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INTELLECTUAL CAPITAL AND SMES COMPETITIVENESS IN PLATEAU STATE

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ABSTRACT

Sustainable competitiveness is important when SMEs keep searching new ways to offer value better than their competitors, especially when competitive environment changes. Knowing which elements of competitiveness to deploy would help SMEs set effective competitive strategies from the very beginning. Intellectual capital as intangible resources is important for a competitiveness of SMEs .However, SMEs in Nigeria have not performed very well which reflected in their failure rate. The main objective of this research is to identify the elements of intellectual capital (knowledge and innovation) and how it influences SMEs across Plateau State. A cross-sectional design and a descriptive survey with a quantitative method approach were used to explore intellectual capital and SMEs competitiveness. The Cronbach Alpha test was used to check for the reliability of the questionnaire. A value of 0.70 showed that the instrument is reliable and good for further analyses .The findings showed that intellectual capital is having a significant relationship as well as influence on SMEs in Plateau State.

KEY WORDS:

Intellectual Capital, knowledge, Innovation, SMEs.

Introduction

The contribution of Small and Medium Enterprises (SMEs) across the globe is well recognized by the government, corporate organizations, and institutions of learning as well as individuals. This is seen in the areas where jobs are created, individuals are employed, and families have gained means of livelihood and revenues generated by government (Dakung, 2017). For instance, in the UK, SME|s have contributed 52% to the GDP, employed 53% of the populace. Similarly, in USA, between 2010 and 2016 SME|s have contributed about 50% to the GDP and 52% of employment. In Hong Kong over 78% of the youth are employed in various categories of SMEs and contributed to over 51% to GDP according to International Centre for Entrepreneurship and Career Development India. In developing country like Nigeria, the situation is different where the contribution of SMEs is place at 48% to GDP in the last five years NBS (2017). This is poor compared to the ones in the developed nations. More worrisome is their high failure rate. For instance, according to Oghojafor and Kuye (2011) only about 50% of small businesses are still trading after their first three years from initial set up. This has majorly been attributed to their inability to compete favorable with the giant firms both within and outside the country.

Giving this scenario, a number of initiatives and programmes were introduced by the Nigerian government. Notable among such programmes are National Poverty Eradication Programme (NAPEP) 2001,National Economic Empowerment and Development Strategy (NEEDS) 2004,Youth Enterprise with Innovation Programme (YOUWIN) in 2009,National Industrial Skills Development Programme (NISDP) Subsidy Reinvestment and Empowerment Programme (SURE-P) 2012, University Entrepreneurship Programme (UNDP) and N-Power,2016 (Dakung & Oyekan 2016). However, these programmes are not able to achieve the desired objective considering the fact that most SMEs continue to die within their first 3 years of operations because of competition (Ugochukwu, 2016).

|Competition which is viewed as rivalry between two or more entities, individuals, economic groups or social groups for scarce resources, leadership and profit is crucial to their survival especially among SMEs. Notably, Busari (2017) observed that for firms to contribute significantly to the growth of the nation there is need for them to survive competitiveness. Suggesting that competition in terms of providing better services, novel way of marketing of products, use of modern facilities in operations and R & D will enable firm to survive. Going further, firms need intellectual capital as a boost.

Intellectual capital (knowledge and innovation) is seen as an intangible resources, is a resource that cannot be seen, it is difficult to understand and imitated by competitors, and as a source of sustainable competitive advantage, which is the basic part of the company's core capabilities and competencies (Hitt,1977).

Prior studies found that knowledge is important in influencing firm competiveness. Similarly, Martinez and Garcia-Meca (2005) established that innovation is related with competitive advantage. However, considering their findings, they have failed to look at the combination if the two dimensions of intellectual capital (knowledge and innovation) in predicting competitive advantage.

Statement of the problem

Small and Medium Enterprises (SMEs) in Nigeria has not performed very well. This is reflected in their high failure rate. For instance, only about 50% of small businesses are still trading after their first three years from initial set up. This has majorly been attributed to their inability to compete favourable with the giant firms both within and outside the country (Oghojafor & Kuye, 2011).

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findings, they have failed to look at the combination if the two dimensions of intellectual capital in predicting competitive advantage. Hence, this study sought to fill the knowledge gap.

