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# Small, Medium, and Micro-Sized Enterprises Strategies for Dealing with Contemporary Management Issues in Post-COVID: A Conceptual Framework

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**Purpose:** Small, medium, and micro-sized enterprises (SMMEs) are integral to global economies, contributing significantly to employment, innovation, and economic growth. However, the COVID-19 pandemic has posed unprecedented challenges to most SMMEs around the world, reshaping their operational landscape and management strategies. This conceptual study seeks to review the available information in detail on contemporary management issues affecting SMMEs in the post-COVID-19 era. The study further assesses the management processes adopted by SMME managers to address these issues and provide a clear and easily understandable conceptual framework for SMMEs to survive post-COVID-19 challenges.

**Design/Method/Approach:** The study rigorously analysed 1,105 peer-reviewed articles from reputable databases and adopted an interpretive qualitative approach and the systematic literature review technique. In this regard, a thematic analysis identified the recurring themes, thereby forming the basis for the conceptual framework.

**Findings:** The identified themes include financial disruptions, shifts in consumer behaviour, resilience, and survival, rapid digital transformation, and remote work dynamics. A conceptual framework was developed, emphasising emotional intelligence, customer-centric adaptations, innovation risk management, financial resilience, technological innovation, adaptive leadership, sustainable business models, and remote workforce management.

**Theoretical Implications:** Contribute to expanding conceptual knowledge base regarding SMMEs post-COVID-19 strategies in dealing with contemporary management issues. This includes the integration of organizational learning theory, which shows how SMMEs can learn from their experiences and adapt to the shifting business dynamics in the contemporary era.

**Practical Implications:** The policy implication for these findings is that governments should develop targeted interventions, fostering a resilient environment for SMMEs. The findings of this study can enable SMMEs to Collaborate among stakeholders so as to propose essentials for creating sustainable solutions, ensuring that SMMEs continue their vital contributions to economic growth and innovation.

**Originality/Value:** Theoretical perspectives on SMMEs post-COVID-19 strategies in dealing with contemporary management issues. The COVID-19 crisis has placed reliance on SMMEs to generate strategies for urgent management challenges, financial resilience, and an improvement in revenue streams.

**Research Limitations/Future Research:** This research was limited to conceptual review and thus created the need to develop a conceptual framework that researchers can utilize to obtain empirical data on SMMEs post-COVID-19 strategies in dealing with contemporary management issues across the globe. Future research could also delve deeper into developing a more robust framework that shows the micro and medium-sized enterprise innovations, industry associations, and capacity-building initiatives that empower SMMEs to navigate the dynamic business landscape in the post-COVID-19 era.

**Paper Type:** Conceptual

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# Стратегії малих, середніх та мікропідприємств для вирішення сучасних управлінських проблем у пост-COVID: концептуальні засади

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**Мета роботи:** Малі, середні та мікропідприємства (МСП) є невід'ємною частиною глобальної економіки, роблячи значний внесок у зайнятість, інновації та економічне зростання. Однак пандемія COVID-19 створила безпрецедентні виклики для більшості МСП у всьому світі, змінивши їхній операційний ландшафт та стратегії управління. Це концептуальне дослідження має на меті детально проаналізувати наявну інформацію про сучасні проблеми управління, що впливають на МСП в епоху після COVID-19. Дослідження також оцінює управлінські процеси, прийняті керівниками МСП для вирішення цих проблем, і пропонує чітку та зрозумілу концептуальну основу для МСП, яка допоможе їм вижити в умовах викликів, що постали після COVID-19..

**Дизайн / Метод / Підхід дослідження:** У дослідженні було ретельно проаналізовано 1 105 рецензованих статей з авторитетних баз даних, а також застосовано інтерпретаційний якісний підхід та метод систематичного огляду літератури. У зв'язку з цим, тематичний аналіз виявив повторювані теми, тим самим сформувавши основу для концептуальних рамок.

**Результати дослідження:** Виявлені теми включають фінансові потрясіння, зміни в поведінці споживачів, стійкість і виживання, швидку цифрову трансформацію та динаміку віддаленої роботи. Було розроблено концептуальну основу, яка наголошує на емоційному інтелекті, клієнтоорієнтований адаптації, управлінні інноваційними ризиками, фінансовій стійкості, технологічних інноваціях, адаптивному лідерстві, стійких бізнес-моделях та управлінні віддаленою робочою силою.

**Теоретична цінність дослідження:** Сприяння розширенню концептуальної бази знань щодо стратегій МСП після COVID-19 у вирішенні сучасних проблем управління. Це включає інтеграцію теорії організаційного навчання, яка показує, як МСП можуть вчитися на власному досвіді та адаптуватися до мінливої динаміки бізнесу в сучасну епоху.

**Практична цінність дослідження:** З точки зору політики ці висновки означають, що уряди повинні розробляти цілеспрямовані заходи, які сприятимуть створенню стійкого середовища для МСП. Результати цього дослідження можуть допомогти зацікавленим сторонам співпрацювати з МСП, щоб запропонувати необхідні рішення для створення стійкого середовища, що забезпечить продовження життєво важливого внеску МСП в економічне зростання та інновації.

**Оригінальність / Цінність дослідження:** Теоретичні погляди на стратегії МСП після COVID-19 у вирішенні сучасних управлінських проблем. Криза, спричинена COVID-19, поклала на МСП відповідальність за розробку стратегій для вирішення нагальних управлінських проблем, забезпечення фінансової стійкості та покращення потоків доходів.

**Обмеження дослідження / Майбутні дослідження:** Це дослідження було обмежене концептуальним оглядом і, таким чином, створило потребу в розробці концептуальної основи, яку дослідники можуть використовувати для отримання емпіричних даних про стратегії МСП після COVID-19 у вирішенні сучасних проблем управління в усьому світі. Майбутні дослідження можуть також заглибитися в розробку більш надійної концепції, яка відображатиме інновації мікро- та середніх підприємств, галузеві асоціації та ініціативи з розбудови потенціалу, що дають змогу МСП орієнтуватися в динамічному бізнес-ландшафті в епоху, що настала після COVID-19.

**Тип статті:** Концептуальний

***Ключові слова:*** адаптивне лідерство; концептуальні рамки; сучасні проблеми управління; пост-COVID-19; стійкість; МСП.

