Coronavirus (Covid-19) Pandemic and Growth of Small and Medium Scale Enterprises (SMEs) in Nigeria: Evidence from Three Small and Medium Scale Enterprises in Enugu Metropolis, Enugu State

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Abstract

This study explores the effect of Coronavirus (COVID-19) pandemic on the growth of SMEs in Nigeria: Evidence from Three Small and Medium Scale Enterprises in Enugu Metropolis, Enugu, Enugu State. The objectives of this study are to determine the effect of lockdown on distribution value chain of SMEs in Enugu state, Nigeria, and to determine the effect of social distancing on efficient service delivery of SMEs in Enugu state, Nigeria. The study followed a quantitative approach, while data was collected through primary and secondary sources. The population of the study comprises 185 employees randomly selected from Aqua Rapha Investment Ltd., Bridgewater Hotel & Suite, and Chitis Nigeria Ltd. A Sample size of 127 employees was established using the Taro Yamani statistical formula; hypotheses were tested using chi-square with 5% or 0.05 level of significance. In the light of the study, it was established that lockdown has a significant negative impact on the distribution value chain of SMEs in the Enugu metropolis, Enugu state, Nigeria. Also, social distancing has a significant negative impact on the efficient service delivery of SMEs in the Enugu metropolis, Enugu state, Nigeria. The study concluded that the Coronavirus (COVID-19) pandemic has a significant negative effect on the growth of SMEs in Enugu Metropolis, Enugu State, Nigeria. To mitigate the negativities occasioned by the pandemic, the study recommends that the supply chain should be flexibly structured to accommodate necessary changes, and more technologies should be adopted in business operations to facilitate risk reduction. Furthermore, it was suggested that future studies should include more firms and sectors to generalise the findings.

Keywords: Coronavirus (Covid-19), Pandemic, Growth, Small and Medium Enterprises (SMEs).

Introduction

The World Health Organisation (WHO) classified the Novel Coronavirus (COVID-19) outbreak a worldwide pandemic on March 11, 2020. As the virus spread over the world, it caused profound adjustments in how people communicate, study, work, and world economy, personal and community life, coexist, with a new normal determining our day-to-day responsibilities (Chukwuka & Mma, 2020).

The pandemic caused worldwide lockdown and social isolation, which had major consequences for the communication patterns, jobs, education, transportation, and the overall well-being of the

people. It triggered a de-globalization process that caused countries to seal their borders, resulting in restrictions on products and services among countries,

The pandemic caused a paradigm shift in the global socio-economic lives of the world, and undeniably, small and medium enterprises are the worst hit.

On February 27, 2020, Lagos State witnessed the verification of the country's first COVID-19 case. The federal government acted immediately, issuing a decree requiring a stop to all movement by the end of March 2020 in Lagos, Africa's largest city, as well as Ogun and the Federal Capital Territory. Similar restrictions on movement within and between states, as well as entry and exit, followed soon after at the state level. This indexed case was a male foreign worker for the multinational Lafarge Cement Company in Ogun State who travelled for a consultation to the company's factory in Ewekoro Ogun, a State close to Lagos State. Milan, Italy, is the country with the fourth-highest incidence, with 371 cases as of February 2020. The foreigner was transferred to Lafarge's clinic in Ewekoro for testing since he was showing symptoms of disease, and there it was discovered that he had COVID-19 (Nigeria Centre for Disease Control [NCDC], 2020; Ebenso & Out, 2020).

The federal government of Nigeria came up with a correction strategy as daily diagnoses continued to be made in various parts of the nation after that. On March 27, 2020, Nigeria adopted and put into effect a national lockdown policy and social seclusion in an effort to limit the spread of the epidemic, joining other countries like China, the United Arab Emirates, Italy, France, and the United Kingdom. Consequently, the Nigerian government put 13 countries with high

financial mobility, and corporate and industrial closures (Barua, 2020; Khan et al., 2020).

pandemic rates under a travel ban. Among them are the United States, United Kingdom, South Korea, Switzerland, Germany, France, Italy, China, Spain, the Netherlands, Norway, Japan, and Iran. As of March 30, 2020 (NCDC, 2020), no local or international aircraft are allowed into or out of Nigeria.

