5th Asia Pacific Conference on Industrial Engineering and Operations Management
Tokyo, Japan, September 10-12
Publisher: IEOM Society International, USA DOI: 10.46254/AP05.20240156
Published: September 10, 2024

Assessing South Africa's SMMEs' Limitations Post COVID-19's State of Emergency

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Abstract

SMMEs face many challenges in a changing business environment. Entrepreneurs and management are under constant pressure to build a competitive edge. The COVID-19 pandemic caused unprecedented challenges worldwide, including operational and strategic upheavals for South African SMMEs, putting their workforce at risk. After 200 questionnaires were distributed and 70.5% were returned, data was analyzed, and a link between the pandemic's economic impact and South African SMME business operations. Findings also stressed the importance of complex financial support systems and showed that different alert levels can manage business impact. This study's targeted analysis of academic and industrial implications is important. Providing insights during a global crisis enhances the University of Johannesburg Department of Quality and Operations Management's knowledge. Industrially, it provides empirical evidence to help South African SMMEs survive health crisis-related economic challenges. Therefore, research findings within the broader spectrum of small enterprises were used to recommend future research. The data is heavily concentrated in Gauteng, which limits and may skew the study. Future researchers should include all South African provinces in their studies.

Keywords
COVID-19, Business Strategy, Operational Changes, Sustainability.

Introduction

According to the National Small Business Amendment Act 26 of 2003 (Republic of South Africa 2003), in South Africa, small to medium enterprises (SMMEs) are described and referred to as any establishment with one or more of the following characteristics: 200 employees or less, annual turnover less than R64 million, or less than R10 million in asset value. This highlights exactly how critical SMMEs are to the South African economy, contributing significantly to national Gross domestic product (GDP) and job creation. In South Africa, the government recognizes the importance of SMME business activities. The economy requires strategic plans that develop small, medium, and micro businesses. The government's National Development Plan (NDP) embraces the potential for future development, as well as promotes optimistic insight into upcoming events. SMMEs must prepare to accomplish their short-term financial goals, plans, and budgets in order to benefit from the upcoming projects and experience South Africa's growth potential (Herrington and Wood 2003).

SMMEs are critical to the country's economic development and have been declared a ministry by the government. However, 50% of all South African start-up businesses fail within the first 24 months according to Ravi Govender, head of small enterprises at Standard Bank (Bizmag.co.za 2019). South Africa needs job creation opportunities due to the rising unemployment rate at 34.9% of the population of 65 million people (Statistics South Africa 2022). The high unemployment rate, in addition to the new potential technologies, is a major concern to South African SMME's. This is due to the potential job loss caused by the capacity reduction benefits of new technologies. The concern is that SMME's will face challenges which would result in increased failure rates, hereby further affecting South Africa's

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economic growth. The researcher's concern is primarily the challenges that South African SMME's face when engaging in the new technological era and dealing with a ruthless global pandemic.

1.1 Problem Statement

Given all the government's initiatives to support SMMEs, while fostering competitive environments where continual growth is stimulated, their success still depends on the individual entrepreneur captaining the ship. The new industrial age brings exciting new opportunities; however, it could be laced with the poison that kills off SMMEs in South Africa. Add in the global pandemic of the COVID-19 virus, a national lockdown, and trade restrictions and it is a recipe for SMME failure… or is it? The COVID-19 pandemic has precipitated a global economic shock, presenting significant challenges to SMMEs that are the backbone of many economies, including South Africa. Despite government initiatives to buttress these enterprises, the virus's impact, exacerbated by the national lockdown and trade restrictions, has threatened the survival and growth of SMMEs.

1.2 Research Aim, Objectives, and Question

This study aims to deepen the understanding of the effects of the various changes implemented by SMME business entrepreneurs and management during the COVID-19 pandemic in South Africa, focusing on the quality and availability of products and the SMMEs' general performance. The main objective of this study is to investigate the effects of the various changes SMMEs in South Africa implemented to mitigate the impacts of COVID-19 on their businesses in terms of quality and product availability and their general business performance.

To achieve the above main research objective, the following specific research objectives (SRO) have been established: (SRO1) - Assess the factors affecting South African SMMEs during the COVID-19 pandemic; (SRO2) - Investigate the perceived impacts of the pandemic on supplier-related operations and the related financial implications for the SMMEs; (SRO3) - Determine the relationship between different types of financial support mechanisms and their perceived effectiveness in business operations during the pandemic; (SRO4) - Explore the operational adaptability of SMMEs to different alert levels during the pandemic, and (SRO5) - Identify the impact of various pandemic-related operational changes on the consistency of business processes among South African SMMEs.

From the above main objective, the research attempted to answer the following main research question: what were the resulting effects of the various changes South African SMMEs implemented to mitigate the impacts of COVID-19 on their businesses in terms of quality and product availability and their general business performance? To answer the above main research question, the following specific research questions (SRQs) have been developed: (SRQ1) - What factors affected South African SMMEs during the COVID-19 pandemic? (SRQ2) - What were the perceived impacts of the pandemic on supplier-related operations and the related financial implications for the SMMEs? (SRQ3) - What is the relationship between different types of financial support mechanisms and their perceived effectiveness in business operations during the pandemic within the South African SMMEs space? (SRQ4) - From the South African SMME's perspective, what were the operational adaptability mechanisms in place for different alert levels during the COVID-19 pandemic? And (SRQ5) - What is the impact of various pandemic-related operational changes on the consistency of business processes among South African SMMEs?

