






“Market and entrepreneurial orientations as predictors of small and medium enterprises’ performance in the COVID-19 era”

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MARKET AND ENTREPRENEURIAL ORIENTATIONS AS PREDICTORS OF SMALL AND MEDIUM ENTERPRISES' PERFORMANCE IN THE COVID-19 ERA

Abstract

The COVID-19 pandemic affected all sectors of the economy, including small and medium enterprises (SMEs). However, it has been observed that while some SMEs succumb to the pandemic, others thrive. Therefore, the study investigates the influence of market orientation and entrepreneurial orientation as well as their dimensions on the performance of SMEs in the COVID-19 era. A cross-sectional research design was adopted in the study. The data were collected through a questionnaire administered to 385 SME owners and managers in Lagos State, Nigeria. 328 copies of the questionnaire, representing 85.1%, were retrieved and used for the analyses. The results of structural equation modeling revealed that entrepreneurial orientation and its dimensions significantly influenced SME performance. Innovativeness and pro-activeness positively influenced performance, while risk-taking negatively influenced performance. Furthermore, the findings indicate that market orientation and its dimensions have no significant influence on SME performance during COVID-19. The insights from the findings will help SME owners and managers to run their operations in a challenging business environment. It will also help SME development agencies in their efforts to encourage SME growth and long-term viability.

Keywords

SMEs, customer orientation, innovativeness, performance, sustainability, Nigeria

JEL Classification

M31, L26

INTRODUCTION

Small and medium enterprises (SMEs) are globally acknowledged as critical drivers of economic growth in developed and developing countries (Shehu & Mahmood, 2014; Adams, 2019; Oyelaran-Oyeyinka, 2020). Olubiyi (2021) pointed out that a well-functioning SME sector would contribute more value to economic fortunes and create more job possibilities than any other sector. SME performance is important for continuous growth in all economies. However, low performance and a high failure rate have significant negative consequences for the economy, particularly in developing nations with limited capital. Profitable SMEs contribute to GDP, improve industrialization, increase revenue, and reduce unemployment and poverty, enhancing people's lives (Sebastian, 2016; Buli, 2017; Olubiyi et al., 2019; Akinwande & Akinola, 2021). As such, emerging nations are consistently looking for innovative strategies to strengthen SMEs to ensure economic stability (Maaodhah et al., 2021). However, according to Oyeku and Oduyoye (2020), the COVID-19 pandemic has exacerbated the rate of business failure, particularly among SMEs.



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Five out of ten SMEs fail within the first twelve months of operation, with about two surviving for more than ten years (Edwin, 2019). Every year, several of these SMEs fail, showing that they cannot cope with the pressures of the business environment (Ayodele, 2018; Adegbuyi et al., 2018). Despite the implementation of several strategies to ensure the success and long-term sustainability of SMEs, the rate of business failure has continued to rise since COVID-19 (Tumber, 2020). This may be attributed to observations that most of the measures are financial, aimed at enhancing SMEs' access to low-cost finance (Oyelaran-Oyeyinka, 2020). However, SMEs face various obstacles, including poor market orientation and low entrepreneurial skills. An analysis of previous studies revealed that the majority of the researchers examined market orientation and entrepreneurial orientation separately, while others investigated market orientation as a mediating variable. This study investigated the combined influence of market orientation, entrepreneurial orientation, and their dimensions on the performance of SMEs in the COVID-19 era.

1. LITERATURE REVIEW

SMEs are non-affiliated, self-contained businesses with revenues, assets, or workers below a particular level (Liberto, 2021). Usually, businesses that employ less than 10 employees are micro-businesses, between 10 to 49 employees are referred to as small scale, and between 50 to 199 are medium scales (SMEDAN, 2010). Kale (2017, p. xvi) noted that there are about 41.5 million (41,543,028) micro, small, and medium enterprises in Nigeria, with micro businesses comprising 99.8% (41,469,947), small businesses 0.17% (71,288), and medium-size 0.03% (1,793). The difference in ratio between the numbers of micro-enterprises to those of SMEs is at an extreme 99.8% to 0.2%. This reveals a significant gap in the transition of micro-businesses to SMEs.

Due to SME increased capacity for employment, SMEs tend to produce more products and contribute to a country's socio-economic progress than micro-businesses. If the number of SMEs increases, which means more micro-business expansion, the business sector will have a greater overall capacity to promote the country's economy. One of the unique characteristics of SMEs in Nigeria is that ownership is centered on a single person or family. Therefore, the majority of SMEs are sole proprietorships or partnerships. As such, research of this sort is required to aid SMEs' owners and managers in improving their business performance.

SME performance refers to the outcomes of SME business activities (Kotane & Kuzimina-Merlino, 2017 cited in Kiyabo & Isaga, 2020). It refers to how well a small business meets its objectives and its potential to survive and thrive in the long

run (Maaodhah et al., 2021). Performance can be measured with financial and non-financial metrics (Arshad et al., 2014; Bakar & Zainol, 2015; Kiyabo & Isaga, 2020). These include annual sales growth, yearly profits growth, investments in the business, market share, and customer satisfaction. Although the outbreak of the COVID-19 pandemic had an impact on business operations and performance in general, some businesses were able to overcome the challenging business environment and soar (Rahaman et al., 2021). This suggests that strategic orientation can impact performance during challenging circumstances. SMEs in Nigeria have enormous development potential, and they are anticipated to account for a significant share of GDP in the near future, as they are in other rising economies. Hence, it is critical to investigate how SMEs may better address the needs of their clients while also striving for long-term viability.

Market orientation is the business philosophy and culture that focuses on customer requirements and long-term profitability to provide value for customers and the business (Tumber, 2020). According to Hussain et al. (2017, p. 11), a market-oriented firm is dedicated to understanding customer needs, sharing consumer information across the organization, and establishing coordination among all functional areas to provide higher value to customers. It focuses on gathering and disseminating market knowledge that helps a business better understand and meet consumer needs than competitors. It also coordinates all internal business processes to offer long-term value to customers, the business, and other stakeholders (Aminu, 2016). Market orientation increases a business's ability to predict, react to, and manage

changes in the environment, resulting in higher performance (Maaodhah et al., 2021). A market-oriented organization is required to structure its activities, processes, and products in response to existing and potential customers' requests and needs (Acar & Ozşahin, 2018). Market orientation has been studied extensively in the past, and it has been found to have a positive link with performance (Shehu & Mahmood, 2014; Aminu, 2016; Maaodhah et al., 2021; Rahaman et al., 2021).

