#### LEARNING ORIENTATIONS AND SME PERFORMANCE: MODERATING ROLE OF TECHNOLOGICAL ORIENTATION

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#### Abstract

Extant empirical research has acknowledged the importance of learning orientation in improving SME performance. There is also a paucity of research on how technological orientation interacts with learning orientation to improve SME performance. To address this knowledge gap, the present study investigates the moderating role of technological orientation on the relationship between learning orientation and SME performance in Kaduna Metropolis, Kaduna State-Nigeria. The study employed cross sectional survey design. Primary data collected from sample of 272 out of a population of 457 SME owners-managers operating within Kaduna Metropolis using simple random sampling technique. The data obtained were analyzed using Statistical Package for Social Science (SPSS) and Partial Least Squares Structural Equation Modeling (PLS-SEM). The study reveals that technological orientation moderates the effect of learning orientation and SME performance. It recommends that SME owner-managers should encourage combining learning orientation and technological orientation strategy in their businesses as it can help them identify more opportunities and take advantage of the customers before their rivals which in turn lead to higher performance.

Keywords: Learning Orientation, Technological Orientation, SME Performance, Kaduna Metropolis

#### 1. Introduction

The performance and contributions of Small and Medium Enterprise (SME) is considered as the bedrock of nation's economic growth and development. This is because they play a vital role in terms of poverty reduction, employment creation, and countries gross domestic product (GDP) of many developing countries (Joel, Tarus, Kibet & Kimitei, 2015; Eniola, Anthony & Abiodun, 2014; Kongolo, 2010). For instance, SME in China contribute 80% of urban employment and



about 60% of Chinese GDP (Chinese National Bureau of Statistics, 2017), and 80% of employment and 70% to GDP in Ghana (Sa'id, Abdul-talib & Hassan, 2019).

In Nigeria, the Small and Medium Enterprises Development Agency of Nigeria of Nigeria (SMEDAN)-2017 and the National Bureau of Statistics (NBS)-2017 statistical study reveals that SME contributed to about 39.5% of total employment and contributed to 8.89% of the country's GDP. This is quite small compared to the contributions in China and Ghana. As such, evidenced from the Wold Economic Forum Survey (2017) indicates that Nigeria was ranked as 115<sup>th</sup> out of 140<sup>th</sup> countries in the Global Competitiveness Index (GCI).

Similarly, the history of low SME performance in Nigeria has led to the introduction of different programmes and policies. Such programmes and policies include Small Industrial Credit Scheme (SSICS) in 1971; The National Economic Empowerment and Development Strategy (NEEDS) in 2003; SMEDAN in 2003; Microfinance Institution (MFIs) in 2005; Youth Enterprise with Innovation in Nigeria (YOU-WIN) in 2011; Development Bank of Nigeria (DBN) in 2014; Government Enterprise and Empowerment Programme (GEEP) in 2016; and recently Agric-Business Small and Medium Enterprise Investment Scheme (AGSMEIS) in 2017, which were aimed to improve SME performance in Nigeria. Thus, despite the introduction of these programs and policies, the performance of SME in Nigeria is still relatively low compared to other developing countries.

Meanwhile, different factors such as lack of skills, technology, infrastructure costs, and regulatory uncertainty make it difficult for SME to survive in Nigeria (World Trade Report, 2017). As such, evidenced from empirical literature identified different factors that if SME integrates them would achieve higher performance. Several studies have been conducted on both direct and indirect relationship between Learning Orientation (LO) and SME performance. For example, looking at the direct relationship, studies (Sawaean & Ali, 2020; Lestari, Ardianti & Rachmawati, 2018; Radwan, Waed & Pavel, 2017; Evelyn & Olawale, 2017; Subhash & Robert, 2015; Aminu & & Shariff, 2015; Sandeep & Rayees, 2015) found the relationship to be significant while others like (*e.g.*, Samson, Micheal & Oziemede 2019; Nawal, 2017; Sema & Martinez, 2016; Justin, Simon, Nadine & Linder, 2016) found insignificant relationship between LO and SME performance.