Research Questions

i. To what extent does knowledge influence SMEs competitiveness in Plateau State?
ii. What is the relationship between Innovation and SMEs competitiveness in Plateau State?

Objective of the Study

i. Examine how knowledge influences competitiveness of SMEs.
ii. Determine the relationship between Innovation and competitiveness of SMEs.

Statement of Hypotheses

H_1 : Knowledge significantly influence SMEs competitiveness.

H_2 : There is a significant relationship between Innovation and SMEs competitiveness.

Literature Review

Conceptual Review

Small businesses do not have a consensually-accepted global definition. Definitions vary across countries and across industries. However, the most common measures used include number of employees, annual turnover, industry, ownership and value of fixed assets (Agyei-Mensah,2011). According to the Organization for Economic Cooperation and Development (OECD), the characteristics of SMEs not only reflect the economic patterns of the country but also the social and cultural dimensions. These differing patterns are noticeable reflected within different definitions and criteria of SMEs adopted by different countries. Whereas some refer to the number of employees as their distinctive criteria for defining SMEs, others use invested capital, while some use a combination of the number of employees, invested capital, sales and industry type (Abiodun & Harry, 2014; Dababneh & Tukan, 2007).

Concept of Competitiveness

Competitiveness of a firm is its capacity to achieve targets. A firm has competitive advantage when it is able to create more economic value than its rivals do (Barney & Hesterly 2010). Competitive advantages are those factors that a firm needs to have in order to succeed in business (Analoui, & Karami, 2003). There are three types of competitive advantage; the cost of leadership, differentiation and focus (Porter, 1985). Similarly, Lynch (2006) observed that each of these three strategic options represents an area that every business and many not-for-profit

organizations can usefully explore and as well choose in order to compete in the marketplace and gain sustainable competitive advantage. He also stated that the general principles can perhaps be applied to public service and not-for-profit organizations where they compete for resources, such as government funding of SMEs. Consequently, some strategic management researchers are advocating the importance of competitive advantage or the understanding of firms' market positions from a dynamic theoretical perspective (Lei et al., 1996; Porter, 1991)

Concept of Intellectual capital

The need to increase the competitive capacity of a company and obtain a strategic edge in the increasingly competing market by the intensive use of intangible resources such as patents, goodwill, expertise, firms learning ability and other intangible assets which cannot be priced has given rise to the concept of intellectual capital. According to Petty et al. (2001), there is increasing evidence that the intellectual capital of an organization represents the path to creating modern and competitive environments. Stewart, (1991) defined intellectual capital as the intangible assets within a company. According to McGrath and Sparks (2006) the knowledge that forms intellectual capital can be viewed as two processes which are combination and exchange. Thus, intellectual capital can been seen as a combination of acquired knowledge and existing knowledge that are not connected. Intellectual capital has components such as human capital, structural capital and external capital. The struggle to accept intellectual capital as an important and representative concept for the modern organization has been generally successful (Andreissen, 2001).

Literature Review

The Resource Based View of the firm (RBV) provides a theoretical foundation for addressing outsourcing from a resource gap perspective (Penrose, 1959). The theory views a firm as a collection of productive resources and organizations compete based on having or controlling unique, valuable and hard-to-imitate resources (Barney, 1991). Rather than competing from a specific product/market position, a set of resources could be used to create various products for various markets. Advantage comes from being the only organization with the resources needed to create and deliver those products. Sustainability of the advantage depends on resource immobility, that is, the difficulty for others to copy, acquire, or develop those resources (Rumelt, 1984). If competitors face no significant cost disadvantage or obstacle in developing those resources, then the resources can provide only a temporary ability to compete until they are copied by another firm. Those resources cannot, by themselves, be strategic according to RBV as they are not unique and can be acquired by competing firms. However, RBV is concerned not only with the deployment of existing resources, but with their leverage as well (Grant, 1991). To fully exploit a firm's existing unique resources, the external acquisition of complementary resources may be necessary (Grant, 1991). A firm