1.3 Limitations and Significance of the Study

Due to the fluctuating COVID-19 infection rates, the researcher had to change the initial approach and cancel all face-to-face interviews. As such, all questionnaires were distributed electronically and there was no physical contact, to safeguard the health of both the researcher and the various participants. Challenges also arose due to poor response rates to the electronic questionnaire, which resulted in the distribution of additional questionnaires. In situations where interviews were incomplete, new potential replacements were sourced. Although data was collected from all provinces within South Africa, the response rates do not represent an even distribution or accurate representation of all areas. As such, the study focuses primarily on the Gauteng area, as such the findings should not be generalised.

This study contributes to the body of knowledge in the field of Operations Management with an inclination on SMME's operations, specifically from a South African perspective. As the study was started and predominately conducted during the pandemic, the researchers are hopeful that it can serve as a baseline for future studies in the field once the availability of new research becomes available. It is believed that the study's findings will assist the SMMEs in South Africa to understand the COVID-19 pandemic's effect locally, as well as the challenges associated with the national lockdown. Furthermore, the study will serve as guidance to future SMMEs on how to potentially survive economically straining periods and provide some potential solutions to common issues.

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2. Literature Review

2.1 background of COVID-19

On December 31, 2019, the Wuhan Municipal Health Commission in China reported a cluster of pneumonia cases in Wuhan, Hubei Province (WHO 2020). WHO announced the first disease outbreak on January 5, 2020, and five days later published a comprehensive report on infection detection, testing, and management. COVID-19, caused by the SARS-Cov-2 virus, is a highly contagious respiratory illness (Petrović and Kocić, 2020). The global pandemic has destabilized the global economy and financial stock markets and killed just under 3.7 million people as of February 2022 (Chang et al., 2020). The pandemic's unknown effects and indefinite lifespan hurt various economic sectors (Del Rio and Malani, 2020). This disrupts healthcare, trade, investments, financial markets, tourism, businesses, and social development (Hall et al. 2020). The first case of COVID-19 recorded outside of China was in Thailand, on 13 January 2020, hereafter, the virus quickly spread around the world, affecting 219 *countries* and territories (Fitriasari, 2020). The South African National Institute for Communicable Diseases confirmed that a suspected case of COVID-19 had tested positive on the 5th of March 2020. The 38-year-old patient and his wife were members of a group of 10 people who travelled to Italy (Mkhize, 2020). According to records provided by the Republic of South Africa's Department of Health, as per May 24th 2022, South Africa has recorded 3935761 positive cases and 101002 deaths (RSA Department of Health 2022) as depicted below in Figure 1.

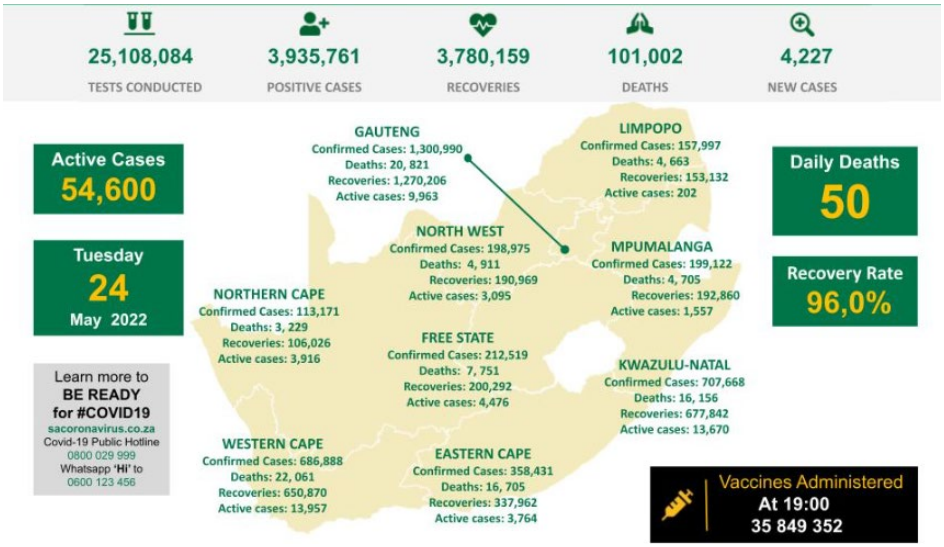

Figure 1. May 2022 COVID-19 Statistics in South Africa (RSA Department of Health 2022)

2.2 Global Healthcare System Overload

On December 31, 2019, the Wuhan Municipal Health Commission in China reported a cluster of pneumonia cases in Wuhan, Hubei Province (WHO 2020). WHO announced the first disease outbreak on January 5, 2020, and five days later published a comprehensive report on infection detection, testing, and management. COVID-19, caused by the SARS-Cov-2 virus, is a highly contagious respiratory illness (Petrović & Kocić, 2020). The global pandemic killed just under 3.7 million people in February 2022. African healthcare systems are among the weakest, and COVID-19 put immense pressure on them. These systems are expected to be most at risk due to limited healthcare infrastructure, unreliable transport, poorly equipped medical facilities, and a shortage of critical care professionals, but there is insufficient research to support this (Tessema et al. 2021).

