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Factors Influencing Competitive Strategy of Non-Indigenous Construction Enterprises for Competitive Advantage in North Central Nigeria

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Abstract
The deployment of appropriate strategy has been shown to be crucial to competitive success. The competitive strength of the foreign construction firms in Nigeria has manifested in their domination of the construction market. Yet very little is known about the competitive strategies deployed. Therefore this study aims at filling this knowledge gap. It adopts the variables of Michael Porter's generic competitive strategies- differentiation, cost leadership and niche market. Data from 87 construction SMEs both indigenous and non-indigenous were analyzed using t-test and linear regression. Results show that 10.8% of the variation in competitive advantage of construction SMEs is explained by competitive strategies. Furthermore foreign SMEs deploy personnel, processes and inputs to support differentiation strategy. They also use management processes- material management, waste and defect management- when they use cost leadership strategy. But indigenous SMEs are willing to reduce their profit margins leading to the low profit that is found in literature.

Keywords: *Competitive advantage, Competitive Strategy, Differentiation, Cost Leadership and Niche Market*

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Background to the Study

The paper identifies the factors influencing competitive strategies of non-indigenous construction enterprises for competitive advantage in North-Central NIGERIA. It is an insight to firms competitive behaviour. The construction enterprises, -Small and Medium sized (SMEs), are important participants in the Nigerian construction market. Chew, Yan, and Cheah (2004) observed that SMEs are usually vaguely used to suggest the idea of firms which are not large. SMEDAN (2010) highlighted that developing countries with large share of Micro, Small and Medium Enterprises (MSMEs) employment have higher economic growth than their counterparts. But in Nigeria, the existing structure of the industry on the basis of Mbamali and Okotie (2012), and the Statistics survey (NBS, 2012), show non-indigenous construction enterprises domination of the construction delivery.Competition within the construction industry is increasing as market borders are breached due to the increased use of telecommunication and increasing efficiency of transportation system. Competing in the market place is like a war (Porter, 1985) and the economics of competition is a fundamental building bloc to the development of strategy (Mintzberg, Ahlstrand and Lampel, 1998).

According to Papulova and Papulova (2006), in order to be successful, organizations must be strategically aware. With effective strategy, the firm is able to cope with and even change rules in the firm's favour (Porter, 1985). Michael Porter has been fundamental to the development of both theory and practice of strategy and strategizing (Stonehouse & Snowdon, 2007). According to Porter (1996), strategy involves choices and trade-offs between alternatives. It is about performing different activities from rivals or performing similar activities in different ways. Rothaermel (2008) established that competitive advantage (CA) is when a firm creates an edge over rivals in securing customers and also defends against competitive forces.

Agency's survey (SMEDAN, 2010) -MSMEs sector analysis- showed the state of small and medium construction enterprises in Nigeria and their ability to compete. The North Central sector is among the weakest. The foreign construction firms on the other hand depend on their competitive advantage strategies. Adopting the competitive strategy options of the foreign construction firms in Nigeria is a worthy solution to unemployment and capital flight. Therefore, this study seeks to establish the factors influencing competitive strategy of non-indigenous construction enterprises for competitive advantage in North Central Nigeria.

Objectives of the Study

1. To determine whether differentiation strategy influence the competitive advantage of non- indigenous small and medium construction enterprises.
2. To establish if cost leadership has relationship with the competitive advantage of non-indigenous small and medium construction enterprises.
3. To identify whether niche market influence competitive advantage of non-indigenous small and medium construction enterprises.

Literature Review

Theoretical Frame Work

Porter submitted that achieving competitive advantage requires a firm to make a choice about the type and scope of its competitive advantage. Fig. (2.1) defines the choice of "generic strategy" a firm can follow. A firm's relative position within an industry is given by its choice of competitive advantage -the tradeoff between differentiation against cost leadership and the choice of competitive scope. Competitive scope allows firms to target broad industry segments and firms focusing on a narrow segment as illustrated in fig 2.1.

