
INFLUENCE OF ENTREPRENEURIAL MARKETING DIMENSIONS ON SUSTAINABILITY OF PLASTIC MANUFACTURING FIRMS IN ANAMBRA STATE OF NIGERIA

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ABSTRACT

This study investigated the influence of entrepreneurial marketing dimensions on sustainability of plastic manufacturing firms in Anambra State of Nigeria. The study ascertained the extent entrepreneurial resource leveraging, innovativeness, proactiveness, calculated risk taking, customer intensity, opportunity recognition and value creation influence the sustainability of plastic manufacturing firms in Anambra State. A survey research design method was adopted in the study. Data were sourced using the questionnaire from the population of entrepreneurs and employees of fifteen plastic manufacturing firms in Onitsha, Awka and Nnewi all in Anambra State of Nigeria. A sample size of 383 was drawn from the target population. A multiple regression statistical technique was used to test the formulated hypotheses at 5% level of significance. The findings showed that entrepreneurial resource leveraging had a significant and positive influence on the sustainability of plastic manufacturing firms in Anambra State. Entrepreneurial innovativeness had a significant and positive influence on sustainability of plastic manufacturing firms in Anambra State. The study discovered that entrepreneurial proactiveness has a significant and positive influence on the sustainability of plastic manufacturing firms in Anambra State. The findings also showed that entrepreneurial customer intensity had a significant and positive influence on sustainability of plastic manufacturing firms in Anambra State. Entrepreneurial value creation had a significant and positive influence on sustainability of plastic manufacturing firms in Anambra State. The findings also revealed that opportunity recognition had a significant and positive influence on sustainability of plastic manufacturing firms in Anambra State. Calculated risk taking had a positive and significant influence on sustainability of plastic manufacturing firms in Anambra State of Nigeria. The study recommended among others that entrepreneurs should continue to invest more on entrepreneurial marketing dimensions since they are significant enablers of sustainability of plastic manufacturing firms in Anambra State of Nigeria.

Key Words: Sustainability, Proactiveness, Innovativeness, Customer Intensity, Plastic Firms.

1. INTRODUCTION

Entrepreneurial marketing is an organizational function and also a set of processes for creating, communicating and delivering value to customers and for managing customer relationship in the manner that benefits the organization as well as its stakeholders. It is a combination of innovative, proactive and risk-taking activities that create, communicate and deliver value to and by customers, entrepreneurs, marketers, their partners and society at large (Whalen et al., 2016). Entrepreneurial marketing is a set of process of creating, communicating and delivering value, guided by effectual logic in a highly uncertain environment (Ionita, 2012). Indisputably, entrepreneurship marketing is one of the key functions in any organization which encompasses innovation, customer intensity, proactiveness and creativity (Collinson & Shav, 2001). Entrepreneurial spirit seeks for employment opportunities in order to achieve the business goals. In Nigeria, millions of jobs are provided by the entrepreneurs, manufacturers, plastic producers as well as numerous other businesses. Such massive employment has multiplier and accelerator effects for the whole economy. More jobs entails more income. This increases demands for goods and services and in return stimulates production. Entrepreneurial refers to the overall activities and behavior of entrepreneurs. Entrepreneurial marketing represents an opportunistic venture wherein entrepreneurs proactively seek novel ways to create value for desired customer and also build customer equity (Pitsamorn, Hills & Hutman, 2014).

Interestingly, entrepreneurial marketing captures the interface between entrepreneurship and marketing and also serves as an umbrella for many emergent perspectives on marketing. It is marketing process of firms pursuing opportunities in uncertain market circumstances often under constrained resource conditions (Becherer et al., 2012). Undoubtedly, in a developing world, entrepreneurs need to emphasize on the role of marketing for the sustainable growth of their enterprise so as to be able to overcome challenges posed by external forces like global financial crisis, economic factors, and environmental factors. Due to rapid economic growth and development, there is need for entrepreneurial businesses so as to support national growth (Sadiku, Dana & Ramadani, 2019). Recently, entrepreneurial marketing appears to be considered as one of the best way to leave recession and if firms can provide the highest degree of value for their customers, they will both benefit from their own competitive advantages (Panama & Ayodele, 2020). Due to an increase in awareness about the impact of entrepreneurship and innovations on marketing and the role in the success of entrepreneurial activity, the two fields have been combined and this concept of entrepreneurial marketing has emerged (Hill & Hulton, 2006). Importantly, the aspect of interface between marketing and entrepreneurship involves how the marketing concept and principles can be made more relevant (Stoke, 2000). Pertinently, entrepreneurial marketing dimensions consist of the following; entrepreneurial proactiveness, entrepreneurial innovativeness, calculated risk taking, the consumer intensity, opportunity focus and resource leveraging (Olannye & Eromafuru, 2016).