may still realize a unique benefit from a purchased resource when combined with one that is unique, especially if that acquired resource complements or supplements its existing resources more effectively than it does for competitors (Dierickx & Cool, 1989). For example, while two competing firms may use the same outsourcing vendor to provide a CRM capability, it may be that one of the firms has a more unique and valuable production capability, sales force, distribution channel, or other related resource which, in net, provides a greater overall advantage. Thus filling resource gaps through knowledge and innovation strategy not only maintains the firm's stock of resources, but can also augment resources and capabilities to remain competitiveness (Cheon, et al., 1995). While the notion of complementary resources explains how intellectual capital can potentially be strategic, it too ignores the role played by knowledge and learning in developing a competitive advantage. Firms need to know more than competitors about how to integrate and deploy their resources, especially those that are externally contracted for and thus commonly available (Zack, 1999).

Knowledge and SMEs Competitiveness

Nowadays firms must compete in a challenging context that is being transformed by globalization, technological development, increasingly rapid diffusion of new technology and the development and use of knowledge (Hiit,keats, and Demarie 1998).Firms are required to do things differently in order to survive and proper . Specifically, they must look to new sources of competitive advantage and engage in new forms of competition. Besides knowledge being an important resource in itself, the efficient allocation and use of other resources requires relevant knowledge. Not all forms and kinds of knowledge are equally important for acquiring competitiveness. Demarest (1997) described the nature of commercial knowledge, which goal of which is not to find the truth, but to ensure performance. Competitiveness is the ability to provide products and services, as effectively as, or more effectively and efficiently than the relevant competitors. Measures of competitiveness include firm profitability, the firm s export quotient (exports or foreign sales divided by output), and regional or global market share. Performance in the international marketplace provides a direct measure of a firm's competitiveness. Competitiveness is also the ability to match or even beat the world's best firms in cost and quality of goods or services.

Innovation and SMEs Competitiveness

Innovation is crucial in enhancing business success. For business to succeed, they need to have edge over rivals. This then suggests that innovation contributes to achieving a competitive advantage (Tidd et al., 2007).Similarly, Leal-Rodriguez et al. (2014) documented that innovation capacity contributes to the organization by creating value. Innovation, for instance, is one of the most important sources of sustainable competitive advantage because it leads to product improvements that increase the value of its product portfolio (Castro et al., 2013). These values

created through innovation by providing new or unique products and services are significant potential for organizational performance (Montes, Moreno & Morales, 2005; Hulery and Hult, 1998). In the same vein, scholars (Montes et al., 2005; Jimenez-Jimenez & Sanz-Valle, 2011; Laforet, 2013) supported the idea that innovation positively affects the performance widely. Similarly, Martín-de Castro et al. (2013) validated that developing successful technological innovations is essential for creating and sustaining an organization's competitive advantage. Supporting this position, Autant-Bernard, Fadairo and Massard (2013) in their survey found the importance of innovation in promoting competitive advantage of a firm. This is supported by results of Noruzy et al. (2012) and Autant-Bernard (2001) established that the innovative activity of organizations significantly influences competitiveness which is based on inimitable skills and abilities.

Methodology

Research design and sample

The study followed a cross-sectional design. Also, a descriptive survey with a quantitative method constitutes the study's research design. The quantitative research design incorporated the standardized measures and statistical techniques associated with the positivist's paradigm to obtain in depth responses about how intellectual capital and SMEs competitiveness are determined in Plateau State. A total sample of 262 of owners of SMEs across Plateau State was determined. The participants were selected using simple random sampling technique after which, data were collected through a personal approach and a response rate of 84% was achieved. The data collection approach was chosen to because it is easier in obtaining the data from the respondents. Also, the limited availability and efficiency of postal/communication services in Nigeria are unfavorable for questionnaires to be mailed to our respondents.

Operationalization and measurement of variables

The questionnaire developed was used in gathering data for the study. Measurement items were adapted from previous scholars. However, modifications were made on some items to fit the study setting. Depending on the construct, responses were expected based on a specified way(s).

