
1 Caroline Aturu-Aghedo - 2 Maurice Aghedo

1Department of Business Administration, Faculty of Management Sciences, National Open University of Nigeria (NOUN), Abuja

2Department of Business Administration, Chrisland University, Abeokuta

Correspondence: caturu-aghedo@noun.edu.ng

Abstract
The global outbreak of COVID-19, commonly referred to as the coronavirus, has profoundly influenced enterprise operations and consumer behaviors. The pandemic’s rapid spread has resulted in immediate socioeconomic repercussions for both industrialized and developing nations. This research explores the impact of the COVID-19 pandemic on enterprise performance within the portable electronic devices sector, focusing on businesses in Computer Village at Ikeja, Lagos. The resource-based theory, behavioral and psychological theory, and strategic adaptation perspective served as the study’s conceptual framework. Descriptive survey research design was used in this study. Data was collected through administering close-ended structured questionnaires. 356 MSMES owners, traders and other stakeholders were drawn through multi-stage sampling technique. Exploratory factor analysis using principal component with varimax rotation, with four factors, which account for 52.438% of total variance and the communalities was used to assess the validity of the scales used for this study. Cronbach’s alpha coefficient reliability of the factors were established: enterprise performance of small businesses (.928), access to innovative assets (.819), entrepreneur’s psychological wellbeing (.781), and available resources (.253) were established. Descriptive statistics and regression analysis were used to analyze the data. The findings revealed that enterprise performance is significantly related to access to innovative assets ($\beta = .406, t = 2.229, p = .027; \rho = .605^{**}$), psychological wellbeing ($\beta = .223, t = 2.740, p = .027; \rho = .467^{**}$), available resources ($\beta = .004, t = 2.740, p = .027; \rho = .172^{**}$) and entrepreneurial eco-system ($\beta = -.030, t = 2.740, p = .027; \rho = .112^{*}$) during the Covid-19 pandemic. It is recommended that SME practitioners should consider implementing innovations to enhance their competitiveness, especially innovations with higher novelty that are new to the market, industry, country, and government needs to promote and support research that leads to the creation of new knowledge critical for innovation.

Keywords: Small-scale business, Crisis (Covid-19 pandemics), Enterprise performance, Response strategies, Business resilience, Embeddedness, Livelihood, Nigeria.
1- Introduction

Regardless of a country's distance, COVID-19 exerted its influence globally, catching everyone off guard. Companies faced heightened pressure to meet their objectives during the pandemic, particularly due to a lack of contingency planning. The business impact was substantial, as many were unprepared for the epidemic's consequences. The rapid spread of the virus had immediate socioeconomic repercussions in both developed and developing nations. In response, numerous countries enforced stringent lockdown measures in the first half of 2020 to contain the COVID-19 pandemic and safeguard vulnerable populations. Consequently, the global economy experienced a sharp contraction. While the implementation of lockdowns significantly contributed to the recession, voluntary social withdrawal in response to rising infections also played a noteworthy role. These circumstances compelled a majority of small and medium-sized enterprises (SMEs) to embrace innovation.

Due to their creativity and readiness to respond in the face of dangerous crises like the COVID-19 epidemic, entrepreneurs have a significant role in society (Linan & Jaen, 2020). In a society where budding entrepreneurs endeavoured to tackle recognized challenges by establishing profitable enterprises, the concept of entrepreneurship took root (Sengupta et al., 2018). Profitability and addressing a social issue are the two objectives of social entrepreneurship (Bacq et al., 2020). Therefore, it is appropriate to use entrepreneurship as a tactic to solve the COVID-19 conundrum and open up new markets for companies operating in a variety of industries.

For instance, individuals pioneering in the education sector could benefit by developing novel instructional methods amid the pandemic. Under COVID-19, business operations were significantly affected by lockdowns and movement control orders (Ionescu & Tarnawa, 2020). Lockdowns significantly impacted people's access to capital and financial capacity, resulting in a worsening of the wealth disparity in society (Perveen et al., 2021). Entrepreneurs need to employ innovation in order to explore business opportunities. Entrepreneurial action's centrality is "fundamental to the study of entrepreneurship (Lerner et al., 2018). With the exception of a few success stories, it is unclear how business owners have planned and reduced their risks in light of the COVID-19 scenario around the world.
Movement limitations impede economic activity and the distribution of resources across sectors and within countries, which may be hampered by greater transaction costs, potential cross-country trade barriers, currency disputes, and other issues. This might make economic misallocation worse and hinder the expansion of total production. It is crucial to know the magnitude of the shock's impact, how it was dispersed, the adjustment mechanisms companies choose, and the uncertainty generated in order to comprehend these reallocation channels and develop better policies that can help lessen the impact of the shock and support recovery. The risk that entrepreneurship will end or be significantly reduced has increased as a result of the current business climate, which has exacerbated failure anxiety. The entrepreneurial projects find it difficult to grow and maintain their operations. It is unlikely that existing business models will be converted to digital ones. The epidemic has made it harder for business owners to think about changing the current structure because of a lack of resources and capacity.

According to the Global Economic Outlook report of (2020) by the World Bank, the COVID-19 recession experienced the swiftest deceleration in economic growth compared to all previous global recessions. It hurts aspiring business owners, especially those from poor nations like Nigeria where there is little government backing. The main variables affecting entrepreneurial activity, and more specifically, the necessity for entrepreneurs to scale-up their businesses amid the epidemic, were lockdowns and minute control orders by authorities. Low demand and market stagnation brought on by the epidemic have made it harder for entrepreneurs to move on with their start-up projects. The current business climate has increased failure anxiety by increasing the likelihood that entrepreneurship will end or be severely curtailed. Fear has been recognized as a pivotal factor constraining entrepreneurial activity among aspiring and emerging business owners (Li 2011; Morgan & Sisak, 2016).

