Gaining and Sustaining Competitive Advantage;  
A Study of Nigeria’s Manufacturing Sector

Authors

Yahaya Sani  
Business College, Sudan of Science and Technology University  
yahaysani20@yahoo.com  
Khartoum, Sudan

Abdel-Hafiez Ali Hassaballah  
Business College, Business Administration, Sudan University of Science and Technology  
hafiezali@yahoo.com  
Khartoum, Sudan

Muhammad Hassan Hafiz  
Business College, Business Administration, Sudan University of Science and Technology  
Khartoum, Sudan

Abstract

Nigeria has allowed itself to be used for all sorts of imported goods from foreign industries and Asian Tigers in the name of globalization. Consequently, this has greatly affected the capacity utilization of various firms in Nigeria’s manufacturing sector. It is a thing of concern that even the oil which Nigeria produces, part of it is refined abroad and imported back to the country to meet-up local consumption, the situation becomes more aggravated due to Nigerians preference for foreign good. The purpose of this study is to investigate on how Nigeria’s manufacturing firms could gain and sustain competitive advantage deciding resource base view’s value, rareness and inimitability as independent variable according to the study as Elements of competitive advantage and innovation as dependent variable also known to be sustainable competitive advantage according to this study. Data were collected through personal questionnaire from 166 manufacturing firms in Nigeria who are Members of Manufacturing Association of Nigeria within North West and North Central zones with 70% response rate. The results from the study indicated that there is positive and significant relationship between elements of competitive advantage namely resource value, rareness and inimitability with sustainable competitive advantage; innovation. According to the result manufacturers in Nigeria fully agreed that implementing strategy that leads to value, rare and inimitable resource yield firms competitive advantage and continues innovation sustained the advantage. This study adds Knowledge to the theory and practice of sustainable competitive advantage particularly in Nigeria’s manufacturing firms. Its theoretical and empirical significance adds more insight on the previous empirical studies in the field that is to say it gives guidelines to manufacturers in Nigeria on the application of strategic management. It gives guidelines to manufacturers in Nigeria on the impact of strategic management approaches on sustainable competitive advantage. For government and firms, the study provides avenue of enhancing sustainable competitive advantage in Nigeria and Africa as a whole since the phenomena is general.

Key Words

Resource Base View, competitive advantage, sustainable competitive advantage and Innovation.
I. INTRODUCTION

Nigeria has allowed itself to be used for all sorts of imported goods from foreign industries and Asian Tigers in the name of globalization. Consequently, this has greatly affected the capacity utilization of various firms of the Nigeria’s manufacturing sector. Similar view were explained by Dembele (1998); Sagagi (2004); Aluko, Akinola and Fatakun (2004).

Another serious problem is that if not all greater Nigerian’s income (national income) is from the sale of crude oil and its allied which is oscillating from one ill to another, this is posing difficulty in applying strategic management principles by manufacturers as manufacturing firms are facing neglect from the regulators. However, it is a thing of concern that even the oil which Nigeria produces, part of it is refined abroad and imported back to the country to meet-up local consumption, because the country’s refineries have over the years been operating below capacity utilization (Daily Trust, 2010). The situation becomes more aggravated due to Nigerians preference for foreign good (Aluko et al. 2004; Ajayi, 1990).

There are few researches on strategic management in emerge markets i.e. developing economy. (Hussam and Hussien (2007), as such Manufacturers in Nigeria do not apply properly strategic management concepts for future development hence this study intends to turn around the minds of regulators and manufacturers in Nigeria to focus on competitive advantage and push to -words sustaining it.

II. LITERATURE REVIEW

The pursuit of competitive advantage is indeed an idea that is at the heart of much of the strategic management literature (Berden, and Proctor (2000); Fahy (2000); Barney (2000a, 2000b, 2007); Lin (2003); Fahy, Ferrelley and Gister (2004); Cousins (2005); Newbert, (2008) among others. Barney, (1991a) contributes to the discussion by exploring the link between a firm’s resources and sustainable competitive advantage. The study concludes that not all firm’s resources hold the potential of sustainable competitive advantage instead, they must possess four attributes: rareness, value, inability to be imitated, and inability to be substituted. Prahalad and Hamel (1990) the study concludes that firms should combine their resources and skills into core competencies, loosely defined as that which a firm does distinctively well in relation to competitors. They also positioned that competitive advantage are realized only when the firm combines assortments of resources in such a way that they achieve a unique competency or capability that is valued in the market place. Day and Wensley (1988) focus on two categorical sources, involved in creating a competitive advantage i.e. superior skills and superior resources. Other authors have elaborated on the specific skills and resources that can contribute to sustainable competitive advantage

