“Assessment of the moderating effects of Nigerian market environment on the relationship between management success determinants and SMEs’ performance”

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ASSESSMENT OF THE MODERATING EFFECTS OF NIGERIAN MARKET ENVIRONMENT ON THE RELATIONSHIP BETWEEN MANAGEMENT SUCCESS DETERMINANTS AND SMES' PERFORMANCE

Abstract

A reported eighty-five percentage failure rate of SMEs in Nigeria before five years of operation was ascribed to a lack of knowledge of the market environment. Hence, this study investigated the moderating effects of the Nigerian market environment on the relationship between management success determinants and SMEs' performance to see how the environment has affected SMEs' performance. The study employed a survey research design, the population of the study comprised chief executive officers (CEOs) of registered SMEs, and a sample size of 1,102 was used. Probability sampling methods of stratified, proportionate, and random sampling were adopted. Responses were collected through a predetermined set of questions and a self-administered questionnaire. Data were analyzed using descriptive and inferential statistics. The study found that the Nigerian market environment had moderating effects on the relationship between management success determinants and SMEs' performance (R = 0.817, R2 adjusted = 0.664, R2 change = 0.041, and Fchange = 19.694 at $\rho = 0.000$), most of the Nigerian market environment's components have significant moderating effects on all the management success determinants relationship with SMEs' performance; management skills ($\beta = 0.220, 0.182$; $\rho < 0.05$), innovation ($\beta = 0.147, 0.135$; $\rho < 0.05$), operating system ($\beta = 0.083, 0.061$; $\rho < 0.05$), organizational structure ($\beta = 0.290, 0.303$; $\rho < 0.05$), business reporting system ($\beta = 0.142, 0.137$; $\rho < 0.05$), system flexibility ($\beta = 0.110, 0.107$; $\rho < 0.05$), environmental scanning ($\beta = 0.091, 0.062$; $\rho < 0.05$). Only decision-making is not statistically significant ($\beta = 0.037, 0.004$; $\rho > 0.05$). These imply that Nigerian SMEs' decisions under intense environmental turbulence are mostly ineffective, and the effects of management success determinants in facilitating performance were also drastically reduced as well as firms' system flexibility. The study has a practical value of identifying the effect of the Nigerian market environment on the relationship between management success determinants and SMEs' performance, thus revealing the gaps in the Nigerian SMEs' management factors.

Keywords system flexibility, environmental scanning, decision-making, organizational structure, innovation, management skill, business reporting system, operating system

JEL Classification M10, D22, L25

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INTRODUCTION

Organization for Economic Cooperation and Development's report revealed that SMEs contributed over 55% of GDP and over 65% of total employment in high-income countries like Great Britain, the United States of America, Germany, Ireland, and the Netherlands. While the Micro, Small, and Medium-scale Enterprises (MSMEs) account for

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over 60% of GDP and over 70% of total employment in low-income countries like Nigeria, South Africa, Kenya, Ghana, etc. They contribute about 70% of GDP and 95% of total employment in middle-income countries like Indonesia, Malaysia, Brazil, the Philippines, Paraguay, etc. (OECD, 2014).

In a developing country like Nigeria, Small and Medium Enterprise (SME) is supposed to be a catalyst for socio-economic development and a veritable employment generation tool. However, the situation is on the contrary. It was noted that eighty-five percent of the SMEs failed before five years of operation. (SMEDAN, 2017).

The environment these businesses operated in has been a suspect for their failures because eighty-five percentage failure rate of SMEs before five years of operation was ascribed to a lack of knowledge of the market environment. The moderating effects of the Nigerian market environment (comprising macro-environmental factors, industry market-specific factors, and environmental firm-specific factors) on the relationship between management success determinants and SMEs' performance have been scarcely researched. Therefore, knowing to what extent the environmental factors moderate the relationship between management success factors and SMEs' performance is of paramount importance.

1. LITERATURE REVIEW

Success has been seen as a profit in business or market growth (Chong, 2012). Other researchers have defined it in terms of economic or financial performance (Lakshmi, 2019). Extrinsically, it has been seen as high financial returns (Serrasqueiro et al., 2018). Adagba and Shakpande (2017) identified it as the ability to survive in a business environment with available resources, particularly for start-ups and new ventures.

Different industries tend to have different success criteria, although operating in the same macro environment (Boso et al., 2019). Mohassesi and Keshvari (2015) and Ahmed et al. (2018) identified strategic planning and participative decision-making as general success factors applicable to most industries. Mirani and Shah (2012) identified management skills, strategic alignment to environmental factors, hard work, good customer services, and product quality as major determinants of management success amongst Pakistani small businesses. Almatrooshi et al. (2016) revealed how the ability to attract capital investment; financing; the owner's experience; project implementation skills; and the ability to monitor and assess environmental factors affect firm success. Lo et al. (2016) identified other business characteristics, such as age of business, size, and location, as integral to business success.