Previous research by Harel et al. (2020) focused on encouraging innovation in small businesses in industry sectors revealed that small businesses that implemented processes for exchanging and using knowledge referred to as "sharing processes". Processes aimed at cultivating an innovation culture that fosters creativity is referred to as "cultural processes" (Harel et al., 2020). In past studies on small businesses, a direct link was found between innovation and business performance and growth. Developing countries like Nigeria have very little empirical research linking
innovation and corporate competitiveness despite the increasing focus on innovation. To understand the consequences of the Covid-19-induced lock down on Pakistan's small and medium-sized businesses. Shafi et al. (2020) carried out a descriptive study and found that majority of business owners were unprepared for the situation when lock down was unexpectedly declared. They both lacked a plan of action for how to handle the situation. The survey also identified those business owners who were struggling financially as a result of a decline in sales and profits. They had to deal with falling demand, problems in the supply chain, and high transportation costs. Businesses use a variety of tactics to promote the development of entrepreneurs. Additionally, innovation-mediated collaboration between suppliers, customers, and competing companies promotes the long-term growth of commercial organizations. However, when all business stakeholders are in danger during emergency situations like lockdown and social isolation brought on by Covid-19, such cooperation becomes difficult or impossible to such an extent.

The entrepreneurial projects struggle to expand and sustain their activities. The likelihood of converting old company models to digital ones is minimal. Due to a lack of resources and capability brought on by the epidemic, it has become even more challenging for business owners to consider changing the current structure. According to the World Bank, the COVID-19 recession will be the worst since World War II and will erect additional obstacles for business owners across all industries. Independent of whether they exist in a developed or developing country, entrepreneurial activities will see a decreasing trend because the economic repercussions would remain longer. However, in emerging economies, companies may be more resilient to external shocks (Dahles & Susilowati, 2015; Nasar et al., 2018). Entrepreneurs have to take a number of steps at this crucial period to seek financial support, alter business models, transition to digitalization, and other things. The pandemic has created new opportunities for study to determine support mechanisms for maintaining entrepreneurial activity in the face of pandemics. This study focuses on the challenges encountered by business owners in Nigeria amid the COVID-19 pandemic. Nigerian business proprietors stand to gain insights into pandemic-adaptive business protocols. The impetus for this study arises from the ongoing epidemic, which has impacted businesses of all sizes, from micro to large-scale enterprises. Entrepreneurs, navigating these challenging circumstances, have pivoted their business strategies, embracing digitization and other
measures. This presents an opportune moment to explore strategies for sustaining entrepreneurial endeavors in the midst of pandemics.

1.1 Objectives of the study

In order to understand how the COVID-19 pandemic response strategies affected SMEs in Lagos, Nigeria, this study examined their operational performance. The primary goal of this study is to evaluate how small companies fared during the COVID-19 pandemic in Lagos State, Nigeria. Although this study's explicit goals are to:

i. examine the various covid-19 response strategies among SMEs in Lagos state.

ii. determine the extent of implementation of covid-19 response strategies among SMEs in the study area.

iii. assess the effects of covid-19 response strategies on the performance of SMEs in Lagos state; and

iv. analyze the challenges confronting implementation of covid-19 response strategies among SMEs in Lagos state.

1.2 Scope of the Study

The aim of the study is to investigate the economic performance of MSMSEs during the COVID-19 pandemics. The study must prioritize middle and small SME owners in the computer village in particular. In the analysis, descriptive statistics and correlation analysis were employed as two of the analytical techniques.

2 Literature review

2.1 Performance of small and medium-sized enterprises (SMES)

In accounting, the term "performance" is used. According to Kothari and Barone (2006), performance is the relationship between an organization's income statement's revenue and outgoing costs. Studies have shown that the performance was a success (Walker & Brown, 2004). Performance evaluation in the literature can be done using either subjective or objective standards.
Two of the objective performance metrics that are frequently employed in studies of SMEs are profit and total sales (e.g., Garg, Mittal, & Goyal, 2005; Arbuthnot, Sisler, & Slama, 1993; Craig, Martin, & Horridge, 1997). Total sales are often viewed as a trustworthy predictor of overall success, especially in samples that are reasonably homogeneous or within the same industry (Kent, 1994; Haber & Reichel, 2005). This is because making a profit is frequently cited as the main corporate purpose.

Although some researchers (Berthon et al., 2008) referred to objective data as sensitive, proprietary information and challenging to get from the respondents, it would appear to be the most straightforward technique to assess performance (Haber & Reichel, 2005). Because it can be challenging to obtain objective data or because it can be time-consuming, some studies (e.g., O'Regan & Ghobadian, 2004; Durham & Littrell, 2000; Walker & Brown, 2004) choose to employ subjective measures (Allen & Helms, 2006). However, because they are subjective and based on the owner's viewpoint, subjective measurements of performance raise the risk of measurement bias and inaccuracy (Kotey, 2005). Therefore, the goal of performance assessment may be more significant if researchers restrict themselves to a certain industry (as in the current study) (Allen & Helms, 2006). The lowest definition of company performance was used in this study, hence objective performance was chosen.

According to Anchez & Anchez-Mar (2005), it is challenging to evaluate a company's success. Look at the company's earnings, ROI, and sales volume for the quickest answer. According to Sarwoko et al. (2013), a company's performance can also be determined by its profit, capital turnover, market share retained under control, and sales volume. Three measures are used by Li et al. (2005) to evaluate performance, with an emphasis on how businesses can increase productivity, promote growth, and optimize profits. Performance measurement is often referred to as qualitative measurement. A specific scale that is usually referred to as a performance indicator is used for this measurement. Aragon & Anchez (2005) claim that this measurement uses a special scale that accounts for elements such corporate environmental responsibility, the ability to create creative products and processes, the ability to operate in a team, and business skill and experience. Three factors, the market, productivity, and profit are crucial for determining how well small and medium-sized enterprises are performing (Lee & Tsang, 2001).
2.2 COVID-19 Pandemic Response Strategies