The rate of transmission of the pandemic in Nigeria accelerated, causing health risks such that over 150 deaths and about 4,641 COVID-19 cases were reported by the Nigerian minister of public health by May 11, 2020 (NCDC, 2020). Nevertheless, because COVID-19 testing was also not performed on every Nigerian, these statistics did not reflect the true situation in Nigeria. The number increased to 7,839 recorded COVID-19 cases and 226 fatalities in Nigeria by May 25, 2020. Aside from the economic uncertainties that threatened a sustainable business climate, there was also the pandemic's devastating impact on healthcare, which reduced production, deprived personnel, and added to the unemployment spike (Mogaji, 2020; Lakuma et al., 2020).

Investors became preoccupied with the effects of disrupted supply chains brought on by regulatory measures, overflow effects extending from the actual economy to financial markets, and worst scenarios becoming a reality as economic activity came to a halt. In spite of the time spent recovering from the 2016 recession, the twin effects of falling oil prices and the COVID-19 pandemic plunged the Nigerian economy back into a recession, the worst in more than 40 years, with real GDP contracting for two

consecutive quarters by 6.1% and 3.6% in Quarter 2 and Quarter 3 of 2020, respectively (Nigeria Bureau of Statistics [NBS], 2020; Chukwuka & Mma, 2020).

National Bureau of Statistics (NBS) posits that Small and Medium Scale Enterprises (SMEs) remain critical to the country's economy, contributing about 48% of the national GDP in the last five years and accounting for 84% of the national workforce (Small and Medium Enterprises Development Agency of Nigeria [SMEDAN] & NBS. 2013). Despite these contributions to the Nigerian economy, SMEs continue to face growth-hampering challenges, such as lack of access to funding, skilled human resources, and high cost of doing business, among others. These existing conditions already posit a challenging environment for SMEs to thrive; the pandemic's entry into the equation heightens their difficulties and slows down their capacity to recover quickly from the negative impact of the pandemic.

In view of the drawbacks occasioned by the COVID-19 pandemic, this study provides a scrupulous discussion on the effect of the COVID-19 pandemic and its effect on the growth of small and medium enterprises in Nigeria: Evidence from Enugu, Enugu state.

Statement of the Problem

The impact of the COVID-19 pandemic on the growth of Small and Medium Scale Enterprises (SMEs) has generated much interest among researchers since the outbreak of the pandemic. To ascertain the level and nature of its impact on the growth of SMEs in Nigeria with a focus on the Enugu metropolis is of great importance to the economic development of Nigeria.

Globally, the COVID-19 pandemic has changed so many ways of doing things before its outbreak, and Nigeria as a nation has witnessed its own share of these changes. It is no news that the lockdown associated with the pandemic had some adverse effects on the operations of SMEs. However, the extent of those adverse effects has to be empirically established. The level of adaptation of the 'new normal' of life in the face of the COVID-19 pandemic in Nigeria, taking a cue from the Enugu metropolis in Enugu state, needs to be ascertained.

SMEs have been an engine of economic growth and development in Nigeria, contributing about 48% of the national GDP in the last five years and 84% of the national workforce (SMEDAN & NBS., 2013). SMEs in the Enugu state are faced with numerous challenges, ranging from poor funding to low access to skilled manpower and poor infrastructures, among others. It is necessary to empirically describe the difficulties that the COVID-19 pandemic has added to the prior difficulties impeding the expansion and development of Nigerian SMEs. This study, therefore, seeks to examine the effects of the COVID-19 pandemic and the growth of SMEs in Nigeria: Evidence from Enugu state.

Objectives of the Study

The overall objective of the study is to determine the effect of Coronavirus (COVID-19) pandemic on the growth of SMEs in Nigeria: evidence from Enugu metropolis, Enugu State. The specific objectives are:

I.   To determine the effect of lockdown on distribution value chain of SMEs in Enugu state, Nigeria.

II. To determine the effect of social distancing on efficient service delivery of SMEs in Enugu state, Nigeria.

Research Questions

I. To what extent does the lockdown affect the distribution value chain of SMEs in Enugu state, Nigeria?

II. To what extent does social distancing affect efficient service delivery among SMEs in the Enugu state of Nigeria?

Research Hypotheses

H1: Lockdown has a significant negative impact on the distribution value chain of SMEs in Enugu metropolis, Enugu state, Nigeria.