# 1. Introduction

Small, medium and micro-sized enterprises (SMMEs) play a pivotal role in the global economy (*Donga, Ngirande & Chinyakata, 2021*). SMMEs contribute substantially to employment, innovation, and economic growth (*Epede & Wang, 2022*). SMMEs operate in a state of homeostasis and cannot survive long outside it (*Kahveci, 2021*). However, the emergence of the COVID-19 pandemic has posed unparalleled challenges to this state of balance (*Rogerson & Rogerson, 2020*). The Organisation for Economic Co-operation and Development (*OECD*) report acknowledges the tremendous global impact of the COVID-19 outbreak on SMMEs and states that:

> *"The current crisis (COVID-19) has affected SMEs disproportionately and has revealed their vulnerability to the supply and demand shock (in particular with regard to their liquidity) with a serious risk that over 50% of SMEs will not survive the next few months." "A deterioration of the financial situation of SMEs could have systemic effects on the banking sector as a whole"* (*OECD, 2020a*).

The pandemic has exposed a gap in the underlying operating and management structure and has also led to the closure of many SMMEs (*Epede & Wang, 2022*). These challenges require SMMEs to implement prompt resolutions, redefine how they operate, and strategize for future challenges (*Enwereji, 2022; Aluko, Bayai, Enwereji, 2023*). These resolutions have added a new dimension to contemporary management issues regarding these enterprises. Some studies point out that the COVID-19 pandemic has been a source of innovation and, indeed, an opportunity for some companies to implement contemporary management strategies (*Clauss et al., 2022; Engidaw, 2022; Kahveci, 2021; OECD, 2020b*). SMMEs that can identify these gaps and make the necessary adjustments to close them will have a competitive advantage both during and after the crisis (*Kahveci, 2021*).

Globally, 90% of all enterprises are small businesses, accounting for more than 50% of the employment (*Zhou, 2023*). Small businesses comprise 99% of enterprises in the US, Germany, and Japan (*Kahveci, 2021; WBG, 2017; Zhou, 2023*). In South Africa, SMMEs account for 95% of registered businesses, contributing approximately 64% of the economic-wide employment and 50% to the total gross domestic product (Cooper*, 2023; SEDA, 2021*). It is evident that SMMEs play a significant role in both developed and developing economies by contributing wealth, promoting economic growth, and creating jobs (*Kahveci & Wolfs, 2019; WBG, 2017*).

According to *Kaplan and Norton (2008*), a management system is an integrated set of procedures and tools that an enterprise uses to formulate its strategy, operationalise it, and track and enhance its efficacy. In line with this definition, the term "contemporary management" describes the management methods and techniques used by managers and businesses in the modern day (*Naranjo-Gil, Sánchez-Expósito & Gómez-Ruiz, 2016*). Globalisation, e-commerce, project management, human resources management, and overall quality management are a few fundamental concerns of contemporary management (*Garengo, Sardi & Nudurupati, 2022*). A substantial proportion of SMMEs are managed by their owners and they have limited internal resources and knowledge compared to larger firms (*Millers & Gaile-Sarkane, 2021*). However, the problem is that the business literature and training programmes often use large-scale enterprises as prime examples of contemporary management practices, which makes them inappropriate for SMMEs (*Hansen-Addy, Parrilli & Tingbani, 2023*). Additionally, owner-managers of SMMEs, who typically lack formal management education, cannot employ contemporary management practices, especially in the post-COVID-19 era.

In light of the gravity of the impact of COVID-19 on SMMEs, it is essential to study the contemporary management issues affecting SMMEs in the post-COVID-19 era. This study further assesses the management processes adopted by SMME managers to address these issues. With respect to the complexity of contemporary business management, devising a management framework will provide SMMEs with a clear and easily understandable set of rules to survive the post-COVID-19 challenges.

Studies on success and failure factors for SMMEs during the COVID-19 pandemic and normal economic conditions have received considerable attention (*Rajamani & Rekha, 2023; Rasit, Ramli & Reniati, 2023; Rogerson & Rogerson, 2020; Rwigema, 2020; Shafi, Liu & Ren, 2020; Ufua et al., 2022*). Despite the SMMEs' vital role in the economy, relatively little research has been conducted on the contemporary management issues affecting SMMEs in the post-COVID-19 era. This work can generate fresh perspectives on contemporary management issues and provide a clear and easily understandable conceptual framework for SMMEs to survive post-COVID-19 challenges.

# 2. Problem Statement

As in almost all other spheres of economic life, COVID-19 has significantly changed how SMMEs do business (*United Nations, 2022*). Many SMMEs have lost access to front-line customers, key personnel, and staff. Furthermore, many SMMEs battle with a complex web of contemporary management issues arising from the far-reaching repercussions of the pandemic, which include shifts in consumer behaviour, supply chain disruptions, the rapid acceleration of digital transformation, the dynamics of remote work, and a pressing call for sustainability and resilience (*Gregurec, Tomičić Furjan & Tomičić-Pupek, 2021*). In the view of *Nyawo (2020*), the issues SMMEs face today extend beyond recovery; they also need to fundamentally reimagine their operational strategies and business models to navigate the ongoing uncertainties.

The significant impact of the COVID-19 pandemic on SMMEs has forced them to adapt to the new normal by changing their business models, introducing new products or services, and implementing flexible working hours. However, these strategies may not be enough to ensure their survival. Therefore, it is essential to develop effective SMME strategies to help them deal with contemporary management issues in the post-COVID era. Given the important roles that SMMEs play in fostering economic stability and growth, addressing the challenges they encounter in the post-COVID era becomes a matter of utmost importance. The problem on which this study focuses is understanding and elucidating the strategies employed by South African SMMEs to navigate and thrive within the dynamics of contemporary management issues posed by the COVID-19 pandemic. Importantly, this study seeks to fill the knowledge gap by seeking to understand how SMMEs are formulating and implementing strategies to address contemporary management issues in the post-COVID era. These insights can serve as a guide for stakeholders, including governments, business associations, and other SMMEs to build a more resilient, adaptable, and sustainable future for SMMEs.

The main objectives of this research are to:

- Examine the contemporary management issues affecting SMMEs across the globe post-COVID-19.
- Determine the management process adopted by SMME managers to solve real-world contemporary management issues across the globe.
- Develop a detailed conceptual framework that addresses the contemporary management issues affecting SMMEs across the globe post-COVID-19.

