

Entrepreneurial Competencies and Performance of SMEs in the Pharmaceutical Industry in Delta State

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Abstract

The study investigated the effect of entrepreneurial competencies on the performance of SMEs in the pharmaceutical industry in Delta State, Nigeria. Specifically, the study focused on the interplays and interactions between marketing competency and pharmaceutical-based SMEs performance, time management competency and pharmaceutical-based SMEs performance, decision-making competency and pharmaceutical-based SMEs performance. The study adopted survey research design. A sample size of 1036 respondents drawn from the population of the study was used for the study and the survey data were analyzed with the statistical tool of ordinary least squares (OLS) multi regression at 0.05 level of significance. The results revealed significant positive relationship between marketing competency and SMEs performance, time management competency and SMEs performance, decision making competency and SMEs performance at coefficient values of 0.693, 0.754 and 0.688 with corresponding t-values of 4.526, 3.148 and 2.873 respectively. The findings revealed that emphasis should be on developing effective marketing skills that can enhance competitive advantages and customer focus, training and development of staff on optimization of time and enhancing pharmaceutical-based entrepreneurs' analytical skills and critical thinking for informed decision making in complex situations.

Keywords: Entrepreneurial Competencies, Marketing Competency, Time Management Competency, Decision-Making Competency, Performance, SMEs, Pharmaceutical Industry, Delta State

Introduction

Entrepreneurial activities in the 21st century have taken a new dimension due to intense changes in business environment and the forces of globalization. In the developed

and emerging market economies, the roles of entrepreneurs in different industries and sectors have become more challenging in the bit to create, manage, grow successful business ventures, create product and service

values and remain competitive. Entrepreneurs in the present age of entrepreneurship are required to have wide range of entrepreneurial competencies to be able to take proactive steps to develop and grow their business beyond basic requirements, identify unique ideas and innovative solutions to overcome challenges, tackle tasks and take decisions effectively, continuously work towards

Sustainable development of developing countries like Nigeria depends largely on the performance of their indigenous micro, small and medium scale enterprises (MSMEs). These enterprises are generally considered as the engine of economic growth as a result of their immense contribution towards employment generation, poverty reduction, export earnings and gross domestic product (Suleiman, Aliyu & Bello, 2021) and fostering the growth of successful SMEs could lead to creation of new jobs and expansion of trade and economic activities to boost the country's gross domestic product (GDP). Entrepreneurial competencies address the issue of what lead to success in entrepreneurial activities. Bird (2015) in his study of the theory of entrepreneurial competencies posits that entrepreneurial competencies are mechanisms to achieve business success. Entrepreneurial competencies are essential traits, skills and a range of characteristics that enable entrepreneurs to succeed. Lack of these factors, is one of the causes of failure in business. Small and medium-sized enterprises play important role in the Nigeria economy. It is estimated that about

goals and build relationship that can support business growth and development. Increasing the chances of success among entrepreneurs would have huge implications for the growth and socio-economic wellbeing of a country (Asian-Pacific Economic Cooperation, 2014). Thus, understanding predictors of success in small and medium-sized enterprises (SMEs) is critical.

a third of the GDP in Nigeria originates from this sector (National Bureau of Statistics, 2017). In spite of these benefits, SMEs are faced with the challenges of entrepreneurial competencies.

Statement of the Problem

More than 95% of businesses in Nigeria are small enterprises; they contribute about 35% of the country's gross domestic product. In Delta State, over a million entrepreneurs operate Small, Medium and Micro Enterprises (SMMEs), accounting for 40% of total employment. These enterprises are widespread across various industries and sectors, with a dominant presence in trade (54%) and services (34%). Micro and small enterprises are critical for supporting livelihoods, as well as overall prosperity and progress. They create employment at relatively low levels of investment per job; utilize and add value to local resources; foster equitable income distribution; and are better positioned to meet local needs in small markets. The technologies used by them are easier to acquire, transfer and adopt even for people with little education and training. They have the potential to compliment large

enterprises through partnership and subcontracting relationships. The operations of micro and small enterprises also serve as training ground for entrepreneurial managerial development (Olomi, 2016).