Some researchers have discovered that these determinants of management success related well with some organizational factors and practices. Pinto et al. (2019) found that return on assets is positively related with an organization's decision-making processes. Forth and Bryson (2019), in a separate study, affirmed that greater delegation enhances performance in a turbulent business environment, while Wang et al. (2017) established that decision-making delay is just dependent on the information processing structure. Bengeledijk and Jindra (2018) found that decision-making autonomy enhances functional areas of innovation and product development. Higher decision-making autonomy positively affects product innovation and functional areas like supplier selection, investment, marketing, sales, and finance. George and Desmidt (2018) noted that rational planning enhances the quality of strategy by exchanging information during the decision-making process. They also found that performance measurement does not contribute to decision quality.

The drive for management success determinants is to ensure the performance of the enterprises. And enterprise performance has been defined in various ways. Games and Rendi (2019) and Kiyabo and Isaga (2019) assessed enterprise performance using both quantitative financial measures, which include profit margin or return on sales, return on assets, return on equity and profitability (Games & Rendi, 2019), and qualitative measures, such as customer and employee satisfaction. A high percentage of MSMEs adopt non-financial internal

standards, ranging in descending order of importance from quality, competitive performance, resource utilization, flexibility, and innovation. They inferred that non-financial standards are far from being overused and abused (Al Asheq & Uzzual, 2019).

Omar and Zineb (2019) further identified some performance measurements as combinations of indicators like operating efficiency; return on assets; market share; market performance (as a measure of customer knowledge); trend performance (or periodic measurements of firm performance); relative performance (as a relative measure to industry performance); system performance (which could be market or production) sales revenue; profitability; employee satisfaction; service quality; customer satisfaction, and strategic marketing performance. Kumar (2018) believes that it is germane to consider the concept of customer lifeline value as a reliable estimate for overall customer value to a firm in measuring strategic marketing performance. He emphasized that customers add value to a firm through social media influence, incentivized referrals, and feedback. In corroborating this, Kim et al. (2018) advised that organizations need to focus more on their customers to keep them. They suggested design and road mapping as valid ways of increasing customer experiences, on which choice of features, functionality, and technology depends in a turbulent environment.

The market environment is a collection of conditions, influences, events, and circumstances surrounding and affecting the business organization in delivering on its promises to the customers. Business organizations like SMEs must interact with these conditions or forces, which may be opportunistic or a threat, to achieve a competitive advantage and hence make a profit (Jayeola et al., 2018). Some researchers have noted that the developing countries' market environments are much different from the developed countries where the environmental variables are less unpredictable (Planing, 2017; Wang & Rafig, 2014). Aligning with this position, Agwu and Onwuegbuzie (2018) and Lee (2014) agreed that the developing countries' market environments are harsh and have had negative effects on SMEs' performance. These include a contraction of opportunities (Planing, 2017), entrepreneurial development (Ayegba & Omale, 2016), and business competitiveness (Babalola & Tiamiyu, 2013). Different results have been reported on the moderating effects of both internal and external environments of business. For example, Kurniawan, Salim, Setiawan, and Rahayu (2019) found that the external business environment cannot moderate the relationship between entrepreneurial orientation and performance, while Rodríguez-Aceves, Baños-Monroy, and Ramírez-Solís (2018) affirmed that familiness, as a source of competitive advantage for family firms, may be more suitable in stable environments characterized by the certainty of conditions. In other words, the effect of familiness on a family firm's performance diminishes in highly dynamic environments. In a separate study, Abdullah and Bin (2018) advanced that business environment moderated the relationship between entrepreneurial skills and small business performance. That is, the relationship between entrepreneurial skills and small business performance is reinforced by the business environment.

Corroborating the effectiveness of the environment to enhance the relationships between variables; Kang and He (2018) found that both environmental orientation and innovation capability positively moderate the effect of institutional forces on firm's Environmental Management Strategy, Onditi et al. (2020) indicated that competitive intensity moderated the relationship between market orientation and non-financial performance but not with financial performance, Oketch, Kilika, and Kinyua (2020) showed that legal environment has significant moderating effect on the relationship between top management team characteristics and performance of the independent regulatory agencies in Kenya, Muharam et al. (2020) indicated that disruptive technology moderated the relationship of process innovation with financial performance, but it has no moderating role on the relationship of market innovation with financial performance, Tajeddini and Mueller (2019) established that for firms competing in a highly dynamic environment, the positive effect of an entrepreneurial orientation on financial performance is enhanced by the moderating effect of the environment, Feng and Wang (2016) indicated that environmental management systems have positive and significant impacts on customer satisfaction, customer loyalty, and financial performance.

