

EFFECT OF DISTINCTIVE COMPETENCES AND TECHNOLOGICAL CAPABILITIES ON SME GROWTH IN NORTH-EAST NIGERIA

ALI BABA MUSAMI

*Department of Marketing, Ramat Polytechnic,
Maiduguri, Nigeria.*

Abubakar Alhaji Saleh

University of Maiduguri

&

Maina YAH

University of Maiduguri

Abstract

Distinctive Competencies and Technological Capabilities are two elements that are used for Business strategic planning to enable entrepreneurs to define the scope and market in which they compete to attain business growth. This is, however, not always the case among SMEs in North-East Nigeria, and that might account for their inability to expand beyond the level of survival. This study examined the effect of these two elements on the growth of small and medium-scale enterprises (SMEs) in North-east Nigeria. It adopted a descriptive survey research design. The population of the study comprises 4,224,252 registered SMEs in North East Nigeria as reported by the Small and Medium Enterprises Development Agency of Nigeria (SMEDAN, 2020). Through a random sampling technique, four hundred (400) SMEs were selected as samples. The size of the study was based on the Taro Yamane sample selection formula. A five-point Likert scale questionnaire was used to capture the opinions of respondents. The Cronbach Alpha test for distinctive competence and technological capabilities shows 0.9779 and 0.9785 respectively and the test for multi-collinearity and heteroscedasticity all produced favourable responses. The study used multiple regression analysis to determine the statistical effects of the variables in business definition measured by distinctive competence (DCOMP), and technological capability (TECHCAP), as independent variables and SMEs business growth (BUSGROT) as dependent variables. The result of

the study indicates that distinctive competence has a positive but insignificant effect on business growth while technological capability has a positive and significant effect on business growth in North East Nigeria. Hence, it was concluded from the findings of the study that SME growth can be anticipated using these variables. Based on these findings, it was recommended that SMEs invest in modern technologies in key business areas, and also in knowledge management as their competence can easily be imitated by other firms.

Keywords: Distinctive competence, technological capability, SME growth, and Business definition.

Introduction

Distinctive competencies and technological capabilities are two terms that are used frequently in the strategic definition of a business. Business definition is the starting point for strategic planning (Abell, 1980). The business should be defined in terms of scope and the market in which it competes, and, answering the seemingly simple questions of who are our customers, what is our business, or what do we want to become. These questions may seem trivial at a glance; however, they have been subjects of long and controversial discussions in many companies and amongst management scholars. According to Drucker (1999), the starting point of planning for a business is the decision about the objectives of the

business that enables marketing, manufacturing, research and development (R&D), and other functional plans to follow suit.

According to Abell (1980), business strategy depends on defining the business in a way that leads to a competitive superiority in the customer's eyes, enabling the business to enjoy flexibility and have a short learning curve. Moreover, a business has to be defined and/or redefined in terms of its scope. Two important keywords in doing this are the "What" and the "How". The "What" stands for the ability of the company to provide to the market a product or service with distinct value, while the "How" determines the efficiency in the provision of this product or service with the aid of its available installed technological capability. Although managers have become schooled in asking the question "What business are we in"? Few know how to formulate the problem to achieve a satisfactory answer.

Business growth according to Penrose (2016) is the product of an internal process in the development of an enterprise and an increase in quality and/or expansion. Growth is defined as a change in size during a determined time" (Dobbs & Hamilton, 2007). A company's growth is essentially the result of the expansion of demands for products or services. "It first results in growth in sales and consequently in investments in additional production factors to adapt itself to new demands". However, Achtenhagen, Naldi, and Melin (2010) researched entrepreneurs' ideas on growth and listed the following; increase in sales, increase in the number of employees, increase in profit, increase in assets, increase in the firm's value and internal development as indicators of growth. Internal development comprises the development of competence, organizational practices in efficiency, and the establishment of a professional sales process.

Distinctive competence and Technological Capability are two key concepts that enable the strategic goal of business growth to attain its fruition. While the former reserves the essence of the firm's engagement in the business, the latter keeps up with the dynamic nature of the environment.