Business operations as well as consumer patterns and behavior have been significantly impacted by the COVID-19 pandemic, also known as the coronavirus. Because of the virus' quick spread, the pandemic, which has immediate socioeconomic impacts on both industrialized and developing nations, has become the new norm. The COVID-19 recession experienced the fastest drop in economic growth among all worldwide recessions, claims the World Bank's worldwide Economic Outlook (2020) report. It hurts aspiring entrepreneurs, especially those from developing nations where the government offers minimal assistance. Government directives for lockdowns and moment control are the main variables that affect entrepreneurship. Despite the fact that the circumstances are particular, best practices can be acquired from nations like Sweden and, more specifically, from the business owners who were able to continue and expand their operations despite the pandemic. The fear factor has been noted as a key barrier to entrepreneurship for potential and developing entrepreneurs in academic literature (Morgan & Sisak, 2016). Due to the low demand caused by the epidemic and the stagnant market, it is now harder for entrepreneurs to advance with their start-up businesses. The risk that entrepreneurship will end or be significantly reduced has increased as a result of the current business climate, which has exacerbated failure anxiety. The entrepreneurial projects find it difficult to grow and maintain their operations. It is unlikely that existing business models will be converted to digital ones. The epidemic has made it harder for business owners to think about changing the current structure because of a lack of resources and capacity. According to the World Bank, the COVID-19 recession will be the worst since World War II, and business owners in all industries would face new difficulties. Entrepreneurs will experience a bad trend because, regardless of whether they were in a developed or developing nation, the negative effects on the economy would persist longer. However, enterprises in underdeveloped countries may be more resilient to external shocks (Dahles & usilowati, 2015; Nasar et al., 2018).

2.3 Gaps in Literature

In examining the existing research to identify overlooked aspects in factors influencing enterprise performance strategies, a comprehensive review was conducted. The theoretical literature pinpointed five (5) factors shaping an enterprise's performance, namely environmental support,
access to creative assets, the entrepreneurial ecosystem, and resource availability. Additionally, the entrepreneur's psychological well-being was identified as a moderating factor in this context.

2.4 Conceptual Model

The study's theoretical framework is comprised of the resource-based theory, behavioral and psychological theory, and the strategic adaptation viewpoint. Each of these theories was chosen because it has the capacity to describe the factors impacting corporate success, particularly in Nigerian businesses. As a result, Figure 1 shows the conceptual framework for this investigation.

**Figure 1:** Conceptual Model

*Source: Conceptual framework based on literature reviewed*

Figure 1 depicts the connection between enterprise Covid-19 pandemic response plans and performance. The linkages between enterprise performance and SME response strategies are depicted in the conceptual framework in Fig. 1. According to the model, an entrepreneur's psychological health has an impact on both interactions (enterprise performance and enterprise reaction tactics). The viability of the business is also impacted by SME performance. The representation of enterprise response approaches (independent variable) in the model included five (5) components (entrepreneur's psychological health, environmental support, access to creative assets, entrepreneurial ecosystem, and available resources).

2.5 Hypotheses of the Study
The study hypotheses include:

i. There is no significant relationship between access to innovative assets and the performance of MSMES in the COVID-19 pandemic in Lagos State, Nigeria.

ii. There is no significant relationship between entrepreneur’s psychological wellbeing and the performance of MSMES in the COVID-19 pandemic in Lagos State, Nigeria.

iii. There is no significant relationship between available resources and the performance of MSMES in the COVID-19 pandemic in Lagos State, Nigeria.

v. There is no significant relationship between entrepreneurial eco-system and the performance of MSMES in the COVID-19 pandemic in Lagos State, Nigeria.

3. RESEARCH SAMPLE AND METHODOLOGY

3.1 Research Design, Population and Sample Size Determination

A questionnaire was used to obtain primary data from SMEs operators and business owners as part of the survey research design. In Nigeria, there are 37,067,416 MSMEs who make up the study's population (NBS, 2016). The sample size of 400 (399.99) was calculated using the Yamane (1967) sample size calculation formula. For the study, 400 MSMEs in Computer Village Lagos were chosen using the purposive sample method. The respondents can indicate their levels of agreement or disagreement with each of the assertions using a 5-point Likert scale with responses structured as (5) strongly agree (4), agree (3), Undecided (2) disagree, (1) strongly disagree.

3.2 Validity and Reliability of the Questionnaire

The structured questionnaire was used to evaluate the study's dependability. For the questionnaire distributed to MSMEs Operators and stakeholders, responses were generated. Through the use of Cronbach Alpha Coefficients evaluated the instrument's internal reliability. Only items that return alpha values of 0.7 or higher were used in this case. The validity of the questionnaire is displayed in Table 2.

Table 4.2: Reliability of the Entrepreneurial Performance Questionnaires
<table>
<thead>
<tr>
<th>S/N</th>
<th>Variable</th>
<th>No of items</th>
<th>Items in Questionnaire</th>
<th>Cronbach's Alpha Coefficient ((\alpha))</th>
<th>Comment</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>Entrepreneurial performance of small businesses</td>
<td>4</td>
<td>V11 V12 V13 V14</td>
<td>.928</td>
<td>Acceptable</td>
</tr>
<tr>
<td>B</td>
<td>Covid – 19 response strategies</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1.</td>
<td>access to innovative assets</td>
<td>4</td>
<td>V15 V16 V17 V18</td>
<td>.819</td>
<td>Acceptable</td>
</tr>
<tr>
<td>2.</td>
<td>entrepreneur’s psychological wellbeing</td>
<td>4</td>
<td>V19 V20 V21 V22</td>
<td>.781</td>
<td>Acceptable</td>
</tr>
<tr>
<td>3.</td>
<td>available resources</td>
<td>4</td>
<td>V23 V24 V25 V26</td>
<td>-.253</td>
<td>Not Acceptable</td>
</tr>
<tr>
<td>4.</td>
<td>entrepreneurial eco system</td>
<td>4</td>
<td>V27 V28 V29 V30</td>
<td>.609</td>
<td>Acceptable</td>
</tr>
</tbody>
</table>

Total: 20

Note: \(V_i (i = 1, 2\ldots 30)\) are questions in the questionnaire (see Annexure I).

