

# MODERATING EFFECT OF ENTREPRENEURIAL ORIENTATION ON ENTREPRENEURIAL COMPETENCIES AND PERFORMANCE OF AGRO-BASED SMEs

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## ABSTRACT

*The objective of this research was to examine the moderating effect of entrepreneurial orientation on the relationship between entrepreneurial competencies and performance of agro-based SMEs in Nigeria. The study used questionnaires gathered from 230 managers of agro-based firms in Lagos state Nigeria. Data analysis was carried out using hierarchical multiple regression to show relationships between the variables. Findings suggest that entrepreneurial competencies have a direct influence on performance of Agro-based SMEs. More so, the statistical result indicates that innovativeness, proactiveness and autonomy are the three entrepreneurial orientations that moderate the relationship between entrepreneurial competencies and performance of the firms.*

**Keywords:** Entrepreneurial Competencies, Entrepreneurial Orientation, Performance, SMEs, Nigeria.

## INTRODUCTION

Entrepreneurial competencies are attributes such as skills and knowledge that employees invest on the job in order to achieve high performance for the firm (Gerli, Gubitta and Tognazzo, 2011). They also consist of qualities such as motives, traits, and special skills, general or particular knowledge that leads to the birth of an enterprise, its survival and growth (Dermol, 2010). In entrepreneurial endeavours, competencies reflect in the extent to which entrepreneurs are willing to take risks so as to enable the enterprise succeed (Oyeku, Oduyoye, Asikhia, Kabuoh and Elmo, 2014). With the aid of entrepreneurial competencies, managers can set business goals for the firm, clearly stating how the goals will be achieved, taking corrective measures and steps to achieve the goals (Solesvik, 2012). According to Man, Lau and Chan (2008); Noor, Hasliza and Siti, (2010); Aruni, Akira and Hironori, (2014) there are six

significant areas of entrepreneurial competencies; they include strategic, commitment, organizing, relationship, conceptual, opportunity competencies. Existing research, such as Sanchez (2011) have revealed that these dimensions of entrepreneurial competencies have a significant effect on firm performance.

Despite these evidences about the interlinkages between entrepreneurial competencies and performance of entrepreneurial firms, Okpara and Wynn, (2007) opined that the rate of failure in small and medium enterprises in developing countries like Nigeria is still high. This situation therefore brings to fore two important questions: the first relates to whether Nigerian entrepreneurs are competent in the business of their choice. The second is whether they have the ability to use competencies to manoeuvre environmental challenges to achieve high performing firms. In a highly volatile, dynamic and competitive business economy, such as Nigeria's, SME operations can sustain operations with the aid of a right mix of entrepreneurial competencies (Ibidunni, Olokundun, Oke and Nwaomonoh, 2017). This is because entrepreneurial competencies help to sustain internal operations of the firm. However, relating internal operations with external environmental challenges require that the firms' managers adopt the appropriate entrepreneurial orientation. The mix of entrepreneurial competencies and orientation is strategic to the firm's performance. Therefore, the originality of this research is in the blend of entrepreneurial competencies and orientation in a single research work. Little research attention has been given to this theoretical blend in existing scientific investigations. Yet the need to present evidences about these issues is significant to business operators in developing economies especially like Nigeria, where there is dear need for transformation in order to enhance economic competitiveness, reduce unemployment significantly and to enhance the standard of living. Based on the foregoing, this research aims at investigating the possibilities of enhancing the relationship between entrepreneurial competencies and performance given the intervention of entrepreneurial orientation.

## **THEORETICAL BASE OF THE STUDY**

### **Entrepreneurial Orientation, Competencies and Firms' Performance**

Entrepreneurial orientation has become one of the most frequently mentioned topics which have been investigated by scholars and practitioners (e.g., Covin and Miller, 2014; Lumpkin and Dess, 1996; Wiklund and Shepherd, 2003). As the field of strategic management develops, emphasis on entrepreneurial orientation is also increasing and has far reaching effect on performance and competitive advantage. Studies (Covin and Miller, 2014; Tingko and Wenyi, 2017) indicate that entrepreneurial orientation through firms' demonstration of innovativeness, pro-activeness, and risk taking significantly impact on organizational performance. Moreover, the potential linkages between entrepreneurial orientation and performance are highlighted in many scholarly publications (e.g., Lumpkin and Dess, 1996; Sarkar et al. 2001). Tingko and Wenyi, (2017) also found in their study that entrepreneurial orientation have a significantly positive influence on performance. Lumpkin and Dess, (1996) in their study revealed that the complexity and relationship between entrepreneurial orientation and performance is context specific. In other words, the strength of the relationship between entrepreneurial orientation (EO) and firm performance is often influenced by internal organizational processes such as competencies, abilities, capabilities, etc. Remarkably, Moreno and Cassilass, (2008) have also shown that the most pressing obstacle influencing the relationship between entrepreneurial orientation and performance is lack of managerial competencies and dynamic capabilities.