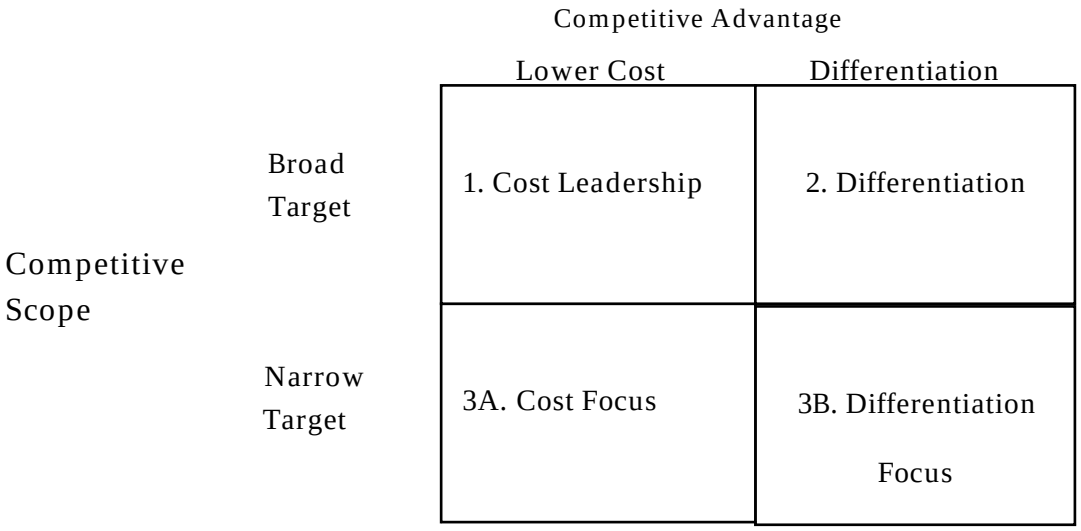

Figure 2.1 Porter's Generic Strategy (source: Porter, 1985)

Competitive Strategy

Ngowi, Pienaar and Talukhaba (2004) observed that one of the most important requirements for a firm to survive in the global competitive environment is a sound strategy. Dess, Lumpkin and Taylor (2005) showed that entrepreneurs can compete successfully within their industry only if they understand the dynamics of competition and follow a simple but sound strategy. Porter (1985) maintains that achieving CA requires a firm to make a choice about the type and scope of its competitive advantage. The competitive strategy is essentially differentiation versus cost leadership and niche market. In a market segment (niche) the choice is still between differentiation and cost leadership. This is the dynamics of competition as established by Porter that an entrepreneur must understand and choose from.

Differentiation strategy

Differentiation strategies refer to those measures applied to evaluate the customer's perception in order to improve the existing or additional services to the customers (Wong, Cheung & Chan, 2004). It is a perception that something is seen to be new Yan, Chew and Cheah (2006). The requirement for differentiation includes resources and core competences in the field of technology, research and development (R&D) and marketing among others (Vele, 2012). According to Porter (1985), differentiation can stem from such

factors including the procurement of high quality raw materials, a responsive order entry system, or a superior product design.

Since differentiation is attractive when buyer preference and / or requirement are diverse and the construction industry encompasses a wide variety of activities with the limited resources Yan et al. (2006) suggested that construction SMEs may adopt differentiation strategy. Either general or focused differentiation was suggested. Specifically it was suggested that general differentiation is particularly an important strategy in a huge and rapidly growing construction market.

Cost Leadership

Cost leadership strategy is about producing product and / or services at the lowest cost than competitors in the industry (Hemmatfar and Salehi, 2010). The summary of this strategy is: provide extra value to clients, improve quality and performance and cut down production cost. Schultman and Sunke (2011) classified all activities that produce cost, directly or indirectly but do not add value or progress as wastes. They showed that waste reduction and others as means of gaining competitive advantage. This is summarized as process enhancement, efficient operation, lower disposal cost, fewer defects, less process waste, energy saving and improved maintenance. Keskela (2000) listed waste of over production, waste of correction, waste of material movement, waste of processing and waste of inventory. Using China indigenous contractor, Chew et al (2004) shows that construction SMEs maintain low running cost. Therefore, they easily leverage on cost leadership as a strategy. Oladimeji and Ojo's (2012) affirmed that Nigerian indigenous contractors earn low and inconsistent profit.

Focus Strategy

According to Pamulu (2010) the two basic types of competitive strategies (differentiation and cost leadership) combined with the competitive scope of activities which a firm seeks to achieve then lead to the third strategy for outperforming rival - the focus strategy (niche market). Porter (1985) maintains that a company is also required to have a choice over the competitive scope of activities over which it seeks advantage. It could either be by a broad or a narrow segment of the industry (fig2.1). Serving only a particular industry segment can be by lower cost or differentiation compared to competitors.