In general, hospitals were overwhelmed and resources such as ventilators and personal protective equipment (PPE) were in high demand, leading to challenges in patient care and healthcare worker safety (The Lancet 2020). However, the pandemic was seen by many as an opportunity to address the structural inequalities and environmental unsustainability that healthcare systems represent, thereby allowing for transformative resilience or "transilience" (Pelling 2010). As such, through the disruption caused by COVID-19, instead of "bouncing back" to the pre-pandemic healthcare system, new systems should be developed adopting a resilient approach of a "system capable of preparing for and effectively responding to crises, maintaining core functions when a crisis hits and reorganizing itself to better address issues as informed by lessons learned during the crisis" (Kruk *et al.* 2015).

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2.3 COVID-19's Long Term Economic Impact

To reduce the spread of the virus, lockdowns and other restrictions were implemented in many countries around the world, which led to severe economic slumps. People were compelled to seek new ways of interacting, working, and learning, and further societal changes influenced the way people traveled, purchased goods and services, and even the consumption of these products. Millions of people lost their jobs because of business closures, and governments were forced to enact stimulus programs to help faltering economies.

The pandemic affected global tourism for years, but empirical data is scarce. The impact of COVID-19 on tourism is not fully understood by policymakers and practitioners (Škare et al. 2021). COVID-19's high infection and mortality rates and lack of global idiosyncratic shocks made it difficult to compare its tourism industry impact to previous pandemics. Peak financial cycles can worsen pandemic effects, leading to decreased capital investments, employment, wages, and household incomes (Škare et al. 2021). Reduced travel hurts many countries' cashflows, and it's unclear if tourist destinations will have enough visitors to support local industries after these borders reopen (Roy 2020). The World Travel and Tourism Council (WTTC) estimates 75 million COVID-19-related job losses. Up to US$ 2.1 trillion in travel tourism GDP loss is expected in 2020 (Škare et al. 2021), excluding aviation industry impacts.

The pandemic resulted in adverse effects on oil-dependent countries (Roy 2020). The ban on travel and the grounding of much of the aviation industry resulted in a drastic decrease in demand resulting in decreased production, and therefore a reduced workforce. As such, the oil price dropped, unemployment in the sector increased and the entire economic market was affected. It is well known that the stock market responds differently to various events (Ramiah, 2013) and it has been argued that there has never been an infectious disease outbreak that has impacted the markets as forcefully as the COVID-19 pandemic (Baker *et al.* 2020). The stock markets were severely affected by uncertainty, volatility, and fluctuations due to widespread fear and panic among traders (Roy 2020). However, Kusumahadi and Fikiri argue that the emergence of COVID-19 should not be viewed as the *only* factor that affected the stock market during this period and encourages further research regarding other factors that affect stock return volatility, especially during a pandemic (Kusumahadi and Permana 2021).

2.4 Global Supply Chain Disruptions

In contrast to previous major disruptions, COVID-19 has affected these supply chains at all stages, causing major disruptions in manufacturing, processing, transport, logistics, and consumer demand (Xu et al. 2020). Ino and Watanabe (2021) predict that diversification and decentralization will complicate global supply chain changes due to increased stakeholders and interdependencies between power nations. This complexity could lead to partial optimization in the event of a supply chain disruption, as it becomes harder to see the full picture, which could disrupt the supply chain in severe ways.

Before the pandemic, India's rapid urbanization and modernization boosted the restaurant industry (Vig & Agarwal 2021). The study notes that a lack of funding and changed consumer behaviour post-pandemic have seemingly affected the industry indefinitely, resulting in negative cash flows and widespread failure of small restaurants, despite entrepreneurs' innovative attempts to include digital technologies to meet consumers' need for contactless dining experiences. The failure of these small restaurants has affected employment, cash flow, and the market because fewer products are purchased due to decreased demand. COVID-19 differs from other major events like earthquakes, tsunamis, nuclear or radiation accidents, and wars because these are usually localized and short-lived (Xu et al. 2020). However, the pandemic spread globally quickly, shutting down many economic sectors. The global supply chain was affected by the foreclosure of many smaller economic contributors due to decreased cash flow and new consumer demands.

2.5 Background of the South African Economy

South Africa's economic history begins with apartheid, a system of political and economic segregation from 1948 to 1994. South African apartheid ended with boycotts, disinvestment, and sanctions (Morgan 2006). Mohammed (2015) believes apartheid disinvestment, parliamentarian fraud, and post-apartheid government mismanagement have sunk the South African economy. De Villiers (2019) declares state-owned companies like SAA bankrupt or "technically insolvent". South African state-owned enterprises fail due to resource mismanagement, nepotism, and daily bribery and corruption. This got ESKOM into R440-Billion debt. Crompton explains how the national electricity supplier loses money due to monthly expenses exceeding revenues (de Villiers 2019). South Africa's economic rating was downgraded to "junk status" by two independent rating agencies in April 2017 (Balkaran 2017). Balkaran (2017) says our "junk status" makes our economy "non-investment". The government cannot borrow money and must pay more

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interest on what it does borrow, reducing funding for basic infrastructure, slowing economic growth, and increasing the already high unemployment rate.