Statement of the Problem

Globally, small and medium-scale enterprises are expected to grow and become large-scale

businesses that support economic growth. However, it has been observed that it is rarely so (OECD, 2018) because businesses have continued to experience slow growth hence being unable to expand beyond the survival level. These phenomena are less evident in developed economies such as The United States of America, Japan, Germany, etc., but seemingly high in developing economies like Nigeria, Ghana, and Kenya, etc. A business that provides solutions to customer needs is supposed to grow, because this is the justification for its existence, and customers go to market to buy solutions, not just the physical goods and services. Unfortunately, there is a limited but growing body of knowledge on the topic of "Distinct competencies and Technological capabilities" of Entrepreneurs upon which researchers can base their investigations, especially in the small business domain, Nigeria in particular, and North East Nigeria as a case study. Though, Igor Ansoff (1957) proposed, in his famous growth matrix, the four strategies of business growth, namely, Diversification, Market Modification, product Modification, and penetration Strategies, and applying them could lead to a more strategically inclined business practice, but, they still cannot guarantee a one-stop solution to the problem. Hence, the question remains, what could be responsible for the inability of SMEs to grow large? Given this puzzle and limitation, this study investigated the effect of the two important variables of distinctive competence and technological capability on the growth of small and medium-scale enterprises (SMEs) in North East Nigeria.

Objective of the Study

The objective of this study was to investigate the effect of distinctive competence and technological capabilities on the growth of SMEs in North East Nigeria.

Statement of Hypothesis

The following null hypotheses were validated in the course of this study:

H₀₁: distinctive competence has no significant effect on SME growth in North East Nigeria.

H₀₂: technological capability has no significant effect on SME growth in North East Nigeria.

Literature Review

Conceptual Framework

Concept of Distinctive Competence

A pertinent starting point in conceptualizing entrepreneurial competence is to first define competence. Competence is simply the unique ability that an individual requires to do an assigned job. In the words of Woodruffe (2007), competence is "A work-related concept which refers to areas of work at which the person is competent". Therefore, competent employees or individuals are those who meet their performance expectations. In management literature, competence is used to describe the set of disparate skills managers require to help them perform their jobs. These skills are identified and effectively initiated in training courses or programs. Competence therefore constitutes a cluster of related knowledge, attitudes, and skills that an individual acquires and uses together to produce outstanding performance in any given area of responsibility. In fact, in competency-based training, all three factors - knowledge, attitudes, and skills must be effectively addressed and taught in an integrated manner. This is the only way outstanding performance can be achieved.

Distinctive Capabilities (DC) and Entrepreneurial Orientation (EO) are parts of the strategic orientation concept (Andrews, 1971; Selznick, 1957). The strategic orientation of firms explains their sustainable competitive advantage and increased financial performance. Bettis and Hitt (1995) found that DC and growth fostered uniqueness in firms that move ahead of others and survive in the new competitive landscape. DC is related to where firms with higher growth levels owned a wider variety of DC and predicted better performance (Smart & Conant, 1994). The firm's strategic orientation and competitive advantage were the focus issues among scholars in North America, Europe, and Australasia countries. However, studies of those issues in developing countries SMEs are at the infant stage (Awang & Ahmad, 2005; Hashim, 2000).

According to Hitt and Ireland (1985), effective integration of resources or capabilities in the firms is the DC that allows them to implement activities successfully. DC refers to the unique skills and activities a firm owns to be ahead of others (Selznick, 1957). Furthermore, DC fulfills valuable, rare, inimitable, and organized resources (VRIO) (Barney, 1991).

Concept of Technological Capability

Technological Capability (TC) is widely regarded as a source of growth and wealth for almost every nation on the planet. It is central to regional and economic change, job creation, and job destruction (Archibugi & Coco, 2004). Not only for nations, but technology is also a core imperative for firms (Monopoloulos, Dimitratos, and Young & Lioukas 2009). The employment of technology demands considerable effort, devoted to learning the new technology and developing the capability, for an efficient development of industry. In this context, since the 1980s, TC has become the main focus of conceptualizing technology study (Rosenburg, 1976; Westphal, Kim & Dahlman 1993). The study of the role of TC in the industry is a subject that has attracted the attention of both academics as well as the industry itself. It is the main and decisive factor in developing competitive positions (Ernst, Ganiatsos, and Mytelka, 1998), competitive strengths (Mytelka, 1993), and sustained growth.