Overall, based on the alpha standard of 0.7, the scale employed in this survey for the entrepreneurial performance of small enterprises in the COVID-19 dataset (=.928) is considered to be reliable (Pallant, 2007). The scale used in the poll for business reaction plans to the Covid-19 pandemic is also trustworthy (=.840). Additionally, enterprise response strategy variables including the entrepreneur's psychological wellness (=.781), the entrepreneurial eco system (=.577), and access to innovative assets (=.819) are dependable. However, the reliability of the accessible resources is poor (= -.253).

3.3 Measurement and Operationalization of Variables

Measures of the constructs of the research model were derived from the literature and modified to suit the nature of this study.

a. Entrepreneurial performance of small businesses:
SME performance was measured using a subjective scale adapted from Bouchikhi (1993), Miller et al. (1988) and O’Farrell (1986). The components of the scale include items related to enterprise sales, profit, assets, capital, production, and market share. These items were measured using a five-point Likert scale (5) strongly agree (4), agree (3), Undecided (2) disagree, (1) strongly disagree). Zhao et al. (2010) used the firm performance growth rate to measure firm performance. Using growth rate can avoid the performance biases caused by firm size and firm industry. The multidimensional construct of firm performance was measured by a 7-item scale (Stam et al., 2014; Rauch and Hatak, 2016; e.g., sales growth, market share growth). A typical question is: “How is the competition status for your company compared with a major competitor in the same industry?” on a 5-point scale, with 1 standing for “falling far behind” and 5 standing for “stronger than competitors.

b. Covid–19 response strategies: The independent variable was measured by environmental support, access to innovative assets, entrepreneur’s psychological wellbeing, available resources and entrepreneurial eco system. These are discussed below:

1. Access to innovative assets: It comprises five sub-constructs adapted from Crossan and Apaydin (2010). Innovation practices usually pertain to new actions and innovation that encourage enterprise internal environmental features (Aragón–Correa et al., 2007). The measures of enterprise innovation practices were made up of several indicators related to enterprise internal settings that operated individually or simultaneously. The five indicators of SME innovation practices embrace (external knowledge, structures, leadership, regenerations, employees’ activities, and marketing activities) extracted from the literature review. All of the items were measured using a five-point Likert-scale (ranging from 5–strongly agree to 1–strongly disagree). External knowledge is indicated by knowledge and information obtained because of existing within social business-related networks in addition to other types of knowledge required to develop enterprise innovation capabilities (Crossan & Apaydin, 2010).

   i. External knowledge (six items) was derived from a scale developed by Martensen et al. (2007), Saunila et al. (2014), and Smith et al. (2008). The structures are related to the required system, work organization, and task arrangement to ensure the success of innovation implementation (Martínez-Román et al., 2011; Smith et al., 2008).
ii. The structure construct is divided into sub-constructs in relation to business expenses and production. The six items for expenses and the six items for production sub-constructs were developed from Adams et al. (2006).

iii. The leadership construct was concerned with the support and the encouragement that an enterprise managerial leadership devotes to innovation (Saunila et al., 2014; Smith et al., 2008). The leadership (seven items) scale was modified from Adams et al. (2006).

iv. Regeneration concerns the extent to which the enterprise is able to learn lessons from the past and benefit from previous experiences in developing current innovations (Saunila et al., 2014; Smith et al., 2008). The regeneration (five items) scale was derived from Crossan and Apaydin (2010). The employees’ activity construct indicates the innovation capabilities of the employees and their enthusiasm and motivation to come up with successful, innovative ideas in different enterprise-related fields (Saunila et al., 2014; Smith et al., 2008).

v. The employees’ activity (five items) scale was derived from Crossan and Apaydin (2010)

vi. Marketing activities concerns trademarks as an additional innovation indicator for knowledge intensive services (Gotsch & Hipp, 2012).

2. Entrepreneur’s psychological wellbeing: This study used the General Health Questionnaire developed by Goldberg and Hillier (1979) to measure entrepreneurs’ PWB. This measurement has been widely used in entrepreneurship studies (Uy et al., 2013; Hahn, 2020; Marshall et al., 2020). Participants were required to respond to questions based on the situation in the past few weeks. This scale includes 12 items, such as the following: “Have you been feeling not perfectly well or not in good health?” “Have you felt constantly under strain?” The participants answered on a 4-point scale, with 1 standing for “not at all, and 4 standing for “much more than usual.” The Cronbach’s alpha value is 0.756, which means the reliability is acceptable. In addition, the results (CMIN/DF = 3.573, CFI = 0.924, GFI = 0.921, RMSEA = 0.092) of the confirmatory factor analysis prove that the validity is acceptable

3. Available resources: This was measured by three factors as follows:

i. External environment, such as support from government regulations, macroeconomic conditions, industrial growth, and opportunities to develop business.

ii. Internal affairs, which includes social support coming from family, relatives, colleagues, employees, and friends. Hisrich et al. (2017) highlight that; the social environment is an...
individual who supports entrepreneurs psychologically, usually coming from their closest people, such as family and friends. They play an important role when entrepreneurs face problems and need discussion partners. Social support is very important for women entrepreneurs (Ekpe, 2011; Neneh, 2017; Molino et al., 2018). Social support usually comes from the closest family and includes emotional, financial, as well as work equipment (Neneh, 2017). Previous study concludes that social support as part of environmental support influences entrepreneur performance (Genoveva, 2020). Molino et al. (2018) in the Italian context also conclude that social support, along with competencies and self-efficacy is influential on entrepreneurs’ business performance. Welsh et al. (2016)’s research in South Africa also arrives at the same conclusion that the environment, especially the family one, is the most influential factor on the performance of women entrepreneurs.

iii. Availability of physical facilities to distribute products or services. According to Oyewobi et al. (2013), the business environment is the interaction between internal and external organizational factors consisting of the physical and social factors concerned within and outside the organizational boundaries, which show a direct influence on individual and group decision-making actions.