Market orientation is a multidimensional concept measured by customer orientation, competitor orientation, and inter-functional coordination (Narver & Slater, 1990; Alabsy, 2021). Customer orientation, according to Acar and Ozşahin (2018), is a set of beliefs that a business's main goal is its customers' demands and satisfaction. It prioritizes the customer's interests and constantly looks for new methods to give superior customer value, increase customer satisfaction, and improve consumer preference. It assists businesses in interpreting the customer value chain to provide higher value to customers. To be customer-oriented, businesses must obtain knowledge about their consumers and engage in customer assistance, brand awareness, and customer familiarity. Buli (2017) and Alabsy (2021) found that customer orientation significantly affects performance; however, it was found not significant by Acar and Ozşahin (2018).

Competitor orientation focuses on gathering and disseminating intelligence about competitors in the target market across the organization. It necessitates recognizing competitors' strengths and weaknesses and comprehending competitors' skills and tactics (Acar & Ozşahin, 2018). As Aminu (2016) points out, SMEs should regularly watch and analyze their competitors' activities and plans. Scholars have discovered a significant positive and influential association between competitor orientation and market success (Asomaning & Abdulai, 2015; Buli, 2017; Acar & Ozşahin, 2018). On the other hand, inter-functional coordination is the coordination of people and other resources to provide higher value to customers (Acar & Ozşahin, 2018). It was further noted that a firm's ability to respond to consumer wants and requests depends on a coordinated effort among diverse functions. According to the literature, SMEs that foster coordinated working relationships among their departments and units

will better serve their customers. There is a strong and significant link between inter-functional coordination and market performance, according to Asomaning and Abdulai (2015), Buli (2017), and Acar and Ozşahin (2018).

Entrepreneurial orientation is a type of business decision-making that involves new, inventive, and risky initiatives and proactive steps (Fasua, 2006 cited in Adegbuyi et al., 2018). Successful SMEs build an entrepreneurial mindset, which entails inventing fresh ideas and putting them into action as new products or procedures. A significant positive relationship between entrepreneurial orientation and performance has been found (Shah & Ahmad, 2019; Herlinawati et al., 2019; Oyeku & Oduyoye, 2020; Akinwande & Akinola, 2021; Olowofeso et al., 2021; Rahaman et al., 2021). That is why Meekaewkunchorn et al. (2021) believe that entrepreneurial orientation is a critical component of business growth, performance, and competitive advantage. As indicated by Maaodhah et al. (2021, p. 734), organizations with an entrepreneurial mindset are more able to quickly adapt to and influence changes in a complicated market environment, hence improving their performance and development potential. The literature indicates that entrepreneurial orientation is measured by several dimensions (Lumpkin & Dess, 1996; Lee & Peterson, 2000), but a majority of authors (Kreiser et al., 2013; Bakar & Zainol, 2015; Adegbuyi et al., 2018; Meekaewkunchorn et al., 2021) opined that entrepreneurial orientation comprises of three dimensions including innovativeness, pro-activeness and risk-taking activities.

Innovativeness is the capacity to create and implement new approaches to improve a product, technology, design, or process (NuelOkoli et al., 2021). An important part of entrepreneurial orientation is a company's ability to engage in and encourage new ideas, novelties, experimentation, and creative processes that may result in new commodities or technological processes (Herlinawati et al., 2019). Businesses that invest more time and effort in innovation are thought to do better than businesses that do not invest (Bakar & Zainol, 2015; Olowofeso et al., 2021). In today's highly competitive market, increased and ongoing product innovation is critical for success. According to Adebusuyi (1997), new ideas and inventions

should be supported even if their benefits are not immediately apparent. If the new concept succeeds, it would result in a large market share profits and propel the business to new heights. Arshad et al. (2014), Adegbuyi et al. (2018), Herlinawati et al. (2019), Garba (2020), Olowofeso et al. (2021), and NuelOkoli et al. (2021) have discovered a significant positive association between innovativeness and performance. However, Buli (2017), Shah and Ahmad (2019), Olubiyi et al. (2019), and Akinwande and Akinola (2021) indicated that innovativeness was not a major factor.

The ability to recognize and seize fresh chances is known as pro-activeness. It is a foresight trait that allows the entrepreneur to hunt for chances ahead of time in preparation for future requests (Herlinawati et al., 2019). It entails being the first to take steps to secure and protect market share (Bakar & Zainol, 2015). It is a strategy for anticipating future needs, seeking new opportunities, and participating in emerging markets (Lee & Lim, 2009). Thus, pro-activeness can be defined as the attitude of anticipating and determining future needs and expectations rather than waiting for them to arise before acting. A proactive entrepreneur keeps track of trends, forecasts changes in demand or future problems that could lead to new opportunities, and detects existing clients' future demands. Proactivity has been shown to have a major impact on performance (Arshad et al., 2014; Adegbuyi et al., 2018; Herlinawati et al., 2019; Olubiyi et al., 2019; Shah & Ahmad, 2019; Garba, 2020; Akinwande & Akinola, 2021; Olowofeso et al., 2021; NuelOkoli et al., 2021).

The tendency and willingness to invest appropriate resources to take chances or engage in business initiatives where the outcome may not be entirely understood is referred to as risk-taking (NuelOkoli et al., 2021). It is the willingness to take planned risks. This implies that SMEs will have to take on more risky ventures to be successful. Businesses incur risks to gain a larger market share and bigger profit margins. Taking on much debt, committing several resources, bringing wholly new items into new markets, and investing in new technologies are all examples of risks. Risk-taking is inherently rife with weaknesses and unknowns; as a result, businesses should proceed with caution so that the risk can yield a competitive edge and

greater market share. Risk-taking is positively connected to business performance by Arshad et al. (2014), Shah and Ahmad (2019), Akinwande and Akinola (2021), and NuelOkoli et al. (2021). On the contrary, Kreiser et al. (2013), Olubiyi et al. (2019), Herlinawati et al. (2019), and Garba (2020) found that risk-taking and performance are negatively related. Olowofeso et al. (2021) found that the association between risk-taking and performance is not cogent.