## 3. Literature Review

### 3.1 Contemporary Management Issues Affecting SMMEs during COVID-19 and beyond

SMMEs throughout the world have been greatly impacted by the COVID-19 outbreak. For these companies, this unprecedented worldwide crisis resulted in a series of difficulties that impacted their operations, long-term profitability, and financial stability (*Obrenovic et al., 2020*). Furthermore, many SMMEs saw a decline in income and experienced operational challenges because of the abrupt implementation of lockdowns, travel restrictions, and supply chain interruptions (*Rwigema, 2020*). Moreover, SMMEs faced increased pressure due to the quick transition to remote work and the requirement for digitisation, particularly those without sufficient technological infrastructure (*Priyono, Moin & Putri, 2020*). Consequently, there is a need for efficient management techniques to address these complex issues if SMMEs are to remain resilient and adaptive both during and beyond COVID-19.

The COVID-19 crisis presented SMMEs with a number of urgent management challenges, one of which was the need for financial resilience. Many SMMEs experienced financial difficulty due to the sudden reduction in revenue streams and higher operational expenditures, such as investments in infrastructure for remote work and health and safety precautions (*Shafi et al., 2020*). According to *Didier et al. (2021*), the ability to obtain external funding became essential for both survival and recuperation. However, the research shows that stricter lending guidelines and intense competition for available funds make it difficult for SMMEs to get loans and grants (*Didier et al., 2021; Shafi et al., 2020*). Navigating financial issues has become more dependent on effective management methods, including strategic alliances, the diversification of income streams, and cost optimisation.

SMMEs started to switch from crisis reaction mode to long-term adaptation tactics as the pandemic progressed. Successful SMMEs reimagined their goods, services, and operations, demonstrating the necessity for adaptability and innovation in business models (*Godavarthi et al., 2023*). In the post-COVID-19 era, digital transformation became essential for SMMEs to succeed since it allowed them to expand into new markets, improve customer experiences, and simplify operations (*Khurana, Dutta & Singh Ghura, 2022*). In this case, adopting technology, developing people, and using customer-centric methods were all necessary components of effective management practices (*van Zyl et al., 2017*). In the post-COVID-19 era, SMME sustainability and resilience will still be greatly influenced by their capacity to take advantage of new technology and adjust to changing consumer needs.

### 3.2 Challenges and Opportunities Presented by a Dynamic Business Environment in a Digital Context

The rapidly evolving digital business environment has brought about a myriad of challenges for organisations. The ever-growing amount of data produced in this digital age is one major difficulty (*Yang et al., 2017*). Companies find it difficult to handle and use this data properly for innovation and decision-making. Furthermore, businesses constantly face obstacles due to the rapid rate of technological advancement and digital disruption since they need to adjust rapidly in order to stay competitive. Due to the increasing complexity of cybersecurity threats, businesses must invest in strong security measures to safeguard confidential data. The challenge of managing the digital workforce, including remote teams, adds complexity to HR management (*Hamouche, 2021*). In this regard, these challenges highlight the dynamic nature of the digital business environment.

The digital world offers businesses many opportunities in addition to its constraints. Predictive analytics and data-driven decision-making have become possible due to the ability to acquire and analyse substantial volumes of data, increasing productivity and creativity (*Davenport & Harris, 2017*). Companies may now easily access global markets, thanks to digital technology, which opens up new income streams and international growth opportunities (*Cahen & Borini, 2020*). The emergence of digital platforms and e-commerce has revolutionised business paradigms, enabling companies to customise their services and connect directly with their customers (*Reinartz et al., 2019*). According to *Yang et al. (2017)*, smaller enterprises may gain a competitive advantage by using cloud computing and software-as-a-service solutions, which provide scalability and affordability.

Organisations must implement certain tactics to prosper in the fast-paced digital business environment. It is imperative to prioritise digital transformation, which includes incorporating new technologies and insights derived from data into fundamental business operations (*Hanelt et al., 2020*). Agile techniques are becoming more popular as businesses look to adapt quickly to changing client demands and market conditions. Access to innovative ideas and technology may be gained through collaboration and partnerships with creative enterprises and technology startups (*Onetti, 2019*). To safeguard valuable digital assets and client confidence, it is also essential to invest in cybersecurity and privacy safeguards (*Corallo,* Lazoi & Lezzi*, 2020*). Long-term success ultimately comes down to taking a proactive stance when it comes to seizing the possibilities and overcoming the difficulties presented by the ever-changing digital business environment.

### 3.3 Strategic Thinking and Leadership Skills to Solve Complex Organisational Challenges Brought about by Changing Technology

In the field of technology, strategic thinking is essential for helping organisations navigate difficult situations. Thus, it is necessary for leaders to have a forward-looking perspective that encompasses a deep understanding of technological trends and their potential impact on business operations (*Kaplan & Norton, 2000*). The capacity to foresee technological developments, spot new possibilities, and proactively match organisational resources and competencies with these changes are all components of strategic thinking (*Teece, 2018*). According to Peppard and Ward (2016), this strategy gives leaders the ability to manage uncertainty and use technology as a driver for innovation and long-term competitive advantage. Furthermore, it facilitates the efficient distribution of resources to leverage transformational technologies, hence guaranteeing organisational flexibility and resilience in the face of technological disruption (*Liedtka, 1998*).

To tackle the obstacles presented by evolving technology effectively, managers must possess diverse skills set. Among these competencies, cultivating a culture of continuous learning and flexibility is essential (*Smith & Tushman, 2005*). To promote a smoother transition and lower resistance to change, leaders must foster a climate in their organisations where staff members are encouraged to adopt new technology and procedures (*Denning, 2010*). Furthermore, it is critical to have effective communication skills to ensure that all organisational levels are in agreement and understand the purpose and justification for technical projects. According to *Kao (1997*), strategic leaders need to possess the ability to integrate intricate technology data effectively, evaluate their significance for the company, and make well-informed choices. Using these comprehensive skills set, leaders may coordinate technology-driven changes that support organisational goals.