III. H2: Social distancing has a significant negative impact on efficient service delivery of SMEs in Enugu metropolis, Enugu state, Nigeria.

Review of Literature

Coronavirus (Covid-19) Pandemic in Nigeria

Coronavirus is a predominant disease that results in an infection in the nose, sinuses, or upper throat; it comes in seven varieties, but the majority are not dangerous (WHO, 2020). World Health Organisation identified SARS-CoV-2 as a new type of Coronavirus in early 2020. The disease was very contagious and was caused by SARS-CoV-2, which can cause respiratory tract infection (Giannos et al., 2022; Mashige et al., 2021). It can affect either the upper respiratory

channel (sinuses, nose, and throat) or the lower respiratory channel (windpipe and lungs). It spreads in the same way as other Coronaviruses do, mostly through individual-to-individual contact. Infections range from mild to fatal. SARS-CoV-2 is one of seven kinds of Coronaviruses, including the ones that cause serious illnesses like Middle East Respiratory Syndrome (MERS) and severe acute respiratory syndrome (SARS) (WHO, 2020; Pathak, 2021).

SARS-CoV-2 was discovered at the beginning of January, and its genetic sequence was made public on January 11 and 12. The complete genetic sequences of SARS-CoV-2 from early human cases, as well as the successions of multiple additional infections obtained from human cases in China and across the world after that time, demonstrate that SARS-CoV-2 has a biological genesis in bat populations. All available evidence suggests that the illness is of animal origin and is not a regulated or generated infection in a lab. Many experts have had the opportunity to examine the genetic characteristics of SARS-CoV-2 and have concluded that there is no evidence that SARS-CoV-2 is a result of laboratory experimentation (WHO, 2020; Mofijur et al., 2021).

Concept of Small and Medium-Scale Enterprises (SMEs)

There are varied definitions of small-scale firms as there exists in each nation a classification of firms based on economic development, the policies and programmes developed by specific authorities or institutions with the authority to create SMEs, and other factors. For instance, a medium- or large-scale firm in a developing economy like Nigeria may be a

tiny business in developed economies or nations like Japan, Germany, and the United States of America (USA). Additionally, depending on the agencies' or emerging institutions' preferred policies, the definition of an SME changes over time (Etuk, Etuk & Baghebo, 2014).

In the late 1940s, the concept of Small and Medium Enterprises (SMEs) was introduced with the primary goal of enhancing commerce and industrialisation in the current industrialised nations. (OECD, 2004). Despite the foregoing variations, a small and medium-sized enterprise (SME) may be identified based on a variety of factors, such as turnover, staff count, profit, capital employed, available financing, market share, and relative size within the industry. The quantitative definitions convey the size of an organisation based on monetary measures like turnover, asset value, and profit, as well as quantitative indices like the number of workers. The United Kingdom's 1975 Companies Act defined a company as small if its annual revenue is less than £1.4 million, medium if it generates between £1.4 and £5.7 million, and big if it generates more than £5.7 million. Even further, the enterprises were divided into three categories depending on the number of employees: small (less than 50 employees), medium (50-250 employees), and large (more than 250 employees). Later on, it classified SMEs as micro (less than 10), small (between 10 and 49 people), medium (50+ employees), and large (above 50-249 employees) (Gerald, Obianuju, & Chukwunonso, 2020).

In Nigeria, the National Council of Industry, 2003 categorised enterprises based on these three criteria: Size, number of employees, and total cost, including working capital, but excluding land. The council categorisation states that Microscale Enterprises are firms that have 1-10 employees with working capital (excluding land) of less than 1 million naira; Small scale Enterprise (11-35 employees with working capital (excluding land) of 1 million – less than 40 Million naira; Medium scale Enterprise (36-100 employees with working capital (excluding land) of 40Million – less than 200Million naira; Large scale Enterprise (101 and above employees with working capital (excluding land) of 200 million naira and above, (NBS, 2017; Oyewale, Adebayo, & Kehinde, 2020; Obiakor, 2020; Ozili, 2020).