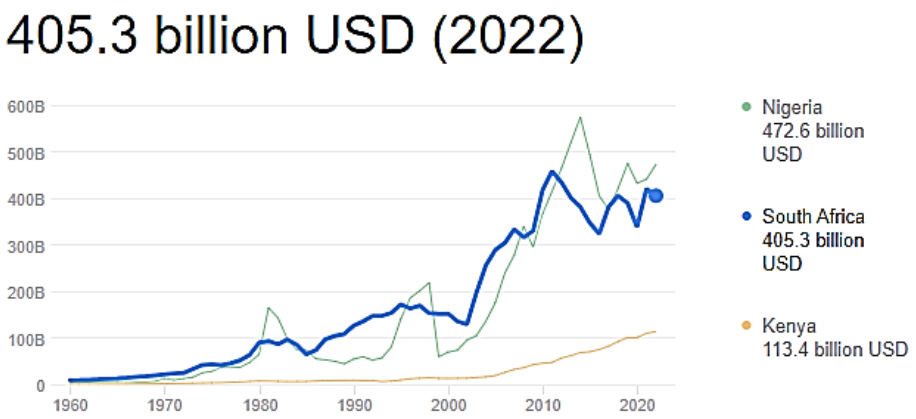

Figure 2. Gross Domestic Product – South Africa (Source: World Bank, (2020))

As of 2022, South Africa's GDP is valued at 405.3 billion USD, while Nigeria's GDP surpasses it at 472.6 billion USD, and Kenya's GDP amounts to 113.4 billion USD. Figure 2 illustrates the substantial growth of South Africa's GDP over time, with noticeable fluctuations occurring around 2010 (World Bank, 2020). Nigeria's Gross Domestic Product (GDP) has exceeded that of South Africa, particularly since the year 2000. However, Kenya's GDP, while experiencing growth, still lags significantly behind that of both Nigeria and South Africa. GDP data in the image suggests several economic conclusions for South Africa. Economic growth in South Africa from 1960 to 2022 shows growth and expansion (World Bank, 2020). However, fluctuations, especially around 2010, indicate economic instability. After 2000, Nigeria's GDP surpassed South Africa's, indicating it is not the region's largest economy. While Kenya's GDP is lower than South Africa's, its economy is more developed and diversified. South Africa's steady growth, despite occasional fluctuations, suggests a resilient economy with growth potential if it can overcome instability.

2.6 South African SMMEs

2.6.1 Background

South African Small, Medium, and Micro-sized Enterprises are called SMMEs (Urban and Naidoo 2012). According to the National Small Business Amendment Act 29 of 2004, an SMME is “a separate and distinct business entity, including co-operative enterprises and non-governmental organizations, managed by one owner or more which, including its branches or subsidiaries, if any, is predominantly carried out in any sector or sub-sector of the economy”. The DTI defines SMMEs as formal, informal, and non-VAT-registered organizations (DTI 2008). These include street vendors, craftspeople, and generations-old businesses that employ over 100 people (Seda 2016). The NDP 2030 aims to create 90% of new jobs through the establishment and promotion of SMMEs (Balkaran 2017). SMMEs are globally recognised as a way to create and grow jobs (Obi et al. 2018). The SME Landscape Report estimates that the average South African SMME employs 2–5 people and generates less than R200 000 in revenue (Thulo 2019). The study also found that 20% of SMMEs earn between R200 000 and 1 million rand annually. The number of employees ranges from one entrepreneur and one employee to 6-50 (Thulo 2019).

SMMEs face issues like access to private funding or government subsidies (Ndiaye et al. 2018), access to South African markets due to larger businesses and fierce competition, restrictive labor laws, and political and economic instability (Gamidullaeva et al. 2020). Mambula adds that poor roads, water supply, telecommunication networking, outdated technologies, and, especially in South Africa, erratic electricity supply hinder the growth and sustainability of SMMEs in developing countries (Mambula 2002). The report states that the respondents' biggest technology challenge was stable and reliable internet access (Thulo 2019). Though most SMMEs face many challenges in their daily operations, they still create jobs and have countless positive impacts on their community and society, contributing to 20% of the country's GDP and 47% of its workforce (Moola 2020).

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2.6.2 The Effects of COVID-19 on South African SMMEs

COVID-19 has devastated daily life (Dwivedi et al. 2020) and forced governments worldwide to implement "COVID-19 Containment Policies" (McGeever 2020). Petrović and Kocić (2020) state that South African regulations aim to prevent direct and indirect transmission of the virus through respiratory droplets and surface contact. Thus, public masks were needed (Balachandar et al. 2020). In the workplace, schools, and public, social distance was 2m (McGeever et al. 2020). SMMEs provide permanent jobs and income to a large population, boosting socioeconomic development (Razumovskaia et al. 2020). The World Bank Group expects 600 million new workers in 15 years, with 400 million SMMEs in Asia and Sub-Saharan Africa creating four out of five jobs (Ndiaye et al. 2018). National economy, employment, and health affect SMME success. Pandemics hurt SMMEs most (Cepel et al. 2020). Social distancing, widespread fear of infection, government restrictions and lockdown, and consumer purchasing power loss due to pay cuts and dismissals lower sales. Financial disruption and cashflow reduction could close many SMMEs, threatening the economy (Akhmadeev & Manakhov 2015). Millennials prefer small businesses for their flexibility and opportunities (Ronda et al., 2020), so the government and business owners should protect them and the economy.