A host of problems make it difficult for SMEs to exploit the existing potentials for improved performance. One of the most serious impediments is limited capacity of people who start and operate the businesses, in terms of the attitudes, motivation, exposure, skills and experiences. This capacity limitation is exacerbated by the effects of other problems including cumbersome regulatory framework, limited access to finance and environmental factors (Olomi, 2016). The concept of entrepreneurial competencies and their application are not absolutely new. It started to gain popularity in the late 1980's following its wide acceptance Boyatzi (2012). Entrepreneurial competencies could offer a realistic view of the knowhow of running a business. However, SMEs face the challenges of lack of appropriate knowledge and skills, limited access to relevant information on technology and dependency on poor and obsolete technology. In the Nigeria setting, the capacity for many entrepreneurs in different industries to innovate in product and service offerings is often times constraint by inadequate knowledge, lack of skills, inadequate personnel with the required abilities, poor facilities and environmental induced influence. Against this background, this study is carried out to investigate the effect of entrepreneurial competencies on the

performance of pharmaceutical-based SMEs in Delta State.

Objectives of the Study

The main objective of this study is to examine the impact entrepreneurial competence on performance of SMEs in the pharmaceutical industry in Delta State. The specific objectives are to:

1. Determine the influence of marketing competency on performance of SMEs in the pharmaceutical industry in Delta State.
2. Investigate the effect of time management competency on performance of SMEs in the pharmaceutical industry in Delta State.
3. Examine the effect of decision-making competency on performance of SMEs in the pharmaceutical industry in Delta State.

Research Questions

1. What affect does marketing competency have on performance of SMEs in the pharmaceutical industry in Delta State?
2. How does time management competency impact on performance of SMEs in the pharmaceutical industry in Delta State?
3. What extent of impact does decision-making competency exert on performance of SMEs in the pharmaceutical industry in Delta State?

Hypotheses

The hypotheses for this research are as follows:

Ho₁: Marketing competency has no significant effect on performance of SMEs in the

Pharmaceutical industry in Delta State

Ho₂: Time management competency has no significant impact on performance of SMEs in the

Pharmaceutical industry in Delta State

Ho₃: Decision-making competency has no significant effect on performance of SMEs in the

Pharmaceutical industry in Delta State

Review of Related Literature

In this section, the review of literature is on conceptual review, theoretical framework, theoretical exposition and empirical review

Conceptual Review

The major concepts in this study are competence, entrepreneurial competencies, marketing competency, time management competency and decision making competence and they are discussed in turn.

Competence

There are several definitions of competence. Almajali, Alamro and Al-Soub (2016) refer to competence as an individual's underlying characteristics, such as a motive, trait, skill, or a domain of knowledge which he or she uses. Woodruffe (2013) posits that competencies are "behavioral repertoires that some people carry out better than others". The term competent is associated with individuals, who manifest efficiency and effectiveness in their work or persons with the ability to perform, to a stipulated performance standard (Kagire & Munene, 2017). Competence has been referred to as

the individual relative abilities of a person concerning a particular work, task or set of related tasks (Jacobs, 2017). All these definitions relate competence to individual performance. A competent manager or entrepreneur therefore, is one who is effective and efficient, having the capacity to perform to a given performance standard. Ogbu (2016) describes competency as the characteristics underlying superior performance of an individual. Boyatzis (2013) defines it as underlying characteristics of an individual, which are causally (change in one variable causing change in another) relating to effective performance in a given task. Also, competency has been defined as a set of skills, related to knowledge and attributes that allow an individual to successfully perform a task or an activity within a specific function or job (UNIDO, 2021). It is also theorized in terms of job knowledge, skills and attitudes or behaviours (Tao, Yeh & Sun, 2016). Furthermore, it refers to the underlying 'aspects of a person', such as capacity, skills, knowledge and attitudes that enables them to be competent (Han, 2016; Moore, 2021). In the opinions of Chiang, Slih and Hsu (2013), the concept cannot be better defined outside the context of individual's expertise, skills, attitudes and behaviours with particular reference to self-entrepreneurial.

Lucia and Lepsinger (2019) opine that competency is the capability of applying or using knowledge, skills, abilities, behaviours and personal characteristics to successfully perform critical work tasks, specific functions or operate in a given role or

position. As Chanran and Useani (2016) note that incompetence manifests in lack of entrepreneurial know-how, resulting in inability to apply appropriate managerial concepts and principles in running a business concern, is responsible for business failure. They added that, it often manifests in poor financial control, weak decision-making process, poor time-entrepreneurial, and failure to develop a strategic plan, uncontrolled growth and improper inventory control.