The successful fusion of strategic thinking with efficient leadership techniques is required to address the complex organisational issues brought on by technological transformation. According to *Charan, Drotter and Noel (2011*), this combination helps managers create a compelling story, develop a clear technology goal, and inspire the organisation to work towards achieving it. The capacity to create a clear plan of action, carry it out precisely, and see a desirable future state are all necessary components of using strategic thinking in leadership (*Bryson, 2018*). According to *Doz and Kosonen (2010*), effective leaders must be flexible, able to modify their tactics in response to changing technical environments, and able to bounce back from losses. Organisations can handle technical hurdles and embrace new chances for development and innovation in a dynamic digital environment by fusing strategic thinking with leadership abilities.

Technology is constantly changing, and leaders need to have a certain set of abilities that combine strategic thinking with people skills. Good leadership abilities allow leaders to put these strategic insights into practice. Strategic thinking enables leaders to foresee, adapt to, and use technological advances for organisational gain. Through innovation, adaptation, and long-term success, this synergistic strategy gives organisations the ability to negotiate the intricacies of the rapidly changing technology world.

## 3.4 Best Practices Used by SMMEs in Sustaining Organisational Change in the 4IR Era

In the age of the Fourth Industrial Revolution (4IR), SMMEs must adapt quickly to changing technological environments. Technology adoption and adaptation on a strategic basis is a fundamental best practice for maintaining organisational transformation. Technological agility—the capacity to recognise, accept, and incorporate innovative technology into current business operations, is crucial for organisational transformation. SMMEs are better positioned to prosper in the 4IR environment if they actively seek out and utilise technologies that align with their business goals (*Kruger & Steyn, 2020*). It is also critical to cultivate a culture of technology exploration and learning. This promotes employee experimentation and the utilisation of novel tools and platforms, hence aiding in the long-term assimilation of technologically driven advancements.

In the context of the 4IR, SMMEs must adopt agile organisational structures and procedures to sustain change effectively. The quick decisions and flexibility needed in the 4IR environment are frequently incompatible with the hierarchical, bureaucratic structures of the past (*Birkinshaw & Gupta, 2013*). Adopting agile approaches can improve the ability of SMMEs to adapt to technological changes. This covers methods like continuous feedback loops, iterative project management, and cross-functional teams. Additionally, implementing decentralised decision-making inculcates a feeling of ownership and commitment among staff members by enabling them to participate in change projects at all levels (*Eisenhardt & Tabrizi, 1995*). By developing flexible, adaptive structures, SMMEs are better prepared to withstand organisational change in the face of 4IR shocks.

The ability to learn and grow continuously is essential for SMMEs looking to maintain organisational transformation in the dynamic 4IR environment. To guarantee that staff members have the skills needed to take advantage of modern technologies and procedures, it is vital to invest in their upskilling and reskilling (*Morandini et al., 2023*). Creating a culture of learning in which staff members are motivated to acquire additional skills and knowledge promotes flexibility and creativity (*Lau, Lee & Chung, 2018; Chukwuneme, Olaniyi & Innocent, 2023*). Establishing alliances with academic institutions and business associations may also help SMMEs gain access to resources and specialised training. SMMEs may successfully navigate the difficulties of 4IR and establish themselves as creative, adaptable players in their respective sectors by prioritising continual learning and growth.

## 3.5 Theoretical Framework

The Organizational Learning Theory has been selected to underpin this study. This theory originated in the 20th century in the field of organisational studies (*Basten & Haamann, 2018*). Pioneers such as Chris Argyris, Donald Schön, and Peter Senge contributed significantly to the development of this theory (*Bolman, 2021*). According to *Zhang and Zhu (2019)*, this theory focuses on how organisations learn and adapt to their environment. According to Argyris and Schön, there are two types of learning: single-loop and double-loop learning (*Clark, 2021*). Single-loop learning occurs when an organisation detects and corrects errors in its actions without questioning the underlying assumptions or values that have led to the error. Double-loop learning, on the other hand, involves questioning the underlying assumptions or values that have led to the error and making changes to them (*Clark, 2021*).

There are different organisational learning models, including the experiential learning model, the knowledge creation model, and the organisational memory model (*Antunes & Pinheiro, 2020*). The experiential learning model emphasises the importance of experience in the learning process. It suggests that organisations learn by reflecting on their experiences and modifying their behaviour accordingly (*Chuang, 2021*). The knowledge creation model focuses on how organisation creates new knowledge. It suggests that knowledge creation occurs through a process of socialisation, externalisation, combination, and internalisation (*Mehralian, Nazari & Ghasemzadeh, 2018*). The organisational memory model emphasises the importance of retaining knowledge within an organisation. *Lau et al. (2018*) suggest that organisations can improve their performance by retaining knowledge from past experiences.

This theory sheds light on how organisations (SMMEs) can systematically gather, interpret, and apply knowledge to address their complex challenges. The organizational learning theory is deemed relevant to this study because it offers a framework for understanding how SMMEs, despite their resource constraints, can learn from their experiences and adapt to the shifting business dynamics. After the pandemic, the ability to learn from past setbacks and incorporate these lessons into their strategies is vital for their survival and success. The post-COVID era demands a dynamic approach, and the organizational learning theory provides a lens through which to examine how SMMEs can evolve and innovate in response to emerging opportunities and threats. The theory's emphasis on knowledge acquisition, change management, and adaptability aligns with the objective of this study by unveiling how SMMEs address contemporary management issues. It provides a robust framework for understanding how these enterprises can effectively learn from crises, implement sustainable practices, and remain competitive in a rapidly changing business environment.

# 4. Methodology

This conceptual study adopts an interpretive qualitative approach and employs the systematic literature review (SLR) approach to review the scholarly landscape on SMMEs and contemporary management issues in the post-COVID-19 era. The SLR applied the recommended checklist in accordance with the preferred reporting items for systematic reviews and meta-analysis (PRISMA). These items address every facet of the manuscript, including the title, abstract, introduction, methods, results, discussion and funding (*Page et al., 2021*). The study adhered rigorously to the following steps to ensure a comprehensive analysis.

## 4.1 Literature Identification

An exhaustive exploration of academic databases and research repositories, including but not limited to SAGE, Wiley, Elsevier, and Inderscience, was conducted to compile the relevant data. This search encompassed studies published in peer-reviewed journals, conference proceedings, and reports. The literature search was conducted using a combination of keywords and search terms specifically linked to management challenges and the processes pertaining to SMMEs in the post-COVID-19 landscape. The keywords and phrases included "Contemporary management challenges for SMMEs in the Post COVID-19 Era", "SMEs' management challenges and post-COVID-19", "SMEs' management processes for addressing contemporary challenges in the post -COVID-19 Era", and "SMMEs' management AND Post-COVID-19 Era".