Concept of Lockdown and Effect on Distribution Value Chain (Supply Chain)

In a colloquial context, as was the trending matter in 2020, lockdown is a restriction policy for people or communities to stay where they are, usually due to specific risks to themselves or to others when they move and interact freely.

A value chain is a plan of action that portrays the full scope of exercises expected to make goods or services. For organisations that produce goods, a value chain contains the means that include carrying an item from conception to distribution and everything in the middle – like obtaining raw materials, manufacturing capacities, and advertising activities. Distribution is one of the most important competitive advantages of various businesses in this day and age. It is no longer simply part of the marketing process. Distribution is about moving the

product or service through the value chain to the customer (Carla, 2020).

Supply chain adaptability is fundamental to economic recovery in Nigeria. An effective supply chain structure ensures higher viability rates, quality control, better customer relationships and service, quicker production cycles, decreased production costs, and an overall improvement in the financial performance of an organisation.

Concept of Social Distancing and Efficient Service Delivery

In order to lessen the likelihood of disease transmission, social distancing is a public health technique that seeks to keep sick individuals from being in close proximity to healthy people. Large-scale actions like postponing gatherings or shutting public areas, as well as individual choices like avoiding crowded areas, might be included (Pearce, 2020).

When an infectious disease spreads through some or all of the following modes: droplet contact (coughing or sneezing), direct human contact (including sexual contact), indirect human contact (such as touching a contaminated surface), or airborne circulation, social distancing measures are the most efficacious. When an infection is spread mostly by insects such as mosquitoes or other insects, contaminated food or drink, or both, precautions are less effective. Authorities have promoted or required social isolation during the COVID-19 epidemic since it is a critical technique for preventing disease transmission. COVID-19 transmission occurs significantly more frequently over short distances than over long ones.

Moreover, in confined, poorly ventilated areas and with sustained exposure, it may spread over lengths greater than two meters (Centers for Disease Control and Prevention [CDC], 2020).

In a survey carried out by PricewaterhouseCoopers (PwC) in Nigeria, social distancing, lockdowns, and movement restrictions are some of the measures, amongst others, implemented by the Nigerian government to contain the spread of COVID-19 which distorted the normal flow of business. The survey posits that these measures, especially social distancing, impacted the supply chain through staff shortages, restrictions in market/delivery routes and changes in consumer behaviour and buying patterns.

Theoretical Framework
Diffusion of Innovation (DOI) Theory

This theory was propounded by Everett M. Rogers in 1962 (Karnowski & Kümpel, 2016). He asserts that diffusion of innovation is a process by which individuals accept a new concept, service, procedure, philosophy, etc. Rogers outlined this procedure and emphasised that, in most situations, the initial few are receptive to the new idea and adopt it. A critical mass develops as more individuals become receptive to it as a result of these early innovators' efforts to "spread the word." The new concept or product gradually spreads throughout the populace until a saturation threshold is reached. Innovation adopters can be divided into five groups, according to Rogers: innovators, early adopters, early majority, late majority, and laggards. Non-adopters are occasionally added as the sixth group.

Contingency Theory

Austrian psychologist Professor Fred E. Fiedler first proposed the hypothesis in 1964 (Peters, Hartke, & Pohlmann, 1985). In order to achieve acceptable competitiveness, company growth performance, and sustainability, contingency theory examines how organisations might continue to adapt their plans to the external environment and uncertainties. According to Dentchev et al. (2018), contingency theory serves as the main theoretical framework through which the company is examined. This theory is crucial to this research to ascertain the extent to which employers implemented new workplace practices in order to maintain maximum productivity levels. New working conditions were brought about by new government policies to contain the spread of the virus through social seclusion and movement restrictions.

Empirical Review

Mogaji (2020) investigated the influence of COVID-19 on transportation in Lagos, Nigeria. He employed a descriptive survey design; copies of the questionnaire were sent to Lagos residents via email. The research demonstrated that lockdown and movement limitations had a considerable favourable influence on the performance of SMEs. The data reveal that disruptions in transportation services caused by the pandemic impacted economic, social, and religious activities during COVID-19. Furthermore, the effect of COVID-19 on transportation in Lagos State, Nigeria, was identified as a rise in the costs of commuting, a shortage or lack of means of transport, and traffic congestion, which

also resulted in a rise in the overall cost of living in the city in addition to a rise in the price of food items.