Undeniably, the rise in the establishment of many entrepreneurial ventures in Nigeria especially in Anambra State has escalated competition among the entrepreneurs. The stiff competition in the Nigerian small and medium scale enterprises has made the business owners, managers and other stake holders in the entrepreneurial businesses to look for the survival strategies (Otika et al., 2019). Besides, the conventional marketing practices appear not to be effective for entrepreneurial firms. Unfortunately, it is not news that firms face unique problems, which affect their performance in terms of growth and profitability and hence diminish their ability to contribute effectively to the sustainable development of Nigeria. Regrettably, many entrepreneurs in Nigeria have several problems that lead to their inefficiency and even business failures. Unfortunately, many firms have problems ranging

from not having enough customers, financial constrains, poor sales, low quality products, little innovation and so on (Sodhi & Bapat, 2020). Apparently, many ventures also operate in a very turbulent environment of increased risk and diminishing ability to forecast the traditional marketing. Inability of business owners to unlearn the traditional ways of doing things and also to replace them with new thinking that not only incorporate change but also create necessary changes in the market place. Although extant researches have reported that many entrepreneurs and business owners do not position themselves well to spot and utilize unique opportunities. Consequently, entrepreneurial marketing has been presented in the entrepreneurial business as a survival strategy that will lead to sustainable development of entrepreneurial ventures in Nigeria. Notwithstanding that a number of studies have been conducted on entrepreneurial marketing and the survival of entrepreneurial firms mostly in advanced nations but scanty literature still exists in South-eastern Nigeria. Therefore, it is against this backdrop that this study sought to fill the gap by examining the influence of entrepreneurial marketing on sustainability of plastic manufacturing firm in Anambra State of Nigeria in order to contribute to knowledge.

Objectives of the Study

The main objective of the study is to examine the influence of entrepreneurial marketing dimensions on sustainability of plastic manufacturing firms in Anambra State of Nigeria. The specific objectives are to;

1. Investigate the influence of entrepreneurial proactiveness on sustainability of plastic manufacturing firms in Anambra State.
2. Assess the influence of entrepreneurial innovativeness on sustainability of plastic manufacturing firms in Anambra State.
3. Determine the influence of calculated risk taking on sustainability of plastic manufacturing firms in Anambra State.
4. Examine the influence of the entrepreneurial customer intensity on sustainability of plastic manufacturing firms in Anambra State.
5. Establish the influence of entrepreneurial value creation on sustainability of plastic manufacturing firms in Anambra State.
6. Find out the influence of opportunity recognition on sustainability of plastic manufacturing firms in Anambra State.
7. Ascertain the influence of entrepreneurial resource leveraging on sustainability of plastic manufacturing firms in Anambra State.

Research Questions

The following research questions were raised based on research objectives.

1. to what extent does entrepreneurial proactiveness influence the sustainability of plastic manufacturing firms in Anambra State?
2. to what level does entrepreneurial innovativeness influence the sustainability of plastic manufacturing firms in Anambra State?
3. to what extent does calculated risk taking influence the sustainability of plastic manufacturing firms in Anambra State?
4. to what degree does entrepreneurial customer intensity the sustainability of plastic manufacturing firms in Anambra State?
5. to what dimension does entrepreneurial value creation influence the sustainability of plastic manufacturing firms in Anambra State?
6. to what level does opportunity recognition influence the sustainability of plastic manufacturing firms in Anambra State.

7. to what extent does entrepreneurial resource leveraging influence the sustainability of plastic manufacturing firms in Anambra State?

Research Hypotheses

The following hypotheses are formulated to guide this study.

- HA₁: Entrepreneurial proactiveness has a significant influence on sustainability of plastic manufacturing firms in Anambra State.
- HA₂: Entrepreneurial innovativeness has a significant influence on sustainability of plastic manufacturing firms in Anambra State.
- HA₃: Calculated risk taking has a significant influence on sustainability of plastic manufacturing firms in Anambra State.
- HA₄: Entrepreneurial customer intensity has a significant influence on sustainability of plastic manufacturing firms in Anambra State.
- HA₅: Entrepreneurial value creation has a significant influence on sustainability of plastic manufacturing firms in Anambra State.
- HA₆: Opportunity recognition has a significant influence on sustainability of plastic manufacturing firms in Anambra State.
- HA₇: Entrepreneurial resource leveraging has a significant influence on sustainability of plastic manufacturing firms in Anambra State.

Significance of the Study

This study is expected to be beneficial to many stakeholders in plastic manufacturing firms in Anambra State. Plastic manufacturers, managers, marketers are expected to benefit from the findings of this study. The findings of this study are expected to assist government as it is considered as one of the possible ways to avert economic recession and also a way of boosting Nigerian economy. The findings of this study are expected to be of immense benefits to the academic community, students and academicians. In addition, the study is expected to be of great relevance to future researchers as the study can serve as reference source of materials to them.

Scope of the Study

The content coverage of this study focused on investigating the influence of entrepreneurial marketing on sustainability of plastic manufacturing firms in Anambra State using Onitsha, Awka and Nnewi commercial areas. The proxies of entrepreneurial marketing are; resource leveraging, entrepreneurial proactiveness, calculated risk taking, entrepreneurial innovativeness, customer intensity, entrepreneurial value creation and opportunity recognition. The dependent variable for this study is sustainability. The study selected fifteen plastic manufacturing firms from Onitsha, Awka and Nnewi. The selected plastic manufacturing firms from Onitsha are; Ezenwa Plastic Industry Nig. Ltd., Silas Polyplastic Ltd., Kristoral & Co. Plastic Ltd., Chudone Plastic Ltd., and Okeyson Plastic Venture. The selected plastic manufacturing firms from Awka are; Global Concepts Plastic Nig. Ltd., Ozalla Plastic Enterprises Ltd., Able God Plastics, Adig Plastic Ltd., and Garbs Plastic Firm. The selected plastic manufacturing firms from Nnewi are; IKC Plastic Nig. Ltd., Oku Investment Plastic Company Ltd., St. Mary's Plastic Industrial Complex Ltd., Cento Group of Companies and Arimaco Plastics Group. The rationales for their selection were based on their high capital base, high marketability, large market share and ease of accessibility.