March 23, 2020, the government declared a COVID-19 State of Emergency, imposing a 21-day lockdown and an Alert Level 5 warning banning non-essential in-person communication outside of family. Pandemic flights, cruise ships, and domestic and international travel were halted, limiting movement and canceling major events (Balachandar et al., 2020). Thus, prolonged containment and reduced interactions devastated South African SMMEs. The government lifted Alert Level 2 lockdown restrictions in August 2020, reopening the market. Many businesses closed permanently due to high Alert Levels and inability to make a living, according to Fubah and Moos (2022). Many SMMEs lost customers, failed to pay rent, expenses, salaries, and wages, and saw income drop due to lockdown restrictions. South African SMMEs benefited little from the State of Emergency and COVID-19. Market gap hunters made short-term sales of pandemic products. The pandemic affected more than SMME entrepreneurs.

2.6.3 Strategies Implemented by South African Entrepreneurs

As face-to-face interaction was illegal, Digital Technologies (DT), Information Systems (IS), and Cloud-based systems were widely used to communicate while maintaining self-isolation and social distance (Kodama 2020). Smart technologies and ICT tools helped organizations adapt to environmental changes and communicate meaningfully. Encourages unconventional business solutions, growth, improvement, and rebranding (Obrenovic et al. 2020). Many street trading businesses, backyard manufacturing services, and home-based enterprises were left in the dark because only technologically advanced SMMEs with disposable income could implement these new technologies (SEDA, 2016). Avoiding risk management, strategic planning, and DT would doom SMME pandemic survival (Stan-Maduka 2013). However, many SMMEs could not afford rapid digitalization or a stable internet connection (Thulo, 2019), so they used other workforce protection methods.

According to Fubah and Moos (2022), entrepreneurial coping mechanisms include a positive entrepreneurial mindset, better communication, networking, and new advertising methods. Tiering staff, limiting public exposure, staggering shifts, and applying for government subsidies were more widespread measures (Craven et al. 2020). Staff layoffs, service fee cuts, and business model changes were the most drastic measures. South Africa's total ban on the sale of all products to reduce public gatherings and unsafe behavior severely impacted the alcohol and tobacco industries, which showed how business models can adapt and change. During the "lockdown", SMMEs based on these industries had to adapt and change their daily business operations, adding food to bars and increasing sales of non-tobacco products in their stores to ensure sustainability, reposition themselves in the market, and boost economic growth. Thus, several mechanisms were identified to help pandemic-affected SMME entrepreneurs boost economic growth and success.

3. Methods

3.1. Research Approach

The researchers opted for an exploratory design that utilized quantitative data, which provided more flexibility to investigate an area with limited previous research. This approach is motivated by the need to understand real-life situations, incorporating various viewpoints, and recognizing the present social, cultural, and political influences impacting SMME entrepreneurs. Comprehending the significance of these factors in relation to competitive advantage offers a suitable framework for in-depth analytical investigation. This comprehensive approach not only utilizes knowledge from a wide range of sources but also strives to reduce any discrepancies or contradictions in the research.

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3.2. Populations and Sampling

The study includes South African SMME owners. Equal representation from all 9 South African provinces was sought. Screening selected participants based on various characteristics and requirements. A study's population is defined as all entities with specific characteristics that meet the sample benchmark for a study and identify the researcher's specific concerns (Banerjee and Chaudhury 2010; Hu 2014; Shah 2023). A target population is also defined as individuals or groups that can answer the modeled questions and to whom the study's results apply (Ledwaba 2012). This study targets SMME entrepreneurs, management, business owners, and other interested parties directly involved in management and operations, such as procurement, human resources, engineering, and maintenance staff in South Africa.

3.3. Data Collection Methods

COVID-19 infection rates fluctuated, limiting the researchers to structured questionnaires. Google Forms was used to create and distribute these surveys. The researcher recruited participants from Yellow Pages, Google, LinkedIn, and Flea Markets. Each potential business received questionnaire links and consent forms via email. These questionnaires and statistical analysis helped the researcher draw conclusions. The surveys collected quantitative data in terms of the sectors and provinces within which the businesses operate, the years of operations, economic factors affecting business operations (EF) such as the COVID-19 pandemic (EF1), economic recession (EF2), inflation (EF3), load shedding/power instability (EF4) and protest/strike actions (EF5), financial implications (FI) such as the price of raw materials purchased from suppliers (FI1), the quality of raw materials purchased from suppliers (FI2), services rendered from suppliers (FI3), range of products available from suppliers limited (FI4) and interaction with suppliers (FI5).

Additionally, the questionnaires also collected data on financial support mechanisms used by SMMEs (FS) such as government financial aid (FS1), the South African Revenue Services tax relief (FS2), debt relief finance scheme (FS3), business loans (FS4), personal loans to cover business debts (FS5). Finally, the survey gathered data on how different alert levels affected business operations (BO). The challenges faced by businesses include reduced operating hours (BO1), limitations on workforce capacity (BO2), restrictions on customer accessibility (BO3), decreased access to raw materials (BO4), and increased operating expenses due to the need for sanitation and social distancing measures (BO5). This approach allowed for precise measurement and the development of numerical trends that future SMMEs can use.