Extant literature shows that entrepreneurial competencies help to create value and develop new businesses (Bowman and Ambrosini, 2003; Ogunnaike, Ade-Turton and Ogbari, 2014); overcoming inertia and introduce innovative programmes that stimulate strategic change and successfully commercialise new technologies generated through Research and Development (Halawi, Aronson and McCarthy, 2005). The literature arguably suggests that identification of entrepreneurial competencies is necessary to meet new challenges arising from rapid and significant changes in regulations, consumer's demand and technological advances among others. Going by the complexity and dynamics of business environment, managers are habitually striving to make choices about the competencies that could further be developed among many identified know-hows (individuals) for effective use of resources, and these in turn, may probably increase variety to firm's entrepreneurial activities (Aruni, Akira and Hironori, 2014; Ibidunni, Ogunnaike and Abiodun, 2017). Hence, a number of studies have assessed the effect of entrepreneurial orientation on firms' performance but yet to explore the role of competencies in enhancing the relationship. This makes the study necessary and important in explaining how entrepreneurial competencies can enhance the link between entrepreneurial orientation dimensions and their impact on performance in Nigeria.

### **Entrepreneurial Practices in Nigeria's Agro-based Industry**

Agro-based firms are businesses that focus in the production of agricultural products such as rice, flour, yam, cassava, poultry farming, cattle rearing and production of cocoa and oil palm products. From pre-colonial era, Nigeria was predominantly an agricultural economy with peasant farmers providing subsistence agricultural produce. At this period, little was known about large-scale agricultural production for commercial purposes for profit making. However, proper commercial agriculture started sometime in the 1960s when people began to produce more than what they needed for their own private consumption giving rise to trading in agricultural produce (Chukwuemeka, 2008).

Modern agro-based business entrepreneurship started in the 1960s with the middlemen and small agricultural firms farming and providing agricultural raw materials for customers. According to the World Bank (2013), agro-based firms and other small-scale businesses reduce regional disparities between urban and rural areas by creating employment opportunities. Bolarinwa and Okolocha, (2016) observed that interpersonal and creative thinking skills are critical entrepreneurial competencies that enhance the performance of agro-based firms. Moreover, Olowa and Olowa, (2015) opined that age, gender and size of business are significant factors to enhancing the entrepreneurial development of agro businesses in Nigeria. Despite the importance of agro business to developing economies, such as Nigeria, there is still dearth of literature that establishes the relationship between entrepreneurial competencies, entrepreneurial orientation and performance of agro-based firms.

## **METHODOLOGY**

The research design used in this study is descriptive because the research attempts to describe the relationships among the variables included in the study (Jong and van der Voordt, 2002). Therefore, the research hypotheses set out for this research include:

H<sub>1</sub>: There is no direct relationship between entrepreneurial competencies and firm performance

H<sub>2.5</sub>: Entrepreneurial orientation (innovativeness, proactiveness, competitive aggressiveness and autonomy) moderates the relationship between entrepreneurial competencies and firm performance

## Measures and Sampling

Questionnaire was used to gather primary data from the respondents. This research benefitted from the ideas of existing research studies. Questions that pertained to entrepreneurial competencies were developed based on Man, Lau and Chan, (2008). Items on entrepreneurial orientation was developed based on Lumpkin and Dess, (1996) while items of firm performance was developed based on Venkatraman (1989) and Wang, Chich-Jen and Mei-Ling, (2010).

In this research work the respondents are owners and managers of agro-based firms. In line with the number of agricultural firms that exist in Nigeria's agro-business industry in Lagos state, there are about 1,500 employees at the senior managerial cadre of the firms. Based on Yamane's (1967) formula for the determination of sample size, 316 respondents were determined for this research study. For the purpose of this research, the simple random sampling method was used.

## Reliability and Validity of the Scale Items

The reliability of the research items was ensured using the internal consistency method while the validity of scale items was carried out using construct validity. These tests were carried out using SPSS version 22. The Coefficient Alpha ( $\alpha$ ) or Cronbach Alpha is the most popularly used to measure internal consistency (Pallant, 2005). Table 1 below shows the reliability and validity results of the scale items.