Given the inconsistencies and weak relationship between LO and SME performance, this study introduced moderator that can strengthen the relationships as suggested by previous scholars (*cf.* Baron & Kenny, 1986). Some studies have selected moderator, such as Market Orientation (e.g., Ahmad, Supian, Muhammad, Tanius, & Ishak, 2019); Learning Culture (Najwa, Bader & Hazar, 2019); Absorptive Capacity (Radwan, Waed, & Pavel, 2017); Business Environment (Aminu & Shariff, 2015) and little or none of the study has been found in the available literature that investigate how Technological Orientation (TO) interact with LO to influence SME performance. To address this knowledge gap. Thus, this study examines the moderating role of TO on the relationship between LO and SME performance in Kaduna Metropolis. This study will be beneficial to the operators of SMEs, regulators and reference point for potential academic researchers.



# 2. Literature Review

This section coveres the review of several conceptual and empirical studies related to SME performance, Learning Orientation (LO) and SME performance and how Technological Orientation (TO) moderate the linkage between LO and SME performance.

### 2.1 Concept of SME Performance

SME performance can be viewed as how the firm delivers value to its stakeholders and customers. It indicates how well the management manages the firm's resources (Moullin, 2007). In other word, Sandberg (2003) views SME performance as the ability to survive, grow and contribute to the creation of employment and alleviate poverty. Thus, SME performance expresses the results of a firm's activities by shouldering a complicated series of actions (Don, 2006). Therefore, SME performance is deemed to be the outcome of constructive management activities and it can be assessed exploiting a number of norms; which comprises efficiency, effectiveness, productivity and growth (Mandy, 2009). Thus high performance can help SME eliminate restrictions and provide more opportunities to compete with other companies in the global market (Aminu & Shariff, 2015). Hence, the study defines SME performance as the ability of the SME to effectively and efficiently utilize the available resources in order to achieve organizational goals and objectives.

## 2.2 Learning Orientation and SME Performance

Learning orientation (LO) is considered as one of the major dimensions of strategic orientation that have inspired researchers over the year. Cheng and Sheu (2017), defined LO as the organization-wide activity of creating and using knowledge to enhance competitive advantage. It is the process through which organization members developed shared values and knowledge based on their past experience and the experience of others can be refered to as learning orientation (Lipshitz *et al.*,1996). Also, Slater and Narver (1995), viewed LO as a process of information acquisition, information dissemination and shared interpretation that increase both individual and organizational effectiveness.

Moreover, Sinkula *et al*, (1997) defines LO as the firm values that influence the creation of knowledge and using knowledge to enhance performance by focusing on commitment to learning, open-mindedness and shared vision. Accordingly, commitment to learning is the extent to which firms indicate the significance of understanding the cause and effect of their actions and learn from it. Thus, employees must be encouraged to develop new knowledge, mind-set, and new ideas that will lead them to achieve superior performance (Bennett, 1998). Open-mindedness refers to the critical evaluation of organization's daily operations and the acceptance of new ideas. It's the organizational value that provides the firm with new ideas and market opportunities (Martinette & Obenchain-Leeson, 2012). And lastly, share vision is knowledge idea which gives meaning to the firm's everyday task and describes the kind of awareness it must seek and create (Senge, 1990). Thus, any firms that wish to utilize the advantage of LO must adequately ensure for practical application of the elements of LO (Baker & Sinkula, 1999). Therefore, this study viewes LO as the ability of SME to create knowledge and use the same knowledge to enhance performance through the activities of commitment to learning, open-mindedness and share vision.

Previous literature provides divergent opinion on the relationship between learning orientation and SME Performance but majority of these opinion concluded that learning orientation has positive



and significantly influence on SME performance (Lestari, Ardianti & Rachmawati, 2018; Radwan *et al*, 2017; Evelyn & Olawale, 2017; Subhash and Robert, 2015; Aminu & Shariff, 2015; Sandeep & Rayees, 2015).

A study by Maria Del, Javier and Joaquin (2016) examined the impact of LO and performance of SMEs in México using a sample of 350 small and medium companies. The result reveals that learning orientation has positive and significant impact on the performance of SMEs in México. In the same vein, Evelyn and Olawale (2017), investigated the impact of LO on the performance of SMEs using a sample of 390 SME owners in Mpumalanga Province of South Africa. The results of their study reveal a significant positive relationship between learning orientation and the performance of SMEs.