2. REVIEW OF RELATED LITERATURE

2.1 Review of Relevant Concepts

2.1.1: Entrepreneurial Proactiveness

Proactivity is a behavioral conduct that exhibits a relatively stable tendency in order to influence the environmental change (Bateman & Crant, 1993). It reflects entrepreneurial willingness to dominate competitors through a combination of proactive and aggressive moves. Proactivity entails defining your goals and your future and arriving there as planned (Mugambi et al., 2017). Proactiveness is a state of mind largely driven by one's consciousness, to sustain a vision, to fulfill a mission, to attain a challenging goal and achieve defined objectives. It is a determination to excel in one's own chosen field and to pursue and attain one's own goal largely defined by one. It can also be seen as the alertness of the firm. Entrepreneurial proactiveness is when an enterprise has insights that other ventures do not have. It is the recognition of the company's opportunity. In addition, entrepreneurial proactiveness depends on attractiveness of the available opportunities and ability of the firm to harness it once it is perceived (Kirzner, 1997). It entails the knowledge of coordinating inputs at below market value and converting the inputs into outputs of high performance. This makes the proactive company to focus on the past, the present and the future (Mehran & Morteza., 2014). It prepares a business venture around a unique product, service or process. It is the willingness to the take up opportunities that will yield profits (John, 2002). Furthermore, a company is proactive if it searches for market opportunities and also carries out experimentation with the hope of changing the environmental trends.

2.1.2: Entrepreneurial Innovativeness

Entrepreneurial innovativeness is the tendency by an enterprise to employ and support new ideas, experimentations, creative processes and novelty that may create new services, products or advanced technological processes (Mehran & Morteza, 2013). It refers to a firm's tendency to engage in creative processes, experimentations of new ideas which may result in the institution of new methods of production and bringing new product to current or new markets. Innovation as a marketing action, involves ability to bring a new level of quality to the products, services, processes and opportunities to lead a company on new markets (Mohammed, 2011). There are different degrees of the successful innovative actions of companies on a market. It can be the highly innovative new market or incremental market maker. The difference between the two dimensions is that market creator has to produce completely new solutions for the customer while market maker can just follow already existing customer relations and use market knowledge. Innovation makes the firm to concentrate on new ideas that lead to new markets, products or processes. Indisputably, the extent to which an organization emphasizes innovation in its market actions can range from the highly innovative new market creator to the incremental market builder (Becherer et al., 2008). Innovativeness facilitates changes as well as creative behaviors which enhance active exchange of ideas, increase information flows and novelty in new product development.

2.1.3: Entrepreneurial Calculated Risk-Taking

Calculated risk-taking entails the willingness of using large resources to exploit lofty opportunities using business strategies (Janet & Ngugi, 2014). In spite of the fact that the consequences of risk taking can sometimes be catastrophic, entrepreneurs should continue to take calculated risk for him/her to progress. Risk taking entails involving in actions or decisions when the consequences or probabilities of outcomes are not known or partially known. The success of most enterprises depends on the capabilities of the entrepreneurs to evaluate risks and decide which path to pursue. Uncertainty has two component, risks and ambiguity. Perhaps, decision makers tend to see more opportunities in high risky situations.

Decision makers are strongly encouraged to take calculated risk, as incorrect decision may bring a venture or an enterprise down. Moreover, it is important to understand the flip side of risk taking. Undoubtedly, risk taking has its benefit, but there are several factors which must be taken into account before leaping into the uncertainty. First, the decision should be based on accurate information. Thus, when a risk taker takes into account all the factors acknowledging the potential risk of failure, it is a calculated risk, as opposed to a complete lack of knowledge of risk factors. With respect to risk taking propensity, Taylor found that high risk takers make more rapid decision based on less information but tend to process information unhurriedly.

2.1.4: Entrepreneurial Customer Intensity

Customer intensity is built on what is often seen as a central focus of marketers in the organization. At times, it is largely ignored in marketing theory and even in some empirical research. It is the emotional aspect that leads to successful market positioning. Consumer's resourcefulness stems from elegantly structured strategic business architecture. Customer intensity is rooted in a deeply felt sense of purpose, a broadly shared dream, and also a complete view of unharnessed opportunities. Entrepreneurial customer intensity can be used to capture a sense of conviction, passion, zeal, enthusiasm and belief in where marketing is attempting to take the firm and the way in which it plans to achieve it (Mugambi et al., 2017). Furthermore, beyond bringing technical competence to the marketing task, entrepreneurial marketers bring intensity, they reinforce the need for all employers to identify at a very fundamental level with the firm's products and brands and what they stand for, and ultimately with the firm's customer value proposition. In addition, successful organizations are those that place a greater emphasis on customer intensity (Gliga, 2016).

2.1.5: Entrepreneurial Value Creation

Value creation is the crucial point of entrepreneurial marketing. Indisputably, the task of a good marketer is to discover untapped sources of customer value and to create unique combinations of resources in order to create value to the firm (Morris et al., 2004). The creation of new value for the enterprises lies at the heart of economic development (Olannye & Eromafuru, 2016). Value is created through an organization's business model which takes inputs from the capitals and transforms them through business activities in order to produce outputs. Entrepreneurial value creation is manifested in outcomes or changes that result from the firms activities. Those outcomes may be affected by the way an organization or a firm attends to its environmental or social concerns of creating value for itself and its stakeholders. Outcomes are not always stable and predictable and take place over multiple time frames. Interestingly, creation of value either in short or medium term has the potential for entrepreneurial value creation in the future (Pitsamorn et al., 2014).