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Besides, Martin et al. (2020) revealed that technological turbulence's moderating effect strengthened two relationships, one between marketing capabilities and marketing communication and the other between marketing communication and competitive strategy. Su and Moaniba (2020) showed that the number of individual inventors could influence distance-R&D intensity relationship, number of organizations, or countries involved in the collaborations, and Zehir and Balak (2018) showed the mediating effects of positive environment conditions on the relationship between market dynamism and firm performance.

Given the noted gap in the literature on the moderating effects of the Nigerian market environment on the relationship between management success factors and SMEs' performance, this study is positioned to fill this gap.

2. AIM

The study aims to assess the moderating effects of the Nigerian market environment on the relationship between management success determinants and SMEs' performance.

3. HYPOTHESES DEVELOPMENT

The various effects of the environment on diverse organizational variables suggest that there may be a probable moderating effect of the Nigerian market environment on the management success determinants relationship with SMEs' performance. Diverse positive or negative effects of the business environment on SMEs' performance have been further noted by other researchers (Auwal et al., 2020; Mu. Aremu, Gbadeyan, & Mo. Aremu, 2016; Jayeola et al., 2018). Hence, Nigerian market environments could affect the relationship between management success factors and SMEs' performance. It is thus hypothesized that:

H_1: *Nigerian market environment significantly moderates the relationship between the management success factors and SMEs' performance.*

H_2: *Nigerian market environment has a significant interactive moderating effect on the relationship between the management success factors and SMEs' performance.*

H_3: *Nigerian market environment significantly moderates the relationship between the individual components of management success determinants and SMEs' performance.*

H_4: *Nigerian market environment has significant interactive moderating effects on the relationship between the individual management success determinants and SMEs' performance.*

4. METHODS

A quantitative research method was adopted using a survey research design, which helped generate information based on real-world observations. The study population comprised chief executive officers (CEOs) of registered SMEs, and the comprehensive list generated by the Small and Medium Enterprises Development Agency of Nigeria was the frame of the study.

The sample size was determined using Krejcie and Morgan formula, and the sample size of 760 was arrived at. However, a 45% attrition rate was added to arrive at 1,102. Probability sampling methods of stratified, proportionate, and random sampling were adopted. Responses were collected through a predetermined set of questions using self-administered questionnaire. An adapted validated questionnaire of 0.82-0.96 reliability coefficients range was used and a response rate of 89.66%. The data were analyzed using descriptive and inferential statistics of multiple and hierarchical regression to establish the Nigerian market environment's effects on the relationship between the management success determinants and SMEs' performance.

5. RESULTS

One thousand one hundred and two (1,102) copies of the questionnaire were administered to the owners/managers of selected small and medium

scale enterprises in Lagos, Ogun, and Oyo states of Southwest, Nigeria, to ensure that the sample size would be achieved. Nine hundred and eighty-eight (988) copies of the questionnaire were correctly filled and returned, and this represents a response rate of 89.66%, while 114 representing 10.34% of the questionnaire were either not returned or not correctly filled.

The results of the study are presented in Tables 1-4.

Table 1 depicts the hierarchical multiple regression of moderating effects of selected Nigerian market environment on the relationship between the management success determinants and SMEs' performance. Model 1 shows $R = 0.781$, R^2 adjusted = 0.608, $F_{(8,979)} = 191.997$, and $\rho < 0.000$ showing that 60.8% variation in SMEs' performance is caused by management success factors and this effect is statistically significant ($F_{(8,979)} = 191.997$ and $\rho = 0.000$) (shown in Table 3). This implies that management success factors are responsible for 60.8% variations in SMEs' performance in Nigeria. This shows the importance of the factors to the survival of SMEs in Nigeria.

The second model shows that $R = 0.792$, R^2 adjusted = 0.623, R^2change = 0.017, and $F_{change} = 14.575$, and $\rho = 0.000$ (shown in Table 3). It means that the Nigerian market environment positively moderates the relationship between management success factors and SMEs' performance by a 1.7% change in the R^2 adjusted value (from 0.608 to 0.623), and the relationship between management success factors and SMEs' performance is also enhanced from $R = 0.781$ to $R = 0.792$, the relationship becomes stronger, meaning the need for critical implementation of the management success factors is driven by the intensity of the environment. These changes are statistically significant ($F_{(3,976)} = 191.997 + 14.575 = 206.572$ at $\rho = 0.000$).