Niche market is selecting a narrow scope segment and been the best in quality, speed or cost in that market. Lung (2004) found out that offering high quality services is a key factor among architectural engineering and construction firm's venturing into foreign locations to clinch construction projects in developing countries in South East Asia (SEA). Yan et al (2006) suggested that for those specialty construction SMEs with few employees, focus differentiation may be the only viable strategy for the target market. Successful differentiation allows SMEs to charge a premium price on product and / or services, increase sales and gain buyers loyalty.

Methodology

A questionnaire was developed for the purpose of the survey. One hundred and twenty (12) questionnaires were distributed to both indigenous and non-indigenous Small and Medium Construction Enterprises in Abuja and Kaduna. Eighty Seven (87) duly completed questionnaires, representing 72.5% of the total number of questionnaire distributed were collected and used for data analysis. The reliability test of Cronbach's alpha coefficients was used to examine the reliability among multiple measures and the internal consistency of the variables of the study. The study used Principal Component Analysis (PCA) and Factor Analysis to validate data collected. Multicollinearity test was conducted among the five study variables using tolerance and variance inflation factor (VIF) statistics of predictor variables.

Alsoboa and Alalaya (2015) deployed t-test to empirically determine the extent to which competitors accounting influence competitive advantage (CA) of manufacturing companies. Then the regression analysis showed the contribution of the technique and also explained the variation in CA. Kavitha, Karthikeyan and Devi (2013) measured CA and competitive priorities of small scale industries using regression analysis. Linear regression allows for estimating the relationship between a dependent and a set of independent variables.

Analysis and Results

General Characteristics of Respondents

Seventy three (73) (83.8%) of the survey respondents operated on a national scale; three (3) (3.6%) of the respondents on a regional scale; and eleven (11) (12.6%) of the respondents operated internationally.

Inferential Statistics

Differentiation

On how differentiation influences competitive strategy of non-indigenous construction SMEs to gain competitive advantage, the respondents were asked whether their firms have delivered project(s) whose consideration is to achieve uniqueness. Insight was sought into differentiation strategy explored by respondents. The survey sought to find out the factors that supported respondents' adoption of differentiation strategy (Table 4.1).

Table 4.1 Factors that Supported the Adoption of Differentiation Strategy

	Indigenous (percentage)	Foreign (percentage)
Project durations	22	82
Artisans	75	81
Subcontractor(s)	44	76
Supervision	65	66
Materials	85	67
Equipment	62	100

More percentage of construction input, personnel, and processes listed in Table4.1 were explored for differentiation strategy by foreign than indigenous. Table4.2 of the independent t-test also shows that the p-value of the t-test (0.048) is less than 0.05. It is therefore conclude that the factors that supported the adoption of differentiation strategy of foreign firms are significantly more than that of the indigenous firms

Table 4.2 Independent Samples Test

T	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference
-1.832	10	0.048	-18.5	17.48761

This finding established Cokin, Bunke and Davis (2008) opinion that found Western companies maintain a slight edge in timeliness, finishing, reliability and quality. The finding also concurred with Raduan, Haslinda and Ismad's (2010) experiential resource like timeliness (duration urgency) as a reputational asset that is difficult to copy and a source of sustainable competitive advantage. Chew, Yan and Cheah (2004) showed that most construction SMEs in China pursue labour intensive project leading to low differentiation in products and services quality. The findings align with Mir, Tanvir and Duirani (2007) who listed craftsmen, supervisors, technicians, engineers as some human resources needed in the construction industry for competitive success.
It is concluded that foreign SMEs use more project duration, subcontractor, equipment and artisan to achieve product differentiation as competitive strategy to gain competitive advantage than indigenous SMEs.

Cost Leadership
For cost leadership, they were asked; has your enterprise successfully completed a project in which the policy is affordability (fit for purpose, cheap and well)? Details were sought by asking respondents of their firms' approaches to cost leadership (Table 4.3).

Table 4.3. Approach to Cost Leadership

	Indigenous (percentage)	Foreign (percentage)
Motivated workers through “finish and go”	43	34
Efficient and effective use of materials	67	82
Minimal profit margin	98	39
Defect management	64	77
Waste management	45	71

Foreign firms deployed process management- effective use of materials, defects and waste management when they deploy cost leadership. Table 4.4 shows that the p-value of the t-test (0.423) is greater than 0.05. It is therefore concluded that the factors that supported the approach to cost leadership of foreign firms is not significantly different from that of the indigenous firms.