2.1.6: Entrepreneurial Opportunity Recognition

Opportunity recognition is the ability of the firm to select the right opportunity (Becherer et al., 2012). Interestingly, opportunity recognition and pursuit of opportunity are marketing actions critical to small and medium enterprises' successes (Kilenthong et al., 2015). However, comparing traditional marketing with entrepreneurial marketing, the latter is more opportunity driven. There are two crucial marketing actions, as acknowledges and occupation that can bring success for small enterprises. There is a need to choose the right opportunity that determines the success for the enterprise (Becherer, Haynes & Helms, 2008). Taking a right action at the right time might bring successfulness for firms. Being forward looking as a key point of opportunity focus for entrepreneurs means serving unsatisfied needs and capturing new opportunities before their competitors. In this case, innovation and creativeness might help to move forward company's two steps forward than competitors

(Kilenthong et al., 2015). Market potential is evaluated by degree of fit relative to the capabilities and resources of the firms. It is the ability of the firm to select the right opportunity that determines success (Hamel, 2000). Opportunities requiring substantial resource commitments may be unattainable to small owner operated firms. However, in the SMEs, the recognition and pursuit of opportunity are more closely aligned with the entrepreneur's individual perceptions (Schindehutte & Morris, 2001).

2.1.7: Entrepreneurial Resource Leveraging

Resource leveraging entails the ability of an entrepreneur to recognize under-utilized resources. Entrepreneurs can acquire additional resources, such as venture capital or bank loans, or by trying to achieve a maximum effect of these scarce resources. Perhaps, in order to see how a resource could be used in a non-conventional way or to convince those that control a resource to let the marketer use it, requires insight, experience and skill (Morris et al., 2004). Entrepreneurial marketing develops a creative capacity for resource leveraging (Mugambi et al., 2017). Apparently, the most critical form of leveraging is the ability to use other people's resources in order to accomplish the entrepreneurial venture purpose. In addition, there are several ways of acquiring resources such as bargaining, borrowing of money and materials, renting, leasing, sharing, recycling, contracting, and outsourcing (Rezvani & Khazael, 2003). Appropriately, entrepreneurial resource leveraging is not simply a matter of effectively using limited resources but a creative synergistic process. Apparently, in some cases, it entails recognizing a resource not harnessed by others (Morris, Schindehutte & Laforge, 2002). Furthermore, scarce resources demand a strict monitoring of business costs, and restricting the range and intensity of entrepreneurial activities a new venture is capable of pursuing.

2.1.8: Sustainability

Sustainability refers to the development which satisfies the present consumer needs without threatening future generations' opportunities to satisfy their own needs (Kuznetsova & Balabash, 2015). Firms that appreciate that the businesses they run do not operate in a vacuum, and are able to nurture the environment that support them, stand to build a high rapport with customers. These firms are in a better position to manage the innovation processes within their enterprises and run less risk of being outpaced by competitors (Yiu, Grant, & Edgar, 2007). The term sustainability is used to indicate programs, initiatives and actions by an entrepreneur aimed at the preservation of a particular resource. Extant literature indicated that there are four pillars of sustainability namely; human, social, economic and environmental. Human sustainability aims to maintain and improve the human capital in the society. An enterprise will view itself as a member of society and promote business values that respect human capital. Human sustainability focuses on the importance of persons involved in the making of products (Benn et al., 2014). It encompasses the development of skills and human capacity to support the functions and sustainability of the firm and to promote the wellbeing of society. Social sustainability aims to preserve social capital by investing and creating services that constitute the framework of our society. Social sustainability focuses on maintaining and improving social quality with concepts such as cohesion, reciprocity and honesty and the importance of relationships amongst people (Diesendorf, 2010). Interestingly, economic sustainability aims to maintain the capital intact and also improve the standard of living. It entails efficient use of assets to maintain company profitability over time (Benn et al., 2014). Environmental sustainability aims to improve human welfare through the protection of natural capital. In addition, environmental sustainability according to Dunphy et al. (2010) places emphasis on how an entrepreneur can achieve positive economic outcomes without doing any harm to the environment.

Sustainability can be seen as achieving the goals of the firm and maximizing the wellbeing of the entrepreneur in the long-run.

2.2: Theoretical Foundation: Resource-Based Theory by (Barney, 1991).

Resource-based theory states that the possession of strategic resources provides an organization with a golden opportunity to develop competitive advantages over its rivals. It contends that the firm's resources are the fundamental determinants of firm's competitive advantage and sustainability. The theory assumes that firms may be diverse with respect to the bundle of resources that they control. This theory believes that these competitive advantages in turn can help the organization enjoy strong profits, especially over time. The theory maintains that a strategic resource is an asset that is valuable, uncommon, not easy to imitate and non-substitutable. It also assumes that resource heterogeneity may continue over time because the resources used to implement firms' strategies are not perfectly mobile across firms. Resource uniqueness is a necessary condition for the resource bundle that contributes to a competitive advantage. This theory posits that a firm's performance is affected by the firm-specific resources and capabilities. Capabilities are what the organization can do based on the resources it possesses. Resources refer to what an organization owns, capabilities refer to what the organization can do. The theory maintains that capabilities tend to arise or expand over time as a firm takes actions that build on its strategic resources. The theory coins that entrepreneurs should be aware of their strengths and weaknesses, in order to develop strategies on how to do better than their competitors with the given resources bundles and capabilities. Resource-based theory suggests that resources that are valuable, rare, difficult to imitate, and non-substitutable best position an enterprise for long-term sustainability. Owing to the fact that entrepreneurial marketing dimensions are component of the resources and capabilities that entrepreneurs use in enhancing the sustainability of the entrepreneurial ventures. Therefore, this study drew inspirations on this premise and anchored on this theory.