A company’s strategy indicates the choices its managers have made about how to attract and place customers (value), how to respond to changing conditions and compete successfully and grow the business (rareness), how to manage each functional piece of the business and develop needed capability and achieve performance target (inimitability). (Thompson, Strickland, and Gamble 2005). Manager’s ability to separate powerful strategy from an ordinary or weak one is
their ability to forge series of moves, both in the market place and internally, that makes the company distinctive as a reason for buyers to prefer its product and or services and produce a sustainable competitive advantage over rivals. Without competitive advantage a company risk of being beaten by stronger rivals hence to set strategy that put them apart from rivals in the mane of achieving sustainable competitive advantage and performance.

A company strategy is viewed as work in progress since most of the times company’s strategy emerges in bits and pieces, the result of changing circumstances, deliberations on management designs and on going management actions to fine tune their pieces of strategy and to adjust to certain strategy elements in response to unfolding conditions. Nonetheless, on occasion, fine -turning the existing strategy is not enough and major strategy shifts are called for, such as when a strategy is clearly failing, when a market condition or buyers preferences changes significantly and new opportunity arises when competitors do something unexpected or when important technological breakthrough occurs.

Regardless of whether a company’s strategy changes gradually or shift, the important point is that a company’s present strategy is temporary (temporary competitive advantage) and on trial, pending new ideas for improvement from management due to changing environmental conditions and any other changes in the company’s situation that managers believe warrant strategic adjustment(innovation).

III. FRAMEWORK AND HYPOTHESIS

Based on the literature reviewed the integrative framework of this study is on resources base view of the firm to determined power of resource value, rareness and resource inimitability on firm’s competitive advantage and continuous innovation as a route for sustaining the advantage. The study examines the elements of competitive advantage in line with resources base view as the independent variable with three constructs i.e. value, rareness and inimitability as bases for firm’s competitive advantage and innovation as an avenue for sustaining the advantage as the dependent variable. See figure 1

In this study three main hypothesis were formulated to test the relationship between the elements of competitive advantage and sustainable competitive advantage i.e. the relationship between resource value and innovation, between resource rareness and innovation and finally resource inimitability with innovation.
According to Porter (1980) that firms must keep on innovating as its revenue stream is constantly exposed to new competitors, substitute product and so forth. Hoffman (2000) in his study, solicited that the fundamental basis of long-run success of a firm is the achievement and maintaining of a sustainable competitive advantage. The study further concludes that knowing the intense nature of competition today, firms must be more innovative and environment conscious in their strategic planning than just lowering price. Fahy (2000) concludes that the essential elements of resource base view are sustainable competitive advantage and performance. Jeroen et al. (2010), affirmed that no sustainable competitive advantage can last forever, but remains a powerful strategic concept in a short run. They go ahead to say that firms are not passive; a competitive advantage can be sustained only at the dynamic level through advantageous “dynamic capabilities” or innovation. Fiol (2001) argues that both the skill/resources and the way organization use them, must constantly change, leading to the creation of continuously changing temporary advantage, that is to say every sustainable competitive advantage must eventually be competed away over time.

Burney et al. (2001), conclude that in a dynamic environment firms cannot derive sustainable competitive advantage from a static set of resources. Resource base view’s logic applies at must to dynamic capabilities as to the firm’s other resources, enable the firm to adopt faster than its competitors. Firm must keep on innovating as its revenue stream is constantly exposed to new competitors, substitute product and so forth (Porter, 1980). Resource base view has emerged to help companies compete more effectively in the ever changing and globalizing environment, it view competence, capabilities and skill or strategic assets as a sources of sustainable competitive advantage for the firm (Mabey et al. 1998).