3.4. Trustworthiness of the Study

Data was handled sensitively, and participants gave informed consent before taking surveys. All candidates were chosen based on the researcher's ability to verify the information using the screening questions at the beginning of the questionnaire. Data validity is a researcher's method to ensure research objectives are supported by credible evidence (Yin 2011). Furthermore, Yin (2011) states that validation also is about the identification of a means to guarantee that the researcher's conclusion represents what is conveyed in the transcripts. Triangulation, comparative analysis, and contextual factors are also used. To ensure credibility and validity, all data was examined and compared. The researcher conducted a pilot study to verify the study before starting it. Statkon helped the researcher validate and process SPSS data.

4. Results and Discussion

A total of 200 questionnaires were distributed and 141 were returned, therefore providing a total response rate of 70.5%. Out of the 141 respondents that returned the questionnaire, 134 were found to be relevant for the data analysis. As such, out of the relevant questionnaires, a valid response rate of 95% was obtained, with the remaining 5% of responses not used due to incompleteness or failure to meet the requirements of the screening questions.

4.1 Descriptive Statistics

4.1.1 Participants Industry Sector and Provinces Business

Figure **3** shows how the 134 research respondents were distributed by industry. These results are summarized: **Most** respondents were "Unspecified" (17.16%), suggesting they did not specify their industry sector. The "Food, Drink, and Tobacco" sector also had many respondents. The second most represented sector was manufacturing (12.69%), indicating a large presence of SMMEs in this industry. Construction, Transport, and Community (8.96%): Nearly 9% of respondents were from these industries. Financial Services and Trade and Accommodation (6.72%): These sectors also had many respondents. With only 1 response, utilities had the lowest representation among respondents (0.75%). Utilities may have low representation because they exceed SMME characteristics like capacity and turnover,

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according to the researcher. The utilities sector may have larger companies that do not meet SMME criteria, so it was underrepresented in this study**.**

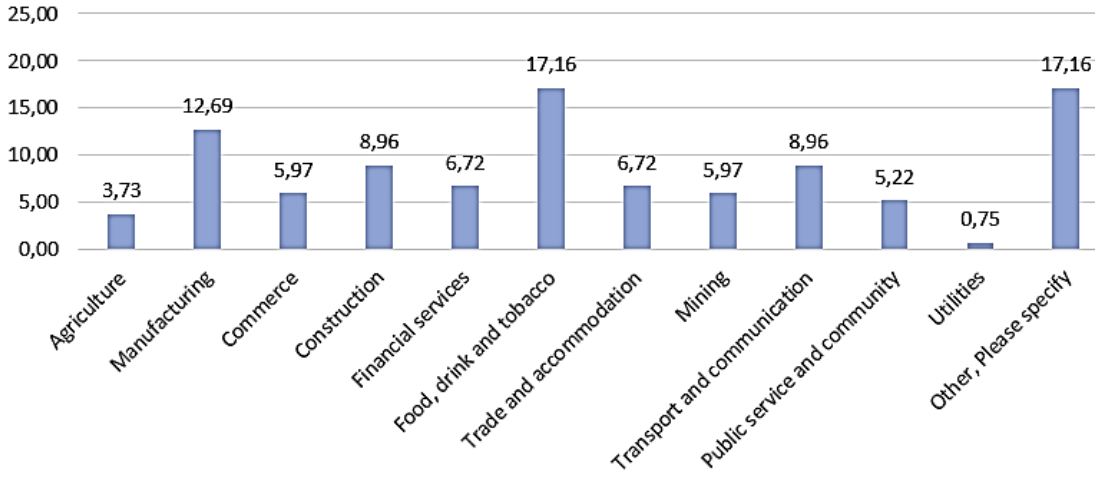

Figure 3. Industry Sector Representing Business Participants

The researcher sought respondents' South African and provincial locations. The researcher distributed the questionnaire to ensure equal coverage to avoid data bias, however, 50 out of 134 respondents were from Gauteng Province (37.31%), followed by Kwazulu-Natal and Western Cape with 13 responses (9.70%), Northern Cape 12 (8.96%), Limpopo 11 (8.21%), North West and Free State with 10 each (7.46%), and Eastern Cape with 8 responses (5.97%) and the least responses were received from the Mpumalanga, with only 7 valid questionnaires completed (5.22%). The researcher sought equal coverage across provinces to avoid data bias, but respondents were unevenly distributed across South Africa's provinces. Gauteng had the most respondents, Mpumalanga the fewest. Consider the imbalance in respondent distribution when interpreting study results, as it may affect generalizability to the entire South African context.