It is often believed that competence is a combination of knowledge, skills and attitudes, which are necessary for pharmaceutical firms to execute tasks or functions effectively. For instance, Stoof (2015) visualizes competency as the ability to perform certain tasks for which knowledge, skills, attitude and motivations are necessary. The individual competencies activate the tangible and intangible resources that take part in the value creation process (Cannavaciale, 2013). Competencies elicitation is critical as small firms and pharmaceutical behaviours are strictly related to the environment in which firms operate. Nwokolo (2019) is of the view that competency means that the individual has acquired the knowledge, skills, attitudes and behaviour required in order to perform impressively at a specified proficiency level in a given task. Kiggundy (2021) views competency as the capacity to perform a task or tasks skillfully and effectively. Competencies refer to the sum of the requisite attributes and abilities for successful and sustainable pharmaceutical (Aminu, 2018). Howell (2015) posits that a

good entrepreneur must possess the ability to plan manage and organize business effectively for profit maximization.

From all indications, competencies constitute a cluster of related knowledge, attitudes and skills which 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, attitude and skills, must effectively be addressed and taught in an integrated manner. This is the only way outstanding performance can be achieved (Inyang and Enuoh, 2018). These clusters of related knowledge, attitudes and skills can be acquired through managerial training and development. In rethinking about entrepreneurial competency, the need for a paradigm shift from attributing all pharmaceutical firms to lack of financial resource and harsh operating environment to lack of requisite skills and entrepreneurial competencies (Inyang, 2020). This author highlighted on the need for entrepreneurial competencies rethinking to achieve success in pharmaceutical sector through entrepreneurial intervention focuses on empowering manager and employees to acquire the skills that can enhance business performance.

Entrepreneurial Competencies

Entrepreneurial competencies describe the knowledge, skill, and/or abilities required to fulfill required job tasks, duties or responsibilities. Hill & Jones (2018) assert that entrepreneurial competency is unique strength that allows a company to achieve

superior efficiency, quality, innovation, or customer responsiveness, and thereby to create superior value and attain a competitive advantage. A firm with an entrepreneurial competency can differentiate its product or achieve substantially lower cost than its rivals. Consequently, it creates more value than its rivals and will earn a profit rate substantially above the industry average (Hill & Jones, 2018). Entrepreneurial competencies refer to “the set of professional skills, abilities, and technical knowledge which specifically deal with the technical aspects of the job, essential to carry out specific entrepreneurial or task-related activities” (Janjua, Naeem, & Kayani, 2021). Janjua et al. (2016) opine that entrepreneurial competencies include vocational and technical skills which are necessary for the accomplishment of task-related objectives of the job. Entrepreneurial competence covers the understanding of and proficiency in managing specific entrepreneurial tasks. It encompasses proficiency in technical tasks and areas appropriate to the specific job. Managers with entrepreneurial competencies possess work planning skills and the ability to make decisions.

Many authors focused their research on entrepreneurial areas and confirmed that entrepreneurial areas could become core competencies of an organization through the combination of skills and resources. Sukboonyasatit and Thanapaisarn (2015) point out that one of the critical entrepreneurial areas for firm to focus on is competency. They listed 55 different distinctive competence activities within

entrepreneurial areas. Competency is defined here as being the particular skills and resources a firm possesses and the superior way in which they are used. In the empirical studies of Akimova (2015), entrepreneurial areas had been seen as source of competitive advantage. Core competencies of entrepreneurial areas through the fusion of resources and capabilities, are main source of competitive advantage (Snezana, 2015). Hill and Jones (2018) aver that competencies at entrepreneurial-level can be sources of competitive advantage through assessing the four factors of competitive advantage efficiency, quality, innovation, and customer responsiveness. Entrepreneurial -level strategies are strategies directed at improving the effectiveness of basic operations within a company. They include primary functions (production, marketing, research and development) and support functions (e.g. information system, human resources, and infrastructure). Boyatzis (2013) views competencies as an underlying characteristic of a person that could be a motive, trait, skill, aspect of one’s self-image, social role, or a body of knowledge which he or she uses. These characteristics are revealed in observable and identifiable patterns of behavior, related to job performance and usually include knowledge, skill and abilities. In another definition, competencies are specified as a mean of ‘being able to perform a work role to a defined standard with reference to real working environments.