Competitiveness: Competitive advantage is defined as when the firm operates in a more efficient or otherwise higher quality manner than its competitors (Barney, 1991; Parrish et al., 2008). Items related to competitive advantage were adapted based on Gilley et al. 2004, Argote and Ingram (2000) and Chen et al. (2009). To determine each firm's nonfinancial performance, respondents are asked to rate their firm's research and development (R&D) outlays, stability/growth of employment, product/process innovations, employee morale/job satisfaction, customer relations, and supplier relations relative to their competitors. Responses

are coded on a 5 point likert scale ranging from 1= at the very bottom of similar firms in the sector to 5= at the very top of similar firms in the sector.

Knowledge was measured by examining firm's understanding about relevant competitiveness. This approach has been successfully utilised in previous studies across different domain. Items utilised include: "Useful knowledge can be easily shared and acted upon", "people at workplace share their experiences and knowledge willingly", "much time is taken by us to get the relevant knowledge", "providing incentives for knowledge sharing is crucial to our firm", "we are sure we can learn from each other's knowledge", "knowledge sharing and learning are valued in our firm's culture". The respondents were expected to indicate their degree of agreement or disagreement with the items generated, anchored on a 5 point scale.

Innovation: is measured by examining the implementation of a new method in SMEs' practices or external relations (OECD, 2005). An adapted measure based on those previously employed by Tierney, Farmer, and Graen (1999); Ohly and Fritz (2010) was utilised. The measurement items were adapted from the literature with minor modifications and rewording to ensure contextual consistency. Example of the items are: "our business generates novel ways of operations", "Innovation is supported and rewarded in our business", "our business has new ideas of marketing to customers", "our business always serve as a good role model for doing new things." The respondents were required to indicate their degree of agreement or disagreement with the items generated, anchored on a 5 point likert scale ranging from 1=strongly disagree to 5=strongly agree.

Control variables

Since previous studies have indicated that men are more likely to develop the intention to start a business venture than women (Kolvereid & Moen, 1997), we controlled for gender. Also, age of the business was controlled for since it has been related both to intentions (Morris & Venkatesh, 2000) and entrepreneurial behaviour (Reynolds, 1987).

Presentation of Results/Findings

The questionnaires were coded, analysed and tested for reliability and validity of instrument. The Cronbach Alpha test was used to check for the reliability of the questionnaire. A value of 0.70 showed that the instrument is reliable and good for further analyses. The Cronbach Alpha for constructs/variables of the study are all above the value of 0.70. This is shown in table 1.

Table 1 Reliability Statistics

Construct	Cronbach's Alpha
Competitiveness	.732
Intellectual Capital	.829
Knowledge	.765
Innovativeness	.894

The descriptive statistics in table 2 reveals that males were more (173) than females (89), with the majority belonging to the 26–36 age bracket (*M* = 66%; *F* = 34%). With regard to the type of business, majority (46.4%) of the respondents were into trade business. Also, majority of the respondents (52%) have been in the business for the past four years. Finally, majority of the respondents (62.6%) were married.

Table 2 Personal Profile

Marital Status	**Single**	**Married**	**Total**		
	37.4%	72.6%	100%		
Gender	**Male**	**Female**	**Total**		
	66%	34%	100%		
Age Group	16-25	26-35	36-45	46-Above	Total
	29%	53%	12%	6%	100%
Type of Business	**Trade**	**Manufacturing**	**Services**	**Others**	**Total**
	46.4%	23%	25%	5.6%	100%
Period of Operation	0-2years	3-5years	>6years	Total	
	46%	54%	100		