Factor & Loading	$\alpha$	
Entrepreneurial Competencies		
SC 1 (0.812), SC 2 (0.748)	0.712	KMO=0.581.
COMC 1 (0.743), COMC 2 (0.723), COMC 3 (0.668), COMC 4 (0.622)	0.656	
CC 1 (0.781), CC 2 (0.597), CC 3 (0.561)	0.546	Bartlett's Test of Sphericity=Chi Sq. (659.686), df. (66), Sig. (0.000)
OC 1 (0.776), OC 2 (0.747)	0.502	
Entrepreneurial Orientation		
PO1 (0.825), PO2 (0.714), PO3 (0.698)	0.643	KMO=0.536.
AO1 (0.757), AO2 (0.733)	0.448	
CAO1 (0.782), CAO2 (0.775)	0.438	Bartlett's Test of Sphericity=Chi Sq. (382.475), df. (45), Sig. (0.000)
IO1 (0.795), IO2 (0.617), IO3 (0.581)	0.485	
Firm Performance (13 Items)	0.781	

## DATA ANALYSIS

A total of 316 copies of the research instrument were distributed, but 232 copies, representing 73.4 percent, of the questionnaires was returned. The respondents that made up the study consist of both the male and female gender however the sample is made up of more males 180 (77.6%) than female 52 (22.4%) respondents. In terms of the age of respondents, no respondents was below 20 years of age, 44 (19.0%) of the respondents are between 21-30 of age, 97 (41.8%) of the respondents are between the age of 31-40 and 91 (39.2%) of the respondents are 41 and above. 46 (19.8%) of the respondents are single, 184 (79.3%) of the respondents are married and 2 (0.9%) are under the categories of other. All respondents are Nigerians. With respect to the educational qualification of the respondents, 18 (7.8%) of the respondents have WASSCE/ O LEVEL, 38 (16.4%) of the respondents have NCE/ OND, 139 (59.9%) of the respondents have HND/ B.SC, 27 (11.6%) of the respondents have a POST GRADUATE/ MBA and 10 (4.3%) fall under the category of others. According to the samples 49 (21.1%) of the firms have been in operation for less than 5 years, 76 (32.8%) of the firms have been in operation for 6-10 years, 59 (25.4%) of the firms have been in operation for 11-15 years and 48 (20.7%) of the firm have been in operation for 16 years and above. According to the samples 219 (94.4%) firms have below 100 staff, 11(4.7%) firms have between 100-199 staff, 2 (0.9%) firms have 200-299 staff and no firm had 300-399 staff. This shows that most firms in the agro-based business are small and medium enterprises. According to the study 32 (13.8%) of the firms estimated annual profit is between 100000-200000, 55 (23.7%) of the firms' annual profit is between 201000 and 300000, 58 (25.0%) of the firms estimated annual profit is between 301000-400000 and 87 (37.5%) of the firms estimated annual profit is 401000 and above.

<b>Table 2</b>										
<b>MODERATING EFFECT OF ENTREPRENEURIAL ORIENTATION ON ENTREPRENEURIAL COMPETENCIES AND PERFORMANCE</b>										
Variable Independent Dependent	<b>Direct Relationship<sup>1</sup></b>			<b>Moderating effect<sup>2</sup></b>						
	B	T	P-value	Variable	$\beta$	t	P-Value	R <sup>2</sup>	Adj R <sup>2</sup>	F-value
EC Perf	0.160**	2.455	0.015	Innovativeness	0.292*	4.615	0	0.108	0.101	21.299
EC Perf	0.160**	2.455	0.015	Proactiveness	0.336*	5.375	0	0.135	0.127	28.895
EC Perf	0.160**	2.455	0.015	Compt. Aggress	-0.027	-0.335	0.738	0.026	0.018	0.113
EC Perf	0.160**	2.455	0.015	Autonomy	0.149**	2.249	0.025	0.047	0.038	5.057

\*p ≤ 0.01, \*\*p ≤ 0.05, \*\*\*p ≤ 0.1

1. Reflects a linear regression between Entrepreneurial competencies and performance variables
2. Reflects the moderating effect of entrepreneurial orientation on the relationship between entrepreneurial competencies and performance.