Over the past decade, the technological capability of firms has been regarded as an important strategic resource, enabling firms to achieve competitive advantage within their industry. Those firms with superior technological capability can secure greater efficiency gains by pioneering process innovations and can achieve higher differentiation by innovating products in response to the changing market environment (Tsai, 2004).

Concept of SME Growth

The business dictionary defines business growth as the process of improving some measures of an enterprise's success and this can be achieved either by boosting the top line or revenue of the business with greater product sales or services income, or by increasing the bottom line or profitability of the operation by minimizing costs. The sources of business growth have been subject to considerable academic attention (Achtenhagen, Naldi & Melin 2010).

Revenue growth is one of the simplest ways to measure company growth over time. Typically, growth is measured using the compounded annual growth rate (CAGR). This calculation is particularly useful for summarizing growth over longer time frames, like 5, 10, or 20 years. The beginning value here would be revenue in the first year; in the range being calculated and the ending

value would be revenue in the last. Workforce Growth keeps track of new hires for the year and compares them to previous years. A growing company should continue to hire new employees as it expands. You can also express this figure as a percentage by dividing the number of new hires in a year by the total number of employees at the beginning of that year (Davidsson, Achtenhagen & Naldi 2010).

Market Share Growth is another measure of growth. Huck and McEwen (2011) asserted that it is a company's portion of the total value of their given industry. It is calculated by dividing the total revenues in an industry over some time by the company's revenue over the same period. This period can be a quarter, a year, or several years. Growth can be determined by calculating the company's market share in several different periods and looking for growth or shrinkage in that company's share of the market, (wikihow.com, 2017). For example, if one is researching a company in a \$1 billion market and that company had revenues of \$ 150 million in 2014 (15 percent of the market) and \$ 170 million in 2015 (17 percent of the market), their market share has increased by 2 percent in the past year.

In general, all SMEs experience growth or business success, it is visible on both public and personal levels. The operational definition of growth for this study is that growth is an achievement of goals and objectives by firms as in the case of small and medium-scale enterprises (SMEs) in North East Nigeria. They are supposed to become large-scale businesses, but it is observed that most concepts of business growth do not give examples of, and where SMEs became large-scale enterprises, especially in Nigeria.

Concept of Small and Medium Scale Enterprises (SMEs)

Defining small business has always been very difficult and controversial because it covers a variety of firms and it is used loosely in most of the literature. According to Nguyen (1983), a small business is independently owned and operated such that it is not dominant in its field of operation. Researchers and other interested parties have used-specific criteria to operationalize the small business, from the perspective of value added, value of assets, annual sales, and number of employees. Annual sales and the number of employees are most often used to delimit the category. The problem of definition confronts all

researchers as well as operators in the field. A review of the literature on Small and Medium Enterprises (SMEs) shows that the definition of MSMEs significantly varies from country to country depending on factors such as the country's state of economic development, the strength of the industrial and business sectors, the size of MSMEs and the particular problems experienced by MSMEs (Harabi, 2003).

The Nigerian Industrial Policy (1989), defined MSMEs as those with a total investment of between \$13,000 and \$260,000 excluding land and working capital, while micro-enterprises and cottage industries are defined as those with investments not exceeding \$13,000 excluding land but including working capital.

The National Policy on MSMEs adopts a classification based on the dual criteria: of employment and assets (excluding land and buildings), as follows:

Where there exists a conflict in classification between employment and assets criteria (for example, if an enterprise has assets worth seven million naira (N7m) but employs 7 persons), the employment-based classification would take precedence and the enterprise would be regarded as micro. Employment-based classification tends to be relatively a more stable definition, given that inflationary pressures may compromise the asset-based definition. In choosing these definitions, cognizance was taken of all possible factors, including international comparisons and peculiarities of the various sub-sectors/enterprises (SMEDAN, 2020).

The operational definition of SME in this study is a small business whose total asset is less than N10 million and has been operating for at least five (5) years, with no reference to its annual turnover or the number of employees. Though it is observed that there is a need for consensus on the definition of SMEs in Nigeria and the world at large, this would help researchers in tracking the growth of SMEs.