Marketing Competency

Marketing refers to the position that a company takes with regards to pricing, promotion, advertising, product design, and distribution. Marketing can improve efficiency by lowering customer defection rates, thus allows a company to achieve substantial cost economies. According to Rauch *et al.* (2019), there are several other ways in which marketing functions of a company can help create value. Through brand positioning and advertising, the marketing function can increase the value that consumers perceive to be contained in a company's product. Insofar as these activities help create a favourable impression of the company's product in the minds of consumers, they increase value.

Time management Competency

Time management has been an area of concern for individuals and corporate bodies in different industries and sectors (Ilesanmi, 2020). Adair (1998) views time as a scarce resource; it is irreplaceable and irreversible and as such, it has got to be spent wisely and judiciously to achieve optimum returns. To this author, ability to see time as a scarce resource, means choosing the best and wisest way to spend it. The principle applies to us all in most areas of our lives. It is truer in the world of work and business. For the potential demands and pressures on our time greatly outweigh what is available.

Decision-Making Competency

The art of decision-making is very important to the success of any pharmaceutical activity. Pharmaceutical firm that wants to succeed in today's globalized business

world must be equipped with the skill of prompt and accurate decision making process. In the opinion of Nwachukwu (2015) decision-making competence is at the heart of or core of pharmaceutical activities. Making a decision is one thing, and making the right decision given the circumstance is another. He reiterated that many businesses have crashed as a result of making wrong decisions. In his opinion, some critical decisions about a business concern are part of strategic entrepreneurial process of an enterprise. He noted further that many people have difficulty bringing their ideas to the market to create a new venture or be bold to take decisions competence that could lead to substantial business expansion. Decision making competency is defined as the total capability of the entrepreneur to perform a job role successfully based on the decision reached (Lau et al., 2018).

Theoretical Framework

This study hinges on competence theory propounded by Bain (1968). Competence theory is the most tangible and reasonable alternative to dominant strategic model of industrial organization. Introduced at a pioneering level by Bain (1968) and successively developed by Porter (1985). They argue that by concentrating excessive attention on product market strategies, the Porter framework neglects the cost of developing the basis of and implementing those very strategies. Resources must be acquired or built before a product market strategy may be implemented. Again, instead of an exclusive outward orientation toward market niches and advantageous cost-revenue combinations, the competence-

based perspective also puts emphasis on building up resources and organizational routines within the firm itself. Organization and production are emphasized, as well as the market.

Porter and Kramer (2016) posit that competence theory proposes to bring, to the strategic reflection, new answers to the “longitudinal problem”, which consists of the individualization of the conditions that permit a firm to reach and hold on to a favourable competitive position over time. This problem, however, cannot be separated from the “cross-sectional problem”, aimed at understanding the causes at the base of the firm’s superior performance at a precise instance in time.

Montgomery and Collis (2019) believe that the industry or business must remain the principal unit of analysis, as the possession of determinate resources or competencies should be, in any case, compared with those of the competitors. It follows that the firm profitability depends both on the attractiveness of the industry in which the firm competes and on its relative position in that industry. Then, if the essence of strategy is choosing to perform activities differently than rivals do the core competencies enable the choice of diversity to be followed, furthermore firms are able to carry out activities at a lower cost or in such a way as to create a greater value for the customer lies in that which Porter calls drivers (Porter 1996). According to the analogy made by Porter (2016), to be capability predators, means to move rapidly from one business to another, copying capacities, developing them so as to assume the role of leader and

this is possible with the aid of flexible human resources and transversal entrepreneurial of the firm.

Competence-based theory is related to this study because it has been applied in the area of entrepreneurial competence. The main cardinal theme of entrepreneurial competence is gaining a competitive advantage. There is recognition of learning-by-doing as a source of endogenous growth. This emphasis on learning and growth means that individuals themselves are in a process of development, in contrast to static and equilibrium-based approaches and recognition of the role of radical uncertainty and other chronic problems pertaining to information and knowledge in the firm which result to competitive advantage.