On the contrary, there are also evidences showing that LO could sometimes be insignificantly or negatively associated/related to SME Performance. For example, Abeer and Nawal (2017) investigate the relationship between learning orientation and performance of Egyptian SMEs. A sample of 80 respondents was used to collect data from 35 SME operating from different industry in Egypt. Findings of the study revealed that LO is positive but insignificantly influence organizational performance.

In the same vein, Justin, Simon, Nadine and Linda (2016), analysed the impact of LO on SMEs performance in Cape Town, South Africa. A survey of 162 enterprises, using partial least squares structural equation modelling was used to analyse the data collected. Findings of the study reveals that LO is positive but insignificantly influence organizational performance.

More recently, Samson *et al.* (2019), drew from the perspective of dynamic capability to examine the moderating effect of access to external finance on the relationship between LO and performance of small and medium enterprise (SMEs) in manufacturing industry in Nasarawa State of Nigeria. Self-administered questionnaire was used to obtain data from SME owner-managers of manufacturing industry in Nasarawa State. Findings indicate that LO is positively but insignificantly related to firm performance. More so, results demonstrate that availability of external financial resources makes the relationship between LO and firm performance to be stronger.

Based on the above empirical review, the researcher proposed the following null hypothesis; Ho<sub>1</sub>: LO has no effect on SME performance in Kaduna Met

# **2.6** Moderating Role of Technological Orientation on the Effect of Learning Orientation and SME Performance

Technological orientation (TO), refers to the ability of a business organization to create a formidable technological structure and use same to develop new products (Gatignon & Xuereb, 1997). It is the process whereby a firm uses its capability to come up with a technical knowledge that enables it to respond to the varied market needs effectively and efficiently more than other competitors in the market (Samson & Cheng, 2017). According to Rusetski (2011), TO is the ability and willingness of business firms to obtain technical knowledge and use it to improve product development. Therefore, technology orientation denotes an entrepreneurial indulgence



which acts from the postulation that nowadays, most people prefer products and services that are in line with technological advancement (Hamel & Prahalad, 1991). Hence, TO in this study is defined as the ability and willingness of SME to create or adopt new technological culture or values as a source of product design or improvement so as to satisfy the needs and wants of their customers.

Some scholars such as Zhou and Li (2010) and Chandler (2000) have argued that firm superior performance depends on the TO. Thus, Aragon and Marin (2005) suggest that technological development and innovation level guide the firm to achieve competitive advantages through the creation of a set of basic elements for success. Hurley and Hult (1998) argue that a technology-orientated firm fundamentally tolerates and encourages new ideas and has a propensity to adopt new technologies in order to develop new products and services. Therefore, it can be suggested that, in a technology-oriented firm, creativity and invention have been established as the dominant organizational behaviours and principles that guide its activities and strategies (Li, 2005; Zhou et al., 2005). Naala, Nordin and Omar (2017) reported that for small businesses to achieve and sustain competitive advantage, they need TO. Pratono (2016) and Zhou and Li (2010) confirm that technological orientation can improve firm performance. In the light of this, the present study introduced TO as possible moderator on the relationship between LO and SME performance. Thus, the study formulate the following null hypothesis;

Ho<sub>2</sub>: TO does not moderate the relationship between LO and SME performance in Kaduna Metropolis.

## 2.7 Theoretical Framework

The framework of this study was developed from extant studies specifically to inspect the moderating effect of TO on the effect of LO and SME performance. Thus, the framework is expressed figure 1.