After the initial search, the findings yielded 1230 distinct publications, comprising various document types, such as peer-reviewed journal articles, conference papers, books, book chapters, and miscellaneous content, including book reviews, encyclopaedias, editorial materials, and reviews. *Tab. 1* provides a breakdown of the search results by document type.

**Table 1:** Preliminary search results by document type for the years 2020 to 2023

| Document type | SAGE | | Wiley | | Elsevier | | Inderscience | | Total | |
|---|---|---|---|---|---|---|---|---|---|---|
| | No. | % of the total | No. | % of the total | No. | % of the total | No. | % of the total | No. | % of the total |
| Peer-reviewed journal articles | 277 | 90.2% | 499 | 90.56% | 199 | 89.24% | 130 | 87.25% | 1105 | 89.84% |
| Proceedings papers | | 0.0% | | 0.00% | | 0.00% | 0 | 0.00% | 0 | 0.00% |
| Book chapters | 5 | 1.6% | 51 | 9.26% | 9 | 4.04% | 4 | 2.68% | 69 | 5.61% |
| Book reviews | 4 | 1.3% | | 0.00% | | 0.00% | 0 | 0.00% | 4 | 0.33% |
| Encyclopaedias | | 0.0% | 0 | 0.00% | 2 | 0.90% | 0 | 0.00% | 2 | 0.16% |
| Datasets | | 0.0% | 0 | 0.00% | 0 | 0.00% | 0 | 0.00% | 0 | 0.00% |
| Editorial materials | 5 | 1.6% | 0 | 0.00% | 5 | 2.24% | 4 | 2.68% | 14 | 1.14% |
| Others | 16 | 5.2% | 1 | 0.18% | 8 | 3.59% | 11 | 7.38% | 36 | 2.93% |
| **Total** | **307** | **100.0%** | **551** | **100.0%** | **223** | **100.0%** | **149** | **100.0%** | **1230** | **100.0%** |

***Source:*** *Research results, 2023*

The selection process for articles followed a predefined set of criteria. In this study, a total of 1230 publications were scrutinised during the review process. The publications covered various challenges and management processes for SMMEs in the post-COVID-19 era. The initial screening led to the exclusion of 125 non-peer-reviewed publications. The remaining 1,105 peer-reviewed research articles underwent an evaluation of their abstracts based on the predetermined inclusion criteria. The final dataset comprised 25 pertinent peer-reviewed articles, organised by their publication year, as illustrated in *Tab. 2*. Notably, preference was given to open-access, peer-reviewed articles published in English between 2020 and 2023.

## 4.2 Data extraction

A standardised data extraction form was employed to capture essential information in the selected publications. Details such as authorship, publication year, research objectives, methodologies, key findings, and recommendations related to SMMEs' management challenges and the strategies employed to address these challenges in the post-COVID-19 era were systematically extracted from these chosen publications.

## 4.3 Synthesis and Analysis of Data

A thematic analysis approach was adopted to unveil recurrent themes and patterns across the selected publications. Comparative analysis was conducted to discern patterns, variations, and areas where the existing literature presents gaps.

# 5. Presentation and Discussion of the Research Findings

In this section, the study presents a selection of peer-reviewed articles integral to the study. These articles serve as a guiding framework for identifying the prominent themes and sub-themes within the adopted SLR approach. For a comprehensive overview, see *Tab. 2*, which offers insight into the peer-reviewed articles on the contemporary SMMEs' management issues and processes to address the issues in the post-COVID-19 era.

## 5.1 Discussion of the Themes Derived from the Systematic Literature Review

The themes that emerged from the selected articles are presented in Table 3 and are discussed subsequently.

**Table 3: Thematic analysis of the findings**

| Themes | Sub-themes |
|---|---|
| **THEME 1:** Contemporary management challenges for SMMEs in the post-COVID-19 era | Financial disruptions<br>Shifts in consumer behaviour<br>Resilience and survival<br>Rapid acceleration of digital transformation<br>The dynamics of remote work |
| **THEME 2:** Management processes to address contemporary challenges | Emotional intelligence<br>Customer-centric adaptations<br>Innovation risk management<br>Financial resilience and adaptation<br>Technological innovation and digital transformation<br>Organisational resilience and adaptive leadership<br>Adaptation of sustainable business models and social responsibility<br>Remote workforce management |

***Source:*** *Research results, 2023*

## 5.2 Contemporary Management Challenges for SMMEs in the Post-COVID-19 Era

### *5.2.1 Financial Disruptions*

According to *Bai, Quayson, and Sarkis (2021)*, the COVID-19 pandemic has had a disruptive impact on SMMEs, especially in developing nations. Due to a lack of digital technology adoption, SMMEs have struggled to sustain operations, resulting in cash flow challenges and resource restrictions. These financial upheavals have the potential to destabilise SMMEs and put the global economy at risk.

The COVID-19 pandemic has resulted in severe financial disruptions for SMMEs, affecting their cash flow, resource accessibility, and overall stability (*Bai et al., 2021; Galanakis et al., 2021*). According to *Moretto and Caniato (2021)* and *Agarwal et al. (2023)*, these interruptions have resulted in increasing debt loads, working capital difficulties, and liquidity issues. Financial planning and recovery attempts have been made more difficult for SMMEs