Theoretical Exposition of Performance of Small and Medium-Sized Enterprises (SMEs)

Typically, performance is ultimate outcome expected in every business activity (Muhammad et al., 2019; Ahmed et al., 2018; Galdeano et al., 2018; Ahmed, Mozammel & Ahmed, 2018; Roespinoedji et al., 2019). SME performance is the total performance of the firm and is showed by the aggregate of performance of finance, business, and human resource functions of the organization in a given time. Firms formulate goals and objectives to be achieved within a given time frame. Performance measures the organizations’ effectiveness against these set objectives. Thus, organizational performance refers to the ability of an organization to attain its goals such as high-profit margin, product quality, and larger market share, better

financial results at a stipulated time and by applying the relevant strategy. Organizational performance has many dimensions which may be difficult to quantify. Rowley (2011) opines that both financial and non-financial indicators have been used to measure performance. The financial indicators are compendium of financial-based measurement metrics. In the service industry, employee productivity has been used as a measure of performance (Mishra, 2018). Gavrea, Ilies and Stegorean (2011) SMEs performance shows the actual output or results of an organization is measured against its proposed outputs. Although the concept of SMEs performance is very common in academic literature, its definition is not yet a universally accepted concept. Richard et al, (2016) view SMEs performance as comprises three specific areas of firm outcomes: financial performance (profits, return on assets, return on investment and others product market performance (sales, market share, etc.); and shareholder return (total shareholder return, economic value added, others).

Waiganjo, Mukulu & Kahiri (2016) note that SMEs performance may be assessed in terms of its multiple objectives of profitability, employee satisfaction, productivity, growth among many other objectives. Proponents of the balanced score card performance entrepreneurial system have suggested a broader performance appraisal approach that recognizes both the financial and non-financial measures including sales, profitability, return on investments, market

share, customer base, product quality, innovation and company attractiveness. Richard et al, (2019) explains that SME performance includes the actual output or results of firms as measured against its intended outputs (goals and objectives).

Kunze (2013) defines SMEs performance as consisting of operational, profitability and overall growth dimensions of performance. To survive and succeed in a potentially austere environment, small and medium enterprises must effectively deploy and combine their physical, human and organizational assets. Thus, they will develop long-term competitive advantages and in turn, achieve superior performance (Lonial & Carter, 2015). However, due to their limited resources, small and medium enterprises need to identify and exploit other means to be able to enhance their competitiveness and performance. In general, various factors of the internal environment, which potentially influence the performance of Small and medium enterprises, are mentioned in the literature of these, particular attention is paid to age and size of firm (Arend, 2014; Nicolini, 2011), human resources and human resource practices (Katou, 2016; Sheehan, 2013), entrepreneurial networks (Bratkovic Kregar & Antoncic, 2016;) occupational health and safety measures (Gopang et al., 2017), product, process, organizational, marketing innovation (Leitner & Guldenberg, 2019), organizational orientations that consist of market, entrepreneurial, and learning orientations (Lomberg, Urbig, Stockmann, Marino, & Dickson, 2017), internationalization (Chiao, Yang, & Yu,

2016; Majocchi & Zucchella, 2013), export (Altuntas et al., 2018), market orientation, planning flexibility (Alpkan et al., 2017), ownership and family involvement (Lien & Li, 2017), intellectual capital (Gomezelj, Omerzel, Smolci & Jurdana, 2016).

Empirical Review

Nguyen (2018) studied entrepreneurial competencies and their effects on performance of pharmaceutical companies in Vietnam. The study adopted survey research design. Structured questionnaires and mail survey was used. A total of 725 questionnaires were sent by mail to pharmaceutical companies. Consequently 125 questionnaires were mailed back at gross response rate of 17.24%. The sample composed of 63.6 per cent limited or joint-stock companies, 27.3 per cent state-owned enterprises and 9.1 per cent foreign capital organizations. Various data analysis procedures were applied including factor analysis, descriptive analysis, single regression and multiple regression in order to accomplish the objectives of the study. The findings identified four set of items of entrepreneurial competencies namely pharmaceutical, marketing, research & development (R&D), and human resource and two set of items of organizational performances called profitability and market performance. It was discovered that seven hypotheses out of eight were supported by the empirical research and there were no unexpected results. The study confirmed that those pharmaceutical companies in Vietnam putting more emphasis on marketing, research & development and human resource competencies can expect to earn

higher profitability and market performance. The study also found the positive and significant relationship between pharmaceutical competency and profitability. These findings are consistent with some previous studies.

Chiyoge (2019) examined the role of core competencies on the relationship between co-alignment variables and organizational performance. Research has demonstrated that managerial core-competencies are crucial for success of any organization. The objectives of this study were to determine the relationship between environment, core competence, strategy, structure, and firm performance in profit-oriented parastatals in Kenya and to establish if the strength of the relationship between the co-alignment variables (environment, strategy, structure) and firm performance is dependent on the level of core competencies in profit-oriented parastatals in Kenya. The research design was based on the positivist philosophy of science. The method used to carry out the research a cross-sectional correlational survey. The results of the study showed that there was a positive relationship between co-alignment variables and organizational performance and that core-competence moderated the relationship between the co-alignment variables and firm performance. That is, the higher the core-competencies, the stronger the relationship between the co-alignment variables and performance and vice versa. The unique contribution of this study is the finding that the strength of the relationship between the co-alignment variable and performance depends on the level of core competencies.