Concept of Business Definition

The concept of business definition simply refers to the strategy of defining the business explicitly and broadly enough to withstand and win competition. Yet the growing importance of business definition (strategic planning) has not

resulted in a consensus as to what it entails. Two contesting viewpoints are evident in both theory and practice (Abell, 1980).

The first viewpoint which gained considerable currency in the late 1960s and early 1970s is that the starting point of planning for a business is the decision to hold, harvest, or build market share. Once this decision about the objective of the business has been made, marketing, manufacturing, research and development (R&D), and other financial plans follow. The prevalence of this viewpoint is not surprising. The importance of market share as a determinant of profitability has been widely publicized and recognized in management and academic circles. In addition, it has been incorporated into several formal planning approaches as a critical variable with which management can influence profits. This study agrees with this first view. The contrasting view can be stated as follows: strategy formulation requires a more creative act. Market share is the result of such an act, not the strategy itself. The business strategy depends on defining the business in a way that leads to competitive superiority in the customer's eyes.

Abell (1980) describes the strategic planning process as the starting principle for an organization's business. This process in turn is driven by the mission statement which provides direction, focus, and the basis for strategies to be further elaborated and driven down. He used three key questions as the three dimensions of his model and these are the foundation for the formulation of the mission statement itself. What are the customers of the organization? How can the organization meet the needs of its customers? What techniques are employed by the organization to meet these customer needs?

Empirical Framework

Distinctive Competence and SME Growth

Darsono, Yahya, and Amalia (2016) analyzed distinctive capabilities and competitive advantages in the tourism sector in Aceh Province, Indonesia. The population was taken using cluster sampling of small-scale tourism industry such as travel agents, hotels, restaurants, and souvenir shops with a total sample size of 50 firms in the tourism industry. The data was analyzed using Linear Regression Analysis to find the direct and indirect effects of the variables tested. The study found that there is a relationship

between competitive advantage and business performance directly or indirectly.

Again, Umar and Nwaiwu (2017) assessed core competencies and entrepreneurship development among small and medium enterprises (SMEs) in Abuja. Point-in-time data were collected from primary sources using a questionnaire. The study adopted a survey research design. The population of the study was 1260 and a sample size of 348 was obtained using the Taro Yamane formula. The regression and correlation statistical tools were adopted to analyze the data and findings revealed that the relationship between core competencies and entrepreneurship development among SMEs in Abuja is significant. It was also found that there is a relationship between core products and entrepreneurship development among SMEs in Abuja. The study concluded that core competencies contribute to entrepreneurship development among SMEs in Abuja. While this study examines the effects of core competencies on entrepreneurial development, the current study assessed the effects of distinctive core competence on the growth of SMEs to address the high death rate of SMEs.

Shigang (2011) builds a conceptual model to investigate the relationship between core competencies and performance within Chinese Construction SMEs. Based on data collected from 121 construction SMEs in China, this research has confirmed the importance of entrepreneurial capability, relationship marketing, and project management to achieve superior performance.

Technological Capability and SME Growth

Chantanaphant, Nabi, and Dornberg (2018) contributed to the literature by empirically studying the relationship between TC of emerging countries SMEs and their export performance. This was a quantitative study where data was gathered by personal and telephone interviews with 111 SMEs in the plastic industry in Thailand, who export. The descriptive and multiple regression analyses were used to examine the impact of TC on export performance. The findings of this research suggest that improvements in manufacturing processes and product design are critical for the SMEs to successfully compete in the international markets. These improvements are based on cumulative technological knowledge acquired from both internal and external sources. These findings contribute to the understanding of how SMEs in

emerging market countries use available technologies to improve firm performance and integrate them into the global economy.