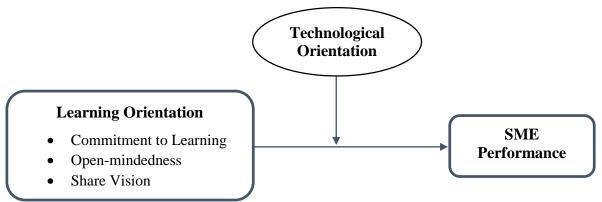


Figure 1: Conceptual Framework

This study used resource-based view (RBV) theory to explains the theoretical foundations of LO, TO and SME performance. The theory first originated from the work of Penrose (1959) and later modified by Barney (1991). The theory assumes that if all firms within an industry have homogeneous resources, then none of them is having a possibility of sustained competitive advantage. According to Barney (1991), the main source of sustained competitive advantage of a firm stems from its possession of heterogeneous and immobile resources that are valuable, rare, inimitable, and non-substitutable (VRIN). Therefore, LO and TO are regarded as VRIN resources



that if firm integrates them together could sustained competitive advantage and improve their performance.

# 3.1 Research Methodology

The study employed survey research design which is cross sectional in nature. Primary data was collected from the population of the study using self-administered questionnaire. The population of the study comprises 457 registered SME operating in Kaduna Metropolis as at 5<sup>th</sup> October, 2019. Specifically, the choice of Kaduna State as domain of the study was based on the report of ease of doing business (2018) which ranks Kaduna State as number one in terms of ease of doing business. As such, the study concentrate o only Kaduna Metropolis because most commercial activities in Kaduna State were carried out within Kaduna Metropolis, as well majority of registered SME in Kaduna State were located within Kaduna Metropolis.

The sample size of 209 was determined from the population using Dillman's (2014) sample size formula. Similarly, to reduce sample size error and also take care of the non-response problem, 30% of the computed sample size was added as suggested by Israel (2013). Thus, 63 respondents were added to the computed sample size of 209 which gives the total of 272. Simple random selection procedure was employed to determine the sample size from the population where each element of a population is assured an equal chance to be included in the sample as suggested by (Saunders, Lewis, & Thornhill, 2009).

However, the questionnaires employ 7-point Likert scales ranging from 1=strongly disagree to 7=strongly agree to gather data for each construct of the research model. All instruments are adopted and adapted from extant studies. SME performance was measured by six (6) items adapted from Suliyanto and Rahab (2012). Similarly, LO was measured by eleven (11) items adopted from Gatignon and Xuereb (1997). In the same vein, TO was measured by ten (10) items adapted from Gatignon and Xuereb (1995). Hence, the researchers conduct validity and reliability tests to ensure the goodness of constructs measurement adapted for the study. Specifically, face validity was conducted through expert in the industry and academics opinions to ensure clarity and the ability of the questionnaire items to represent the domain of the study. It also conducts constructs. The result indicated that all the adapted measurements are valid and reliable in measuring the construct. Therefore, the next step is to prepare for data collection and analysis.

## 3.2 Data Screening and Preparation

In this study, a total of 272 questionnaires were administered to the SME owners-managers. Out of this figure, 224 questionnaires were returned. However, 12 questionnaires had an unengaged response, thus they were all deleted, reducing the questionnaires to 212 for further analysis. Furthermore, upon checking for missing data, 30 cases were found with less than 10% missing values and they were replaced using mean substitution (Tabachnick & Fidell, 2007; Hair, Black, Babin & Anderson, 2014). Finally, the study utilized 212 questionnaires for the final analysis.

## 4.1 Data Analysis Technique

The study employed the SmartPLS version 3.0 in order to compute the two basic model of PLS path modeling *i.e.*, measurement model and structural model (Anderson & Gerbing, 1988). Some of the reasons for the use of PLS are: it can simultaneously estimate the relationships between

constructs, as well as the relationships between indicators and their corresponding constructs, it provide statistically reliable estimates of interaction effects in simple moderation models based on bootstrapping techniques that is capable of reducing the possible relationship as well as the improvement of the validation of the theory and lastly, it can handle both reflective and formative measures in the constructs (Nitzl, Roldán, & Cepeda, 2017; Allard *et al.*, 2016; Hair *et al.*, 2014).

#### 4.1 Measurement Model Results

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The measurement model was assessed based on items reliabilities, internal consistency reliabilities, convergent validity and discriminant validity for all reflective constructs (*i.e.*, TO and SME performance). Whereas, formative constructs (*i.e.*, LO) was assessed based on tolerance level (TOL) or variance inflated factor (VIF), outer weights, outer loadings, and t-values.