Table 1. Regression model summary of moderating effects of selected Nigerian market environment on the relationship between the management success determinants and SMEs' performance

Source: Field survey results (2019).

Model summary									
Model	*R*	R^2	Adjusted R^2	Std. error of the estimate	Change statistics				
					R^2change	F_{change}	df1	df2	Sig. F_{change}
1	.781[a]	.611	.608	4.288	.611	191.997	8	979	.000
2	.792[b]	.627	.623	4.201	.017	14.575	3	976	.000
3	.817[c]	.668	.664	3.967	.041	19.694	1	975	.000

Note: a. Predictors: (constant), management success determinants, b. Predictors: (constant), management success determinants, Nigerian market environments, c. Predictors: (constant), management success factors, Nigerian market environment.

Table 2. Analysis of Variance (ANOVA) of moderating effects of selected Nigerian market environment on the relationship between the management success factors and SMEs' performance

Source: Field survey results (2019).

ANOVA[a]						
Model		Sum of squares	Df	Mean square	F	Sig.
1	Regression	28235.812	8	3529.476	191.997	.000[b]
	Residual	17996.921	979	18.383	–	–
	Total	46232.733	987	–	–	–
2	Regression	29007.498	11	2637.045	149.418	.000[c]
	Residual	17225.235	976	17.649	–	–
	Total	46232.733	987	–	–	–
3	Regression	30890.914	12	2574.243	163.598	.000[d]
	Residual	15341.819	975	15.735	–	–
	Total	46232.733	987	–	–	–

Note: a. Dependent variable: SMEs' performance, b. Predictors: (constant), management success factors, c. Predictors: (constant), management success determinants, Nigerian market environments, d. Predictors: (constant), management success factors, Nigerian market environment.

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Table 3. Results of moderating effects of selected Nigerian market environment on the relationship between the individual management success factors and SMEs' performance

Source: Field survey results (2018).

No.	Variables	Without NME 1 (β)	With NME 2 (β)	With MSF·NME (β)	ρ_1 (sig.)	ρ_2 (sig.)	ρ_3 (sig.)
1	Management skill	0.220	0.182	–0.158	0.000	0.000	0.000
2	Innovation	0.147	0.135	–0.165	0.000	0.000	0.000
3	Decision making process	0.037	0.004	–0.182	0.144	0.885	0.000
4	Operating system	0.083	0.061	–0.061	0.001	0.015	0.020
5	Organizational structure	0.290	0.303	0.032	0.000	0.000	0.335
6	Business reporting system	0.142	0.137	–0.089	0.000	0.000	0.006
7	System flexibility	0.110	0.107	–0.033	0.000	0.000	0.176
8	Environmental scanning	0.091	0.062	–0.048	0.000	0.011	0.058

The last model reveals the moderating effect of the interaction between management success determinants and the Nigerian market environment, which has R = 0.817, R^2 adjusted = 0.664, R^2 change = 0.041, and F_{change} = 19.694 at ρ = 0.000, which means that the interaction of Nigerian market environment with management success factors moderated the relationship that exists between management success factors and SMEs' performance with 4.1% change in the value of the effects of R^2 adjusted now 0.664 from 0.623. A stronger relationship now exists between management success factors and SMEs' performance, meaning the performance of SMEs is more affected when indices of the environment are premised into the management success factors as these environmental factors' intensity affects the effectiveness of the management success factors increasing performance. These effects and relationship are statistically significant F_{change} = 19.694 at ρ = 0.000.

Table 2 shows Analysis of Variance (ANOVA) of moderating effects of selected Nigerian market environment on the relationship between the management success factors and SMEs' performance, which reveals that the moderating effects of Nigerian market environments are significant for the three models which are the effects of management success factors on SMEs' performance ($F_{8,979}$ = 191.997 at ρ = 0.000), the moderating effects of the Nigerian market environment on the relationship between the management success factors and the SMEs' performance ($F_{11,976}$ = 149.418 at ρ = 0.000) and the interaction effects of the management success factors and the Nigerian market environment on SMEs' performance. ($F_{12,975}$ = 163.598 at ρ = 0.000).