Hoffmann (2000), confirms that the fundamental basis of long-run success of a firm is the achievement and maintaining of a sustainable competitive advantage. The study concludes that knowing the intense nature of competitors today, firms must be more innovative and environment conscious in their strategic planning than just lowering price. Based on the above discussion the following hypotheses are generated:

H1 There is positive relationship between resources value and innovation

H2 There is positive relationship between resource rareness and innovation

H3 There is positive relationship between resources inimitability with innovation

IV. Research Design

The study considers a survey method being a popular and common strategy in business research, because it allows for the collection of large amount of data from sizable population in a highly economical way. Therefore, this research considers questionnaire tool for data collections. Sanders et al. (2007), are of the opinion that research project for academic courses are time constrained, therefore in this study due to time management a cross-sectional strategy is
employed, a study in which a group of individuals are composed into one large sample and studied only at a single point in time.

This research selects a cross-sectional approach which is a dominant method in marketing research and the questionnaire survey approach which sounds most appropriate means of collecting data from the manufacturing firms in Nigeria.

V. VI. DATA ANALYSIS

A total of 166 questionnaires were distributed to and personally administered on the respondents. A total of 116 questionnaires were collected, the overall response rate was 70% and to ensure the goodness of measurement exploratory factor analysis (principal component analysis) was conducted on elements of competitive advantage and innovation. In addition reliability test (Cronbach’s Alpha) was done to measure the internal consistency of the items used on the questionnaire. These two methods were very important to assess the goodness of the measures (Sekaran, 2003). Correlation test was conducted to measure the relationship among the variable and regression analysis was also run in the study in order to test the relevance of the hypotheses.

Table 1 presents the result of factor analysis on Inimitability measured by 4 questions, Rareness 2 questions and Value also 2 questions. This result had been achieved after deleting various items for insufficient correlation (MSA <0.50). The (KMO) was .74 and Bartlett test of sphericity was significant, both indicate significant correlation for factor analysis. From table 1, the result of the analysis, shows three loading factors ranging from .82 -. .71, Factor one 4 questions, factor two 2 questions and factor three 2 question also. The factors cumulatively captured 70% of the total variance in the data. All items had loading above 0.05 with Eigen value 3.3 for factor one, factors two 1.2 and factor three 1.05. The factors are subject to varimax rotation and the original names of the 3 factors remain. The reliability value (Cronbach’s alpha) for Inimitability were (.83), Rareness (.61) and value (.70). All assumptions were satisfactorily fulfilled. All the remaining items had more than recommended value of at least 0.50 in MSA with KMO value of .74 (above the recommended minimum level of 0.60), and Bartlett’s test of sphericity is significant (p<.01) Eigenvalue above 1. This indicated that elements of competitive advantage according to manufacturers in Nigeria were 3 i.e. inimitability, rareness and value.

<table>
<thead>
<tr>
<th>Variable and Question items</th>
<th>F1</th>
<th>F2</th>
<th>F3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Inimitability</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Our resources are difficult to describe in terms of how wecreate them by competitors</td>
<td>.82</td>
<td>.011</td>
<td>.074</td>
</tr>
<tr>
<td>It is difficult for customers to imitate us given unique socialcharacteristic of our firm.</td>
<td>.81</td>
<td>.223</td>
<td>.186</td>
</tr>
<tr>
<td>My firm has historical record of difficulty of imitation byothers.</td>
<td>.72</td>
<td>.086</td>
<td>.141</td>
</tr>
<tr>
<td>We provide each customer with personalized service.</td>
<td>.71</td>
<td>.303</td>
<td>.271</td>
</tr>
</tbody>
</table>
Table 2: Inter correlations of variables

<table>
<thead>
<tr>
<th>Variables</th>
<th>Mean</th>
<th>S/Deviation</th>
<th>Inimitability</th>
<th>Rareness</th>
<th>Value</th>
<th>Innovation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Inimitability</td>
<td>3.55</td>
<td>.891 **</td>
<td>1.00</td>
<td>.400***</td>
<td>.377***</td>
<td>.519***</td>
</tr>
<tr>
<td>Rareness</td>
<td>3.70</td>
<td>.900</td>
<td>.400***</td>
<td>1.00</td>
<td>.282**</td>
<td>.252**</td>
</tr>
<tr>
<td>Value</td>
<td>4.15</td>
<td>.561</td>
<td>.377***</td>
<td>.282**</td>
<td>1.00</td>
<td>.412***</td>
</tr>
<tr>
<td>Innovation</td>
<td>3.78</td>
<td>.827</td>
<td>.519***</td>
<td>.252**</td>
<td>.412***</td>
<td>1.00</td>
</tr>
</tbody>
</table>