Some researchers considered whether market orientation can mediate and moderate the correlation between entrepreneurial orientation and performance. For example, Amin et al. (2016) analyzed the mediating role of market orientation concerning the effect of entrepreneurial orientation on SME success. It was estimated that market orientation significantly affects SME performance; at the same time, it mediates the influence of entrepreneurial orientation on SME performance. Furthermore, Cho and Lee (2020) examined how market orientation can mediate the relationships between learning orientation, entrepreneurial orientation, and financial performance. They found that the innovative-proactiveness dimension of entrepreneurial orientation statistically and significantly affects financial performance. However, risk-taking propensity has no effect. The customer orientation dimension of market orientation was found as a mediator for the relationship between innovative-proactiveness and financial success dimensions, whereas the competitor orientation had a limited mediating effect. Finally, Hussain et al. (2017) investigated the role of market orientation as a moderating variable in the link between entrepreneurial orientation and organizational performance. Organizational performance and entrepreneurial orientation were found to be favorably associated. The findings also revealed that market orientation plays a mitigating influence in the relationship.

Except in a few cases, the literature has established that the practical application of the two orientations individually or collectively improves performance. According to Hussain et al. (2017), studying the individual role of entrepreneurial orientation in influencing organizational performance may present an incomplete picture. Buli (2017) further stated that incorporating entrepreneurial and market orientations into SMEs' operations improves per-

formance, allowing them to thrive in complicated and economically volatile circumstances. In developing country studies, the degree of heterogeneity in the influence of both market orientation and entrepreneurial orientation on SME performance has not been a primary focus. There is a request to reassess the amount of market orientation and entrepreneurial orientation's impact on business success under varied business contexts and cultures, as observed by Rahaman et al. (2021).

2. AIM AND HYPOTHESES

Consequently, the study aims to investigate the extent to which market orientation and entrepreneurial orientation contribute to the performance of SMEs during the COVID-19 pandemic. Thus, the following hypotheses are formulated:

- H_1 : *Market orientation has a significant influence on SME performance during the COVID-19 pandemic.*
- H_{1a} : *Customer orientation has a significant influence on SME performance during the COVID-19 pandemic.*
- H_{1b} : *Competitor orientation has a significant influence on SME performance during the COVID-19 pandemic.*
- H_{1c} : *Inter-functional coordination has a significant influence on SME performance during the COVID-19 pandemic.*
- H_2 : *Entrepreneurial orientation has a significant influence on SME performance during the COVID-19 pandemic.*
- H_{2a} : *Innovativeness has a significant influence on SME performance during the COVID-19 pandemic.*
- H_{2b} : *Pro-activeness has a significant influence on SME performance during the COVID-19 pandemic.*
- H_{2c} : *Risk-taking has a significant influence on SME performance during the COVID-19 pandemic.*

3. METHODS

A survey research design was used in this study. Lagos State, Nigeria, was chosen as the study region since it is the country's economic hub. The target population consists of owners and managers of all licensed SMEs operating in the manufacturing, trading, and service sectors in Lagos State, Nigeria. According to the Lagos Ministry of Commerce, Industry, and Cooperatives, the state has 11,663 SMEs (Olubiyi, 2021). Using Karasar's (2014) formula, which is given as:

$$n = \frac{Nt^2 pq}{d^2 (N - 1)} + t^2 pq, \tag{1}$$

where n = Sample size; N= Population size; t = t value; p = Probability of the event occurring; q = Probability of the event not occurring; d = Sampling error.

$$n = \frac{11,663 (1.96)^2 0.5(0.5)}{0.05^2 (11,663 - 1)} + (1.96)^2 0.5(0.5) = 385. \tag{2}$$

Therefore, the sample size was put at 385. A sample of 385 SME owners and managers was drawn from the population. The study adopted a quota sampling technique in the selection of SME businesses based on manufacturing (20%), trading (30%), and services (50%).

The survey questionnaire was constructed using the Likert scale approach. There are four sections to the questionnaire. The demographics of the respondents and the business are covered in Section A, which is the first section. Section B is about market orientation. The measurement items of market orientation were based on three dimensions (customer orientation, competitor orientation, and inter-functional coordination) adapted from Alabsy (2021). Section C, which was derived from Lee and Lim (2009) and Meekaewkunchorn et al. (2021), addressed entrepreneurial orientation, while Section D, adapted from Alabsy (2021), measured SME performance. The principal researcher and two research assistants administered the questionnaires to the owners or managers of the SMEs. Although 385 copies of the questionnaire were administered, 328, representing 85.1%, were retrieved and analyzed.

4. RESULTS

According to the demographic analysis, more than half of the respondents (66.2%) were males. 50.6% were between the ages of 31 and 40, 29.6% were under 30, 12.2% were between the ages of 41 and 50, 5.5% were between 51 and 60, and 2.1% were 61 years and older. The bulk of businesses is in the service industry, with 48.8% in the service sector, 29.9% in the trading, and 21.3% in manufacturing. Moreover, half of the businesses (51.5%) have been in operation for less than ten years, 27.4% for 11 to 20 years, 18.3% for 21 to 30 years, and 2.7% for 31 years or more. The bulk of the businesses, 61.3%, were small businesses with fewer than 49 employees.

The result of the PLS algorithm for the structural equation model is presented in Figure 1.

Factor loadings were computed for all the items in the research questionnaire, and those with load-

ings less than 0.6 were removed from the model. Table 2 summarizes the retained items for each construct and their respective loadings.

The results of the factor loadings show that all the retained items have loadings greater than the minimum acceptable value of 0.5, suggesting that they all share significant variance with their respective construct variables. In addition, the result of the convergent validity reveals that the Average Variance Extracted (AVE) of the construct variables are all above the threshold of 0.50. Furthermore, the construct variables' Composite Reliability (CR) values are above the minimum threshold value of 0.7, implying that the items have no reliability problem.