Table 3 Triggers of SMEs Competitiveness

	SD	**D**	**N**	**A**	**SA**	**Total %**
Competitiveness						
Our firm's research and development (R&D) outlays is rated at the top relative to our competitors	6.7	12.0	10.9	54.7	26.6	100
Our firm's stability/growth of employment is rated at the top relative to our competitors	0.7	1.5	3.3	46.1	33.6	100
Our firm's Product/process innovations is rated at the top relative to our competitors	Nil	0.4	3.0	42.4	35.7	100
Our firm's employee morale/job satisfaction is rated at the top relative to our competitors	19.6	11.8	8.7	30.6	14.5	100
Our firm's supplier relations is rated at the top relative to our competitors	6.0	7.0	3.4	12.0	61.1	100
Our firm's operating profit margin is rated at the top relative to our competitors	24.7	17.3	5.0	18.8	20.6	100
Innovativeness						
Our business innovation is supported/ rewarded	2.3	1.8	0.5	42.4	34.7	100
Our business always has better ideas of marketing to customers	0.7	Nil	2.5	48.5	35.8	100
Our firm serves as a good rolemodel for innovation	Nil	1.1	1.1	49.4	31.5	100
Pricing of our products is entirely unique	Nil	1.4	12.5	46.5	39.6	100
Our firm employs modern way of training employees	3.7	Nil	2.6	64.5	29.2	100
Novel ways of getting business resources is always our priority	8.8	4.4	11.1	28.6	29.2	100
Our business uses modern facilities	14.8	1.8	3.0	52.1	27.6	100
Knowledge						
We have the knowledge of evaluating business opportunities	1.1	2.6	2.6	64.5	29.2	100
We have the knowledge of looking for business premises	0.7	1.4	1.5	41.3	38.4	100
We have the knowledge of sourcing for employees	11.0	4.5	9.8	28.5	29.3	100
We have the knowledge of analyzing my competitors	0.4	1.5	3.3	46.1	33.6	100
We have the knowledge of developing a business plan	Nil	0.4	3.0	42.4	35.8	100

The table 3 above, reveal that, competitiveness, innovation and knowledge have positive impact on SMEs in Plateau State with over 50% agreed.

Table 4

Hypotheses	Path	Estimate	P-Value	Remark
H1: There is positive relationship between innovation and SMEs competitiveness	INN⟶COMP	3.27**	0.00	Accepted
H2: There is positive relationship between knowledge and SMEs competitiveness	KNW⟶COMP	0.61*	0.04	Accepted

Significant at 10%; *Significant at 5%; **Significant at 1%

Discussion

Table 4 provides the hypotheses results of the influence of innovation, knowledge and intellectual capital factors on SMEs' competitiveness. Innovation is positively related (â = 3.27, $p<0.01$) to SMEs' competitiveness. This finding confirms our hypothesis 1 that there is a positive relationship between innovation and competitiveness of SMEs in Plateau State. The result supports the findings of scholars (Leal-Rodriguez et al., 2014; Autant-Bernard, Fadairo & Massard, 2013;Martín-de Castro et al., 2013; Montes, Moreno & Morales, 2005) who documented a very strong influence of innovation on competition of firms. In addition, the result for H2 is accepted since it reveals a positive and significant relationship (â = 0.61; $p<0.05$) between knowledge and SMEs' competitiveness. This result is in tandem with the previous findings of scholars (Hiit, Keats and Demarie 1998). Importantly, knowledge in terms of evaluating business opportunities, sourcing for employees, analyzing my competitors and developing a business planby the owners of SMEs particularly in Plateau will enable them compete favourably in the sector.

Conclusion

There is a global consensus that the contribution of SMEs to the growth and development can be seen in the areas where jobs are created, families have gained means of livelihood and revenue generated by government. The research also compared the various contributions of SMEs in developed and developing countries like Nigeria and the various interventions by government for the sustainability of SMEs. However, the intervention has failed to achieve the desire results.

Finally, the Cronbach Apha test was used to check for the reliability of the questionnaire. A value of 0.70 showed that, the instrument is reliable. Further discussion reveals that, innovation is positively related (*B*=3.27: *p less than 0.01)*to SMEs competitiveness in Plateau State, which confirms with our hypothesis 1. In addition, the result for hypothesis 2 is accepted since it showed a positive and significant relationship *(B=0.61: p less than 0.05)*between knowledge and SMEs competitiveness in Plateau State.

Limitations of the study

The study is only restricted to Plateau State – Nigeria. Further research could be conducted to cover all the States in the North-Central region of Nigeria. Also, this study employed the cross-sectional approach. A longitudinal approach should be employed to study the trend over a period of at least two years. Finally, the two (2) factors identified as predictors of competitiveness may not be sufficient enough in explaining the phenomenon. Hence, there are other factors that may contribute in influencing competitive advantage of SMEs that were not part of this study.

Recommendations

SMEs in Plateau State should maintain their level of innovation to enable them sustain their competitiveness.

SMEs in Plateau State should improve their knowledge to enable them to compete globally.

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