Sobanke, Adebite, Illori, and Egbetokun (2012) examined the factors associated with the accumulation of technical capability among metalworking firms in Nigeria. A questionnaire was administered to 200 firms, of which 133 (66.5%) responded. Data were gathered on internal and external factors which were believed to influence capability build-up in the firms. The empirical evidence suggests that the prior work experience of the entrepreneur, in-house training of technical staff, and networking with the industry association had a significant and positive influence on the accumulation of firm-level technical capability. Collaboration between the firms and research institutes was found to be weak. We conclude that firm-specific assets such as entrepreneurs' training and experience as well as in-house training are highly important for the build-up of technological capability in developing country firms. The relative importance of interaction through the industry association casts some doubt on the relevance of universal industry interactions for these firms.

Obembe, Ojo, and Illori (2014) evaluated the effects of Technological Capabilities, Innovations, and clustering on the performance of firms in furniture furniture-making industry in Southwestern Nigeria. The aim is to recommend policy measures to enhance the innovative performance of the furniture makers. The research covered Lagos, Oyo, Ondo, and Ekiti States because of the predominance of the industry in these selected locations. The sample population consisted of 319 furniture makers. The research instruments were questionnaires and personal observation approaches. The questionnaire was administered to furniture makers and elicited information on the effects of Technological Capabilities, Innovations, and Clustering on the performance of firms in the furniture industry in Southwestern Nigeria. Personal observation was used to obtain more information on the industry. Both descriptive and inferential statistical techniques were employed for data analysis. The result shows the positive impact of technical capabilities, innovations, and clustering on the performance of the firms on new furniture products produced monthly through adaptation or modification of office furniture, cabinets, upholstery, beds, and doors among others.

Theoretical Framework

The Knowledge-Based Theory

The economic change from material-based production to information-based production created a revaluation of the firm workers. Increasingly we find knowledge-based workers at the core of the organization's functions: concept and technology designers, as well as finance and management people. Other individuals are considered to be in the firm's periphery, as a consequence their responsibilities change permanently and they are defined by the tasks they perform at the moment. This way, a new differentiation in labour arises (Child & McGrath, 2001). Many firms consider that, to act with efficacy in today's economy, they must become a knowledge-based organization. But few understand what that means, and how to make the changes necessary to achieve it. Perhaps the most common mistake firms make is considering that the higher the knowledge-based content of their products and services, the closer they are to being true knowledge-based organizations. But the products and services are only the visible and tangible reality they present to their clients - the tip of the iceberg. As in real icebergs, the largest reality that allows the firm to produce is located below the surface of the water, hidden in the intangible assets of the organization, and it entails the knowledge of what the firm does, how it is done, and why it is done that way (Zack, 2003).

Customer perceived value theory guided this study because it is fundamental to superior value creation and providing solutions to customer needs, which leads to business growth.

Methodology

The study adopted a survey research design, using primary data and multiple regression to examine the effects of distinctive competence and technical capabilities on the growth of SMEs in North East Nigeria.

The population of the study comprised 4,224,252 (SMEDAN, 2020) registered SMEs in North East Nigeria. However, to examine their growth, the research work focused on SMEs that have been operating for at least five (5) years. Through random sampling, 400 businesses were sampled for the study. Out of the four (400) questionnaires administered, only 328 were returned and valid due to the accuracy of information provided for the study by the respondents; the remaining 72 did not meet the requirements because most of

them were not returned, while others provided wrong information and therefore, were excluded from the study. The respondents were selected through their business addresses and questionnaires were administered to them. Based on the stated criteria, the selected population and samples are presented in Tables 3.1 and 3.2 in selecting the sample size, the study adopted the sample size determination formula in social sciences propounded by Taro Yamane (1967). The formula takes into consideration a 95% confidence level and a 5% sampling error level.

To get the sample size for the study therefore the equation is substituted with the population as shown in the table.

Table 3.1: Population of SMEs in North-East Nigeria

S/N	North-East States	Population
1	Adamawa State	657,465
2	Bauchi State	1,133,256
3	Borno State	855,958
4	Gombe State	569,604
5	Taraba State	480,809
6	Yobe State	527,160
	Total	4,224,252