2.3: Proposed Research Model for the Study

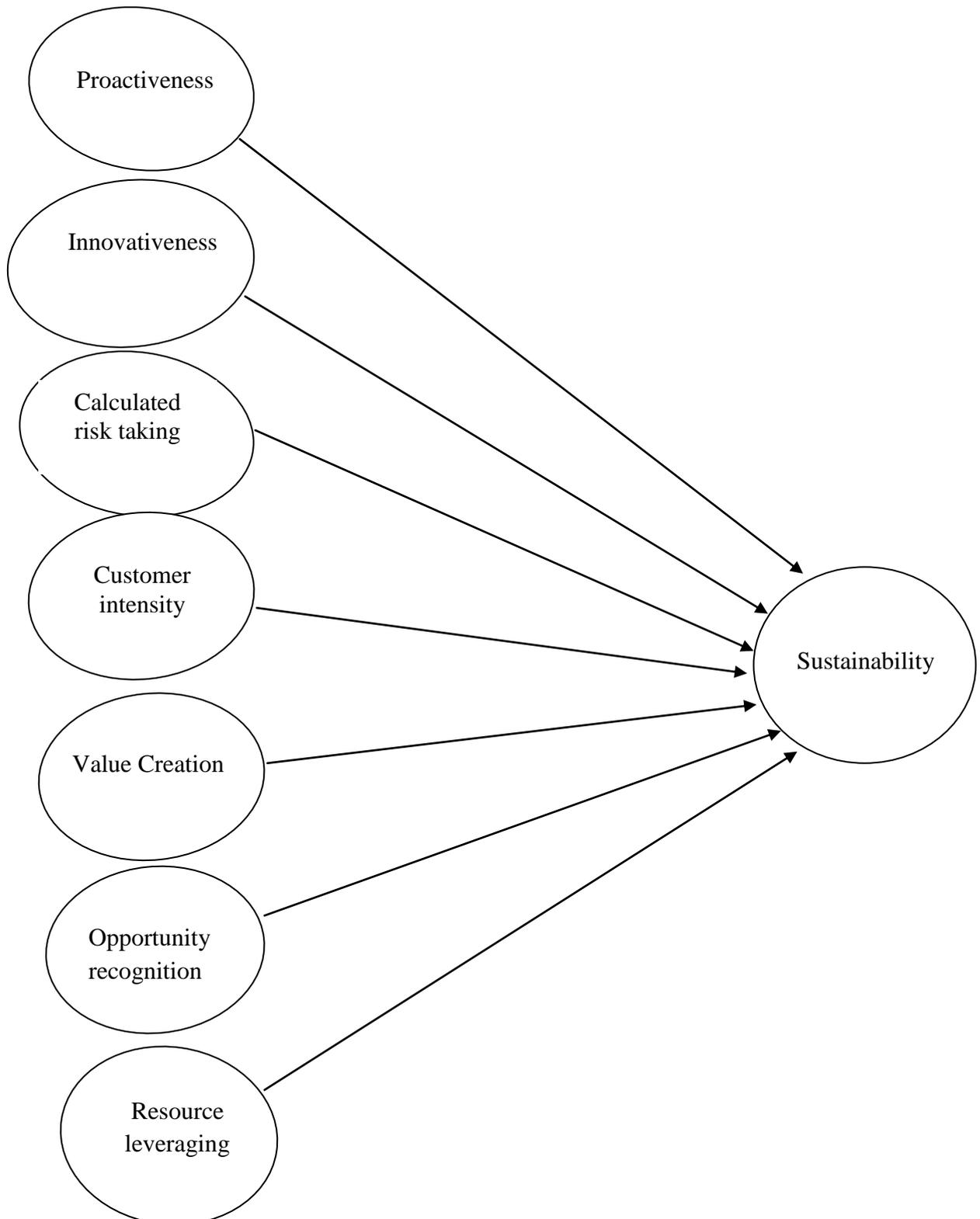


Figure 1: Proposed Research Model for the Study
Source: Adapted from Jones and Rowley (2011).

3. MATERIALS AND METHODS

The study adopted a descriptive survey research design method. In this study, the survey research method is used to elicit responses, opinions and information from the respondents concerning entrepreneurial marketing dimensions and sustainability of plastic manufacturing firms in Anambra State. The geographical area of the study is Anambra State. The study selected fifteen plastic manufacturing firms; five from each of the three cities namely; Onitsha, Awka and Nnewi. The target population of this study consists of entrepreneurs and employees of the fifteen selected plastic manufacturing firms under investigation in Onitsha, Awka and Nnewi. The population size is 9050 (source: field survey, 2021). Taro Yamane formula was used to arrived at the sample size of 383. A purposive sampling method was adopted. Primary sources of data were using which was facilitated using the questionnaire. The research instrument was developed from the literature and modified to suit the context of this study. The constituents of the questionnaire were designed to enable the respondents give relevant information and this enabled the researchers obtained the necessary information. The validation of the research instrument was done by four research experts and this ensured the soundness of the research instrument. The reliability of the research instrument was established through a pilot study by using test-retest reliability method. A pilot study was conducted in Owerri, Imo State using 20 pilot respondents in two different occasions at the interval of two weeks. The scores from the first and second administrations of instrument to the pilot respondents were collated, compared and correlated using Cronbach alpha correlation which yielded an average value of 0.718. The reliability result confirmed the consistency and the appropriateness of the research instruments. Multiple regression analysis was the statistical technique used for the study which was computed using SPSS version 25 software package. Seven formulated hypothesis were tested at research accepted stipulated significant level. Ms excel package was also used to organize the scores which SPSS software package was used to compute the data generated from the respondents. The decision rule is as follows: accept the null hypothesis if the p-value is greater than 0.05 the research stipulated level of significance (5%). Or accept the alternative hypothesis if the p-value is less than 0.05 the research stipulated level of significance (5%). Otherwise, reject.

