sustainability of paint manufacturing firms in Enugu state. However, the specific objectives of the study are to:

- i. Determine the effect of green product innovation on market share in manufacturing firms.
- ii. Assess the effect of social sustainability on the reputation of manufacturing firms.

LITERATURE REVIEW

Conceptual Framework

Business Models: During the dotcom blast of the 1990s, the plan of action thought acquired prevalence, with all the more as of late, a lively and different exploration pattern (Zott et al., 2011). This examination prompted an exhaustive extraordinary issue in 2010 in the diary Long Range Planning and an extensive number of writing surveys, like (George & Bock, 2011; Zott et al., 2011). Unique, innovative income strategies were executed during the internet business blast of the 1990's. The plan of action structure was initially utilised in this sense to convey complex business ideas within a brief period of time to expected financial backers (Zott et al., 2011). From that point, the reason for the idea created to be considered both a device for the foundational investigation, arranging, and correspondence of the design and execution of at least one hierarchical unit and applicable pieces of their current circumstance in the face of authoritative intricacy Doleski (2015); Knyphausen-Aufsess and Meinhardt (2012), as well as an essential resource for upper hand and firm execution (Afuah, 2014).

Plans of action, in any case, as oversimplified portrayals of incentive, esteem creation and circulation, and components of significant worth and connections inside a hierarchical unit between these components. Because there may be several forms of similar authoritative design, meanings of the concept should be regarded as changing. A private venture is a focal partner with the most capital and abilities (Porter & Kramer, 2011). Plans of action consolidate all the central parts of business methodologies and tasks that produce and convey worth to the two clients and firms. Parts of plans of action ordinarily incorporate critical client division choices, selling items and administrations (or offers), attracting market and exploration partners, creating apparatuses and stages for offering some incentive, and concealing expense construction and income streams to ensure organisation monetary soundness (Rashid et al., 2013).

Both strategies and activities are supported by plans of action, be they expressed or suggested. Organizations need to persistently rethink and upgrade their plans of action to improve or keep up with their market position. Plans of action that are innovative are critical to all organisations and associations for all intents and purposes of staying in the game or being at the forefront of the competition while ensuring their exercises are financially reasonable or manageable. Revolutionary changes in plans of action suggest returning to the client base and rethinking items and administrations. These changes can involve high risks and incorporate a level of vulnerability, making it challenging for most organisations to embrace them. Plans of action frequently change and don't really indicate an extreme update of significant worth proposition. All things being equal Chesbrough (2017), the changes could also zero in on further developing creation processes or reconfiguring hierarchical constructions.

Plan of action advancements are related to delivering more significant returns than item or interaction advancements Chesbrough, (2017) manageable plan of action may likewise profit

from higher risk alleviation and flexibility and give extra opportunities for enhancement and worthwhile co-creation Porter and Kramer (2011); Tu Associations are especially keen on carrying out maintainable answers to comprehend these advantages. However, many advances in the plan of action fizzle. This has real monetary ramifications for endeavours and contributes to significant delays in the execution of manageable plans. The explanations for the misfortune remain somewhat neglected, given the meaning of these worries.

Sustainability

The word "*sustainability*" comes from the possibility of a maintainable turn of events, which implies the ability to consistently control the organization's capital. Creation comprises a bunch of practises that occasionally appear to conflict with one another, requiring the overall change and corruption of the indigenous habitat and social connections for the generation of society. It will probably focus on building ware creation (labor and products) custom-made to attract compelling interest via exchange (Rist, 2014).

The interest in manageability as an accepted practise in current ventures is confronting organisations and carrying out change programmes in action plans, for example, frameworks, innovation, partners, and exercises that convey the worth of items and administrations to customers (Teece, 2010). To address this difficulty, associations need to figure out how to assemble the right abilities and how to embrace the proper practises that empower manageability advancements to be created. The questions that arise are: what are the plans of action and how they can assist associations in changing their practises to make and market manageability advancements?