**Table 2:** Peer-reviewed articles on SMMEs' Management challenges and processes in the post-COVID-19 era

| Author (Year) | Title | Journal |
|---|---|---|
| *Agarwal et al. (2023)* | Building resilience for sustainability of MSMEs post-COVID-19 outbreak: An Indian handicraft industry outlook | Socio-Economic Planning Sciences |
| *Chanda et al. (2023)* | Investigating the determinants of mobile shopping applications continuance usage intention in the post-COVID-19 pandemic | International Journal of Applied Management Science |
| *Das et al. (2023)* | An impact study on COVID-19 and tourism sustainability: intelligent solutions, issues and future challenges | World Review of Science, Technology and Sustainable Development |
| *Farjam*, Shojaei & Askarifar *(2023)* | A conceptual model for open innovation risk management based on the capabilities of SMEs: A multi-level fuzzy MADM approach | Technovation |
| *Jaradat et al. (2023)* | Towards sustainability in SMEs post recovery from COVID-19 crisis: the influence of intellectual capital and cost strategy | International Journal of Productivity and Quality Management |
| *Khan et al. (2023)* | Influence of emotional intelligence on enterprise performance with mediating role of entrepreneurial resilience: a case of SMEs in Pakistan under the light of Covid-19 | Transnational Corporations Review |
| *Rajamani and Rekha (2023)* | COVID-19 and MSMEs: Basic insights from India on revival through financial inclusion backed by digital technologies | World Review of Science, Technology and Sustainable Development |
| *Rasit et al. (2023)* | Recovery strategies in response to the COVID-19 pandemic: empirical evidence of the Malaysian hotel industry | International Journal of Business and Emerging Markets |
| *Asriati et al. (2022)* | Analysis of business behaviour and HRM perspectives on post-COVID-19 SME business sustainability | Cogent Business & Management |
| *Bilotserkivets et al. (2022)* | Development of economy digitalisation: Global and national dimensions in the pre-COVID and post-pandemic world | International Journal of Global Environmental Issues |
| *Bocar et al. (2022)* | COVID-19 work from home stressors and the degree of its impact: employers and employee's actions | International Journal of Technology Transfer and Commercialisation |
| *Cugno et al. (2022)* | Industry 4.0 and production recovery in the COVID era | Technovation |
| *Kolog et al. (2022)* | COVID-19 pandemic: How can the lessons learnt contribute to the digital transformation of schools of tomorrow? | International Journal of Technology Enhanced Learning |
| *Nugraha et al. (2022)* | Fintech Adoption Drivers for Innovation for SMEs in Indonesia | Journal of Open Innovation: Technology, Market, and Complexity |
| *Nyu, Nilssen & Nenadic (2022)* | Managing global supply chain disruptions under the COVID-19 pandemic: the case of the Norwegian seafood industry | International Journal of Export Marketing |
| *Ozen and Pala (2022)* | Current trends and future research themes for sustainable business management post-COVID-19 | International Journal of Management and Enterprise Development |
| *Ufua et al. (2022)* | Lean entrepreneurship and SME practice in a post COVID-19 pandemic era: A conceptual discourse from Nigeria | Glob J Flex Syst Manag |
| *Bai et al. (2021)* | COVID-19 pandemic digitization lessons for sustainable development of micro-and small- enterprises | Sustainable Production and Consumption |
| *Galanakis et al. (2021)* | Innovations and technology disruptions in the food sector within the COVID-19 pandemic and post-lockdown era | Trends in Food Science & Technology |
| *Gregurec et al. (2021)* | The impact of COVID-19 on sustainable business models in SMEs | Sustainability |
| *Islam et al. (2021)* | Remote working challenges and solutions: Insights from SMEs in Bangladesh during the COVID-19 pandemic | International Journal of Quality and Innovation |
| *Moretto and Caniato (2021)* | Can supply chain finance help mitigate the financial disruption brought by Covid-19? | Journal of Purchasing and Supply Management |
| *Munasinghe (2020)* | COVID-19 and sustainable development | International Journal of Sustainable Development |
| *Obrenovic et al. (2020)* | Sustaining enterprise operations and productivity during the COVID-19 pandemic: Enterprise Effectiveness and Sustainability Model | Sustainability |
| *Priyono et al. (2020)* | Identifying digital transformation paths in the business model of SMEs during the COVID-19 pandemic | Journal of Open Innovation: Technology, Market, and Complexity |

***Source:*** *Research results, 2023*

due to market dynamics and uncertainty about customer behaviour (*Galanakis et al., 2021*). Since SMMEs are essential for economic expansion and job development, it is imperative that the financial disruption issues they face be resolved to ensure their sustainability and resilience. Together, policymakers and business leaders must devise plans and resources to assist SMMEs in overcoming the financial effects of the pandemic and prepare for future challenges in the post-COVID-19 era.

The post-COVID-19 financial disruption concerns that SMMEs face have brought important contemporary management issues to the fore that need to be swiftly addressed. The pandemic has emphasised the significance of SMMEs' financial stability and has exposed their susceptibility to unanticipated shocks (*Agarwal et al., 2023; Moretto & Caniato, 2021*). The continued existence of SMMEs and their essential role in the larger economy will be seriously impacted by their capacity to adjust and recover from these financial disturbances. To ensure the long-term survival of SMMEs, policymakers, experts, and business leaders must work together to establish comprehensive solutions that address these current financial issues. More investigation, focused legislation, and creative solutions are needed to help SMMEs navigate the challenging post-COVID-19 financial environment. The capacity of SMMEs to function as engines of employment and economic progress depends on their financial stability and health; thus, it is vital to determine how to successfully handle these modern management difficulties.

### *5.2.2 Shifts in Consumer Behaviour*

Significant changes in customer behaviour brought about by the COVID-19 pandemic create contemporary management problems for SMMEs in a variety of industries (*Galanakis et al., 2021; Khan, Zubair & Shah, 2023*). These modifications stem from shifting customer priorities, tastes, and spending patterns. Consumers now prioritise safety when interacting with goods and services because they are increasingly health-conscious (*Khan et al., 2023*). As a result, SMMEs have had to modify their product offerings, put strict safety measures in place, and communicate these changes effectively to reassure and retain their clientele. Furthermore, the rise in digital interaction and online buying has changed how customers engage with enterprises; thus, SMMEs must improve their e-commerce capabilities and online presence (*Farjam et al., 2023*). Recognising and adjusting to these changes in customer behaviour is crucial for SMMEs to remain competitive and sustainable in the post-COVID-19 era.

The economic uncertainties brought on by the pandemic have changed consumer spending patterns and purchasing power, which influence SMMEs in various industries (*Galanakis et al., 2021; Nugraha et al., 2022*). Consumers are looking for value and quality in their purchases and are becoming more frugal with their discretionary income (*Nugraha et al., 2022*). Considering this change, SMMEs must now re-evaluate their product offers, pricing policies, and marketing techniques. Businesses are more likely to prosper in the changing economic environment if they successfully manage these shifts in consumer spending behaviour. Moreover, SMMEs have a challenge and an opportunity because of the increased awareness of sustainability and ethical factors in purchasing decisions (*Farjam et al., 2023*). Socially and ecologically sensitive firms are gaining popularity among customers. SMMEs who identify with these principles will have a competitive advantage; nevertheless, it will require a deliberate effort to review supplier chains, manufacturing procedures, and marketing plans.