***p<0.01 and **p<0.05

Table 3 above shows the result of the inter correlations among the variables. The tables indicated that the mean value of both variables is above average indicating that they are positively and sufficiently correlated with each other. The table shows that inimitability is positively and significantly correlated with rareness (r=.400*** p-value <0.01) and inimitability is positively and significantly correlated with value (r=.337*** p-value <0.01), the test indicated further inimitability is sufficiently correlates with innovation (r=.519*** p-value <0.01). From the correlation test Rareness is positively and significantly correlates with value (r=.282** p-value <0.05) also rareness is positively and significantly correlates with innovation (r=.252**p-value <0.05). From the same test the correlation table shows that value is positively and significantly correlates with innovation (r=.412***p-value <0.01). Therefore both independents and the dependents variable of this study are sufficiently correlated.

VI. Results and Discussion

Testing the relationship between Elements of Competitive advantage (Value, Rareness and Inimitability) as independent variable and Innovation as dependent variable, hierarchical regression equation as shown in table 2 tested the influence of elements of competitive advantage in enhancing sustainable competitive advantage (innovation). The table shows that elements of competitive advantage cumulatively contributed 30% of the variance in innovation. It further shows positive and significant relationship between the variables. Thus H.1 (value and innovation) and H3 (Inimitability and Innovation) were accepted, while H2 (Rareness and Innovation) was rejected.
E. Table 3 Multiple Regressions: Influence of Elements of Competitive Advantage in Sustainable Competitive Advantage (Innovation) (Beta Coefficient)

<table>
<thead>
<tr>
<th>Variables</th>
<th>Innovation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Value</td>
<td>.264**</td>
</tr>
<tr>
<td>Rareness</td>
<td>.005</td>
</tr>
<tr>
<td>Inimitability</td>
<td>.388**</td>
</tr>
<tr>
<td>R²</td>
<td>.291</td>
</tr>
<tr>
<td>Adjusted R²</td>
<td>.278</td>
</tr>
<tr>
<td>Δ R²</td>
<td>.291</td>
</tr>
<tr>
<td>F change</td>
<td>15.780**</td>
</tr>
</tbody>
</table>

Significant level **p<0.01

Therefore the regression coefficient from the above table indicated that the independent variable inimitability is the most important in explaining the variance in innovation with (β=0.39) followed by Value (β=0.26).

Regarding the relationship between element of competitive advantage (value rareness and inimitability) which is the independent variable and sustainable competitive advantage (innovation) the dependent variable, the results indicated that there is positive and significant relationship between the variables. Element of competitive advantage value has positive and significant relationship with sustainable competitive advantage (innovation). The finding follows the same track with previous research findings. (e.g. Barney, 1986, 1991; Peteraf, 1993; Fahy, 2000; Clulow et al, 2007) they explore the link between resource and sustainable competitive advantage, that not all firm’s resources hold the potential of sustaining competitive advantage, instead they must be rare, valuable and difficult to imitate.

Similarly, Morgan and Hunt (1996); Bharadwaj, Rajan and Fahy (1993) posited that specific combination of skills and resources that are unique and specialized are of greater importance to innovation as source of sustainable competitive advantage. Also studies such as those from Hoffmann (2000); Fahy (2004); Eva and Alena (2010); have shown positive relationship with findings of this study. Manufacturers in Nigeria recognized the fruits of creating valuable resources as a road to sustainable competitive advantage through continued innovation.

Looking at the relationship between element of competitive advantage Rareness and sustainable competitive advantage Innovation, the result from the study indicates negative relationship, this could not be divorced from the attitude of manufacturers in Nigeria who share their resource secret with other firms, as they form informal unions among themselves where they meet and discuss issues of their common concerns and solve problems.