Table 3 depicts the Fornell and Larcker (1981) criterion. The square root of the construct variables' AVE is bolded and located in the diagonal. The remaining values represent the inter-construct

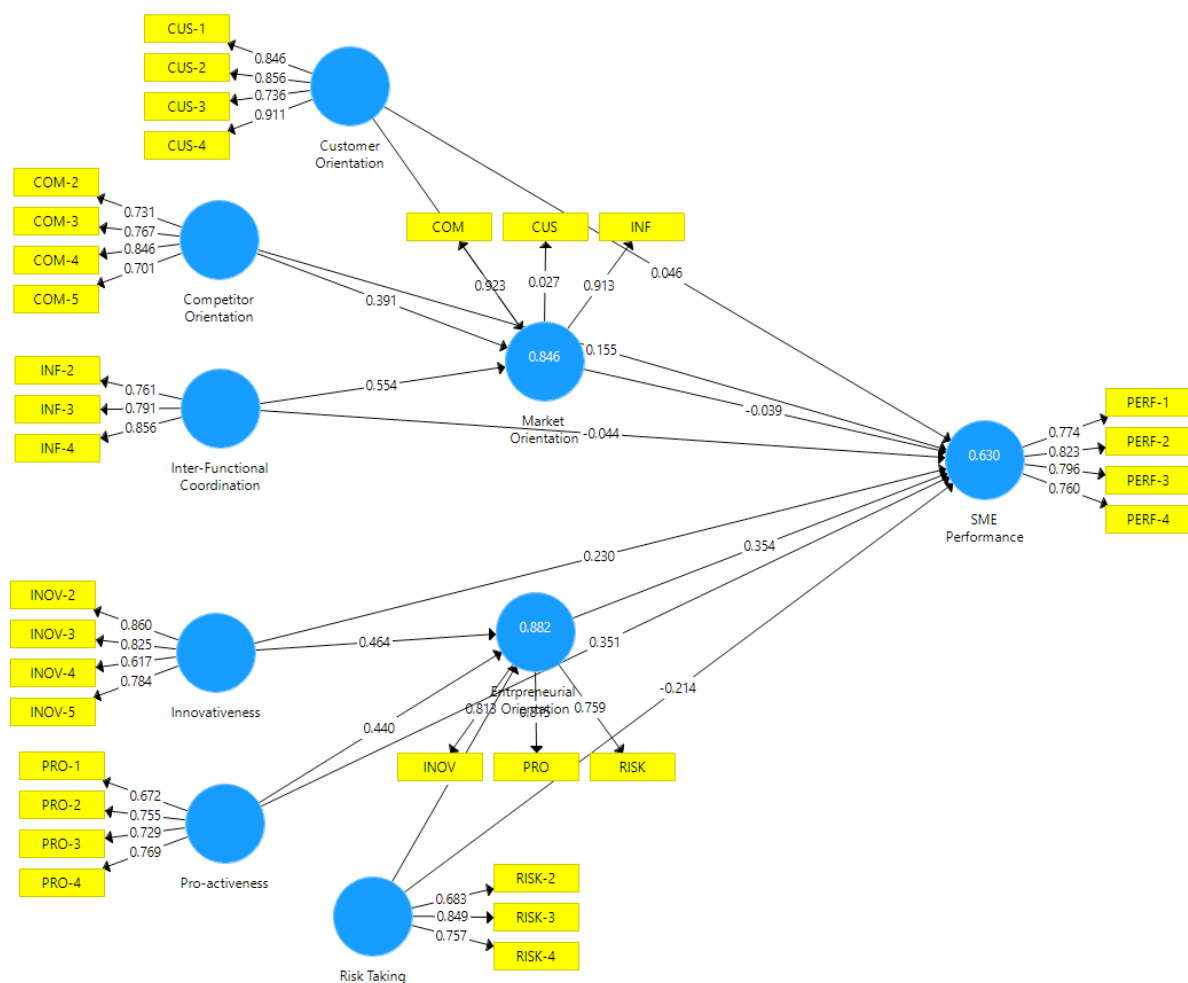


Figure 1. Structural equation model of predictors of SME performance during COVID-19

Table 1. Demographic profile of the respondents and business

Characteristics	Frequency	Percentage
Gender		
Male	217	66.2
Female	111	33.8
Age		
Below 30	97	29.6
31-40	166	50.6
41-50	40	12.2
51-60	18	5.5
61 and above	7	2.1
Sector of Business		
Manufacturing	70	21.3
Trading	98	29.9
Services	160	48.8
Age of Business		
Less than 10	169	51.5
11-20	90	27.5
21-30	60	18.3
31 and above	9	2.7
Number of Employees		
10-49	201	61.3
50-89	106	32.3
90-129	15	4.6
130-159	6	1.8

Table 2. Validity and reliability of measuring items

Second-order construct	First-order construct	Item code	Loadings	AVE	CR
Market orientation	Customer Orientation	CU-1	0.846	0.705	0.905
		CU-2	0.856	–	–
		CU-3	0.736	–	–
		CU-4	0.911	–	–
	Competitor Orientation	CO-2	0.731	0.583	0.848
		CO-3	0.767	–	–
		CO-4	0.846	–	–
		CO-5	0.701	–	–
	Inter-functional Coordination	INF-2	0.761	0.646	0.845
		INF-3	0.791	–	–
		INF-4	0.856	–	–
		INO-2	0.864	0.603	0.857
Entrepreneurial orientation	Innovativeness	INO-3	0.825	–	–
		INO-4	0.617	–	–
		INO-5	0.784	–	–
		PR-1	0.672	0.536	0.822
	Pro-activeness	PR-2	0.755	–	–
		PR-3	0.729	–	–
		PR-4	0.769	–	–
		RISK-2	0.683	0.587	0.809
	Risk-Taking	RISK-3	0.849	–	–
		RISK-4	0.757	–	–
		PER-1	0.774	0.622	0.868
		PER-2	0.823	–	–
SME Performance	PER-3	0.796	–	–	
	PER-4	0.760	–	–	

Table 3. Fornell-Larcker criterion

Construct	Customer orientation	Competitor orientation	Inter-Functional coordination	Innovativeness	Pro-activeness	Risk-taking
Customer orientation	0.840	–	–	–	–	–
Competitor orientation	0.012	0.763	–	–	–	–
Inter-Functional coordination	0.002	0.687	0.804	–	–	–
Innovativeness	0.054	0.264	0.211	0.777	–	–
Pro-activeness	0.081	0.335	0.216	0.618	0.732	–
Risk-taking	0.014	0.496	0.418	0.469	0.444	0.766