4. Entrepreneurial eco system (EES): An entrepreneurial ecosystem is a set of interconnected entrepreneurial actors (Mason and Brown, 2014). The following actions are affirmative in this respect:

   i. Human capital: Spread the culture of entrepreneurship in society, especially among the next generation, in different ways such as educational institutions; media; rewards; and success stories.

   ii. Government encouraged new startups. New start-ups were able to enter the market

   iii. Finance: Provide finance and technical support to start-ups to adopt the initiatives

   iv. Support: Inspired youth to unleash their ideas Government rolled out grants to bring their ideas to life (initiatives) Provide knowledge & skill supports for initiatives Adopt the initiatives Follow-up the start-ups and provide the financial support to continue their activity and growth Give the necessary guarantees with assistance to obtain the required finance

   v. Technology: Expand for activity and growth through technological advancement
3.4 Method of Data Analysis

Descriptive statistics are computed using Statistical Package for the Social Sciences (SPSS) version 23.0 to determine the valid antecedent attributes of entrepreneurial performance of small businesses in covid-19 pandemic, compute descriptive statistics, and for initial data analyses. Correlation study was conducted to assess the effects of the explanatory variables on Covid – 19 response strategies.

4. Results

4.1 Demographic Characteristics

350 participants who met the inclusion criteria for the study completed the questionnaire; of these, 71.1% were in the "Manufacturing" sector, 20.7% were in the "trade" sector, 7.9% were in the services sector, and 3% were categorized as "others" (Table 1). In terms of enterprise status, 34.1% are "others," 52.8% are "stakeholders," and 31% are "MSMEs operators." There are 11.1% "Female" respondents and 88.9% "Male" respondents. 11.15 of the respondents were "Below 20 Years of Age," 24.9% were "Between 20 and 30 Years of Age," 15.4% were "Between 31 and 40 Years of Age," and 48.5% were "Over 40 Years of Age." 61.6% of people identify as "single," 37.4% as "married," and 10% as "others." 43.9% of people have postgraduate degrees, 37% have graduate degrees, 13.1% have professional certificates, 3% have HNDs, 10% have ONDs or NCEs, 2.3% have SSCEs or GCSEs, and 2.3% have other degrees. Less than 5 years, 6 to 10 years, and 11 years and more make up 26.6%, 45.2%, and 28.2% of the total experience categories, respectively. Among the respondents, 13.1% identify as "Christians," 85.9% as "Muslim," and 1% as "others." 34.4% of the population is classified as "Yoruba," 34.4% as "Ibo," 29.5% as Hausa/Fulani, and 1.7% as "others." The percentage of employees who are "50 and above" in the company is 778.4%, followed by "51-100" at 19.7%, and "101-300" at 1.9%.

Table 1: Demographic Presentation of the Respondents

<table>
<thead>
<tr>
<th>Demographic</th>
<th>n (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>N = 350</td>
<td></td>
</tr>
<tr>
<td>Sector</td>
<td></td>
</tr>
<tr>
<td>Category</td>
<td>Count</td>
</tr>
<tr>
<td>--------------------</td>
<td>-----------</td>
</tr>
<tr>
<td><strong>Manufacturing</strong></td>
<td>217 (71.1)</td>
</tr>
<tr>
<td><strong>Trade</strong></td>
<td>63 (20.7)</td>
</tr>
<tr>
<td><strong>service sectors</strong></td>
<td>24 (7.9)</td>
</tr>
<tr>
<td><strong>Other(s)</strong></td>
<td>1 (.3)</td>
</tr>
<tr>
<td><strong>Status</strong></td>
<td></td>
</tr>
<tr>
<td>MSMES owners</td>
<td>40 (13.1)</td>
</tr>
<tr>
<td>Stakeholders</td>
<td>161 (52.8)</td>
</tr>
<tr>
<td><strong>Other(s)</strong></td>
<td>104 (34.1)</td>
</tr>
<tr>
<td><strong>Gender</strong></td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>271 (88.9)</td>
</tr>
<tr>
<td>Female</td>
<td>34 (11.1)</td>
</tr>
<tr>
<td><strong>Age Group</strong></td>
<td></td>
</tr>
<tr>
<td>Below 20 years</td>
<td>34 (11.1)</td>
</tr>
<tr>
<td>20 – 30 years</td>
<td>76 (24.9)</td>
</tr>
<tr>
<td>31 - 40 years</td>
<td>47 (15.4)</td>
</tr>
<tr>
<td>Above 40 years</td>
<td>148 (48.5)</td>
</tr>
<tr>
<td><strong>Marital Status</strong></td>
<td></td>
</tr>
<tr>
<td>Single</td>
<td>188 (61.6)</td>
</tr>
<tr>
<td>Married</td>
<td>114 (37.4)</td>
</tr>
<tr>
<td><strong>Other(s)</strong></td>
<td>3 (1.0)</td>
</tr>
<tr>
<td><strong>Education</strong></td>
<td></td>
</tr>
<tr>
<td>Postgraduate</td>
<td>134 (43.9)</td>
</tr>
<tr>
<td>Graduate</td>
<td>113 (37.0)</td>
</tr>
<tr>
<td>Professional Certificate</td>
<td>40 (13.1)</td>
</tr>
<tr>
<td>HND</td>
<td>1 (3.0)</td>
</tr>
<tr>
<td>OND/NCE</td>
<td>3 (1.0)</td>
</tr>
<tr>
<td>SSCE/GCE</td>
<td>7 (2.3)</td>
</tr>
<tr>
<td><strong>Other(s)</strong></td>
<td>7 (2.3)</td>
</tr>
<tr>
<td><strong>Years of Experience</strong></td>
<td></td>
</tr>
<tr>
<td>Less than 5 year(s)</td>
<td>81 (26.6)</td>
</tr>
<tr>
<td>6 - 10 years</td>
<td>138 (45.2)</td>
</tr>
<tr>
<td>11 years and above</td>
<td>86 (28.2)</td>
</tr>
<tr>
<td><strong>Religion</strong></td>
<td></td>
</tr>
</tbody>
</table>
Christian & 40 (13.1) \\
Muslim & 262 (85.9) \\
Other(s) & 3 (1.0) \\