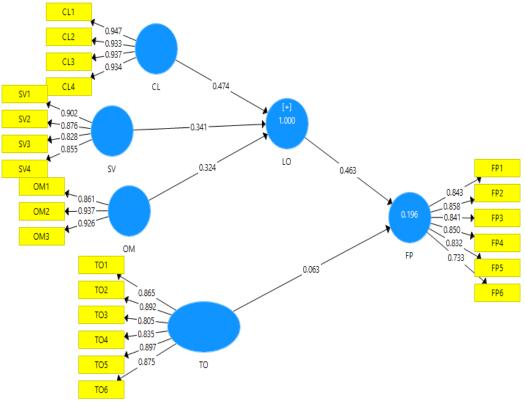


Figure 2: *Measurement Model* including *Two-stage Approach* **Note:** The formative factors on Learning Orientation (LO) are the latent variable scores of commitment to learning (CL 1), share vision (SV 2) and open-mindedness (OM 3).

Table1: Internal consistency reliability and convergent validity for reflective construct

Construct	Item	Loadings	AVE	CR
Technological Orientation	TO1	0.86	0.74	0.94
	TO2	0.89		
	TO3	0.80		
	TO4	0.83		
	TO5	0.89		
	TO6	0.87		



Firm Performance	FP1	0.84	0.68	0.92
	FP2	0.85		
	FP3	0.84		
	FP4	0.85		
	FP5	0.83		
	FP6	0.73		

**Note:** AVE= Average Variance Extracted and CR = Composite Reliability

Table 1 shows the results of the factor loadings, average variance extracted and composite reliability of the reflective constructs (i.e., TO and SME performance) under study. As revealed in Table 1, the AVE values that range from 0.74 to 0.68, with consistent composite reliability values also ranging from 0.94 to 0.92 interprets that the items employed in the study measure the constructs and as well show an attainment of convergent validity. Therefore, CR, factor loadings, and AVE in this study are suitable and achieved as recommended by Hair et al. (2014).

Furthermore, to ascertain the discriminant validity, Duarte and Amaro (2018) proposed the use of Heterotrait-Monotrait Ratio (HTMT) technique as a more reliable criterion for assessing discriminant validity compared to traditional Fornell-Larcker criterion and cross-loadings. Therefore, the discriminant validity of this study is assessed using HTMT. Thus, the recommended thresholds of Heterotrait-Monotrait Ratio (HTMT) value should be less than 0.85, 0.9 or 1 (Hair et al., 2017; Henseler et al., 2015; Kline, 2011). Thus, the HTMT value presented in Table 2 indicates that the study possessed adequate discriminant validity because the value is less than suggested threshold.

Table 2: Discriminant Validity (Heterotrait-Monotrait Ratio (HTMT) (n=212)

Constructs	FP	ТО
FP		
ТО	0.130	
Note: FP-Performance TO-	Technological Orientation	

**Note:** FP=Performance, TO=Technological Orientation

Similarly, to ascertain the formative construct (LO), the researchers have examined two conditions upon each indicator to determine whether they are significant in or not. As shown in Table 3, first was to assess the collinearity among the indicators using Tolerance Level (TOL) or Variance Inflation Factor (VIF) values, the threshold of which is 0.20 for the TOL and 5 for VIF. The second condition is to assess the significance of the statistical contribution (absolute and relative contributions) of each formative indicator to the main construct.

Formative Construct	Formative Indicators	VIF	Outer Weights	Outer Loadings	T Statistics
Learning	Commitment to		0	0	
Orientation	Learning	4.871	0.257	0.797	1.134
	Open-mindedness	4.693	0.196	0.772	0.890
	Share Vision	1.396	0.694	0.928	7.649

Table 3. Formative Measurement Model (n-212)

**Note:** The values for outer loadings represent absolute contribution, while the values for outer weights represent the relative contribution of an indicator or the LOC to the main construct or the HOC (*i.e.*, LO).