Hamiza (2020) conducted research on the impact of the coronavirus lockdown on small- and medium-sized businesses in Arua Municipality, Uganda. He adopted a descriptive survey, and self-administered questionnaires were mailed to residents of Arua Municipality because movement restrictions and social distancing protocols were a hindrance to one-on-one interviews. The study's findings indicated that the lockdown had a considerable favourable influence on the performance of SMEs in Arua Municipal, Uganda.

Ozili and Arun (2020) showed in their contribution that the rising number of lockdown days, monetary policy choices, and foreign travel limitations have a considerable favourable influence on SME performance. Furthermore, the data show that restrictions on internal mobility and increased fiscal policy spending had no beneficial influence on the performance of SMEs.

Abideen (2020) conducted research on Coronavirus (COVID-19) and Small and Medium Enterprise Survival in Abeokuta, Ogun State, Nigeria. Data was collected via questionnaire and analysed using descriptive and regression analysis and SPSS. The study found that COVID-19 sub-variables such as lockdown, mobility limitation, and foreign travel restriction all had a substantial negative association with the performance of SMEs in Abeokuta, Ogun State, Nigeria.

Adenomon, Maijamaa, and John (2020) studied the effects of the COVID-19 outbreak on the Nigerian

Stock Exchange's performance using evidence from GARCH Models covering a period between 2 January 2020 and 16 April 2020. The findings revealed that profits plummeted during the COVID-19 period under study in Nigeria as opposed to the normal pre-COVID-19 results.

The FATE Foundation and BudgIT (2020) examined how COVID-19 affected 1,943 Micro, Small, and Medium Enterprises (MSMEs) across Nigeria's 36 states, including the Federal Capital Territory. The online survey was sent to Micro, Small, and Medium-Sized Enterprises (MSMEs) in Nigeria between March 28, 2020, and April 27, 2020, via email and significant social media platforms. Descriptive analysis was also used in the study. The results show that the pandemic had an adverse effect on 94.3% of the responding enterprises, particularly in the areas of cash flow, sales, and revenue. The African Development Bank's (AfDB) African Economic Outlook 2020 projected that real GDP in Africa would decline by 1.7 percent in 2020, falling by 5.6 percentage points from January 2020 pre-COVID-19 prediction. If the virus's spread continues through the second quarter of 2020, a further GDP drop of 3.4 percent is anticipated, which is 7.3 percentage points less than the growth anticipated before the COVID-19 breakout (AfDB, 2020).

Methodology

The research design of the study was a descriptive survey research design method. The study used a structured questionnaire to obtain data. The area of the study is Enugu State, Nigeria. The choice of location hinged on its proximity, effective coverage, and to minimise cost. The population of the study comprises the 185 staff of Chitis Limited, Aqua Rapha Investment Nigeria Limited and Bridgewaters and Suites Limited, all in Enugu State. Taro Yamane sample technique was adopted to narrow down the population to 127 as the sample size. The hypotheses stated were tested using the chi-square method.

Data Presentation and Analysis

Table 1: **Comprehensive Demographics of Respondents**

Title	Frequency	Percentage
Questionnaire distributed	127	100
Number returned	118	92.91
Number not returned	9	7.09
Age Bracket		
18 - 25 Years	24	20.34
26 – 35 Years	41	34.75
36 – 45 Years	34	28.81

46 – and above	19	16.10
Gender		
Male	71	60. 17
Female	47	39.83
Marital Status		
Married	42	35.60
Single	76	64.40
Educational Qualification		
O'Level	24	20.34
OND/NCE	32	27.12
HND/B.Sc.	46	38.98
MBA/M.Sc.	16	13.56
Duration of Employment		
1 – 10 years	67	56.78
11 – 20 years	23	19.49
21 – 30 years	18	15.25
31 and above	10	8.48

One hundred and twenty-seven (127) copies of the questionnaire were designed and distributed to respondents. Out of the 127 copies of the questionnaire distributed, 118 (92.91%) copies were completed and returned, while 9 (7.09%) copies were not returned. Therefore, 93% of respondents were a good representation. The study showed the respondents' profile in frequency and percentage distribution of age bracket, gender, marital status, educational status and duration of employment.