Source: SMEDAN, 2017

Table 3.2: Sample of SMEs According to States in North East Nigeria

S/N	North-East Nigeria	Population	Samples
1	Adamawa State	657,465	$\frac{657,465}{4,224,252} \times 400 = 62$
2	Bauchi State	1,133,256	$\frac{1,133,256}{4,224,252} \times 400 = 107$
3	Borno state	855,958	$\frac{855,958}{4,224,252} \times 400 = 81$
4	Gombe State	569,604	$\frac{569,604}{4,224,252} \times 400 = 54$
5	Taraba State	480,809	$\frac{480,809}{4,224,252} \times 400 = 46$
6	Yobe State	527,160	$\frac{527,160}{4,224,252} \times 400 = 50$
	Total	4, 224, 252	400

Source: SMEDAN, 2020

Techniques for Data Analysis and Model Specification

Statistical tools were employed for data processing, analysis, and presentation. Simple descriptive statistics such as tables, arithmetic mean, and standard deviation were used to classify and summarize the data collected. These descriptive statistics were used due to their ability

The formula is: $n = \frac{N}{1+N(e)^2}$

Where n = Sample size or respondents for the study

N = Population size

e = the level of precision (95% confidence level or 5% error of sampling)

Therefore, $n = \frac{N}{1+N(e)^2}$

Where n = Sample size

N = 4, 224, 252

n = 0.05

Hence $n = n \frac{N}{1+N(e)^2}$

$$n = \frac{4224252}{1 + 4224252 (0.05)^2}$$

$$n = \frac{4224252}{1 + 4224252 (0.0025)}$$

$$n = \frac{4224252}{1 + 10560.63}$$

$$n = \frac{4224252}{10561.63}$$

$$n = 399.96$$

$$n = 400.$$

to convey information simply, clearly, and summarily for further analysis. Then multiple regression techniques were employed to examine the effect of distinctive competence and technological capabilities (the predictor variables) on the growth of small and medium enterprises (the predictor variable). In all cases, reliability was examined to bring to the fore the level of

internal validity and reliability within the test items utilizing the Cronbach Alpha estimates.

The study used a multiple regression model to test the relationship between the variables in business definition measured by defining distinctive competence (DISCOMP), identifying Technological capability (TECHDCAP), as the independent variables, and SME business growth (BUSGROT) with at least five (5) years in business as the dependent variable.

The model for the study is specified thus;

$$\text{BUSGROT} = \beta_0 + \beta_1 \text{DISCOMP}_{it} + \beta_2 \text{TECHCAP}_{it} + U_{it}$$

Where:

BUSGROT = SMEs business growth with at least five years in business

TECHDCAP = identifying technological capability

DISCOMP = distinctive competence

β_0 = intercept/constant form

$\beta_1, \beta_2, \beta_3, \beta_4$ = coefficient of independent variables

U_{it} = error term

Test of Significance

T-test of significance and probability value (p-value) were used to determine the level of significance of the coefficient.

Data Presentation and Analysis

This section covers the presentation and analysis of data collected from the sampled SMEs in North East Nigeria. Four hundred (400) questionnaires were administered to owner-managers and general managers of the SMEs that have been in operation for more than five years. Most SMEs are not large enough to have spate-level managers such as operation managers, marketing managers, finance managers, and production managers. Descriptive statistics, correlation matrix, and regression were used. The study hypotheses were tested at a 5% level of significance.

Descriptive Statistics for the Variables

Descriptive statistics are summaries of a given data set which can be either a representation of the entire population or a sample of it. In this section of the study, the mean for each variable is presented with their corresponding standard deviation. The minimum and maximum values are also presented to ascertain the presence or absence of outliers.

Table 4.1: Descriptive and Statistics for the Variables

STAT	BG	DCOMP	TECHCAP
MEAN	3.219508	3.311584	3.146946
MIN	1	1	1
MAX	5	5	5
SD	1.406852	1.552466	1.373356

Source: STATA13 Output

Table 4.1 presents the result of the Descriptive Statistics conducted on the variables. SME growth has a mean of 3.219508 and a standard deviation of 1.406852. Distinctive competence had a mean of 3.311584 and a standard deviation of value of 1.552466. The study also indicated that technological capability's mean stood at 3.146946 and the standard deviation of 1.373356. These data showed that the opinions of the respondents did not vary much between them.

Correlation Coefficient Matrix

The correlation matrix is used to determine the relationship between the dependent and independent variables of the study. Table 4.5 shows the Pearson correlation coefficient between all combinations of dependent and independent variables.