Table 2 shows the linear relationship between entrepreneurial competencies and firm performance. It also shows the moderating effect of entrepreneurial orientation on the

relationship between entrepreneurial competencies and firm performance. From the table above there is a significant influence between entrepreneurial competence and firm performance ( $\beta=0.160$ ,  $p<0.05$ ). More so, different dimensions of entrepreneurial orientation were found to enhance the relationship between entrepreneurial competencies and firm performance. For instance, innovativeness was revealed to influence the relationship ( $\beta=0.292$ ,  $p<0.001$ ) and the explanatory power of interaction is 10 percent ( $r^2=0.108$ ). Proactiveness was also shown to have effects on the linear relationship ( $\beta=0.336$ ,  $p<0.001$ ); it also accounts for about 13.5 percent ( $r^2=0.135$ ) of all variations in the linear relationship between entrepreneurial competencies and firm performance. Based on the results in the table, the moderating effect of competitive aggressiveness is found to be insignificant. However, autonomy of firms has a significant moderating role on the relationship between entrepreneurial competencies and firm performance ( $\beta=0.149$ ,  $p<0.05$ ), with an explanatory power of only 4.7 percent ( $r^2=0.047$ ).

## DISCUSSION

The study investigated the moderating effect of entrepreneurial orientation on the relationship between entrepreneurial competencies and orientation. The linear relationship between entrepreneurial competencies and firm performance was found to be significant. This implies that the ability of entrepreneurs to identify an opportunity, to possess an internal drive towards the business of the firm, to develop long term goals and to make quality decisions determines the success of the firm in terms of performance (Olokundun, Moses, Iyiola, Ibidunni, Amaihian and Peter, 2017). The Nigerian business environment, in these times of economic diversification, tends to favour agriculture as a major driver of economic development and growth. Therefore, opportunities abound for existing and new start-up entrepreneurial firms to explore the gaps in the industry and innovatively involve themselves in new business lines (Zelleger and Sieger, 2010). Also, entrepreneurs in this business economy must engage with business models that help them to be proactive, build strategic internal competencies and sustain operation over the long term. Moreover, with the moderation of entrepreneurial orientation, the relationship between entrepreneurial competencies and firm performance was significantly improved. Innovativeness, as an entrepreneurial orientation, was shown to enhance the relationship between the dependent and independent variables. It implies that when entrepreneurs take innovative measures towards the engagement of their competencies, firms' performance will significantly improve (Ambrosini and Bowman, 2009). Proactiveness entrepreneurial orientation was also revealed to be a significant moderator between the entrepreneurial competencies and firm performance relationship. This result indicates that entrepreneurial competencies need to be engaged with a foresight as to the future directions that the firm seeks to explore (Uchebulam, Akinyele and Ibidunni, 2015). More so, the engagement of competencies for the entrepreneurial manager must be opportunity seeking and based on a target to take the first mover position in new markets. Furthermore, the engagement of entrepreneurial competencies must be based on the autonomy orientation of the firms. Thus, in consonance with Hughes and Morgan (2007), as a self-directed initiative, entrepreneurial autonomy means that firm managers must be free thinkers and able to initiate actions that align with their firm's strategic directions and entrepreneurial competencies in enhancing performance.

## IMPLICATIONS

### Theoretical Implications

This study has contributed to existing studies by empirically showing the relationships that exist between entrepreneurial competencies, orientation and the performance of agro-based SMEs, especially in developing economies, such as Nigeria. Therefore, subsequent scientific studies in the area of strategic management and entrepreneurship research can gain insights about specific competencies and orientations that shape performance of entrepreneurial firms.

### Practical Implications

The findings of this study have important implication for managers of entrepreneurial firms, especially those operating in the agro-based industry. Specifically, managers of these firms will enhance the firms' performance through the engagement of opportunity, conceptual, strategic and commitment based entrepreneurial competencies. More so, the adoption and inclusion of entrepreneurial orientations, such as innovativeness, proactiveness and autonomy on the firm's competencies are significant to achieving higher levels of performance.

## CONCLUSION AND FURTHER STUDIES

This research was undertaken to examine the influence of entrepreneurial competencies and orientation on firm performance using evidence from SMEs operating in Nigeria's agro-based industry. Based on the finding of this study, it is concluded that entrepreneurial competencies, such as opportunity, conceptual, strategic and commitment competencies, significantly influences the performance of agro-based firms in Nigeria. More so, the moderating role of entrepreneurial orientation on entrepreneurial competencies and performance was statistically established. Therefore, the research concludes that managers should focus keenly on adopting innovative, proactive and autonomy orientations because they are significant of enhancing the influence of entrepreneurial competencies on firms' performance.

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