Table 3 shows the standardized beta value of the management success factors under different scenarios, without the moderating effects of the Nigerian market environment, moderating effects of the Nigerian market environment, and the interaction of management success factors with the Nigerian market environment. The intensity of the Nigerian market environment reduces the effect of most of the management success factors on SMEs' performance, except organizational structure, which increased from β = 0.290 to 0.303 and later reduced to 0.032 when the Nigerian market environment interacted with management success factors. The positive effects of the decision-making process were insignificant (ρ = 0.144 and ρ = 0.885), while the negative effect was significant for SMEs' performance (ρ = 0.000), meaning effective decisions were not made under intense environmental dynamism. However, the positive effect of organizational structure were significant (i.e., β_1 = 0.290, ρ_1 = 0.000, β_2 = 0.303, ρ_2 = 0.000), while the interaction effects of the environment with the management success factors for organizational structure was not significant (β_3 = 0.032, ρ_3 = 0.335) meaning the organizational does not significantly change the performance of SMEs under environmental influence.

System flexibility has significant effects without the moderating effects of the environment (β_1 = 0.110, ρ_1 = 0.000), and with the Nigerian market environment as moderators (β_2 = 0.107, ρ_2 = 0.000) which means it has effects that were reduced by the intensity of the environment by 0.003. However, its effect was insignificant when the Nigerian market environment interacted with management success factors (β_3 = –0.033, ρ = 0.176), meaning system flexibility effects of the SMEs were not felt when the intensity of the environmental factors increased. This could be responsible for the high mortality among the SMEs.

Similarly, environmental scanning practice has positive effect on SMEs' performance without moderation (β = 0.091, ρ = 0.000), with moderation (β = 0.062, ρ = 0.011) and with interaction, it has negative effect but insignificant (β = –0.048, ρ = 0.058). The more environmental scanning was done, the less the effects of the environment on the SMEs, which means SMEs had valuable information through the scanning to curtail the environment's influence.

The critical thing to note in this result is that the intensity of the Nigerian market environment reduces the performance (β = 0.187, ρ < 0.05), management skills (β = 0.142, ρ < 0.05), innovation (β = 0.057, $\rho \leq$ 0.05), operating system (β = 0.266, ρ < 0.05), organizational structure (β = 0.109, ρ = 0.05) and environment scanning (β = 0.118, ρ = 0.05). The organizational structure, management skills, environmental scanning, and system flexibility have the highest effects on SMEs' performance. All the effects are statistically significant ($\rho \leq$ 0.05). Efficiency decreases by reducing the workability of the management factors. As it is noted, the effects of all the management factors reduce when the Nigerian market environment interacted with it. This is also depicted in Figure 1 and Table 3.

Source: Field survey results (2018).