#### 4.2 Structural Model Results

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After satisfying all the requirements for the measurement model, the next section presents the structural model of the analysis through the standard bootstrapping method using 5,000 bootstrap samples for 212 dataset to ascertain the significance levels of the direct and moderating relationships (Hair *et al.*, 2014). These include the hypotheses testing, evaluation of R-square, effect size and predictive relevance.

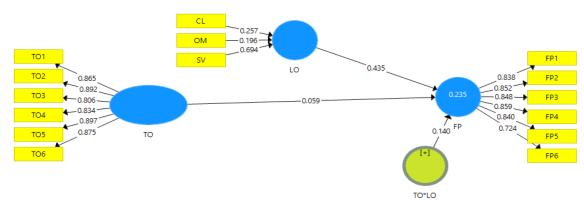


Figure 3: *PLS Algorism for Direct and Moderation* 

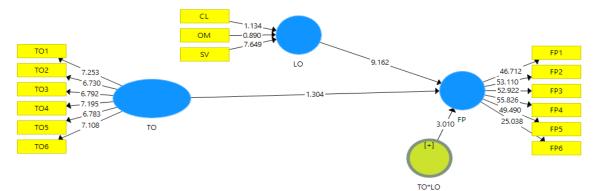


Figure 4: *Bootstrapping for Direct and Moderation* Table 4: *Path Coefficient for Direct and Moderation Relationships* 

Relationships	Beta	<b>Standard Deviation</b>	<b>T</b> Statistics	P Values	Findings
LO -> FP	0.441	0.047	9.162	0.000	Significant
TO -> FP	0.048	0.045	1.304	0.192	Insignificant
$TO*LO \rightarrow FP$	0.131	0.046	3.010	0.003	Significant

**Note:** LO = Learning Orientation, TO = Technological Orientation and FP = Performance



Table 4 presents the results of direct and moderation relationships between independent variable and the dependent variable. The findings for the relationship between LO and SME performance reveals a positive relationship ( $\beta = 0.441$ , SD = 0.047, TV = 9.162). This result is consistent with (Kreiser, Marino, Kuratko, & Weaver, 2013; Naranjo Valencia *et al.*, 2016), which are all positively significant. Therefore, hypothesis one is rejected.

Another standard used for assessing structural model is coefficient of determination ( $R^2$ ) of endogenous construct (Hair *et al.*, 2017). According to Chin (1988) the  $R^2$  values of 0.67, 0.33 and 0.19 for endogenous latent constructs can be viewed as substantial, moderate and weak respectively.

 Table 5: Coefficient of Determination (R2) for direct and Moderation Relationships

Construct	R-Square (R <sup>2</sup> )
SME Performance	0.235 (23%)

As presented in Table 6, the exogenous construct of this study (*i.e.*, LO) and the moderator (*i.e.*, TO) explains 23 percent of the total variance in SME performance. Consequently, following Chin's (1998) recommendations, the *R*-squared ( $R^2$ ) value explained by these exogenous construct and the moderator on the target endogenous construct (*i.e.*, SME performance) is moderate.

Having achieving the coefficient of determination ( $R^2$ ), the next assessment is effect size ( $f^2$ ) as recommended by Hair, Ringle, and Sarstedt (2013). Thus, Cohen (1988) describes  $f^2$  values of 0.02, 0.15 and 0.35 as having small, medium, substantial effects respectively. Hence, Keny (2016), proposed that 0.005, 0.010 and 0.025 as more realistic thresholds for small, medium, and large effect size respectively. Hence, Aguinis *et al.*, (2005) have argued that the average effect size in test of moderation is only 0,009. Thus, Keny (2016), proposed that 0.005, 0.010 and 0.025 as more realistic thresholds for small, medium, and large effect size respectively.

Construct	$\mathbf{F}^2$	Effect Size
LO	0.159	Large
LO*TO	0.039	Large
ТО	0.008	Medium

Table 6: Effect Size for direct and Moderation Relationships: F-Square

**Note:** LO = Learning Orientation and TO = Technological Orientation

As presented in Table 6, LO have large effect on SME performance based on Keny's (2016) proposition. In the same vein, interaction between LO and TO was found to have large effect on SME performance. Lastly TO was found to have medium effect on SME performance.