Subramanian, Kamalesh and Strandholm (2020) examined the role of organizational competences in the market-orientation-performance relationship: An empirical Analysis. The purpose of this paper is to examine the specific ways in which market orientation of an organization contributes to the creation of organizational competences that lead to superior performance. Survey data from 159 acute care hospitals were statistically analyzed to test 35 the research hypotheses. The findings show that the Market orientation makes a significant contribution to the creation of a number of organizational competences which, in turn, lead to superior performance in the areas of cost containment, growth in revenue, success in retaining patients, and success of new services.

Bani-Hani and AL-Hawary (2019) examined the impact of core competences on competitive advantage: strategic challenge. This study examines the impact of core competences on competitive advantage and it was applied on Jordanian insurance organization. The population for this study consisted of all the Jordanian insurance organizations heads. A simple random sampling technique was used to select the respondents surveyed for this study, a total of 61 questionnaires were administered to respondents chosen from 18 companies; statistical tools were used to test the hypothesis such as: spearman correlation, and multiple regression. The findings indicated that there is a significant positive relationship between core competences and competitive advantage from the sample point of view. The study also showed that

the core competences had a significant impact on competitive advantage.

Ljungquist (2018) studied specification of core competence and associated components: A proposed model and a case illustration”. This study aimed to outline a core competence model by exploring links between core competence and the associated concepts of competences, capabilities, and resources, and by proposing refinements to the characteristics of these concepts. A case study based primarily on personal interviews. The findings suggest that competences, capabilities, and resources are all linked to core-competences; the first two continuously, and the third intermittently; motivate refinement of the competence concept, by adding adaptation competence as governing customer loyalty, and transfer competence as managing transcendental integration; and motivate refinement of the capability concept, by adding capacity as a quality characteristic, and communication as a characteristic that can actively initiate organizational change.

Manar (2018) examined the impact of core competence on organizational performance. An applied study on Paint Industry in the United Arab Emirates, through exploring the impact of Core Competence variables on Performance directly and indirectly through Competitive advantage. This study was applied on Paint Industry in the UAE, and took the samples from the middle and top entrepreneurial s. In order to achieve the objectives of the study, the researcher designed a questionnaire consisting of (42) paragraphs to gather the primary information from the study sample. The

Statistical Package for Social Sciences (SPSS) program was used and Path analysis to analyze and examine the hypothesis. The study came to show high level of importance for the study variables for the companies, and showed significant indirect impact of core competence on performance through competitive advantage.

Ismail, and Abidin, (2018) studied the impact of workers' competence on their performance in the Malaysian private service sector". The study aimed to analyze the impact of workers competence towards their performance in the private service sector. The study sample consisted of 1136 workers who are either executive, manager or professional from three service subsectors, namely, education, health and information and communication technology (ICT) in Selangor, Federal Territory of Kuala Lumpur, Penang and Johor collected in 2017/2018. The study results showed that workers' competence has significant influence towards workers' performance. Besides that, human capital and workers' characteristics also determine workers' performance in the service sector. The study recommended that efforts should be made to enhance an efficient labor force must consist of a human capital package.

Gladson and Augustine (2018) conducted a study on "Managerial competencies and marketing effectiveness in corporate organizations in Nigeria". The aim of the study was to assess the impact of managerial competencies on organization marketing effectiveness. The study used twenty seven item survey questionnaire which was developed and distributed over 84 corporate

organizations in Nigeria that were selected from 2015 edition of the Nigerian stock exchange gazette as a sample of this study. One hundred questionnaires were distributed and collected from key informants in the organizations. The study concluded strong association between managerial competencies and marketing effectiveness of corporate Organizations in the Nigerian context. The study also found that managerial competencies lead to marketing effectiveness in corporate organizations in Nigeria. The study recommends that Nigerian government should ensure a stable economy and make economic policies that will enhance existing business development in the country. Entrepreneurial must consistently motivate its sales team so that it will analyze the customer's needs, seek to satisfy them, and try to adapt the products to these needs, react to competitors' actions and responses.