Table 4. Item cross-loadings

Item Code	Items	CUS	COM	INF	INOV	PRO	RISK	PERF
CU-1	Since COVID-19, our customers have been satisfied with the pricing of our products	0.846	0.032	0.007	0.061	0.085	0.038	0.098
CU-2	Since COVID-19, our customers have been satisfied with the quality of our products	0.856	0.045	0.038	–0.004	0.049	–0.014	0.066
CU-3	Since COVID-19, the business rarely receives complaints from our customers	0.736	–0.054	–0.020	0.055	0.035	–0.008	0.044
CU-4	The business serves a lot of previous customers	0.911	–0.006	–0.022	0.068	0.088	0.017	0.109
CO-2	Since COVID-19, the business has regularly analyzed competitive strategies for our primary competitors	0.006	0.731	0.703	0.330	0.241	0.539	0.315
CO-3	Our business targets customers and customer groups where we can develop a competitive advantage	0.015	0.767	0.726	0.114	0.236	0.227	0.104
CO-4	Our business carries out benchmarking towards main competitors	0.027	0.846	0.709	0.124	0.276	0.332	0.19
CO-5	Our sales force shares competitor information	–0.016	0.701	0.453	0.235	0.273	0.404	0.275
INF-2	In general, employees are proud of working in our business	–0.003	0.675	0.761	0.312	0.178	0.510	0.279
INF-3	Since COVID-19, employees have worked beyond their duties to ensure the success of the business	–0.015	0.637	0.791	0.074	0.102	0.159	0.017
INF-4	The relations between the business and its employees are strong	0.02	0.614	0.856	0.111	0.229	0.314	0.166
INO-2	Since COVID-19, we seek out new ways to do things	0.045	0.254	0.196	0.860	0.406	0.430	0.510
INO-3	In my business, there exists a firm emphasis on R&D and innovations	0.001	0.294	0.25	0.825	0.508	0.372	0.533
INO-4	My business favor experimentation and original approaches to problem-solving	0.132	0.043	0.071	0.617	0.468	0.320	0.468
INO-5	I try my unique way of doing things rather than doing it as everyone else does	0.005	0.201	0.121	0.784	0.537	0.330	0.548
PR-1	My business typically initiates action to which the competition then responds	0.073	0.308	0.215	0.474	0.672	0.277	0.433
PR-2	My business excels at identifying opportunities	0.02	0.175	0.098	0.472	0.755	0.335	0.452
PR-3	My business acts in anticipation of future problems, needs, or changes	0.100	0.321	0.256	0.390	0.729	0.349	0.621
PR-4	In the business, we monitor trends in the environment to take specific steps	0.041	0.175	0.06	0.482	0.769	0.333	0.588
RISK-2	My business is quick in decision making on new ideas and product improvements	–0.014	0.463	0.377	0.200	0.270	0.683	0.216
RISK-3	Owing to the nature of the environment, wide-range strategies are necessary to achieve the business's objectives	0.010	0.396	0.352	0.415	0.366	0.849	0.234
RISK-4	We take bold actions by venturing into the unknown	0.031	0.296	0.243	0.439	0.373	0.757	0.257
PER-1	Sales of the business have increased since COVID-19	0.077	0.210	0.117	0.614	0.538	0.365	0.774
PER-2	Return on investment (ROI) has increased since COVID-19	0.084	0.236	0.139	0.486	0.584	0.224	0.823
PER-3	Return on assets (ROA) has increased since COVID-19	0.048	0.237	0.176	0.463	0.568	0.172	0.796
PER-4	The profit of the business has increased since COVID-19	0.108	0.235	0.207	0.374	0.596	0.199	0.760

correlations among the variables. None of the inter-construct correlations is greater than the square root of the AVEs, thus satisfying the condition for discriminant validity.

According to Chin (1998), the cross-loading criterion for discriminant validity requires that all the loadings be higher on their individual constructs than on their corresponding constructs. Results from Table 4 suggest that this condition is satisfied by the indicator items of the construct variables.

The HTMT ratios of the construct variables, as indicated in Table 5, are all below 1. This implies that all the variables satisfy the HTMT condition for discriminant validity.

The R-squared value is used to establish the model fit and specify the predictive power of the variables in the formative model. The results in Table 6 reveal that all the first-order constructs variables strongly account for the variations in their respective second-order constructs (Market Orientation, $R^2 = 0.846$ and Entrepreneurial Orientation, $R^2 = 0.882$). In addition, the second-order constructs variables show an excellent predictive power on the endogenous variable (SME performance, $R^2 = 0.630$).

To show the significance of the relationships among the constructs and test the research hypotheses, bootstrapping was conducted on the PLS-SEM. The estimates, t-statistics, and p-values are depicted in Tables 7 and 8.

The relationship results in Table 7 show that all the weights of the first-order constructs are significant on their respective second-order construct ($p < 0.05$), except that of ‘Customer Orientation’, which has a non-significant p-value of 0.581. This suggests that only ‘Entrepreneurial Orientation’ has significant dimensions between the two second-order constructs. Furthermore, ‘Inter-Functional Coordination’ has the highest weight among the three dimensions of ‘Market Orientation’ (beta = 0.554), while ‘Innovativeness’ has the highest weight among the three dimensions of ‘Entrepreneurial Orientation’ (beta = 0.464).