Table 4.2: Correlation Coefficient Matrix

	BUSGRO T	DCOM P	TECHCA P
BUSGRO	1.0000		
T			
DCOMP	0.6533	1.0000	
TECHCA	0.4553	0.9681	1.0000
P			

Source: STATA13 Output

Table 4.2 revealed that there is a positive correlation between the dependent variable and all the independent variables. It indicated that there is a positive relationship between distinctive competence, technological capability, and SME growth. The result showed a high tendency of correlation of the dependent and independent variables. This implies that these variables have a positive significant relationship with SME growth in the area studied.

Hypothesis Testing

In this section of the chapter, the study tested the hypotheses formulated for the study; Table 4.5

presents the coefficients of the variables of the study from which the hypotheses are tested.

Table 4.3: Regression Coefficients of the Study

Variables	Coefficient	P-value
Distinctive competencies	0.0503135	0.537
Technological capabilities	0.3432196	0.000

Source: STATA output

Distinctive Competencies and Business Growth

The results in Table 4.3 above show that distinctive competencies (DCP) have a statistically positive insignificant impact on business growth as indicated by the coefficient of 0.0503135 which is insignificant at a 95% level of significance (P-value 0.537). That is to say that the distinctive competencies of SMEs have a positive effect on their growth although the impact is insignificant as evidenced by the p-value of 0.537. Based on this, the study rejects the null hypothesis one (H01) which states that, distinctive competencies do not affect business growth in North East Nigeria. Therefore, the study submits that a percentage change in distinctive competencies of SMEs can increase growth by 5% in the area covered.

Technological Capabilities and Business Growth

The results in Table 4.3 also show that technological capabilities (TECH) have a statistically significant positive effect on business growth as indicated by the coefficient of 0.8676321 which is significant at a 5% level of confidence (P-value 0.000). That is to say that the technological capabilities of SMEs can significantly increase their growth. Based on this outcome, the study rejects the null hypothesis two (H02) which states that SME's technological capabilities have no significant effect on business growth in North East Nigeria.

Discussion of Findings

(i) Distinctive Competences and SME Growth

The first objective was to investigate the effect of distinctive competencies on the growth of SMEs in Nigeria East Nigeria. The hypothesis tested stated that there is no significant effect of distinctive competencies on SME growth in North East, Nigeria. The regression result indicated that distinctive

competencies have a positive but insignificant effect on SMEs growth in North East, Nigeria. It, therefore, means that distinctive competencies can contribute to SMEs' growth but such contribution will be very insignificant. These results contradict the studies of Yamoah (2013), Venter and Eeden (2011) Umar and Nwaiwu (2017) and are in line with those of Shigang (2011), Odero (2013) and support the knowledge-based theory which is one of the theories underpinning this study.

Technological Capabilities and SME Growth

The second and final objective of this study is to identify the effect of technological capabilities on the growth of SMEs in North East Nigeria. The outcome of the test indicated that the relationship between the dependent variable (SME growth) and independent variable (technical capabilities) is statistically and positively significant. It means that when business improves on their technological capabilities, it results in the growth of these businesses, these results align with knowledge-based theory as the theory upon which this study is anchored and consistent with the findings of Oliner and Sichel (2004), Stiroh (2010), David (2012), Yusuf (2013) and contradicts Sobanke, Adebite, and Egbetokun (2012).

Conclusion and Recommendations

The study assessed the effect of Distinctive competencies and Technological capabilities on SME growth in North East Nigeria. Based on the findings of this study, it was concluded that distinctive competence has a positive but insignificant effect on SMEs growth, while Technological capabilities have a positive and significant effect on SMEs growth. These conclusions reveal that once an SMEs distinctive competence is imitated by its competitors, it is no longer a distinctive competence because it would have no significant effects on the growth of the SMEs. On the other hand, technological capability is a means of satisfying the customer's perceived values, and how these needs (values) are met (technological capability) affects SMEs' growth as customers would be retained and would continue to buy the products thereby enabling the business to achieve growth.