Question One: To what extent does lockdown affect the distribution value chain of SMEs in the Enugu state of Nigeria?

Table 2: **Limited transportation led to a shortage of raw materials for production.**

Response	Frequency	Percentage (%)
Strongly agree	36	30.51
Agree	70	59.32
Undecided	12	10.17
Disagree	0	0
Strongly disagree	0	0
Total	**118**	**100**

Table 2 above shows that 36 (30.51%) participants strongly agree that movement restriction led to the shortage of raw materials needed for production, 70 (59.32%) participants agree that movement restriction led to the shortage of raw materials needed for production, while 12 (10.17%) participants were undecided in giving their responses.

Table 3: This firm experienced difficulties in selling finished goods/services.

Response	Frequency	Percentage (%)
Strongly agree	46	38.98
Agree	30	25.43
Undecided	19	16.10
Disagree	15	12.71
Strongly disagree	8	6.78
Total	**118**	**100**

Table 3 above shows that 46 (38.98%) strongly agree there were difficulties in selling finished goods/services, 30 (25.43%) participants agree that there were difficulties in selling finished goods/services, while 15 (12.71%) participants disagree that there were difficulties in selling finished goods/services, 8 (6.78%) participants strongly disagree with the notion that there were difficulties encountered during the course of selling finished goods/services, and 15 (12.71%) participants were undecided.

Table 4: This firm experienced low sales as a result of movement restriction.

Response	Frequency	Percentage (%)
Strongly Agree	47	39.83
Agree	51	43.22
Undecided	13	11.02
Disagree	5	4.24

Strongly Disagree	2	1.69
Total	**118**	**100**

From Table 4 above, it shows that 47 (39.83%) strongly agree that their firm experienced low sales as a result of movement restriction, while 51 (43.22%) agree that their firm experienced low sales as a result of movement restriction, 13 (11.02%) were indecisive, 5 (4.24%) disagree, and 2 (1.69%) strongly disagree to the statement. This implies that majority of the employees believe that restriction of movements as a result of the lockdown facilitated lower sales value.

Question Two: To what extent does social distancing affect efficient service delivery among SMEs in Enugu state of Nigeria?

Table 5: **This firm reduced the volume of production and delivery of goods/services because of low demand.**

Response	Frequency	Percentage (%)
Strongly Agree	15	12.71
Agree	58	49.15
Undecided	24	20.34
Disagree	9	7.63
Strongly Disagree	12	10.17
Total	**118**	**100**

Table 5 above shows that 15 (12.71%) strongly believe and are in no doubt that the volume of production and delivery of goods/services was reduced because of low demand, 58 (49.15%) concur with the statement, while 24 (20.34%) were undecided, 9 (7.63%) responded that they disagree with the statement, and 12 (10.17%) strongly disagree with the statement. This implies that the majority of the staff believe that the firm reduced its volume of production and delivery of goods/services.

Table 6: **This firm started to shift work for employees to implement social distancing measures.**

Response	Frequency	Percentage (%)
Strongly Agree	29	24.58
Agree	58	49.15
Undecided	10	8.47

Disagree	9	7.63
Strongly Disagree	12	10.17

From Table 6 above, it shows that 29 (24.58%) participants strongly agree that their firm adopted the shift work method to implement social distancing, 58 (49.15%) agree that the shift work method was adopted by their firm, while 10 (8.47%) were undecided, 9 (7.63%) disagree with the statement, and 12 (10.17%) strongly disagree with the statement. This implies that the majority of the respondents agree that shift work was one of the strategies adopted by firms to implement social distancing measures.

Table 7: The rate at which customer were served was reduced due to social distancing rule.