This study further assesses the predictive relevance  $(Q^2)$  of the full model. It was conducted through blindfolding process to determine how the values are assembled around the model. The result of cross validated redundancy was used because it explains how capable the model is to predict the endogenous constructs. It is believed that any model above "0" has predictive relevance; it has the ability to predict relationship and if the value is "0" and below means the model has no any predictive influence (Geisser, 1974; Stone, 1974).

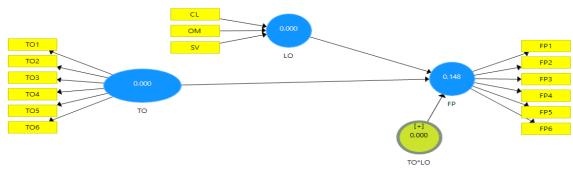


Figure 5: Predictive relevance Moderator

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Table 7: Predictive Relevance for M	Aoderation Relationshi	<i>ns: O-Sau</i> are	

Total	SSO	SSE	1-SSE/SSO
SME Performance	2,388.000	2,035.022	0.148
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**Note:** SSO=Sum of squared observation and SSE=Sum of squared prediction errors

As presented in Table 7, the  $Q^2$  value for the cross-validation redundancy measure for the endogenous latent construct is greater than zero (0.148), confirming the predictive relevance of the model (Hair *et al.*, 2014; Hayes, 2009; Chin, 1998).

#### 5. Discussions

The objective of this study is to examine the relationship between LO and SME performance in Kaduna Metropolis and to determine the extent to which TO can strengthen the relationship for a higher SME performance. Thus, TO was espoused as a moderating variable in line with suggestions by Baron and Kenny (1986). This study confirmed that TO as moderating factor have a potential influence on the relationship between LO and SME performance in Kaduna Metropolis. In this regards, SME in Kaduna Metropolis are inspired to combine their intangible resources (*i.e.*, LO and TO) to achieved higher performance.

## 5.1 Theoretical, Methodological and Practical Implications

Some few previous empirical studies have investigated the direct relationship between TO and SME performance (Naala *et al.*, 2017; Amirkhani & Reza, 2015; Al-Ansari, Altalib & Sardoh, 2013; Zhou & Li, 2010), and little or no study has been found in the available literature, which has investigated how TO interact with the presents study independent variable and the dependent variable to the best of the researcher's knowledge. Thus, the present study is empirically addressed this knowledge gap by extending our understanding on how TO interact with LO to influence SME performance. The findings support RBV postulation that LO and TO plays a vital role in determining firm performance.

Methodologically, the study used first-order and hierarchical component model (HCM) using PLS-SEM with the aid of Smart PLS Version 3.0 statistical software to examine LO (commitment to learning, open mindedness and share vision) using second stage approach as the reflective-formative type of HCM which is very uncommon in the previous PLS-SEM studies (Ringle *et al.*,



2012). Therefore, the study had succeeded in reducing the complexity associated with LO construct, thereby achieving parsimony. Additionally, the study used HTMT to assess discriminant validity. However, Hair, *et al.* (2017) argues that both Fornell-Larcker criterion and cross-loading does not provide reliable discriminant validity and thus suggested the use of HTMT technique as a more reliable criterion.

Practically, the findings of this study will help the management and owners of SME, policy makers such as SMEDAN, Central Bank of Nigeria, National Bureau of Statistics and academic researcher's in designing the policies and programmes to promote SME performance in Nigeria.

#### 5.2 Limitations and Suggestions for Future Study

In spite of obtaining a number of interesting answers, the present study has some important limitations. At first, the study adopted cross-sectional design that captures only responses of data collected over a single period of time. Therefore, future studies should consider a longitudinal approach that collects data over a period of two or more particular points in time. Second, the study focused on SME in Kaduna Metropolis Therefore, future research is needed to go beyond Kaduna Metropolis by covering other part of the state as well as the entire northern region. Finally, the this study examines the moderating role of TO on the relationship between LO and SME performance. Therefore, the study suggests to future researchers to look at the moderating role of TO on the effect of entrepreneurial orientation, learning orientation and market orientation against SME performance.

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