Sustainable Business Model

A maintainable plan of action (SBM) can be treated as moving toward economic strategic policies more adult than technique. Changes that are made to address manageability issues at a vital level and in processes are relied upon to bring about the reshaping of plan of action systems. Portrayal of reasonable plans of action is proposed, considering the most acknowledged way to deal with maintainability (Triple Bottom Line) (Elkington, 2017). "*SBM utilises a triple main concern approach which considers a wide scope of partner needs, including ecological and social issues. They are basic in driving and incorporating manageability into corporate development, can assist with coordinating maintainability into business purposes and cycles, and fill in as a vital driver of upper hand*" (Bocken et al., 2014). In a practical plan of action, the organisation needs to "*distribute assets and coordinate exercises in a pattern of significant worth creation that defeats the hole between public and private benefit*". It requires: joining public and private advantages; making clients more occupied with the value creation process; setting great estimates that will show ecological and social impacts; and improving non-market points of support.

Numerous thoughts feature the issue of "*making the upper hand through higher shopper fulfilment and adding to the business and society's supportable turn of events*". Jonker expects that SBM should cover four components: information sharing, associating (supportability is between organizations), mindfulness, and making numerous qualities. There are also various models and standards that work closely with SBM representations (Bocken et al., 2014; Epstein & Buhovac, 2010). Despite the fact that the meanings of SBM show the whole range of basic

components and the pith of maintainability in various aspects, commendable models uncover a few inconsistencies while discussing the execution stage.

Environmental and sustainability impacts

Natural effects are among the most thoroughly investigated issues in each investigation of new plans of action. A few creators propose an organised strategy for the assessment of the ecological advantages of each kind of plan of action. The *"feasible plan rules approach"* in assessing each kind of PSS model against a bunch of effect-decreasing systems. The finding was that most PSS types bring about ecological enhancements, yet the degree of progress is fairly humble. Upgrades will generally be gradual to just OK and are *"mostly connected with monetary proficiency gains and thus may be less important for [transforming the current] human-asset concentrated frameworks"*. Extremist upgrades must be normal on account of promising utilitarian outcomes. The special case is framed by PSS frameworks that make clients less answerable for cautious utilization of the item, for example, item renting.

Then again, most different examinations give a more hopeful judgement on the ecological and manageability effects of new plans of action. These are associated with: a) decreased energy and asset utilisation and related natural impacts; b) decreased CO₂ and compound discharges to the air; c) decreased spills to water; d) decreased synthetic waste and further developed removal; and so on. For instance, utilitarian deal-based plans of action are assessed to diminish 50-60% or a greater amount of the assets required for creation and lifetime utilisation of the item. ESCO projects have been found to improve indoor air quality, which also works on employees' ability to maintain fixation at work.

Besides, novel plans of action frequently assist in keeping up with ecological enhancements over the long haul. For example, DBFO models, with their absolute lifecycle approach, motivate efforts to reduce long-term energy costs. CMS provides impetus for reduced use or replacement of dangerous synthetic substances, creating the possibility of a support-to-support plan and share plans urge firms to plan the item for further developed strength and quality and to make remanufacturing conceivable, which thusly reduces the item volumes and related requirements for virgin assets.

In a considerable number of the examined cases, the plans of action contribute to speeding up the presentation of natural innovations and items. Clients, for example, gain access to electric vehicles through e-portability administrations, which they may be hesitant to purchase because of high introductory venture expenses and execution vulnerabilities.

Simultaneously, many examinations know that the natural advantages related to specific plans of action rely enormously upon the manner in which the items are utilised by clients. For example, sharing of items might involve negative ecological effects assuming that the admittance to a common item expands the customers' utilisation of the item (for example, vehicle sharing might increase the absolute utilisation of vehicle portability by further developing admittance to individuals who, in any case, don't utilise vehicles) or, on the other hand, assuming that the ecological effect from coordinated operations expected to send and gather the common things surpasses the advantages acquired from item sharing.