4.1.2 Business Years of Operations

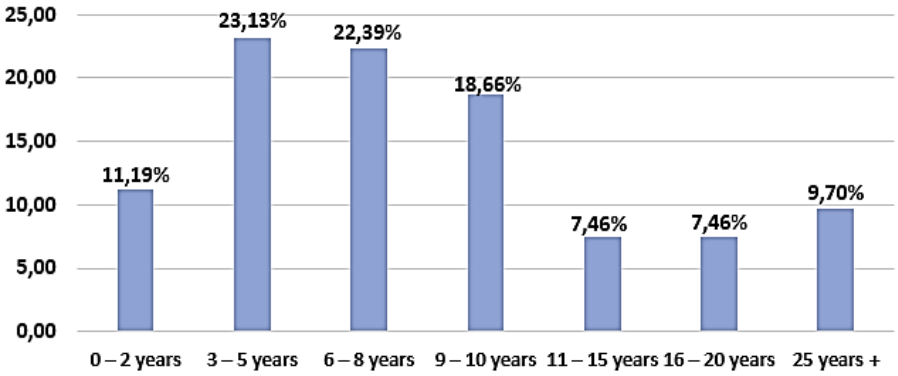

Figure 4. Business Years of Operations

The data in Figure 4 indicates that a significant portion of the Small, Medium, and Micro-sized Enterprises (SMMEs) surveyed are relatively new to the market, with 70% of the respondents having been in business for less than 10 years. The cumulative percentage of 75.73% for businesses that have been operating for 0 to 10 years shows that the majority of SMMEs in the sample are relatively new, with a substantial proportion in the 3 to 8 years range. This information is valuable for understanding the youth of the SMME sector and the potential implications for their resilience and response to challenges such as the COVID-19 pandemic.

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4.2 Discussions of Findings

4.2.1 Economic Factors (EF) Affecting Business Operations

The survey revealed that a significant majority of respondents, specifically 81.40%, expressed that their businesses were negatively impacted by the COVID-19 pandemic. The average agreement score was 4.28. It is evident from this data that the COVID-19 pandemic had a significant impact on business operations. Many business owners agreed or strongly agreed. According to the survey, 68.70% of the respondents mentioned that their business was negatively affected by a recession. The average score for the statement was 3.77. According to the data, it is evident that the recession had a significant impact on business operations. Most respondents agreed or strongly agreed. Most respondents, about 78.30%, scored 4.01 when rating the financial effects of inflation. Most of the respondents agreed or strongly agreed that inflation had an impact on many businesses. EF4 relates to loadshedding and power instability, with 71.70% reporting experiencing financial issues, with an average score of 3.99. According to the data, it seems that many businesses are concerned about loadshedding and the instability of power with many entrepreneurs expressing strong agreement with this concern.

4.2.2 Financial Implications (FI) Affecting SMMEs' Suppliers

Most respondents (70.20%) say supplier raw material prices affect their business (FI1). Raw material prices are worrying businesses. This factor has an average score of 3.83, which is concerning. Over half (53.80%) of survey respondents said supplier raw material quality affects their business (FI2). They averaged 3.37 for this factor. It appears that material quality (FI2) affects business success and efficiency. Supplier services affected business operations for 65.70% of survey respondents (FI3). Their average service rating was 3.7. Limited products range from suppliers (FI4) had a moderate to major impact on respondents. Out of all respondents, 70.90% averaged 3.81. Most respondents (78.40%) said supplier interactions affected their business operations (FI5). Their overall rating was 4.04/5. Supplier communication and management are key to business success. Most respondents say supplier factors affect their business. Business success depends on good supplier and other relationships.

4.2.3 Financial Support (FS) Mechanism Implemented by SMMEs

The survey on financial support mechanisms yielded diverse opinions. With relation to FS1, 78.40% strongly disagreed or disagreed with government financial aid. This question averaged 1.81 points. It appears that many are unhappy with government aid. FS2 highlighted that 64.20% of respondents disagreed or strongly disagreed with SARS tax relief. Conversely, 29.80% agreed or strongly agreed. Average score for this question was 2.27. 64.90% of people disagreed or strongly disagreed with the Debt Relief Finance Scheme's effectiveness (FS3). However, 21.70 percent agreed or strongly agreed. The average scheme score was 2.13. Some appreciation for the scheme's efforts is expressed in the negative sentiment. Most respondents (56.70%) disagreed or strongly disagreed with business loans' effectiveness (FS4), while 34.30%) agreed. The average score was 2.46. Some businesses benefited from business loans, while others did not. Many (30.60%) agreed or strongly agreed with using personal loans to pay off business debt (FS5), but most (62.00%) disagreed. The average score was 2.31. Some businesses needed personal loans, but overall, there was reluctance.

4.2.4 Alert Levels on Business Operations (BO)

The data on "Alert Levels Business Operations (BO)" provides information on how business operations are impacted by different alert level restrictions. Most respondents (74.60%) expressed that they found reduced operating hours to be challenging for their business, with an average score of 1.8 in relation to BO1. BO2 which addressed the restrictions on workforce capacity revealed that 75.40% of the respondents found workforce capacity restrictions to be very difficult or difficult for their business operations, with a mean score of 1.87. According to the survey, 76.10% of respondents found customer accessibility restrictions to be very difficult or difficult for their business operations, with a mean score of 1.82 (BO3). Regarding BO4, it was found that 64.90% of respondents, with a mean score of 2.12, experienced challenges with reduced access to raw materials for their business operations. There has been an increase in general operating expenses in BO5. According to the survey, 67.90% of the respondents found it challenging to manage the increased general operating expenses for their business operations, which included the costs of sanitation and social distancing measures. On average, they rated the difficulty level as 2.09.