Model Specification and Operationalization of the Study Variables

$$Y = a + \beta x + \epsilon$$

$$Y = a + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + \beta_5 X_5 + \beta_6 X_6 + \beta_7 X_7 + \epsilon$$

$$SUS = a_0 + \beta_1 PRO + \beta_2 INN + \beta_3 CAR + \beta_4 CUI + \beta_5 VCR + \beta_6 OPR + \beta_7 REL + \epsilon$$

Where:

a = constant (intercept)

β_1 - β_7 = Coefficient of parameter $X_1 - X_7$

ϵ = stochastic error term

PRO = proactiveness

INN = innovativeness

CAR = calculated risk taking

CUI = customer intensity

VCR = value creation

OPR = opportunity recognition

REL = resource leveraging

Sustainability is a function of entrepreneurial proactiveness

Sustainability is a function of entrepreneurial innovativeness

Sustainability is a function of entrepreneurial calculated risk taking

Sustainability is a function of entrepreneurial customer intensity

Sustainability is a function of entrepreneurial value creation

Sustainability is a function of entrepreneurial opportunity recognition
 Sustainability is a function of entrepreneurial resource leveraging

4. RESULTS

The researchers distributed 383 copies of the questionnaire to the respondents but only 358 valid copies were used for analysis in this study. The multiple regression results are presented accordingly.

Multiple Regression Analysis Result

Table 1: Variables Entered/Removed^a

| Model | Variables Entered | Variables Removed | Method |
|-------|---|-------------------|--------|
| 1 | PRO, INNO, CAR, CUI, VCR, OPR, REL ^b | | Enter |

a. Dependent Variable: SUSTAINABILITY (SUS)

b. All requested variables entered.

Table 2: Multiple Regression Model Summary^b

| Model | R | R Square | Adjusted R Square | Std. Error of the Estimate | Durbin-Watson |
|-------|-------------------|----------|-------------------|----------------------------|---------------|
| 1 | .821 ^a | .726 | .722 | 1.129 | 2.012 |

a. Predictors: (Constant), PRO, INNO, CAR, CUI, VCR, OPR, REL.

b. Dependent Variable: SUSTAINABILITY (SUS)

Table 2 indicates that a (R) has a value of 0.821 which shows a strong positive relationship between the independent and dependent variables. The adjusted R² value of 0.722 entails that 72.2% of the changes in the dependent variable (sustainability) was determined by the independent variables (entrepreneurial marketing variables) adjustment made. In addition, the Durbin-Watson (DW) test for autocorrelation result of 2.012 indicates the absence of autocorrelation among the explanatory variables used in the regression model.

Table 3: Multiple Regression ANOVA Result

| Model | Sum of Squares | Df | Mean Square | F | Sig. |
|------------|----------------|-----|-------------|---------|-------------------|
| Regression | 1599.103 | 7 | 228.443 | 279.125 | .000 ^b |
| Residual | 461.505 | 362 | 1.275 | | |
| Total | 2060.608 | 369 | | | |

a. Dependent Variable: Sustainability (SUS)

b. Predictors: (Constant), PRO, INNO, CAR, CUI, VCR, OPR, REL

Table 3 shows that the F-statistics value of 279.125 (P-value = 0.000) which demonstrate that the model is significant and fit well with the data used.

Table 4: Multiple Regression Coefficients Result

| Model | | Unstandardized Coefficients | | Standardized Coefficients | T | P-value. |
|-------|------------|-----------------------------|------------|---------------------------|-------|----------|
| | | B | Std. Error | Beta | | |
| 1 | (Constant) | .260 | .013 | | 2.789 | .024 |
| | PRO | .577 | .023 | .545 | 8.892 | .001 |
| | INNO | .694 | .011 | .638 | 9.859 | .000 |
| | CAR | .123 | .098 | .121 | 2.506 | .042 |
| | CUI | .408 | .038 | .412 | 6.107 | .002 |
| | VCR | .337 | .062 | .331 | 4.586 | .004 |
| | OPR | .208 | .078 | .211 | 3.284 | .013 |
| | REL | .385 | .053 | .383 | 4.617 | .002 |

Dependent variable: Sustainability (SUS).
 Source: SPSS Computation Output, 2021.

Test of Hypothesis One

HO₁: Entrepreneurial proactiveness has no significant influence on the sustainability of plastic manufacturing firms in Anambra State.

HA₁: Entrepreneurial proactiveness has a significant influence on the sustainability of plastic manufacturing firms in Anambra State.

Based on the result on table 4, the absolute value of t-statistic for entrepreneurial proactiveness is 8.892 with a p-value of 0.001. Since 0.001 is less than 0.05, the stipulated acceptable level of significance for this study, the decision is to accept the alternative hypothesis and reject the null hypothesis. We conclude that entrepreneurial proactiveness has a significant influence on the sustainability of plastic manufacturing firms in Anambra State.

Test of Hypothesis Two

HO₂: Entrepreneurial innovativeness has no significant influence on the sustainability of plastic manufacturing firms in Anambra State.

HA₂: Entrepreneurial innovativeness has a significant influence on the sustainability of plastic manufacturing firms in Anambra State.

Based on the result on table 4, the absolute value of t-statistic for entrepreneurial innovativeness is 9.859 with a p-value of 0.000. Since 0.000 is less than 0.05, the stipulated level of significance for this study, the decision is to accept the alternative hypothesis and reject the null hypothesis. We conclude that entrepreneurial innovativeness has a significant influence on the sustainability of plastic manufacturing firms in Anambra State.