**Ethnic Group**

*Yoruba* & 105 (34.4) \\
*Ibo* & 105 (34.4) \\
*Hausa/Fulani* & 90 (29.5) \\
Other (s) & 5 (1.7) \\

**How many employees are there in your company?**

<table>
<thead>
<tr>
<th>Range</th>
<th>Count (Percentage)</th>
</tr>
</thead>
<tbody>
<tr>
<td>50 and below</td>
<td>239 (78.4)</td>
</tr>
<tr>
<td>51–100</td>
<td>60 (19.7)</td>
</tr>
<tr>
<td>101–300</td>
<td>6 (1.9)</td>
</tr>
<tr>
<td>301–500</td>
<td>-</td>
</tr>
<tr>
<td>501–1000</td>
<td>-</td>
</tr>
<tr>
<td>1001–4999</td>
<td>-</td>
</tr>
<tr>
<td>5000 and above</td>
<td>-</td>
</tr>
</tbody>
</table>

### 4.2 Descriptive Statistics

Table 2 shows the summary of descriptive statistics. These statistics are discussed below.

**Table 2: Summary of Descriptive Statistics**

<table>
<thead>
<tr>
<th>Variables</th>
<th>N</th>
<th>Minimum</th>
<th>Maximum</th>
<th>Mean</th>
<th>Std. Deviation</th>
<th>Skewness</th>
<th>Kurtosis</th>
<th>Std. Error</th>
<th>Statistic</th>
<th>Std. Error</th>
<th>Statistic</th>
</tr>
</thead>
<tbody>
<tr>
<td>Performance of MSMES (EPM)</td>
<td>305</td>
<td>4.20</td>
<td>6.87</td>
<td>6.3784</td>
<td>.49690</td>
<td>-2.260</td>
<td>4.742</td>
<td>.278</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*Statistical analysis and discussion of the performance of MSMES (EPM) based on the provided descriptive statistics.*
### Access to Innovative Assets

<table>
<thead>
<tr>
<th></th>
<th>Mean</th>
<th>Standard Deviation</th>
<th>Skewness</th>
<th>Kurtosis</th>
</tr>
</thead>
<tbody>
<tr>
<td>MSMES</td>
<td>4.0014</td>
<td>.61973</td>
<td>-.983</td>
<td>1.246</td>
</tr>
<tr>
<td>AIA</td>
<td>3.0014</td>
<td>.61973</td>
<td>-.983</td>
<td>1.246</td>
</tr>
</tbody>
</table>

### Entrepreneur's Psychological Wellbeing

<table>
<thead>
<tr>
<th></th>
<th>Mean</th>
<th>Standard Deviation</th>
<th>Skewness</th>
<th>Kurtosis</th>
</tr>
</thead>
<tbody>
<tr>
<td>MSMES</td>
<td>3.7512</td>
<td>.59427</td>
<td>-.957</td>
<td>2.004</td>
</tr>
<tr>
<td>AIA</td>
<td>3.0014</td>
<td>.61973</td>
<td>-.983</td>
<td>1.246</td>
</tr>
</tbody>
</table>

### Available Resources

<table>
<thead>
<tr>
<th></th>
<th>Mean</th>
<th>Standard Deviation</th>
<th>Skewness</th>
<th>Kurtosis</th>
</tr>
</thead>
<tbody>
<tr>
<td>MSMES</td>
<td>3.6754</td>
<td>.67478</td>
<td>.079</td>
<td>.274</td>
</tr>
<tr>
<td>AIA</td>
<td>3.0014</td>
<td>.61973</td>
<td>-.983</td>
<td>1.246</td>
</tr>
</tbody>
</table>

### Entrepreneurial Ecosystem

<table>
<thead>
<tr>
<th></th>
<th>Mean</th>
<th>Standard Deviation</th>
<th>Skewness</th>
<th>Kurtosis</th>
</tr>
</thead>
<tbody>
<tr>
<td>MSMES</td>
<td>3.6754</td>
<td>.67478</td>
<td>.079</td>
<td>.274</td>
</tr>
<tr>
<td>AIA</td>
<td>3.0014</td>
<td>.61973</td>
<td>-.983</td>
<td>1.246</td>
</tr>
</tbody>
</table>

### Valid N (Listwise)

<table>
<thead>
<tr>
<th></th>
<th>N</th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>MSMES</td>
<td>305</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>AIA</td>
<td>305</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Source: Author’s Computation from SPSS 23.0 Version

**A. Performance of MSMES (EPM):** The Enterprise Performance level is high, as indicated by the mean Performance of MSMES (EPM) and standard deviation of .49690. EPM has a skewness of -2.260, which indicates that it is left-handed, and a kurtosis of 4.742, which is less than 3 and suggests that it is normally distributed.

**B. Access to Innovative Assets (AIA):** The level of access to innovative assets is strong, as indicated by the mean of AIA being 4.0014 and the standard deviation being .61973. In other words, AIA is skewed to the left with a skewness rating of -.983. The fact that AIA has a kurtosis value of 1.246, less than 3, suggests that the data is regularly distributed.

**C. Entrepreneur’s Psychological Wellbeing (PWB):** The average level of psychological wellbeing (PWB) was 3.7512, and the standard deviation was .59427, indicating a moderately high degree of PWB. PWB has a skewness of -.957, which indicates a leftward bias. The fact that the kurtosis value for PWB is 2.004—less than 3—indicates that the data are regularly distributed.

**D. Available Resources (AVR):** The average level of resources (AVR) is 3.6787, and the standard deviation is .46377, indicating a moderately high level of resources. The AVR has a skewness of .105, which denotes that it is skewed to the right. Given that it has a kurtosis value of .274, which is less than 3, AVR is likely to have a normal distribution.
E. Entrepreneurial eco system (EES): The average level of the entrepreneurial eco system (EES) was 3.6754, and the standard deviation was .67478, which indicates a moderately high level of the entrepreneurial eco system. EEE is skewed to the right because the skewness for EES is .079. Given that it has a kurtosis value of -.221, which is less than 3, EEE is likely to be regularly distributed.