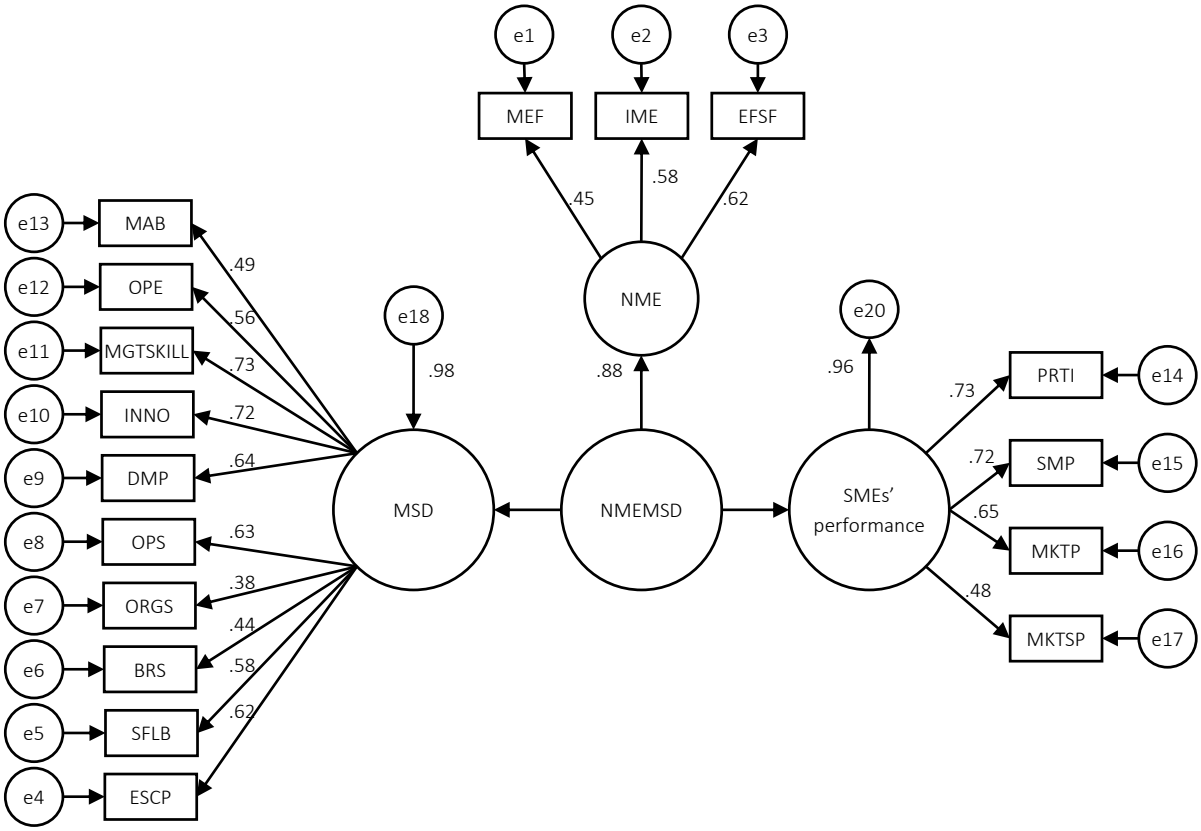

Figure 1. Path analysis diagram of the moderating effects of Nigerian market environment on the relationship between the management success factors and SMEs' performance

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Table 4. Path analysis of the moderating effects of Nigerian market environment on the relationship between the management success factors and SMEs' performance

Source: Field survey results (2018).

Variables	NMEMSD	NME	SMEs_Performance	MSD
NME	.882	.000	.000	.000
SMEs_Performance	.964	.000	.000	.000
MSD	.983	.000	.000	.000
EFSF	.547	.620	.000	.000
IME	.516	.585	.000	.000
MEF	.400	.453	.000	.000
MKTSP	.466	.000	.483	.000
MKTP	.629	.000	.652	.000
SMP	.698	.000	.725	.000
PRTI	.703	.000	.730	.000
MAB	.481	.000	.000	.489
OPE	.551	.000	.000	.560
MGTSKILL	.722	.000	.000	.735
INNO	.710	.000	.000	.722
DMP	.625	.000	.000	.636
OPS	.624	.000	.000	.635
ORGS	.573	.000	.000	.582
BRS	.666	.000	.000	.677
SFLB	.430	.000	.000	.437
ESCP	.513	.000	.000	.521

H_1: *Nigerian market environment significantly moderates the relationship between the management success factors and SMEs' performance.*

The moderating effects of Nigerian market environment on the relationship between the management success determinants and SMEs' performance model 1 shows $R = 0.781$, R^2 adjusted = 0.608, $F_{(8,979)} = 191.997$, and $\rho < 0.000$ showing that 60.8% variation in SMEs' performance is caused by management success factors and this effect is statistically significant ($F_{(8,979)} = 191.997$ and $\rho = 0.000$). The second model shows that $R = 0.792$, R^2 adjusted = 0.623, R^2change = 0.017, $F_{change} = 14.575$, and $\rho = 0.000$ (shown in Table 3). It means that the relationship between management success factors and SMEs' performance is positively moderated by Nigerian market environment (comprising macro-environmental factors, industry-specific factors, and environmental firm-specific factors) by 1.7% change in the R^2 adjusted value (from 0.608 to 0.623) and the relationship between management success factors and SMEs' performance is also enhanced from $R = 0.781$ to $R = 0.792$, the relationship becoming stronger. These changes are statistically significant ($F_{(3,976)} = 191.997 + 14.575 = 206.572$ at $\rho = 0.000$); hence, the hypothesis is not rejected.

H_2: *Nigerian market environment has a significant interactive moderating effect on the relationship between the management success factors and SMEs' performance.*

The last model reveals the moderating effect of the interaction between management success determinants and the Nigerian market environment, which has $R = 0.817$, R^2 adjusted = 0.664, R^2 change = 0.041, and $F_{change} = 19.694$ at $\rho = 0.000$, which means that the interaction of Nigerian market environment with management success factors moderated the relationship that exists between management success factors and SMEs' performance with 4.1% change in the value of the effects of R^2 adjusted now 0.664 from 0.623. A stronger relationship now exists between management success factors and SMEs' performance. These effects and relationship are statistically significant $F_{change} = 19.694$ at $\rho = 0.000$. Hence, the hypothesis is not rejected.

H_3: *Nigerian market environment significantly moderates the relationship between the in-*

dividual components of management success determinants and SMEs' performance.