Methodology

The study adopted survey research design method. This design was adopted to enable the researchers conduct the study using a sample size that is a true representation of the population of interest for data collection, analysis and generalization. The population for this study consists of 5,394 SMEs in Delta State. The sample size of 1036 was determined through the application of a formula developed by Borg and Gall in 1973. A structured questionnaire designed to reflect the popular five (5) point Likert scale of strongly agree; agree; disagree; strongly disagree and undecided, was used by the researcher to elicit information from the respondent. The instrument was face and

content validated. Test re-test method was carried out to achieve reliability. The Cronbach Alpha was used to determine the reliability of the instrument by using Statistical Package for Social Sciences (SPSS). The data generated from the field were subjected to empirical test and the formulated hypotheses were tested with ordinary least squares (OLS) multiple regression statistical tool at 0.05 level of significance.

Data Presentation and Analysis

The data generated in this study were presented and analyzed. Ordinary Least Squares (OLS) multiple regression analysis was used to test and verify the various null hypotheses formulated to guide the objectives of the study and strengthen the analysis. The table shows that 1036 copies of the questionnaire were issued out, 1021

were completed and returned, thus showing a response rate of 97 percent while 15 copies of the questionnaire which represent 3% that were not returned were treated as invalid.

Test of Hypotheses

The tests were conducted to verify the claims of the null hypotheses so as to be properly guided in taking decisions concerning the results of the hypotheses. The hypotheses were set mainly to determine the effect of various competencies on competitive advantage of pharmaceutical companies. Answers to the research questions have already shown that the acquisition of the said competencies are quite necessary to successful organization but the hypothesis aspect is still very necessary to confirm whether the answers are statistically significant or whether they occurred by chance.

Table 1: Summary of the Analysis of Variance (ANOVA) for the Model

Source of Variation	Df	Sum of Squares	Mean Square	F-ratio	Sig.
Regression	4	279.281	69.820	18.624	.000 ^a
Residual	1017	543.569	3.749		
Total	1021	822.850			

a. Predictor: (constant), MMC, TMC, DMC ,

b. Dependent variable: performance of SMEs

Table 1 presents the summary of analysis of variance (ANOVA) for the regression model. The table shows that F-Statistic is 18.624 and the probability level is .000

which is less than $P \leq 0.05$. The implication is that overall; regression model is statistically significant, valid and fit for prediction.

Table 2: Summary of Regression Results

Model	R	R. Square	Adjusted R-Square	Standard Error of Estimate
	0.857	0.741	0.709	0.69527

a. Predictor: (constant), MMC, TMC, DMC,

As could be seen from Table 2, the regression coefficient represented by 'R' has the value of 0.857 and it means that 85.7 percent relationship exists between the dependent and the independent variables. Similarly, the coefficient of determination represented by R^2 has the value of 0.741 and it means that 74.1 percent of the variation in

the dependent variable can be explained by the independent variables in the model. The R^2 being the explanatory power of the model shows that the changes in competitive advantage can be accounted for by the marketing entrepreneurial competency, time entrepreneurial competency, decision-making competency

Table 3: Coefficients of the Predictor Variables, t-values and the Significant Level

Model	Unstandardized Coefficients		Standardized Coefficients	t-value	Sig.
	B	Std. Error	Beta		
1(Constant)	-.187	.207	-	-.741	.454
Marketing competency (X_1)	.189	.047	.693	4.526	.000
Time management competency (X_2)	.178	.059	.754	3.148	.000
Decision-making competency (X_3)	.563	.078	.688	2.873	.000

a. Dependent Variable: performance of SMEs

Table 3 presents the coefficients of the respective variables as well as the t-values and the probability levels. As could be seen from the table also, many of the predictors have high coefficients. For instance, marketing entrepreneurial competency, time management competency and decision-making competency are quite high in

predicting the dependent variable, performance of SMEs. It is also worthy of note that all the expected signs the a priori, obeyed the theoretical expectations.

Re-Statement of the Hypotheses

The formulated hypotheses we re-stated in this section of the analysis to ensure that the objectives as well as the research questions

are well located in the hypotheses which we are testing to establish that the answers to the research questions did not occur by chance but with statistical significance. All tests were conducted at the 0.05 level of significance. That being the probability at which we were willing to risk type I error.

Ho₁: Marketing competency has no significant effect on SMEs growth in Delta State.

Ha₁: Marketing competency has significant effect on SMEs growth in Delta State.