Response	Frequency	Percentage (%)
Strongly Agree	22	18.64
Agree	52	44.07
Undecided	19	16.10
Disagree	16	13.56
Strongly Disagree	9	7.63
Total	**118**	**100**

From Table 7 above, it shows that 22 (18.64%) participants strongly agree that the customer service rate reduced, 52 (44.07%) agree with the statement. However, 19 (16.10%) participants were undecided, while 16 (13.56%) disagree with the statement, and 9 (7.63%) strongly disagree that customer service rate reduced in their firm during the pandemic. This implies that the majority of the respondents agree that the rate at which customers were served was reduced due to the implementation of social distancing as a protective measure.

Test of Hypotheses

The two hypotheses were formulated for this study and tested, and the decision taken is based on the rule stated below.

Decision rule: Reject Ho if P-value < 0.05.
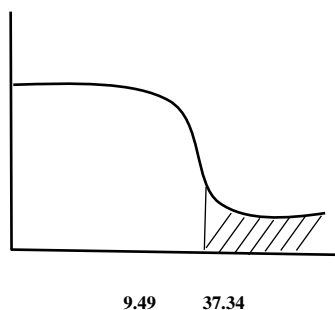
Test of Hypothesis One

H_0: Lockdown has no significant negative impact on the distribution value chain of SMEs in Enugu state, Nigeria.

H_I: Lockdown has a significant negative impact on the distribution value chain of SMEs in the Enugu state of Nigeria.

Table 8: **This firm experienced difficulties in selling finished goods/services.**

Response	Observation (o)	Expected value (ϵ)	$(o - \epsilon)$	$(o - \epsilon)^2$	$(o - \epsilon)^2 / \epsilon$
Strongly agree	46	23.6	22.4	501.76	21.26
Agree	30	23.6	6.4	40.96	1.74
Undecided	19	23.6	-4.6	21.16	0.90
Disagree	15	23.6	-8.6	73.96	3.13
Strongly disagree	8	23.6	-15.6	243.36	10.31
Total	**118**	**118**	**-**	**-**	**$\Sigma = 37.34$**

Therefore, Chi-square value (X^2) = **37.34**

Placing the level of confidence at 5% *(0.05)*,

Degree of Freedom to be 5-1 = 4,

Therefore, our Critical Value on the Chi-square table is = **9.49**

0   **9.49**   **37.34**

From the above, we see that our chi-square value (X2) = 37.34 is greater than (>) our critical value (Xa2) = 9.49, so it falls on the rejection region.

Decision Rule:

Since (X^2) tends to be higher than $(X_a{}^2)$, and the (X^2) falls on the rejection region, it is now clear that we need to reject the Null hypothesis (H_o) which states that "Lockdown has no significant negative impact on distribution value chain of SMEs in Enugu state, Nigeria." and accept the alternative hypothesis (H_I) "Lockdown has significant negative impact on distribution value chain of SMEs in Enugu state, Nigeria."
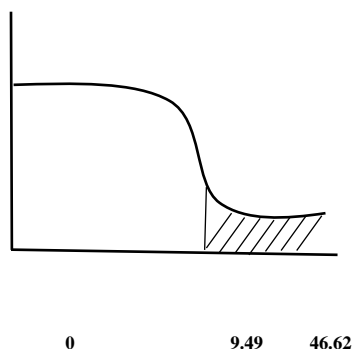
Test of Hypothesis Two

H_0:   Social distancing has no significant negative impact on efficient service delivery of SMEs in Enugu state of Nigeria.

H_2:   Social distancing has a significant negative impact on efficient service delivery of SMEs in Enugu state of Nigeria.

To test this hypothesis, the response to the third question in 'Section D' from the questionnaire, as found in Table 9, was used. The goal is to determine if the rate at which customers were served was reduced due to social distancing rules. We proceed using the *Chi-square method* (X^2) as previously established:

Table 9:   **This firm experienced difficulties in selling finished goods/services.**

Response	Observation (o)	Expected value (ε)	(o - ε)	(o - ε)²	(o - ε)²/ε
Strongly agree	22	23.6	-1.6	2.56	0.11
Agree	52	23.6	28.4	805.56	34.13
Undecided	19	23.6	-4.6	21.16	0.90
Disagree	16	23.6	-7.6	57.76	2.45
Strongly disagree	9	23.6	-14.6	213.16	9.03
Total	**118**	**118**	**-**	**-**	**Σ = 46.62**

Therefore, Chi-square value (X^2) = **46.62**

Placing the level of confidence at 5% *(0.05)*,

Degree of Freedom to be 5-1 = 4,

Therefore, our Critical Value on the Chi-square table is = **9.49**

0   9.49   46.62

From the above, we see that our chi-square value (X^2) = 46.62 is greater than (>) our critical value (Xa2) = 9.49, so it falls on the rejection region.