Most of the Nigerian market environment's components have significant moderating effects on all the management success determinants relationship with SMEs' performance; management skills ($\beta = 0.220, 0.182$; $\rho < 0.05$), innovation ($\beta = 0.147, 0.135$; $\rho < 0.05$), operating system ($\beta = 0.083, 0.061$; $\rho < 0.05$), organizational structure ($\beta = 0.290, 0.303$; $\rho < 0.05$), business reporting system ($\beta = 0.142, 0.137$; $\rho < 0.05$), system flexibility ($\beta = 0.110, 0.107$; $\rho < 0.05$), environmental scanning ($\beta = 0.091, 0.062$; $\rho < 0.05$). Only decision-making is not statistically significant ($\beta = 0.037, 0.004$; $\rho > 0.05$). It is important to note that only organizational structure (from $\beta = 0.290$ to 0.303) effects increased with the moderating effects of Nigerian market environment. The effect of the decision-making process not being significant meant that non-effective decisions were mostly made under environmental intensity, while the increasing effect of the organizational structure shows the importance of flexibility in structure in a dynamic environment.

H_4: *Nigerian market environment has significant interactive moderating effects on the relationship between the individual management success determinants and SMEs' performance.*

The interactive moderating effect of the Nigerian market environment had a negative effect on most of the management success determinants and the SMEs' performance, meaning that increasing environmental intensity reduces the positive effects that management success determinants (MSD) have on SMEs' performance. For example, management skills ($\beta = -0.158$, $\rho < 0.05$), innovation ($\beta = -0.165$, $\rho < 0.05$), operating system ($\beta = -0.061$, $\rho < 0.05$), business reporting system ($\beta = -0.089$, $\rho < 0.05$), system flexibility ($\beta = -0.033$, $\rho > 0.05$), environmental scanning ($\beta = -0.048$, $\rho > 0.05$), decision-making ($\beta = -0.182$, $\rho < 0.05$). Though the organizational structure is also positive, the effect is not statistically significant. The system flexibility and environmental scanning are not also statistically significant.

6. DISCUSSION

The intensity of the market environment reduces the effect of all the management success factors on SMEs' performance, except organizational structure. This means the dynamism of the environment reduces the ability of the management success determinants/factors to facilitate performance. This is in line with the diminishing effects noticed in the study of Rodríguez-Aceves et al. (2018). This is also noted in dynamic capability theory; Teece (2011) asserted that the major organizational activities that constitute dynamic capabilities are sensing (that is; discovering technological activities, testing markets, collecting customer and general business-related information through environmental scanning, thus identifying and assessing opportunities) seizing (taking advantage of the opportunities for value creation and competitive advantage) and transforming (alignment of the firm's assets to achieve best fit strategy with the structure for effectiveness). The theory suggests that structure modification for improved performance in a dynamic environment is important. Hence going by the reducing effects the Nigerian market environment had on the relationship between management success determinants and SMEs' performance as moderators in this study, one could infer that aligning the SMEs' assets to achieve best fit strategy for effectiveness is a problem amongst Nigerian SMEs. This is because earlier results showed a positive and significant relationship between environmental scanning and SMEs' performance, which inferred that the SMEs have been scanning their environments to identify and assess opportunities and take advantage of it to create performance, which also supports the basis of absorptive organizational learning theory, which states that a firm can adjust and improve on its performance in a dynamic or turbulent environment when its systems, policies, and routines assimilate the effects of the factors in the environment (Battisti & Deakins, 2017; Grant, 1996; Njanja et al., 2012; Obiekwe & Nwaeke, 2020), but this result suggests that there has been inadequate reconfiguring of the SMEs capabilities and resources to accommodate the negative tendencies of the environment.

It is also noted that the Nigerian SMEs had not developed enough resilience to assimilate the effects

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of the factors in the Nigerian market environment hence the lowered performance obtained when the environment was used to moderate the management success determinants and SMEs' performance relationship; again, the value of the environmental scanning practice of the SMEs though fair but needed to be enhanced. Frank et al. (2017) and Bii and Onyango (2018) noted that the higher the environmental dynamism and hostility, the more the need for dynamic capabilities, particularly effective environmental scanning and learning and flexibility.

It could also be deduced that the reducing effects caused by the environment on the management success determinants and SMEs' performance relationship were caused by the inability of the managers/owners to adopt appropriate strategies that are fitted for the situations at different times as advocated by contingency theory which emphasizes that the appropriateness of different control systems depends on the settings of the business and suggests organizational, structural and decisional adaptation to environmental dynamics (Lawrence & Lorsch, 1967; Mintzberg, 1984). It thus summarizes that firms' performance depends on the alignment between the organizational structure, internal processes, and behavior. This aligns with the positions of dynamic capability theory, absorptive, and organizational learning theory.