4.3 Computation of the Correlation Matrix
As expected, the correlation matrix of the explanatory variables shows a significant correlation between the variables (Table 3). The statistical tests, based upon the null hypothesis that the population correlation coefficient is equal to zero indicate that all correlations are significantly different from zero at the 1 per cent significance level. As a result, all four exogenous variables and the enterprise performance of MSMES (EPM) show a substantial association with access to innovative assets (AIA) ($\rho = .605^{**}$, p .000), psychological wellbeing (PWB) ($\rho = .467^{**}$, p .000), available resources (AVR) ($\rho = .172$, p.003), and entrepreneurial ecosystem (EEE) ($\rho = .112$, p .050) are all related to it in descending order of magnitude. According to Bryman and Cramer (1997), the correlation coefficient should not exceed 0.80. In the opinion of Dwivedi (2008) the correlation coefficient should not exceed 0.90; otherwise, the independent variables that show a relationship in excess of 0.80 may be suspected of exhibiting multi-collinearity.

Table 3: Correlation Matrix for Enterprise Performance of MSMES and Covid – 19 Response Strategies

<table>
<thead>
<tr>
<th>Performance of SMEs</th>
<th>Enterprise Performance of MSMES</th>
<th>Access To Innovative Assets</th>
<th>Psychological Wellbeing</th>
<th>Available Resources</th>
<th>Entrepreneurial Ecosystem</th>
</tr>
</thead>
<tbody>
<tr>
<td>Performance of SMEs</td>
<td>Pearson Correlation</td>
<td>$1$</td>
<td>$.605^{**}$</td>
<td>$.467^{**}$</td>
<td>$.172^{**}$</td>
</tr>
<tr>
<td>Sig. (2-tailed)</td>
<td></td>
<td></td>
<td>$.000</td>
<td>$.000</td>
<td>$.003</td>
</tr>
<tr>
<td>N</td>
<td>305</td>
<td>305</td>
<td>305</td>
<td>305</td>
<td>305</td>
</tr>
<tr>
<td>Pearson Correlation</td>
<td>$.605^{**}$</td>
<td>$1$</td>
<td>$.403^{**}$</td>
<td>$.269^{**}$</td>
<td>$.237^{**}$</td>
</tr>
</tbody>
</table>

Covariance Analysis: Spearman Rank-Order
### Access to innovative assets

<table>
<thead>
<tr>
<th></th>
<th>Sig. (2-tailed)</th>
<th>.000</th>
<th>.000</th>
<th>.000</th>
<th>.000</th>
</tr>
</thead>
<tbody>
<tr>
<td>N</td>
<td>305</td>
<td>305</td>
<td>305</td>
<td>305</td>
<td>305</td>
</tr>
</tbody>
</table>

### Psychological Wellbeing

<table>
<thead>
<tr>
<th></th>
<th>Pearson Correlation</th>
<th>.467**</th>
<th>.403**</th>
<th>1</th>
<th>.185**</th>
<th>.120*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sig. (2-tailed)</td>
<td></td>
<td>.000</td>
<td>.000</td>
<td>.001</td>
<td>.036</td>
<td></td>
</tr>
<tr>
<td>N</td>
<td>305</td>
<td>305</td>
<td>305</td>
<td>305</td>
<td>305</td>
<td></td>
</tr>
</tbody>
</table>

### Available resources

<table>
<thead>
<tr>
<th></th>
<th>Pearson Correlation</th>
<th>.172**</th>
<th>.269**</th>
<th>.185**</th>
<th>1</th>
<th>.407**</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sig. (2-tailed)</td>
<td></td>
<td>.003</td>
<td>.000</td>
<td>.001</td>
<td>.000</td>
<td></td>
</tr>
<tr>
<td>N</td>
<td>305</td>
<td>305</td>
<td>305</td>
<td>305</td>
<td>305</td>
<td></td>
</tr>
</tbody>
</table>

### Entrepreneurial eco system

<table>
<thead>
<tr>
<th></th>
<th>Pearson Correlation</th>
<th>.112*</th>
<th>.237**</th>
<th>.120*</th>
<th>.407**</th>
<th>1</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sig. (2-tailed)</td>
<td></td>
<td>.050</td>
<td>.000</td>
<td>.036</td>
<td>.000</td>
<td></td>
</tr>
<tr>
<td>N</td>
<td>305</td>
<td>305</td>
<td>305</td>
<td>305</td>
<td>305</td>
<td></td>
</tr>
</tbody>
</table>

* Correlation is significant at the 0.01 level (2-tailed).

* Correlation is significant at the 0.05 level (2-tailed).

Source: Author’s Computation Using SPSS 23.0 (2022).

Among the notable correlations with marketing performance, complaint resolution strategies emerged as the least correlated factor, indicating that it requires the most improvement and may be a viable candidate for an endogenous variable. This variable could serve as a potential second endogenous (or fixed) variable in Structural Equation Modeling (SEM), as suggested by (Dash & Paul, 2021; Goodhue et al., 2017). However, it’s important to note that SEM was not implemented in this paper.