Based on the findings and conclusion of this study, the following recommendations were made;

- i. Small and medium-scale enterprises (SMEs) should invest elements that promote distinctive competence because their competence can be easily imitated by other firms; and once a competence is imitated it is no longer a distinctive competence and will contribute insignificantly to SMEs growth. Selznick (1957) asserted that firms that are innovative in distinctive competence have unique product and service offerings that enhance their performance.
- ii. It is also recommended that SMEs should invest heavily in modern technologies in all sections of the business to facilitate production and transaction processes as this approach can lead to efficiency in services and ultimately business growth. This is based on the knowledge-based theory which opined that organizations gain high performance for a significant time through technological capability.

References

- Abell, F. D., (1980). Defining the Business: The Starting Point of Strategic Planning. Prentice-Hall, inc., Englewood Cliffs, N J. 07632.
- Achtenhagen, L., Naldi, L., & Melin, L. (2010). "Business growth": do Practitioners and Scholars Really Talk About the Same Thing? *Entrepreneurship Theory and Practice*, 34(3), 289-316.
- Barney, J.B., (1991). Firm Resources and Sustained Competitive Advantage. *Journal of Management*, 17(1), 99-120
- Day, G. S., (1992). Marketing's Contribution to the Strategy Dialogue. *Journal of the Academic of Marketing Science* 20 (Fall): 323-329.
- Dobbs, C., & Hamilton, A., (2007). The Value Concept and Relationship Marketing. *European Journal of Marketing*, 30,(2) , 19-30
- Drucker, P. F. (1999). The Theory of the Business. *Harvard Business Review*, 72(5), 95-104.
- Fink, L., (2014). The Effects of Customer Competence on Construction Project Performance. *Procedia-social and Behavioural Sciences* 119(2014) 427-436. www.sciencedirect.com. Retrieved on 5th March, 2018.
- Grant, R., (1991). A Resource-based Perspective of Competitive Advantage. *California Management Review*, 33, 114-135.
- Griffin, R., W., (2012). Managing New Venture Formation and Entrepreneurship, In Griffin, R. W. (Ed.), *Management: Principles and Practices: South- Western*, Cengage Learning.
- Harabi, J., (2003). Barriers to Entrepreneurship and Small and Medium Scale Entrepreneurial Growth. *Journal of Entrepreneurship*, 12(01): 71-94
- Hauser, J. A., (2006). Research on Innovation: A Review and Agenda for Marketing Science, 25, (6), 687.
- Hoopes, D., Madsen, T., & Walker, G., (2003). Guest Editor's Introduction to the Special Issue: Why is there a Resource-based view? Toward a Theory of Competitive Heterogeneity. *Strategic Management Journal*, 24, 889-902.
- Makhija, M., (2003). Comparing the Resource-based and Market-based Views of the Firm: Empirical Evidence from Czech Privatization. <https://onlinelibrary.wiley.com>
- Man, T. W. Y., Lau T., & Snape E., (2008). Entrepreneurial Competencies and the Performance of Small and Medium Enterprises: An Investigation Through a Framework of Competitiveness, *Journal of Small Business and Entrepreneurship Publisher*, vol. 21, no. 3, pp. 257-276.
- Nguyen, A., (2008). Functional Competencies and their Effects on Performance of Manufacturing Companies in Vietnam. Ph.D Thesis (<http://ethesis.unifr.ch>)
- Penrose, M. M., (2006). Design for Mass Customization, *CIRP Annals*, 45,(1), 153-156.
- Pla-Barber, J., & Alegre, J., (2007). Analyzing the link between export intensity, innovation and firm size in a science-based industry, *International Business Review*, 16(3), 275-293.

SMEDAN, (2007). National Policy on Micro, Small and Medium Enterprises. <http://www.smedan.gov.ng/search.php?searchwords=National%Policyv%20%MSMES.Asessed> March 8, 2018

Vandermerwe S., (2012). The Transformation of Customer Focus: Lessons from Emerging Markets. *Innovative Marketing*, Volume 8, Issue 2, 2012

Wernerfelt, B. A., (1984). Resource-based View of the Firm. *Strategic Management Journal*, 5, 171-180.

World Bank, (2007). World Development Report. Washington, Oxford University Press for the World Bank.