Ho₂: Time management competency has no significant impact on SMEs growth in Delta State.

Ha₂: Time management competency has significant impact on SMEs growth in Delta State.

Ho₃: Decision-making competency has no significant effect on SMES growth in Delta State.

Ha₃: Decision-making competency has significant effect on SMES growth in Delta State.

Interpretation of Regression Results

In interpreting the regression results, we considered the value of the coefficients (X), t-statistic and the significance level. From Table 3 above, the values of the regression coefficients, shows that relative contributions in predicting the dependent variable which in this case is on performance of SMEs. The decision rule about the significance of the coefficient or otherwise is based on the values in the table. The coefficient of marketing competency represented by X₁ in the model has the value of 0.693. This means that when marketing

entrepreneurial competency is increased by one unit, competitive advantage will increase by 6.9 percent when other variables in the entrepreneurial equation (model) are held constant. The t-value of 4.526 and the probability level of 0.000 corresponding to the coefficient show that the coefficient is significant because 0.000 is less than 0.05 significance level set for the study. At 0.05 level of significance and t-value of 4.526, the coefficient is positive and significant. Given the weight of evidence against the null hypothesis, the null hypothesis is rejected while the alternate hypothesis that marketing competency has significant effect on performance of SMEs in the Delta State is upheld. Thus, the significant effect marketing competency exerts on SMEs is a positive one.

In a similar vein, the coefficient of time management competency represented by X₂ in the model is 0.754 and it means that when time management competency is increased by one unit, performance of SMEs will increase by 7.5 percent if other factors in the equation (model) are not allowed to vary. The t-value of 4.526 and the probability level of .000 corresponding to the coefficient show that the coefficient is positive and significant because .000 is less than the significance level 0.05 set for the study. At 0.05 level of significance and t-value of 3.148, the coefficient is significant and positive. Consequently, the null hypothesis is rejected while the alternate hypothesis that time management competency has significant impact on performance of SMEs in the Delta State is accepted.

For the decision-making competency, the coefficient is represented by X_3 in the model and it has the value of .654 which means that when decision-making competency is increased by one unit, firm performance will increase by 7.5 percent if other variables in the model are not allowed to vary. The t-value of 2.873 and the probability level .000 corresponding to the coefficient show that the coefficient is positive and significant because 0.000 is less than 0.05 significance level. At 0.05 level of significance and t-value of 3.148, the coefficient is significant and positive. Consequently, the null hypothesis is rejected while the alternate hypothesis that time management competency has significant positive effect on the performance of SMEs in Delta State is accepted.

Summary of Findings

The results of the regression analysis show that:

Marketing competency had a significant positive effect on performance of SMEs in Delta State (t-value of 4.526; $p=0.000$).

Time management competency had a significant positive effect on performance of SMEs in Delta State (t-value of 3.148; $p=0.001$).

Decision-making competency had a significant positive influence on performance of SMEs in Delta State (t-value 2.873; $p=.000$).

Conclusion

This study examined entrepreneurial competencies and performance of SMEs in the pharmaceutical industry in Delta State, Nigeria. Three distinct areas of

competencies viz marketing competency, time management competency and decision-making competency were examined. Their interactions and interplays with SMEs performance were evaluated. With the multiple regression analysis, the results of the study revealed significant positive relationship between the dependent variables of the study (marketing competency, time management competency and decision-making competency) and the independent variable (SMEs performance). The three metrics of entrepreneurial competencies showed positive correlation with SMEs performance. The results of the regression analysis depicted that the regression model was statistically significant. Based on the result of the analysis the study concluded that enhancing entrepreneurial competencies is crucial for improving SMEs performance in the pharmaceutical industry, particularly in a resource-constrained environment.

Recommendations

Based on the results of the analysis of data, the following recommendation/policy dialogue was made:

1. Marketing competency is one of the major skills for generating revenue for pharmaceutical-based entrepreneurs. Hence, SMEs in the industry should develop effective marketing skills that can enhance their competitive advantages and customer focus.

2. Time is a scarce resource and its judicious use depends on the ability of the pharmaceutical-based SMEs to effectively manage time. Pharmaceutical-based SMEs should train

their staff on how to optimize time toward the achievement competitive advantage.

3. Competency in decision making involves analytical skills, decisiveness, critical thinking, and

Informed decision that pharmaceutical-based entrepreneurs should be acquitted with to make

good decisions in complex situations.

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