Furthermore, consumers in the post-COVID-19 era are prioritising convenience and flexibility in their business contacts, in addition to concerns about the economy and health (*Bai et al., 2021; Cugno et al., 2022*). Consequently, the demand for contactless services, tailored experiences, and expedited checkout processes has increased (*Cugno et al., 2022*). It can be difficult for SMMEs to fulfil these changing customer expectations, especially for those in the retail and service industries. To adapt to these changes in customer behaviour, SMMEs are utilising a variety of tactics, including rearranging the physical facilities, streamlining delivery systems, and implementing technological solutions. Adapting to these changes is crucial for immediate survival and establishing a competitive advantage in the future.

#### *5.2.3 Resilience and Survival*

A*garwal et al. (2023)* draw attention to the pandemic's devastating effects on the Indian handicraft industry, which is dependent on SMMEs. Because this industry was seasonal and unstructured, it was especially vulnerable. With challenges such as machine-made product competition, inadequate government support, and managerial inefficiencies in the internationalisation responses, survival and resilience became critical. Moreover, the COVID-19 pandemic has had a long-lasting effect on the global economy, posing survival and resilience issues for SMMEs. The post-pandemic era still poses significant challenges for SMMEs. Due to a drastically changed economic climate, these enterprises, which are an essential part of the global economy, have been battling the twin difficulties of survival and resilience.

SMMEs' short- and long-term survival in the post-COVID-19 era is still in jeopardy. Numerous SMMEs are suffering financially because of the pandemic's significant economic disruptions, which include lockdowns, disruptions in the supply chain, and a decline in consumer demand. These difficulties have made it more likely that these businesses will not survive. *Galanakis et al. (2021)* highlighted that the pandemic had a negative impact on the food sector, which is a domain that includes a considerable number of SMMEs, making survival a pressing concern.

A crucial issue facing SMMEs in the post-pandemic environment is resilience. Building resilience is crucial for the sustainability of micro, small, and medium-sized businesses, especially in sectors like handicrafts, according to *Agarwal et al. (2023)*. The pandemic highlighted SMMEs' susceptibility to unanticipated shocks and the need for adaptation and resilience building to protect them against similar crises in the future. For SMMEs looking to secure their long-term survival, the capacity to innovate, adapt, and withstand future disruptions remains a key concern.

The economic effects of the pandemic have threatened the survival of SMMEs, but resilience is a necessary quality for these companies to weather future uncertainties. The literature on this subject emphasises the necessity of strategies and policies to support SMMEs' survival and resilience, ultimately securing their position in the post-pandemic business landscape.

#### *5.2.4 Rapid acceleration of digital transformation*

Significant management challenges faced by SMMEs in the post-pandemic landscape resulted from the rapid and profound shift towards digital transformation across industries. The rapid pace of digitalisation brought about several challenges, chief among them being those related to resource allocation, technological adaptation, and cybersecurity (*Nugraha et al., 2022*).

Due to the rapid pace of digital transformation, SMMEs face significant challenges in adapting to innovative technologies. *Cugno et al. (2022)* have observed that SMMEs need to be open to Industry 4.0 technologies, which are defined by the adoption of various digital tools. However, significant financial outlays, technological expertise, and organisational restructuring are needed to quickly adopt these technologies. Many SMMEs have had trouble with implementing and integrating these technologies quickly into their existing operations, particularly those with limited resources.

Allocating resources has become a crucial issue because of the quick acceleration of digital transformation. According to *Bai et al. (2021)*, SMMEs have difficulties when it comes to devoting financial and human resources to digitalisation initiatives because they frequently have limited resources. A major management challenge has been striking a balance between the necessity of investing in digital capabilities and the need for immediate survival. The difficulty is further increased by allocating resources to implement, upkeep, and upgrade digital systems.

Cybersecurity concerns have been amplified in the wake of the rapid digital transformation. The evolution of a business model towards greater reliance on digital technology has increased the scope of potential cyberattacks. SMMEs are more vulnerable because they have fewer financial resources and expertise to dedicate to cybersecurity measures. According to *Khan et al. (2023)*, SMME managers are now more concerned with safeguarding sensitive data and ensuring digital operations are secure.

For SMMEs in the post-COVID-19 era, the quick acceleration of digital transformation poses a unique set of management challenges. These difficulties include resource allocation, cybersecurity, and technological adaptation. SMMEs must navigate these obstacles with extreme caution, especially if they have little funding.

#### *5.2.5 The dynamics of remote work*

The peculiarities of working remotely have created complex problems with regard to managing teamwork, tracking productivity, and ensuring the welfare of employees. One major issue that SMMEs face as they navigate remote work processes is team coordination. *Galanakis et al. (2021)* draw attention to the fact that leading teams spread out over different places, necessitating a major adjustment in management techniques. A lack of physical closeness can obstruct the free flow of ideas and spontaneous communication. Finding efficient strategies to promote team cohesion, encouraging collaboration, and guaranteeing that workers are focused on shared objectives despite physical distance is the responsibility of SMME managers.

The task of productivity monitoring has become more difficult for SMMEs as they adjust to the demands of remote work. When traditional in-person supervision is impractical, managers must develop new ways to evaluate employee performance (*Farjam et al., 2023*). Accordingly, it can be difficult to strike a balance between the need for accountability and trust-based management. SMME managers have a challenging task with regard to implementing the appropriate tools and technologies to measure and monitor productivity without violating employee privacy.

The safety of remote workers is now of utmost importance in the post-COVID-19 era. According to *Obrenovic et al. (2020)*, the move to remote work has made it more difficult to distinguish between work and personal life, which could result in burnout and lower job satisfaction. Creating programmes and policies that support worker well-being, mental health, and work-life balance in the context of remote work arrangements is a challenge for SMME managers (*Priyono et al., 2020*). To keep a happy and motivated workforce, it is crucial to ensure employees in remote work environments feel supported, connected, and valued.