Besides, some empirical works agree with this finding. For example, Adeoye and Elegunde (2012) identified that macro-environmental and industry market-specific factors had contributed greatly to SMEs' failure in Nigeria. This was corroborated by Onyenekenwa (2010), Ogundele et al. (2013). Sia et al. (2004) also affirmed that lack of adequate perception of the degree of complexity, stability, and uncertainty prevalent in business environment could have negative effects on organizational performance. Schilke (2014) stated that developing economies' emerging market environments are very dynamic with a high level of uncertainty characterized with information deficit necessary to identify and evaluate the causes of the factors and the interaction between these factors. The situation becomes worse for businesses in these environments because the dynamism is often nonlinear and discontinuous.

Aligning with this position, Dinh et al. (2010) and Lee (2014) agreed that the market environment of the developing countries is harsh and that it has had negative effects on SMEs' performance, which include contraction of opportunities (Planing, 2017) and general entrepreneurial development (Ayegba & Omale, 2016). Wang and Rafig (2014) pointed out that emerging markets like Turkey, Nigeria, Ghana, and so on are often characterized with turbulence due to inconsistent policies, weak macro-economic framework, deficient infrastructural support, and these gave room to rapid and discontinuous changes and hence the need for organizations in such environments to have resources and capabilities fitted to arrest these changes. In further corroborating the finding of this research, Andrevski and Ferrier (2019) affirmed that some firms that may try to be aggressive to capture the variations in the business environment and beat the competitors to it may also end up incurring costs and diminish their performance.

However, other researchers got a positive and significant relationship of environmental factors with some management success determinants, which are not consistent with the findings of this research. For example, Wiengarten et al. (2017) asserted that firms' proactiveness could make the external environment play a major role in the operational slack- safety relationship, thus enabling the firms to stabilize in an environment filled with uncertainty. Also, Knight et al. (2019) affirmed that the effective management of firm's resources is positively related to environmental behavior and result and pro-environmental decision-making in SMEs affects the attitude and norms of management. The reason for the difference in findings of these researchers when compared with the finding of this work could be as a result of the difference in the workability of the management determinants, which vary from firm to firm, industry to industry, and country to country(different countries provide different platforms of operation). Frynas et al. (2018) corroborated this by arguing that organizations that survive in a VUCA (Volatile, Uncertain, Complex, and Ambiguous) environment is one that has management processes and practices in place, such that the organizational, competitive, institutional, and technological contexts are veritable platforms for innovations and performance. Hamann et al. (2016) attested to this by stating that SMEs' environmental management could improve environ-

mental performance through the effective development of pro-environmental behaviors that arrest changes in the environment before they happen. Shaw, Wilson, and Pret (2017) recommended that better performance is achieved when the SMEs are well embedded in their industries in terms of culture, social and symbolic capital access, which are components of the external environment.

CONCLUSION

Given the findings of this research that revealed that the Nigerian market environment affects the performance of the SMEs and are also responsible for a significant amount of variations in the SMEs' performance, it could be inferred that the failure experienced by these firms in the time past may be partly due to the volatile, uncertain, complex, and ambiguous nature of the environment. More so, the higher the intensity of the environment, the lower the performance of the SMEs. This implies for the SMEs to enhance performance, there is a need to reduce the unpredictability of the environment; if this is impossible, they may need to reconfigure their capabilities to align with the environment's variability.

It is also important that the SMEs make deliberate strategic re-orientation; hence it is recommended that continuous monitoring of the environment is done to make the uncontrollable components more controllable through effective forecasting, monitoring, evaluation, and assessment, and there is a need for absorptive Training and Re-Training Strategy (ATReTS) that emphasizes on the integration of the information drawn from the environment into the systems and processes of the firms. Such information must be concretized into absorbable pellets for training at the managerial level and the operational levels. The operational leaders should be made to disseminate the information to the tactical workers or floor workers. Finally, there is a need for a Management Re-engineering Strategy (MAReS) to make them more effective in the face of environmental dynamism. This is particularly necessary in the case of a decision-making process that showed an insignificant value, which meant that some ineffective decisions were made in the face of a dynamic market environment.

The study concluded that SMEs' performance in Nigeria would be enhanced with a proper understanding of the market environmental factors. Management success factors like organizational structure, management skill, and environmental scanning are particularly critical success factors in the Nigerian market environment.

AUTHOR CONTRIBUTIONS

Conceptualization: Olalekan Asikhia.
Data curation: Olalekan Asikhia.
Formal analysis: Olalekan Asikhia.
Investigation: Olalekan Asikhia.
Methodology: Olalekan Asikhia.
Project administration: Olalekan Asikhia, Vannie Naidoo.
Supervision: Vannie Naidoo.
Validation: Vannie Naidoo.
Visualization: Vannie Naidoo.
Writing – original draft: Olalekan Asikhia.
Writing – review & editing: Vannie Naidoo.

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