The research findings went ahead to disclosed the relationship between element of competitive advantage inimitability and sustainable competitive advantage innovation, the result indicated positive relationship between the variables. The finding is not a surprise as similar positive findings were identified from previous studies (e.g. Eva, and Alena, 2010; Jeroen et al, 2010; Barney, 1986, 1991; Peteraf, 1993; Rumelt, 1984) they positioned that new knowledge about strategic management is connected with education and innovation as a source of sustainable competitive advantage.
competitive advantage. Burney (1991) further elaborates that potentials to generate sustainable competitive advantage, a firm resource must have some attributes i.e. it must be valuable, in the sense that it exploit opportunities and neutralized threat in a firm environment, it must be rare among a firm's current and potential competitors and it must be imperfectly imitable. Also studies such as that of Fahy (2000); Lin (2003); Conner (1991) all showed positive relationship between inimitability and sustainable competitive advantage (innovation). This positive result shows that manufacturers in Nigeria recognized that resources inimitability as a way that could lead to sustainable competitive advantage. This further shows that manufacturers in Nigeria were much concerned about resources imitations.

**VII. Theoretical and Managerial Implications**

This result is consistent with Resource Base View which states that a firm is said to have competitive advantage when it is implementing a value creating strategy not implemented simultaneously by any current or potential player. This study of manufacturing firms in Nigeria contributes and supports the theory and various studies carried out by several scholars in the area of resource base view, above all its contributions to the Nigeria's firms and theory as well as to emerging economies.

The findings also provided evidence of relationship between elements of competitive advantage (Value, Rareness and Inimitability) and sustainable competitive advantage (Innovation). This was found in Barney (1991); Newbert (2008) among other that are advocated of resource base view, that firm must identified and implement resource-based strategy (Value, Rareness and Inimitability) to sustain competitive advantage in producing product with more benefits inform of unique features (innovation). This study also support the view of sustainable competitive advantages as its finding contributes to the area of sustainable competitive advantage.

The findings encouraged managers that, competitive advantage should be enhanced to proceed to the next level i.e. sustainable competitive advantage considering the environmental dynamism in such issues like technological changes among others. The findings from this study indicated that Manufacturers in Nigeria adopt proper implementation and control of value creating, rare and inimitable strategy which leads to sustainable competitive advantage in form of innovation, therefore they should continue with similar effort non-stop in the name of turning around the Nigeria's manufacturing sector and the attainment of its vision 20: 20: 20.

Furthermore, the findings of this study indicated that regulators in Nigeria paid much attention to one sector of the economy that is crude oil production giving less priority to manufacturing sector, therefore it is very important based on the findings of this, for firms or economy to achieve sustainable competitive advantage which requires proper application of strategic management techniques, in essence giving due concern to the manufacturing sector,
VIII. LIMITATIONS AND FUTURE RESEARCH

There are number of issues that could be addressed in future researches aimed at developing a kind of comprehensive understanding of the impact of strategic management elements in enhancing sustainable competitive advantage in Nigeria’s manufacturing firms. This stands a clear limitation for the study due to its inability to include service industry too. Hence future researches should consider other areas such as service firms among others with similar framework.

The study is supposed to cover the six geo-political zones in Nigeria, but due to the time constraints and financial implications, the study sampled two zones i.e. North West and North Central. Therefore, similar study could be conducted in other zones particularly South West where there are concentrations of companies equally. Further study can use the strategic orientation (cost, focus and differentiation) using the same framework as the mediator between independent variable and the dependent variable to compare with the findings from this study, also future study to include all the elements of competitive advantage giving much concern to resource rareness, since this study could not isolate positive relationship with the dependent variable and compare the findings.

IX. CONCLUSION

The main aim of this study was to examine firm’s resources power (Value, Rareness and Inimitability) creating competitive advantage and means of upgrading it to sustainable competitive advantage through Innovation in the Nigeria’s manufacturing firms. Manufacturers in Nigeria appreciated resource value and resource inimitable as a means of creating firm’s competitive advantage as well as means of sustaining the advantage through innovations.

Furthermore, the study on enhancing sustainable competitive advantage in the Nigeria’s manufacturing sector discovered that resources based view theory has impacted on firm’s competitive advantage as well as sustaining the advantage further. This has been seen from various past researches and the findings from this study also supported the theory. The study encourages managers and government in the utilization of the concept of strategic management in the name of sustaining competitive advantage, and also solicits future studies to be conducted to include all the element of competitive advantage and much attention be paid to resource rareness. The findings provided empirical support for the theoretical framework, demonstrating the fact that the study had sufficiently addressed the research questions. The study also highlighted the implication, limitations and suggestions for future research.

REFERENCES