Test of Hypothesis Three

HO₃: Calculated risk taking has no significant influence on sustainability of plastic manufacturing firms in Anambra State.

HA₃: Calculated risk taking has a significant influence on sustainability of plastic manufacturing firms in Anambra State.

Based on the result on table 4, the absolute value of t-statistic for calculated risk taking is 2.506 with a p-value of 0.042. Since 0.042 is less than 0.05, the stipulated level of significance for this study, the decision is that alternative hypothesis is accepted and null hypothesis rejected. We conclude that calculated risk taking has a significant influence on the sustainability of plastic manufacturing firms in Anambra State.

Test of Hypothesis Four

HO₄: Entrepreneurial customer intensity has no significant influence on sustainability of plastic manufacturing firms in Anambra State.

HA₄: Entrepreneurial customer intensity has a significant influence on sustainability of plastic manufacturing firms in Anambra State.

Based on the result on table 4, the absolute value of t-statistic for entrepreneurial customer intensity is 6.107 with a p-value of 0.002. Since 0.002 is less than the stipulated level of significance for this study, the decision is that alternative hypothesis is accepted and null hypothesis rejected. We conclude that entrepreneurial customer intensity has a significant influence on the sustainability of plastic manufacturing firms in Anambra State.

Test of Hypothesis Five

HO₅: Entrepreneurial value creation has no significant influence on the sustainability of plastic manufacturing firms in Anambra State.

HA₅: Entrepreneurial value creation has a significant influence on the sustainability of plastic manufacturing firms in Anambra State.

Based on the result on table 4, the absolute value of t-statistic for entrepreneurial value creation is 4.586 with a p-value of 0.004. Since 0.004 is less than 0.05, the stipulated level of significance for this study, the decision is that alternative hypothesis is accepted and null hypothesis rejected. We conclude that entrepreneurial value creation has a significant influence on the sustainability of plastic manufacturing firms in Anambra State.

Test of Hypothesis Six

HO₆: Opportunity recognition has no significant influence on the sustainability of plastic manufacturing firms in Anambra State.

HA₆: Opportunity recognition has significant influence on the sustainability of plastic manufacturing firms in Anambra State.

Table 4 result indicated that the absolute value of t-statistic for opportunity recognition is 3.284 with a p-value of 0.013. Since 0.013 is less than 0.05, the stipulated level of significance for this study, the decision is that alternative hypothesis is accepted and null hypothesis rejected. We conclude that opportunity recognition has a significant influence on the sustainability of plastic manufacturing firms in Anambra State.

Test of Hypothesis Seven:

HO₇: Resource leverage has no significant influence on the sustainability of plastic manufacturing firms in Anambra State.

HA₇: Resource leverage has a significant influence on the sustainability of plastic manufacturing firms in Anambra State.

Based on the result on table 4, the absolute value of t-statistic for resource leverage is 4.617 with a p-value of 0.002. Since 0.002 is less than 0.05, the stipulated level of significance for this study, the decision is that alternative hypothesis is accepted and null hypothesis rejected. We conclude that resource leverage has a significant influence on the sustainability of plastic manufacturing firms in Anambra State.

5. Conclusion and Recommendations

This study has provided a comprehensive understanding that entrepreneurial marketing dimensions have significant and positive influences on sustainability of plastic manufacturing

firms in Anambra State. The study concludes that entrepreneurial proactiveness has a significant and positive influence on sustainability of plastic manufacturing firms. Entrepreneurial innovativeness has a significant and positive influence on the sustainability of plastic manufacturing firms. Calculated risk taking has positive and significant influence on sustainability of plastic manufacturing firms. Entrepreneurial customer intensity has a significant and positive influence on sustainability of plastic manufacturing firms. Also, entrepreneurial value creation has a significant and positive influence on sustainability of plastic manufacturing firms. Opportunity recognition has a significant and positive influence on sustainability of plastic manufacturing firms. Entrepreneurial resource leveraging has a significant and positive influence on the sustainability of plastic manufacturing firms. Therefore, plastic manufacturers and managers should be proactive and must be aware of who the competitors are in the market. Conclusively, entrepreneurs should be more creative and innovative so as to provoke and recognize opportunities in order to produce unique products in distinctive markets using unique strategies. Conclusively, entrepreneurial marketing dimensions adopted for entrepreneurial ventures are very important and indispensable for the sustainability of the firms. Based on findings, the study recommended that entrepreneurial marketing should be propagated and encouraged as it seeks novel ways in creating value for the customers. Entrepreneurs should continue to invest on those dimensions that yielded positive and significant influences toward the sustainability of plastic manufacturing firms in Anambra State of Nigeria.