The results of the hypotheses testing in Table 8 reveal that the regression coefficients of customer orientation, competitor orientation and inter-functional coordination (beta = 0.046, 0.155, and -0.044) are not significant at the 5% statistical level ($p = 0.215, 0.056, \text{ and } 0.657$). This implies that none of the dimensions of market orientation exerts a significant

Table 5. Heterotrait-Monotrait (HTMT) ratios

Construct	Customer orientation	Competitor orientation	Inter-Functional coordination	Innovativeness	Pro-activeness	Risk-taking
Customer orientation	–	–	–	–	–	–
Competitor orientation	0.061	–	–	–	–	–
Inter-Functional coordination	0.040	0.910	–	–	–	–
Innovativeness	0.087	0.352	0.283	–	–	–
Pro-activeness	0.101	0.457	0.298	0.842	–	–
Risk-taking	0.050	0.716	0.607	0.653	0.648	–

Table 6. R-Square

Constructs	R Square	R Square Adjusted
Market Orientation	0.846	0.845
Entrepreneurial Orientation	0.882	0.881
SME_Performance	0.630	0.621

Table 7. Relationships of the first order constructs with their second-order constructs

Second-order construct	First-order construct	Estimates	T statistics	P-values
Market Orientation	Customer Orientation	0.042	0.552	0.581
	Competitor Orientation	0.391	10.828	0.000
	Inter-Functional Coordination	0.554	14.63	0.000
Entrepreneurial Orientation	Innovativeness	0.464	16.692	0.000
	Pro-activeness	0.440	15.932	0.000
	Risk-Taking	0.212	8.288	0.000

Table 8. Hypotheses testing

Hypothesized path	Beta	T-statistics	P-values	Decision
Customer Orientation → SME Performance	0.046	1.242	0.215	Not Supported
Competitor Orientation → SME Performance	0.155	1.914	0.056	Not Supported
Inter-Functional Coordination_ → SME Performance	-0.044	0.444	0.657	Not Supported
Market_ Orientation → SME Performance	-0.039	0.382	0.703	Not Supported
Innovativeness → SME Performance	0.230	3.079	0.002	Supported
Pro-activeness → SME Performance	0.351	6.091	0.000	Supported
Risk Taking → SME Performance	-0.214	4.008	0.000	Supported
Entrepreneurial Orientation → SME Performance	0.354	3.602	0.000	Supported

impact on SME performance. Moreover, the coefficient of the hypothesized path between market orientation and SME performance is negative (beta = -0.039) and non-significant at the 5% level (p = 0.703). This suggests an inverse but non-significant link between market orientation and SME performance in the COVID-19 era. These findings are at variance with Shehu and Mahmood (2014), Asomaning and Abdulai (2015), Aminu (2016), Buli (2017), Maaodhah et al. (2021), Alabsy (2021), and Rahaman et al. (2021). They found that market orientation has a significant positive relationship with performance. However, the results support the results of Acar and Ozşahin (2018) that customer orientation has no significant influence on performance. Thus, *H1*, *H1a*, *H1b* and *H1c* were not supported.

Further results from Table 8 show that at the 5% statistical level, there exist a significant and direct relationship between innovativeness and SME performance (beta = 0.23 and p = 0.002); a significant and direct relationship between pro-activeness and SME performance (beta = 0.351 and p = 0.00), and a significant but inverse relationship between risk-taking' and SME performance (beta = -0.214 and p = 0.00). This means that all the dimensions of entrepreneurial orientation significantly influence SME performance. The finding that innovativeness has a significant influence on SME performance corroborates Arshad et al. (2014), Adegbuyi et al. (2018), Herlinawati et al. (2019), Garba (2020), Olowofeso et al. (2021), and NuelOkoli

et al. (2021). However, it contradicts Buli (2017), Shah and Ahmad (2019), Olubiyi et al. (2019), and Akinwande and Akinola (2021). Similarly, the finding that risk-taking has a significant negative influence on SME performance aligns with the results of Kreiser et al. (2013), Olubiyi et al. (2019), Herlinawati et al. (2019), and Garba (2020). On the contrary, it contradicts Arshad et al. (2014), Shah and Ahmad (2019), Akinwande and Akinola (2021), and NuelOkoli et al. (2021) that risk-taking is positively related to performance. In addition, in the study of Olowofeso et al. (2021), risk-taking was insignificant. The finding that pro-activeness significantly influences SME performance supports the results of previous studies (Arshad et al., 2014; Buli, 2017; Adegbuyi et al., 2018; Herlinawati et al., 2019; Olubiyi et al., 2019; Shah & Ahmad, 2019; Garba, 2020; Akinwande & Akinola, 2021; Olowofeso et al., 2021; NuelOkoli et al., 2021). Similarly, the coefficient of the hypothesized path between 'Entrepreneurial Orientation' and 'SME Performance' is positive (beta = 0.354) and significant at the 5% level (p = 0.00). This suggests that entrepreneurial orientation significantly and directly influences SME performance in the COVID-19 era. These findings agree with previous findings (Shah & Ahmad, 2019; Herlinawati et al., 2019; Oyeku & Oduyoye, 2020; Akinwande & Akinola, 2021; Olowofeso et al., 2021; Rahaman et al., 2021) that entrepreneurial orientation significantly influence performance. Hence, *H2*, *H2a*, *H2b*, and *H2c* were supported.

CONCLUSION

The purpose of this study was to examine the extent to which market orientation and entrepreneurial orientation influenced SMEs' performance during the COVID-19 pandemic. The findings show that entrepreneurial orientation and its aspects (innovativeness, pro-activeness, and risk-taking) have a considerable impact on the success of SMEs. Moreover, it was revealed that SMEs in Nigeria used entrepreneurial orientation rather than market orientation to overcome the obstacles of the COVID-19 outbreak.

According to this study, SMEs owners and managers should be innovative. They should experiment with fresh ideas, novelties, and creative processes to develop new products and technological processes. Moreover, they should be proactive by anticipating future needs or changes in the corporate environment and looking for possibilities ahead of time. Last but not least, they must take reasonable risks.

This paper provided insights into the variables that can sustain the performance of SMEs in a challenging business environment. This will enable SME owners, managers, and policymakers to create enduring businesses.