THEORETICAL FRAMEWORK

Ecological Modernization Theory

Ecological modernization theory was first utilized. From that point forward, environmental investigation and associations have broadly taken on or adjusted this theory to clarify green financial aspects, green development drives, green administration and green innovation. Ecological modernization theory is considered being a methodical eco-development theory that is applied at the miniature level and full scale level, for example, at the hierarchical or inventory network level and creation process. This theory upholds the possibility that manufacturing organizations can put resources into process/item development to diminish environmental debasement and consequently assist with financial additions. In a perfect world, ecological modernization theory depicts a "*shared benefit*" situation by which mechanical turn of events and advancement can help enterprises and nations to accomplish both financial and environmental sustainability. As a result, ecological modernization theory is connected with this review and the speculations that green administrative development advances a company's standing. A survey of the connected writing uncovers extra exploration supporting and advancing the ecological modernization theory.

Consequently, the substance of this theory is that it upholds the thought behind the expectation of associations in embracing green item development procedure as method for expanding its piece of the pie. Thus, this theory upholds the speculation that states green item

Resource Dependence Theory

The resource dependence theory (RDT) proposes that organisations depend on others to give basic resources, parts, or capacities (given by others). The dependence of one party gives the premise to the force of the other. Hence, firms with solid haggling power can exercise command over more fragile gatherings. The dispersion of environmental practises in the production network can be disclosed concerning the power advancement part of the RDT. Contingent upon their capacity to control resources and expected substitutes, firms have a few choices for tying down admittance to environmental resources. The purchasing association's capacity to inspire providers to focus on environmental organisations is generally founded on the provider's dependence on the purchaser.

Perennial buyers are bound to expect environmentally friendly practises from their less expensive providers. The party with the predominant market power can impact the environmental arrangements and procedures of other production network individuals and direct provider interest in green inventory network exercises, despite the fact that these probably won't be seen as straightforwardly gainful by providers. They discovered that their case organisations tended to favour ventures initiated by the dominant firms and then restricted to the more vulnerable upstream individuals rather than the advancement of long-term advantage for the production network as a whole. Nonetheless, providers are likely to go along with it, but only to respond to the bare necessities. This approach probably won't be great over the long haul; associations may be reluctant to expand their dependence on different firms.

In view of the way organisations depend on others to give basic resources, parts or capacities given by others, there is a high requirement for social sustainability. However, this implies that organisations will actually want to assemble the right sort of relationship that will empower those organisations to achieve their authoritative objectives and targets. Hence,

keeping up with great social relations with the interior and outer environment of the associations empower the firm completes upper hand and business sustainability. Consequently, this theory upholds the speculation that states: Social sustainability positively affects the standing of manufacturing firm.

Empirical Review

Gungor and Dincel (2018) examined corporate sustainability practices and its impact on financial performance. Data was gathered from annual reports for the years between 2012-2017. MANOVA analysis is used to analyze the relationship between the sustainability levels and the financial performance indicators. The results implied that sustainability levels have statistically significant effect between the group means of 3 variables. These are Current Ratio, Gross Profit Margin and Corporate Governance Index. For Current Ratio variable, there is a significant difference between sustainable and least sustainable category for 10% significance level. For CG Index variable, there is a significant difference between most sustainable and sustainable category and most sustainable and least sustainable category for 5% significance level. For Gross Profit Margin variable, there is a significant difference between most sustainable and sustainable category for 5% significance level.

Ali et al. (2018) investigated Impact of corporate sustainability on corporate financial performance. The study used content analysis to examine the literature and establish the current state of research. A total of 132 papers from top-tier journals are shortlisted. The results showed that 78% of publications report a positive relationship between corporate sustainability and financial performance. Variations in research methodology and measurement of variables lead to the divergent views on the relationship. Furthermore, literature is slowly replacing total sustainability with narrower corporate social responsibility (CSR), which is dominated by the social dimension of sustainability, while encompassing little to nothing of environmental and economic dimensions.