Decision Rule:

Since (X^2) tends to be higher than (X_a^2), and the (X^2) falls on the rejection region, it is now clear that we need to reject the Null hypothesis *(H_o)* which states that "Social distancing has no significant negative impact on efficient service delivery of SMEs in Enugu state, Nigeria" and accept the alternative hypothesis (H_I) "Social distancing has significant negative impact on efficient service delivery of SMEs in Enugu state, Nigeria."

Summary

The following are the major findings of the study:

I.   The lockdown has a significant negative impact on the distribution value chain of SMEs in Enugu metropolis, Enugu state, Nigeria (this was established by using the Chi-square Method of analysis where (X2) = 37.34 was greater than (>) our (Xa2) = 9.49).

II.   Social distancing has a significant negative impact on the efficient service delivery of SMEs in the Enugu metropolis, Enugu state, Nigeria (this was established by using the Chi-square Method of analysis where (X^2) = 46.62 is greater than *(>)* our (X_a^2) = 9.49).

Discussion of Findings

Small businesses in Enugu, Nigeria, experienced adverse effects during the Covid-19 pandemic. A lot of small business owners have not fully recovered from the impact the pandemic had on their operations and finances. The majority could not access raw materials for production as a result of movement restriction; others had to get innovative – go back to the drawing board to draw out new adaptive ways to cope and cushion the effects of the pandemic on their business. The study revealed that statistically, the lockdown has a significant negative relationship with SMEs' performance as regards the distribution value chain of these SMEs in Enugu state, Nigeria, i.e., the efficient distribution of value by SMEs in Enugu state was adversely affected by the lockdown order imposed as a containment measure by the government during the Covid-19 pandemic. Since movement restrictions hindered some of the operational activities of the firms, such as accessing raw materials and equipment for production, the efficient distribution of value to customers was undermined.

The study also revealed that there is a statistically significant negative effect of social distancing on efficient service delivery of SMEs in Enugu state, Nigeria, since the rate at which customers were served was reduced as a result of the implementation of the social distancing measure. The pandemic caused a lot of small businesses in Enugu to modify their approach to customers' orders, delivery of goods/services, and staff management.

Conclusion

From the findings and implications of this study, it is concluded that the Coronavirus (COVID-19) pandemic had a significant negative impact on the growth of SMEs in Enugu state of Nigeria. As the direct effect of COVID-19 spread throughout the Nigerian economy, the supply chain industry, especially the small and medium-scale enterprises, faced new obstacles. Manufacturers of final goods and services, which are often evenly distributed throughout the value chain, were unable to obtain raw materials from suppliers. The pandemic also triggered a local lockdown, affecting wholesale, retail, and distribution businesses. As a result, COVID-19 has had an influence on the supply chain sector, resulting in increased inflation and a decrease in the volume of products delivered across the value chain.

Recommendations

The findings of this study recommended that actors across the value chain are to implement efficient solutions aimed at sustaining production and final customer delivery. Also, innovative measures like the use of technology to accept and deliver consumer orders, strategic collaborations between manufacturers, middlemen, and delivery firms, and innovative inventory management should be adopted to avoid stockouts and so on. The majority of these strategies have shown to be effective even in times of economic and natural uncertainty and should be continued in the future.

Furthermore, gains achieved in managing public health during the COVID-19 era (such as hand

washing before entry into public places, minimum social distancing and other proactive health management protocols) should be sustained to promote public health, which will enhance organisational performance.

Areas for Further Research

This study cannot be said to be exhaustive as there is still room for further studies in areas such as "Effects of enforced movement restrictions on social lifestyle and business operations in Southeast, Nigeria", "Impact of COVID-19 on Economic growth and development in Nigeria" and "The impact of COVID-19 on Educational growth and development in Nigeria among other sectors of the economy".

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