AUTHOR CONTRIBUTIONS

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REFERENCES

1. Acar, A. Z., & Ozşahin, M. (2018). The relationship among strategic orientations, organizational innovativeness and business performance. *International Journal of Innovation Management*, 22(1), 1-27. <https://doi.org/10.1142/S1363919618500093>
2. Adams, K. O. (2019). Nigeria's economy challenges: Causes and way forward. *IOSR Journal of Economics and Finance*, 10(2), 78-82. Retrieved from <https://www.iosrjournals.org/iosr-jef/papers/Vol10-Issue2/Series-1/I1002017882.pdf>
3. Adebusuyi, B. S. (1997). Performance evaluation of small-medium enterprises (SMEs) in Nigeria. *Bullion*, 21(4), 66-72. Retrieved from <https://dc.cbn.gov.ng/bullion/vol21/iss4/6/>
4. Adegbuyi, A. A., Oladele, O. P., Iyiola, O. O., Adegbuyi, O. A., Ogunnaike, O. O., Ibiidunni, A. S., & Fadeyi, O. I. (2018). Assessing the influence of entrepreneurial orientation on small and medium enterprises' performance. *International Journal of Entrepreneurship*, 22(4), 1-7. Retrieved from <https://www.abacademies.org/articles/assessing-the-influence-of-entrepreneurial-orientation-on-small-and-medium-enterprises-performance-7683.html>
5. Akinwande, A., & Akinola, M. (2021). Entrepreneurial orientation and performance of small and medium scale enterprises (SMEs) in Ikeja, Lagos State, Nigeria. *Acta Universitatis Danubius*, 17(2), 36-51. Retrieved from <https://dj.univ-danubius.ro/index.php/AUDOE/article/view/835>
6. Alabsy, N. M. (2021). Market orientation and corporate performance of small and medium-sized enterprises in Saudi Arabia. *Innovative Marketing*, 17(1), 66-77. [http://dx.doi.org/10.21511/im.17\(1\).2021.06](http://dx.doi.org/10.21511/im.17(1).2021.06)
7. Amin, M., Thurasamy, R., Aldakhil, A. M., & Kaswuri, A. H. (2016). The effect of market orientation as a mediating variable in the relationship between entrepreneurial orientation and SMEs performance. *Nankai Business Review International*, 7(1), 39-59. <https://doi.org/10.1108/NBRI-08-2015-0019>
8. Aminu, S. A. (2016). Market orientation and small and medium enterprises performance

- in Nigeria: A review. *Ilorin Journal of Marketing*, 3(1), 122-132. Retrieved from https://www.academia.edu/37196594/Market_orientation_and_small_and_medium_enterprises_SMEs_performance_in_Nigeria_A_review
9. Arshad, A. S., Rasli, A., Arshad, A. A., & Zain, Z. M. (2014). The impact of entrepreneurial orientation on business performance: A study of technology-based SMEs in Malaysia. *Procedia - Social and Behavioral Sciences*, 130, 46-53. <https://doi.org/10.1016/J.SB-SPRO.2014.04.006>
 10. Asomaning, R., & Abdulai, A. (2015). An empirical evidence of the market orientation – market performance relationship in Ghanaian small businesses. *Educational Research International*, 4(2), 69-86. Retrieved from https://www.academia.edu/40633017/An_Empirical_Evidence_of_the_Market_Orientation_Market_Performance_Relationship_in_Ghanaian_Small_Businesses
 11. Ayodele, J. C. (2018). Empirical analysis of survival and growth of Small and Medium Scale business in developing economy: The case of Nigeria. *Sumerianz Journal of Business Management and Marketing*, 1(1), 26-32. Retrieved from [https://www.sumerianz.com/pdf-files/sjbmm1\(1\)26-32.pdf](https://www.sumerianz.com/pdf-files/sjbmm1(1)26-32.pdf)
 12. Bakar, L. A., & Zainol, F. A. (2015). Vision, innovation, pro-activeness, risk-taking and SMEs performance: A proposed hypothetical relationship in Nigeria. *International Journal of Academic Research in Economics and Management Sciences*, 4(2), 45-53. <https://doi.org/10.6007/IJA-REMS/V4-I2/1665>
 13. Buli, B. M. (2017). Entrepreneurial orientation, market orientation and performance of SMEs in the manufacturing industry: Evidence from Ethiopian enterprises. *Management Research Review*, 40(3), 292-309. <https://doi.org/10.1108/MRR-07-2016-0173>
 14. Chin, W. W. (1998). The partial least squares approach to structural equation modelling. In G. A. Marcoulides (Ed.), *Modern Methods for Business Research* (pp. 295-336). Mahwah, NJ: Erlbaum.
 15. Cho, Y. H., & Lee, J. H. (2020). A study on the effects of entrepreneurial orientation and learning orientation on financial performance: Focusing on mediating effects of market orientation. *Sustainability*, 12(11), 4594. <https://doi.org/10.3390/su12114594>
 16. Edwin, A. (2019). *Why SMEs fail and its impact on national development*. Lbs Insight. Retrieved from <https://www.lbs.edu.ng/lbsinsight/why-smes-fail-and-its-impact-on-national-development/>
 17. Fornell, C. G., & Larcker, D. F. (1981). Evaluating structural equation models with unobservable variables and measurement error. *Journal of Marketing Research*, 18(1), 39-50. <https://doi.org/10.2307/3151312>
 18. Garba, A. (2020). Effect of entrepreneurial orientation on the performance of Small and Medium Scale Enterprises (SMEs) in selected North Central Nigeria. *Journal of Research in Business and Management*, 8(7), 43-49. Retrieved from <http://www.questjournals.org/jrbm/papers/vol8-issue7/E08074349.pdf>
 19. Herlinawati, E., Suryana, E., Ahman, E., & Machmud, A. (2019). The effect of entrepreneurial orientation on SMEs business performance in Indonesia. *Journal of Entrepreneurship Education*, 22(5), 1-15. Retrieved from <https://www.abacademies.org/articles/The-effect-of-entrepreneurial-orientation-on-1528-2651-22-5-461.pdf>
 20. Hussain, J., Abbas, Q., & Khan, M.A. (2017). Entrepreneurial orientation and performance: The moderating effect of market orientation. *GMJACS*, 7(1), 9-18.
 21. Kale, Y. (2017). *National survey of micro, small, and medium enterprises (MSMEs)*. SMEDAN and National Bureau of Statistics. Retrieved from <https://nigerianstat.gov.ng/elibrary/read/966#>
 22. Karasar, N. (2014). *Scientific Research Methods*. Ankara: Nobel.
 23. Kiyabo, K., & Isaga, N. (2020). Entrepreneurial orientation, competitive advantage, and SMEs' performance: Application of firm growth and personal wealth measures. *Journal of Innovation and Entrepreneurship*, 9(12), 1-15. <https://doi.org/10.1186/s13731-020-00123-7>
 24. Kreiser, P. M., Marino, L. D., Kuratko, D. F., & Weaver, M. K. (2013). Disaggregating entrepreneurial orientation: The non-linear impact of innovativeness, pro-activeness and risk-taking on SME performance. *Small Business Economics*, 40(2), 273-291. <https://doi.org/10.1007/s1187-012-9460-x>
 25. Lee, S. M., & Lim, S. (2009). Entrepreneurial orientation and the performance of service business. *Service Business*, 3, 1-13. <https://doi.org/10.1007/s11628-008-0051-5>
 26. Lee, S. M., & Peterson, S. J. (2000). Culture, entrepreneurial orientation and global competitiveness. *Journal of World Business*, 35(4), 401-416. [https://doi.org/10.1016/S1090-9516\(00\)00045-6](https://doi.org/10.1016/S1090-9516(00)00045-6)
 27. Liberto, D. (2021). Small and mid-size enterprise (SME). In J. Berry-Johnson & S. Kvilhaug (Eds.), *Investopedia*. Retrieved from <https://www.investopedia.com/terms/s/smallandmidsizeenterprises.asp>
 28. Lumpkin, G. T., & Dess, G. G. (1996). Clarify the entrepreneurial orientation construct and linking it to performance. *Academy of Management Review*, 21(1), 135-172. <https://doi.org/10.5465/AMR.1996.9602161568>
 29. Maaodhah, A. S., Singh, H., Al-Juboori, Z. M., Pitchy, A. L., & Ekene, I. (2021). The impact of market orientation and entrepreneurial orientation on firm performance of wholesale and retailer SMEs in Malaysia. *International Journal of Academic Research in Business and Social Sciences*, 11(6), 729-743. <http://dx.doi.org/10.6007/IJARBS/v11-i6/10019>