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| Appendix: Data Used for the Study | | | | | | | |
|--|---|-----------------|----------------|----------------|-----------------|-----------------|--------------|
| | Items | SA 5 | A 4 | D 3 | SD 2 | IN 1 | Total |
| SN | Entrepreneurial proactiveness | | | | | | |
| 1 | A strong proactive behavior gives SMEs the ability to anticipate needs. | 123 | 157 | 57 | 18 | 3 | 358 |
| 2 | Entrepreneurial proactiveness leads to enhanced firm performance. | 118 | 163 | 52 | 21 | 4 | 358 |
| 3 | Entrepreneurial proactiveness enables the introduction of new products and brands. | 120 | 160 | 52 | 24 | 2 | 358 |
| 4 | Proactiveness influences environmental change of a firm. | 122 | 161 | 50 | 19 | 6 | 358 |
| 5 | Proactivity helps in achieving entrepreneurial business goals. | 112 | 142 | 48 | 39 | 17 | 358 |
| | Entrepreneurial innovativeness | | | | | | |
| 6 | Entrepreneurial changes in business activity creates an environment conducive for further change. | 114 | 122 | 56 | 60 | 6 | 358 |
| 7 | Adequate facilities promote change and creative behaviours. | 115 | 148 | 50 | 32 | 13 | 358 |
| 8 | Entrepreneurship is a creative activity. | 126 | 160 | 48 | 20 | 4 | 358 |
| 9 | Innovation involves new ideas that helps the firm exhibits its uniqueness.. | 116 | 122 | 90 | 28 | 2 | 358 |
| 10 | Entrepreneurs should be quick to adapt to new changes. | 168 | 111 | 58 | 15 | 6 | 358 |
| | Calculated risk taking | | | | | | |
| 11 | The success of most enterprises depends on the ability of an entrepreneur to evaluate risks. | 128 | 115 | 90 | 17 | 8 | 358 |
| 12 | An entrepreneur previous success propels him to take more calculated risks. | 185 | 123 | 30 | 11 | 9 | 358 |
| 13 | Entrepreneur hopes on favorable outcomes. | 142 | 113 | 55 | 30 | 18 | 358 |
| 14 | An entrepreneur is optimistic over uncertainty. | 128 | 95 | 69 | 36 | 30 | 358 |
| 15 | High risk taker makes a wise and profitable decisions. | 150 | 102 | 48 | 401 | 8 | 358 |
| | Customer intensity | | | | | | |
| 16 | Relationship between the entrepreneur and the customer should be mutual. | 99 | 158 | 40 | 35 | 26 | 358 |
| 17 | The image of the enterprise influences customers perception. | 187 | 126 | 26 | 11 | 8 | 358 |
| 18 | An entrepreneur focuses on creating relationship with their customers. | 102 | 156 | 50 | 27 | 23 | 358 |
| 19 | Entrepreneurial marketing is built on customers satisfaction. | 99 | 148 | 40 | 41 | 30 | 358 |
| 20 | Customer relationship increases the sales turnover of an entrepreneurial venture. | 150 | 145 | 32 | 15 | 16 | 358 |
| | Entrepreneurial value creation | | | | | | |
| 21 | An entrepreneur creates new value by using existing technology. | 189 | 122 | 37 | 6 | 4 | 358 |
| 22 | Resources are exploited to create value for customers. | 125 | 180 | 30 | 17 | 6 | 358 |
| 23 | Value created should be commensurate with the customers' expectations. | 87 | 158 | 72 | 39 | 2 | 358 |
| 24 | The focal point of entrepreneurial marketing is value creation. | 134 | 157 | 49 | 12 | 6 | 358 |
| 25 | The task of an entrepreneur is to discover untapped sources | 159 | 133 | 45 | 15 | 6 | 358 |

| | | | | | | | |
|-----------------------------|--|-----|-----|----|----|----|-----|
| | of customer value. | | | | | | |
| | Entrepreneurial opportunity recognition | | | | | | |
| 26 | Opportunities exist where there are technological innovations. | 159 | 156 | 25 | 9 | 9 | 358 |
| 27 | An entrepreneur's ability to social network contributes to opportunity recognition. | 189 | 115 | 26 | 18 | 10 | 358 |
| 28 | An entrepreneur should be alert and creative in order to identify opportunities. | 112 | 135 | 55 | 28 | 28 | 358 |
| 29 | An entrepreneur explores and harness right opportunities | 101 | 150 | 80 | 15 | 8 | 358 |
| 30 | The recognition and pursuit of opportunity is the hallmark of entrepreneurial prowess. | 178 | 141 | 27 | 7 | 5 | 358 |
| | Entrepreneurial resource leveraging | | | | | | |
| 31 | Entrepreneurial effectiveness and capabilities increase the resources of an enterprise. | 107 | 172 | 35 | 15 | 29 | 358 |
| 32 | An entrepreneur should be able to identify the key resources of an enterprise. | 98 | 193 | 56 | 6 | 5 | 358 |
| 33 | The method of utilizing the resources determines the growth performance of the enterprise. | 138 | 203 | 6 | 7 | 4 | 358 |
| 34 | Resources should be used to accomplish the company's goals. | 150 | 201 | 3 | 2 | 2 | 358 |
| 35 | Resources should be effectively used in order to yield profit. | 125 | 150 | 30 | 33 | 20 | 358 |
| | Sustainability | | | | | | |
| 36 | New and improved products are enhanced due to entrepreneurial proactiveness. | 200 | 103 | 93 | 54 | 8 | 358 |
| 37 | Market and sales volume have increased due to entrepreneurial innovativeness. | 153 | 172 | 15 | 12 | 6 | 358 |
| 38 | Customer turnover has reduced due to intensified efforts on planned risk taking. | 89 | 148 | 58 | 33 | 30 | 358 |
| 39 | Quality of products has be sustained due to efforts on customer intensity. | 144 | 94 | 64 | 26 | 30 | 358 |
| 40 | The profitability of the firm has risen due to added value created by the entrepreneurs. | 109 | 169 | 46 | 29 | 5 | 358 |
| 41 | The enterprise is sustained due to opportunities well recognized. | 134 | 182 | 32 | 3 | 7 | 358 |
| 42 | Proper leveraging of resources has contributed to the sustainability of the firm. | 142 | 97 | 53 | 42 | 24 | 358 |
| Source: Field Survey, 2021. | | | | | | | |