### 4.3 DISCUSSION OF FINDINGS

Due to multicollinearity in the regression data and the inaccessibility of the partial least squares structural equation (PLS-SEM) model, the correlation values shown in Table 3 are used to examine the link between the research variables.
Hypothesis 1: Access to innovative assets has no significant influence on Enterprise Performance of MSMES in Covid – 19 Pandemics

This study found a correlation between MSMES company performance and access to innovative assets ($r = .605$, $p = .000$). The significant relationship is statistically supported. The conclusions are in line with those of Adam and Alarifi's paper "Innovation Practices for Survival of Small and Medium Enterprises (SMEs) in the COVID-19 Times: The Role of External Support," which was released in 2021. The results of structural equation modeling showed that SMEs' deployment of innovation methods to combat COVID-19's effects had a positive impact on performance and the propensity of their businesses to survive. PLS-SEM bootstrap results demonstrated that external support aids boost the positive influence of SMEs' innovative strategies on company survival, in contrast to its performance. Furthermore, Sulistyö & Ayuni, (2020) demonstrated that entrepreneurial orientation and social capital have a significant impact on innovation and performance capabilities in the study titled "Competitive Advantages of SMEs: The Roles of Innovation Capability, Entrepreneurial Orientation, and Social Capital." The ability of SMEs to innovate greatly affects their capacity to perform better and keep a competitive edge. In the study by Ploypailin et al. (2020) titled "Innovation and Firm Performance: The Moderating and Mediating Roles of Small and Medium Enterprise Finance," the research indicates that both firm size and financial capital play moderating and mediating roles in the influence of innovation on firm performance, with effects that can be either positive or negative. The emphasis on the significance of business size and financial resources in the implementation of innovations for enhancing firm performance holds implications for decision-makers.

Hypothesis 2: Psychological Wellbeing has no significant influence on Enterprise Performance of MSMES in Covid – 19 Pandemics

According to this study, there is a strong link between psychological health and MSMES's enterprise performance ($r = .467**$, $p = .000$). The results support or contradict Hassan's (2021) findings from his study, "Impact of Women Entrepreneurs and the Growth of Small-Scale Enterprises in Yobe State." According to the study's findings, business opportunity recognition has a strong significant relationship with fashion designers' profitability and business growth, whereas business orientation has a weak significant relationship with these outcomes. The report advises female business owners to actively look for and take advantage of market opportunities in the fashion industry. The study's conclusions suggest that women entrepreneurs can improve the
performance of their businesses by acquiring long-term financial resources. Fulfilling customer needs, paying attention to customer feedback, and attending seminars and workshops are other ways to spot business chances.

**Hypothesis 3: Available resources do not significantly affect Enterprise Performance of MSMES in Covid – 19 Pandemics**

This study found a correlation between the enterprise performance of MSMES and the resources that are accessible (r = .172, p = .003). The result challenges Ebrahim *et al.* (2018) conclusions. The study's findings revealed a bad correlation between charismatic, transactional, and bureaucratic leadership philosophies and organizational effectiveness. However, there was a positive association between organizational success and democratic, autocratic, and transformational leadership styles. According to the report, businesses should adopt a leadership strategy that enhances employees' abilities and competences.

**Hypothesis 4: Entrepreneurial eco system does not significantly affect Enterprise Performance of MSMES in Covid – 19 Pandemics**

This study found a correlation between the MSMES's company performance and the entrepreneurial eco system (r = .112, p = .050). Khayal's conclusions are refuted by the results (2021). The study's findings demonstrated that the five ecosystem pillars of policy, culture, financing, education and training, and networking significantly influence women entrepreneurs in Egypt and have an impact on their entrepreneurial journey at various levels of endeavor. Additionally, Yahya, *et al.*, (2018) found that human capital, government, support, money, and technology are the five factors that have the biggest effects on Omani entrepreneurial success and start-ups. The discoveries broaden the present body of information on entrepreneurial contexts. Additionally, they advise different business owners or start-ups to develop business plans based on the requirements specified in the framework and pay greater attention to Omani officials who aid in its implementation. A number of recommendations have also been made as areas of concentration for a strategy plan to boost the entrepreneurship sector.

## 5 Conclusion

The study looked at how business performance at MSMSE in Nigeria was impacted by COVID-19 pandemic response strategies. The study found a relationship between MSMES's ability to access innovative assets, psychological health, and the entrepreneurial eco system. According to
respondents' perceptions of the response strategies, which ranged from moderately high to high, Nigeria needs to support efficient pandemic management techniques. Both the management system for public health and company performance would benefit from this. During the Covid-19 pandemic, personal protective equipment (PPE) like hand sanitizers, nasal masks, and other pandemic PPE were in high demand for both frontline healthcare personnel and individuals. Nose masks were to be worn before entering any public area. MSMEs in Nigeria used to be limited to only operating on days of the week in order to halt the spread of the virus. In Computer Village, Ikeja, Lagos State, for example, proprietors were required to only be open on certain days of the week—Monday, Wednesday, and Friday—and social distance was also used as a criterion for market participation. The medical professionals were on the scene to implement the various strategies proposed by health organizations to address the current issues. It sparked a desire to recruit and work with more medical staff members and volunteers. It changed the medical field's demography for several government institutions and parastatals.

Governments reacted to the outbreak differently from state to state, with some limiting people's freedom of travel and others stockpiling palliatives. Another event involved the taking of government-locked vaults containing medications for the public. Many entrepreneurs who relied on day-to-day income were also unable to pay their bills due to restrictions on mobility and other considerations.

The globe had come to a standstill and businesses and corporate groupings were unable to carry out their usual operations on-site as they should. There was a lot of innovation and the replacement of physical office space as all activities were moved online or employees were encouraged to work remotely. There have also been changes in how business owners conduct their operations. Many business owners were forced to change how they operated and how they sourced their supplies.

5.1 RECOMMENDATIONS

i. Prioritize an in-depth examination of the various COVID-19 response strategies adopted by SMEs in Lagos State. This analysis should encompass a range of industries and business scales to capture a comprehensive understanding of the diverse approaches taken.
ii. Due to the positive impact innovation activities have on performance, SME owners and managers should pay particular attention to how these activities are implemented in their businesses. All types of innovation, but especially process and organizational innovation, are necessary to boost the performance of SMEs in Nigeria.

iii. Government must support and encourage research that leads to the creation of novel knowledge, which is necessary for innovation by providing benchmarking or diagnostic services, that government encourages and coordinates private initiatives.

iv. The provision of relevant infrastructure and internet backbone, such as industrial estates and business hubs that would be strategically located all over the country. More so, government should monitor innovation performance, evaluates innovation capacity and screens firms' needs.

References


OECD (2020). Turning hope into reality, OECD Economic Outlook, 8(1).