Raymond et al. (2016) assessed effect of sustainability accounting measure on the performance of corporate organizations in Nigeria. The formulated hypotheses were tested using Regression Analysis with aid of SPSS Version 20.0. The study found that environmental cost does not impact positively on revenue of corporate organizations in Nigeria, also that environmental cost impact positively on profit generation of corporate organizations in Nigeria.

The examined eco efficiency and eco-commitment analysis of Kenyan manufacturing firms. The methodology used for the study is survey design through which questionnaire was shared to six Kenyan manufacturing firms. The finding of the study showed that there is a potential gain in the profitability of the firm by improving eco-efficiency in resource use. Further, proactive firms are found to perform better than reactive firms in terms of profitability and eco-efficiency but firms that combine both proactive and reactive EMS perform even better which shows the benefit of adopting commitment based approaches alongside the compliance based approaches to environmental management.

The examined the effects of corporate social responsibility practices and environmental factors through a moderating role of social media marketing on sustainable performance of business firms. The data was analysed through Statistical Package for the Social Sciences (SPSS-V25) and the Smart PLS V-3.2.8. The results indicated that corporate social responsibility presented a positive impact on firms' sustainable performance. The findings also revealed that social media marketing tools moderated the relationship between CSR and sustainable production of business firms.

METHODOLOGY

The study used descriptive survey research design. The population of study for this research comprises of four paint manufacturing firms in Enugu, Nigeria. The target population for this study consists of 934 staff of selected manufacturing firms in Enugu. The sample size determination formula. Was used to arrive at the sample size of 273. The main instrument of the data collection used in this study is a structured questionnaire. Data were presented in tables and descriptive statistic was used to analyse the data. However, linear regression was used in the hypotheses testing. This was done with the aid of Statistical Package for Social Sciences (SPSS) software ver.22 to fully analyze the data by coding the items and entering them into the SPSS for analyses.

Data Presentation and Analysis

Questionnaire	Respondents	Percentage of Respondents
Returned	250	91.6
Not returned	23	8.4
Total distributed	273	100

Source: field survey, 2022

Table 1 above shows the distribution and returns of the questionnaire. The copies of questionnaire administered were 273 representing (100%) from which 250 (91.6%) were returned, while 23 representing (8.4%) were not returned. The 250 copies of questionnaire that were returned were considered adequate enough for making valid deductions and conclusions. Hence, the research analysis was based on the returned copies of questionnaire.

S/N	ITEMS	SA	A	U	D	SD	N	FX	\bar{X}	Decision
1	The production of environmentally friendly goods has a positive influence on the mindset of our customers.	126	92	-	10	22	250	1040	4.2	Accepted
2	Our innovative product packaging method increases mark awareness significantly.	119	93	1	9	28	250	1016	4.1	Accepted
3	Increasing the life span of our company by green product innovation enhances the purchasing of the product.	85	36	9	70	50	250	786	3.1	Accepted
4	Using new technology during development helps reduce emissions and the overhead cost.	121	87	-	30	12	250	1025	4.1	Accepted
Total	Mean								3.8	Accepted

Source: Field Survey, 2022

Table 2 above shows the mean mark calculated from the response of the respondents on the effect of green product innovation on market share in manufacturing firms. Based on the decision rule, that if \bar{x} is below 2.5 it is considered rejected and if \bar{x} is 2.5 and above it is considered accepted. However, all the items in the table were accepted because they score the mean score of 2.5 and the overall mean is 3.8 it therefore indicates that green product innovation affect market share in manufacturing firms.