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4.3 Reliability and Validity

4.3.1 Reliability

Table 1 displays the Cronbach's Alpha values for the constructs in the study, which indicate their reliability. "Economic Factors Affecting Business Operations" and "Financial Implications Affecting Suppliers" have received high-reliability scores of 0.837 and 0.825, respectively. The reliability score for "Financial Support Mechanisms Implemented" is 0.709, which is considered acceptable. The score of 0.876 for the "Alert Levels on Business Operations" is highly reliable. There is another construct called "Economic Factors Affecting Business Operations" that has a reliability score of 0.865. Most constructs are generally reliable, which means that the measures used in the study are likely to be consistent.

Table 1. Cronbach's Alpha Coefficient of Constructs

Constructs	Cronbach's Alpha
Economic Factors Affecting Business Operations (EF)	0.837
Financial Implications Affecting Suppliers (FI)	0.825
Financial Support Mechanisms Implemented (FS)	0.709
Alert Levels on Business Operations (BO)	0.865

4.3.2 Validity

Confirmatory Factor Analysis (CFA) is a statistical method that helps researchers gain insights into the relationships between variables and factors. In general, CFA tends to accept factor loadings that are above 0.5. There are several economic factors that have an impact on businesses. Some of the challenges we are currently facing are COVID-19, recession, inflation, and power instability, also known as loadshedding. I carefully measured and loaded these factors. The factors of raw material price, quality, services rendered, product range, and supplier interaction have moderate to strong loadings. It seems like there is a strong connection between the constructs. Business loans have a lower factor loading of 0.428 compared to government financial aid, SARS tax relief, and the debt relief finance scheme, which have factor loadings of 0.674, 0.687, and 0.767, respectively. Business loans may not have a direct connection to the concept being studied. The business operations alert levels are ranked as follows: Alert Level 3 (0.844) and Alert Level 2 (0.808) have strong factor loadings, while Alert Level 4 (0.578) is slightly lower. It's clear that alert levels have a significant impact on operations. There are specific restrictions that apply to different business operations at different alert levels. Some of the factors to consider are the operating hours, the capacity of the workforce, how accessible the business is to customers, the availability of raw materials, and the operating costs.

5. Conclusion

High reliability scores and factor loadings indicate strong construct correlations. This shows that the survey items are collecting the desired data. As a researcher, this means that the survey constructs and items are strong indicators of COVID-19's economic impact. However, "Business Loans" has weaker correlations, according to the researcher. This suggests further investigation into why certain financial support mechanisms do not strongly correlate with business success. This statement underpins recommendations, customized financial assistance, and program design and implementation. In-depth insights into how the COVID-19 pandemic has affected South African SMMEs helped the research achieve its goals. Businesses faced significant economic, financial, and operational challenges, revealing how the pandemic affected them.

Based on the data, it appears that the researcher can confidently establish a link between the economic impact of the pandemic and business operations. Furthermore, it emphasizes the importance of having complex financial support systems and offers proof that using different alert levels can effectively manage the impact on businesses. Understanding these insights is crucial for creating specific interventions and policies that can help businesses navigate the ongoing challenges caused by the pandemic. Based on these findings, policymakers and business strategists should consider economic factors that affect businesses. SMMEs must address their suppliers' financial issues to stabilize their supply chain. Reassessing financial support, especially business loans, is crucial. When considering alert-level policies, businesses' economic and operational feedback is crucial. Policymakers should consider how they will affect business operations.

The researcher can advise South African SMMEs on a pandemic similar to COVID-19, the economic crisis, and business development. Small, medium, and micro enterprises (SMMEs) should diversify their income to weather

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economic downturns. Expanding your business can involve entering new markets, adding new products, or selling online. A solid financial plan should include money to protect your business during economic uncertainty. Despite disagreements, the government provides grants, loans, and tax relief to businesses.

Businesses should evaluate financial support options to ensure they choose the right ones for their needs and abilities. Build strong supplier relationships to ensure high-quality materials and services. This is necessary financially. SMMEs must be ready for COVID-19 alert levels. This includes remote work, flexible scheduling, and safety measures to protect employees. After the pandemic, SMMEs must develop long-term market expansion, innovation, and technology adoption strategies to stay competitive. SMMEs must adapt, be financially prepared, and think ahead to survive COVID-19 and economic crises. SMMEs in South Africa can succeed in a changing business environment with these tips.

Future South African researchers should collect data from all provinces more evenly. This will show how COVID-19 affects SMMEs nationwide. Researchers should figure out how to increase electronic questionnaire responses. Different questionnaire distribution methods, reminders to non-responders, and incentives to participate are examples. COVID-19's long-term effects on SMEs need longitudinal studies. These studies would show business adaptation and support system effectiveness. Compare foreign SMMEs to identify their unique challenges and effective strategies. Assessments of financial support mechanisms can reveal best practices and areas for improvement. The adaptation and resilience strategies that helped SMMEs survive the pandemic should also be studied. Technology like e-commerce and remote working can help SMMEs survive digital transformation. In conclusion, examining how government policies and lockdowns have affected business operations can help policymakers improve future crises. South African and other SMMEs can benefit from these recommendations based on the current study.

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