30. Meekaewkunchorn, N., Szczepańska-Woszczyna K., Muangmee, C., Kassakorn, N., & Khalid, B. (2021). Entrepreneurial orientation and SME performance: The mediating role of learning orientation. *Economics & Sociology*, 14(2), 294-312. <https://doi.org/10.14254/2071-789X.2021/14-2/16>
31. Narver, J. C., & Slater, S. F. (1990). The effect of a market orientation on business profitability. *Journal of Marketing*, 54(4), 20-35. Retrieved from https://www.academia.edu/18234506/The_Effect_of_a_Market_Orientation_on_Business_Profitability
32. NuelOkoli, I. E., Nwosu, K. C., & Okechukwu, M. E. (2021). Entrepreneurial orientation and performance of selected SMEs in Southeast, Nigeria. *European Journal of Business and Management Research*, 6(4), 108-115. <https://doi.org/10.24018/ejbmr.2021.6.4.946>
33. Olowofeso, E., Ojo, O. J., & Ajayi, M. O. (2021). Influence of entrepreneurial orientation on the profitability of real estate firms in South West, Nigeria. *Journal of Management and Economic Studies*, 3(1), 16-27. <https://doi.org/10.26677/TR1010.2021.722>
34. Olubiyi, T. (2021, February 28). *Key to SME growth in Lagos State*. TheCable. Retrieved from <https://www.thecable.ng/key-to-sme-growth-in-lagos-state>
35. Olubiyi, T. O., Egwakhe, A. J., Amos, B., & Ajayi, A. A. (2019). Entrepreneurial orientation and firm profitability: Evidence from Lagos State Nigeria. *IOSR Journal of Business and Management*, 21(6), 42-54. Retrieved from <https://www.iosrjournals.org/iosr-jbm/papers/Vol21-issue6/Series-2/F2106024254.pdf>
36. Oyeku, O. M., & Oduyoye, O. (2020). Effect of entrepreneurial orientation, entrepreneurial self efficacy and environmental uncertainty on entrepreneurial success. *International Journal of Small Business and Entrepreneurship Research*, 8(4), 34-67. Retrieved from <https://www.eajournals.org/wp-content/uploads/Effect-of-Entrepreneurial-Orientation-Entrepreneurial-Self-Efficacy-and-Environmental-Uncertainty-on-Entrepreneurial-Success.pdf>
37. Oyelaran-Oyeyinka, B. (2020). *Financial system strategy 2020* (Presentation). FSS 2020 International Conference. SME: Issues, Challenges and Prospects. Retrieved from https://www.cbn.gov.ng/fss/wed/SME_Issues,%20Challenges%20and%20Prospects_Oyeyinka%20Banji.pdf
38. Rahaman, M. A., Luna, K. F., Mite, S., Islam, M., & Wafik, H. M. (2021). The effect of entrepreneurial orientation, market orientation and gender on business performance: An empirical study of SMEs in Bangladesh. *The Journal of Asian Finance, Economics and Business*, 8(6), 741-746. <https://doi.org/10.13106/jafeb.2021.vol8.no6.0741>
39. Sebastian, L. (2016). Determinants of organization performance: Evidence from Romanian listed companies. *Review of Economic and Business Studies*, 9(1), 53-69. Retrieved from <http://rebs.feaa.uaic.ro/articles/pdfs/200.pdf>
40. Shah, S. Z., & Ahmad, M. (2019). Entrepreneurial orientation and performance of small and medium-sized enterprises: Mediating effects of differentiation strategy. *Competitiveness Review*, 29(5), 551-572. <https://doi.org/10.1108/cr-06-2018-0038>
41. Shehu, A. M., & Mahmood, R. (2014). An empirical analysis of market orientation and business performance relationship in the context of developing economy. *International Journal of Academic Research in Business and Social Sciences*, 4(9), 457-470. Retrieved from https://hrmars.com/papers_submitted/1151/An_Empirical_Analysis_of_Market_Orientation_and_Business_Performance_Relationship_in_The_Context_of_Developing_Economy2.pdf
42. Small and Medium Enterprises Development Agency of Nigeria (SMEDAN). (2010). *Annual report*. Retrieved from <https://smedan.gov.ng/images/PDF/smedan-2010-annual-report.pdf>
43. Tumber, M. (2020). Market orientation and business success of Small and Medium Scale Enterprises in Port Harcourt. *International Academy Journal of Management, Marketing and Entrepreneurial Studies*, 8(1), 88-100. Retrieved from <http://www.arcnjournals.org/images/ASA-IAJMMS-8-1-8.pdf>