Table 4.4 Independent Samples Test

t	Df	Sig. (2-tailed)	Mean Difference	Std. Error Difference
0.198	8	0.423	2.8	22.28901

It is deduced that the indigenous cost leadership style were motivating workers through "finish and go" and minimal profit margin. This aligned with Oladimeji and Ojo's (2012) that Nigerian indigenous contractors earn low and inconsistent profit. Foreign firms utilized management process including efficient and effective use of materials, defect management and waste management. This finding confirms Schultman and Sunke (2011) showing that waste reduction and others as means of gaining competitive advantage.

It is concluded that foreign SMEs utilising efficient and effective use of materials, defect management and waste management approaches do not support cost leadership to gain competitive advantage more significantly than indigenous firms.

Niche Market Strategy

For niche market the question was; does your enterprise have a strategy of filling market niches unfilled by rivals? The specific market niche filled by respondents' firms were also sought (Table 4.5).

Table 4.5 The Specific Markets Niche Filled by Construction Companies.

	Indigenous (percentage)	Foreign (percentage)
Surveying	30	1
Air conditioning	3	2
Roofing	23	67
Interior decorations	45	33
Mechanical works	23	12
Lift and escalator	22	15
Building skeletons	32	33
Fitting (doors, windows)	53	12
Conducting tests	33	19
Electrical works	39	18
Landscaping	60	67

Table 4.6 shows that the p-value of the independent t-test (0.187) is greater than 0.05. It is therefore concluded that the specific markets niche filled by foreign firms is not significantly different from that of the indigenous firms

Table 4.6 Independent Samples Test

t	Df	Sig. (2-tailed)	Mean Difference	Std. Error Difference
0.905	20	0.187	7.636	19.776

4 2 4 Regression Analysis on Competitive Strategy and Competitive Advantage
Linear regression model was employed to model the relationship between the dependent variable (competitive advantage) and independent variable –competitive strategy (Alsoboa & Alalaya, 2015; Kavitha, Karthikeyan & Devi 2013; Pamulu, 2010).

Table4.7 Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.329	.108	.100	.24168

Predictors: (Constant), Competitive Strategy
Dependent Variable: Competitive advantage

The Table 4.7 shows that the correlation between competitive strategy and competitive advantages of small and medium construction industries in North-Central Nigeria is 0.329, implying a linear relationship between competitive strategy and competitive advantages. The coefficient of determination R-Square is 0.108 indicating that 10.8% of the variation in competitive advantages of small and medium construction industries is explained by competitive strategy. This implies that an increase in competitive strategy such as differentiation or cost leadership and focus strategy leads to an increase in competitive advantage of construction SMEs. Next an analysis of variations in Table 4.8 shows the result of ANOVA which reveals that competitive strategy have significant effect on competitive advantage of non-indigenous construction SMEs. Since the p-value is actually is actually (0.000) which is less than 0.05. It is therefore concluded that the model is significant and therefore fit for use.

Table 4.8 Analysis of Variance

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	.773	1	.773	13.243	.000[b]
	Residual	.290	5	.058		
	Total	1.063	6			

a. Dependent Variable: Competitive advantage
b. Predictors: (Constant), Competitive Strategy

Next the exact model fit result is in Table 4.9.

Table 4.9 Coefficients

Model		Unstandardized Coefficients		Standardized Coefficients	T	Sig.
		B	Std. Error	Beta		
1	(Constant)	.628	.069		9.109	.000
	Competitive Strategy	.229	.063	.329	3.639	.000

Dependent Variable: Competitive advantage

$$y = 0.628 + 0.229 * x_2$$

strategy lead to increased competitive advantages in North-Central Nigeria. The results show that the linear relationship between resources and the competitive advantage of non indigenous small and medium construction industries in North Central Nigeria is $y = 0.628 + 0.229x_2$. Where y is competitive advantages in North-Central Nigeria and x_2 is competitive strategy. The p-value of the slope of the model (0.000) is less than 0.05. It is therefore concluded that competitive strategy is a significant determinant in the competitive advantages of non-indigenous small and medium foreign construction industries in North-Central Nigeria.

Conclusion

From this study, it is concluded that indigenous construction SMEs should deploy more personnel, processes and inputs to support differentiation strategy to gain competitive advantage. Furthermore, adopting cost leadership, when process management including efficient and effective use of materials, defect management and waste management will create more competitive advantage than profit reduction

Recommendation

Further search is necessary to establish whether the Nigerian client will be willing to pay the indigenous SMEs premium prices (rates) appropriate to a differentiated quality. This is necessary in view of the relationship that has been built with non indigenous SMEs since independence. Further details are also necessary to focus on the construction management processes (while adopting cost leadership by foreign construction SMEs) to gain competitive advantage.

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