S/N	ITEMS	SA	A	U	D	SD	N	FX	\bar{X}	Decision
5	Significant community support for social welfare and local development adds to the strong mutual goodwill partnership.	111	75	1	37	26	250	958	3.8	Accepted
6	Socially responsible businesses are focused on open communicating environment, proper health, and safety and welfare systems to improve productivity and efficiency for employees.	78	81	2	49	40	250	858	3.4	Accepted
7	Being socially responsible improves the company's reputation.	71	96	1	47	35	250	871	3.5	Accepted
8	The participation of stakeholders in the making of corporate decisions gives the company a competitive advantage.	121	87	-	30	12	250	1025	4.1	Accepted
Total	Mean								3.7	Accepted

Source: Field Survey, 2022

Table 3 above shows the mean mark calculated from the response of the respondents on the effect of social sustainability on the reputation of manufacturing firms. Based on the decision rule, that if \bar{x} is below 2.5 it is considered rejected and if \bar{x} is 2.5 and above it is considered accepted. However, all the items in the table were accepted because they score the mean score of 2.5 and the overall mean is 3.7 it therefore indicates that social sustainability affects reputation of manufacturing firms.

DISCUSSION OF FINDINGS

Effect of Green Product Innovation on Market Share of manufacturing firms in Enugu State

The result revealed that green product innovation has a positive significant effect on the market share of manufacturing firms. This is consistent with international previous studies of which results showed that green product innovation has a higher impact on organizational performance compared to green process innovation, apparently its easier to develop new green product than altering the manufacturing process itself. As for the moderate variable environmental management behavior, it is clear that the environmental management behavior deeply effect the relationship between green innovation and organizational performance since in Jordan green adoption is self-imposed as mentioned previously there for it is logical to say that the higher the environmental management behavior toward green practices the better the

outcome for organizations. Furthermore a study done and concluded that green innovation is considered as one of the key factors for improving firms environmentally, social and financial outcomes.

Effect of Social sustainability on the Reputation of Manufacturing Firms

The result revealed that social sustainability has a positive effect on the reputation of manufacturing firms. This result is consistent with who think consumers are less likely to be familiar with firms' green image as measured by its emissions to water or atmosphere. A firm's image can be boosted through proactive green innovators gaining environmental legitimacy under the tendency of popular environmentalism consciousness of consumers and severe regulations. Therefore, this study asserts that green managerial innovation has a positive influence upon firm image.

Summary of Findings

Having carried out this research project, the researcher made the following findings:

1. The study revealed that green product innovation has a positive significant effect on the market share of manufacturing firms. The statistical result is given as; (Green product innovation $\beta = .230$; $t=4.272$; $p>000.05$)
2. The study revealed that social sustainability has a positive effect on the reputation of manufacturing firms. The statistical result is given as; (Green managerial innovation $\beta = .230$; $t=2.459$; $p=.015<05$)

CONCLUSIONS

This research was conducted to examine the appropriate business models for economic sustainability of paint manufacturing firms in Enugu state. Based on statistical research results, green product innovation and green process innovation have a positive effect on the efficiency of the organisation. The testing of hypotheses found that green product innovation has a greater impact on corporate performance compared to green process innovation, essentially making it easier to develop new green technology than altering the production process itself. Hence, the study concluded that eco-design and eco-innovation activities frame the business model of sustainability as drivers of value creation at the three levels of sustainable development: for the economy, the people who work in and interact with (social) and the world in which everyone works and develops (social and environmental).

RECOMMENDATIONS

Based on the findings and conclusion, the researcher made the following recommendations:

- i. Manufacturing firms should make more efforts to understand customer needs and expectations in order to better anticipate their changing preferences and align green product innovation initiatives with consumer values to promptly satisfy market demand, thus gain competitive advantage.
- ii. Moreover, since green innovation has been indicated to be an important strategy for manufacturing firms to gain better sustainable advantages and attract more customers, this study implies that firms should pay more attention to excel their competencies in innovating their products and processes once attempting to lead the market.

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