## 5.3 Management Processes to Address Contemporary Challenges

In this post-pandemic era, SMMEs have been confronted by multifaceted challenges spanning financial disruptions, shifts in consumer behaviour, resilience and survival, the rapid acceleration of digital transformation, and the dynamics of remote work. To navigate these complexities, SMMEs have implemented a range of management strategies tailored to their unique circumstances and industries. This review synthesises the key strategies SMMEs have adopted to address contemporary management challenges in the aftermath of COVID-19, thereby providing valuable insights for practitioners, policymakers, and researchers.

### *5.3.1 Emotional Intelligence*

SMMEs face several difficulties in the post-COVID-19 era, such as changes in consumer behaviour, resilience and survival concerns, financial disruptions, the quickening pace of digital transformation, and the demands of remote work. These issues can be addressed by SME leaders who possess emotional intelligence, as it enables them to make wiser choices and create a positive work atmosphere. SMMEs that put their leaders' and employees' emotional health first are better able to handle the financial setbacks brought on by the pandemic (*Cugno et al., 2022*). SMME managers who possess emotional intelligence are better equipped to adjust to changes in customer behaviour by encouraging empathy and clear communication in response to evolving needs.

In the face of a crisis, emotional intelligence serves as a catalyst for SME resilience and survival. *Khan et al. (2023)* demonstrate how important emotional intelligence (EI) is to improving business performance in times of crisis like COVID-19. SMMEs are better equipped to manage the challenges of the post-COVID-19 era when they invest in EI training for their leaders and employees. They are better equipped to recognise and meet the emotional needs of their workers, which is essential for maintaining both organisational resilience and worker well-being. Therefore, SMMEs can ensure a more successful transition into the post-pandemic business environment by reducing the detrimental effects of the rapidly accelerating digital transformation and the dynamics of remote work on the emotional health of their employees.

In the post-COVID-19 era, SMMEs are beginning to recognise the value of EI as a strategic tool for addressing current management issues. Empirical data demonstrate that SMMEs that place a high priority on EI are better equipped to manage financial setbacks, adjust to changing consumer preferences, cultivate resilience, and handle the challenges posed by remote work and rapid digital transformation. Although the post-COVID-19 era presents a variety of challenges, it is evident that EI has become a crucial management tactic for SMMEs looking to prosper in the new business environment.

### *5.3.2 Customer-Centric Adaptations*

To reach and interact with their target audience, SMMEs have responded proactively to changes in consumer behaviour through digital marketing strategies, social media platforms, and e-commerce channels (*Das, Nayak & Naik, 2023; Nugraha et al., 2022*). SMMEs have been able to customise products and services to meet the changing demands by utilising data analytics and customer relationship management systems to gain valuable insights into consumer preferences (*Chanda et al., 2023*).

Additionally, SMMEs now place a greater focus on the satisfaction and experience of their customers. To improve service quality and responsiveness, they have made investments in staff training and development programmes (*Islam et al., 2021*). SMMEs have investigated diversifying their product offerings to meet the changing customer demands. For example, the food industry introduced innovations like healthier and plant-based substitutes (*Galanakis et al., 2021*). It is critical for SMMEs to understand these changes in consumer behaviour and match their product and service offerings to them in the current business environment. SMMEs have established a culture of continuous improvement by actively seeking feedback and conducting surveys, thereby guaranteeing that their products and services meet the expectations of their clientele (*Islam et al., 2021*).

SMMEs have adapted to the demands of remote work by putting strong technology infrastructures and teamwork tools in place that promote smooth communication and increased productivity (*Islam et al., 2021*). SMMEs have shown a commitment to work-life balance and employee well-being by creating a positive virtual work environment in addition to preserving operational continuity (*Jaradat et al., 2023*).

### *5.3.3 Innovation Risk Management*

Following the COVID-19 pandemic, SMMEs have faced unprecedented challenges that called for creative management techniques. The ability of SMMEs to adapt and prosper in the post-pandemic era is contingent upon their capacity to effectively manage risks related to innovation, which is a crucial component of this endeavour. For SMMEs looking to strengthen their resilience, innovation risk management has become a strategic priority (*Das et al., 2023*). To remain competitive, they must innovate their processes, goods, and services. According to *Bocar, Khan and Epoc (2022)*, innovation enables SMMEs to adjust to evolving consumer preferences and puts them in a position to react swiftly to unforeseen obstacles. It is essential to foster an innovative culture within the company (*Kolog et al., 2022*). By encouraging creativity and continuous growth, SMMEs are better equipped to address contemporary challenges effectively.

Adopting a thorough approach to open innovation risk management, as suggested by *Farjam et al. (2023)*, is a crucial strategy for SMMEs. The multi-level fuzzy MADM (Multi-attribute decision-making) model emphasises the importance of recognising and ranking the risks connected to open innovation. SMMEs can systematically evaluate and rank risks using methods such as the Best-worst method, which serves as a foundation for focused risk mitigation initiatives. There is a need to build trust between collaborators and the pivotal function of SMEs' capabilities, specifically in terms of goal-oriented leadership and staff dedication to learning. SMMEs can manage innovation risks successfully and take advantage of open innovation's potential for long-term growth by concentrating on these factors.

Furthermore, *Nugraha et al. (2022)* provide insight into the use of financial technology (Fintech) to address issues that SMMEs face, especially considering the COVID-19 pandemic. The study highlights how SMMEs' intention to adopt Fintech is influenced by factors like perceived usefulness, ease of use, and government support. This demonstrates how technology-driven solutions can improve inclusivity and financial access, particularly in the face of disruptions, such as a worldwide pandemic. SMMEs can increase their financial adaptability and resilience by utilising Fintech solutions, setting them up for success in the post-COVID-19 era.

According to *Cugno et al. (2022)*, supply chain finance (SCF) is essential for reducing financial disruptions in supply chains, which are made worse by the pandemic. SCF offers a framework for enhancing monetary flows and fostering stronger bonds between supply chain participants. SMMEs are better able to manage uncertainty due to this strategic financial approach, which also ensures a more robust and resilient supply chain ecosystem. Through SCF, SMMEs are better equipped to handle financial setbacks and strengthen their position in the post-pandemic business environment.

### *5.3.4 Financial Resilience and Adaptation*

The pandemic has caused major financial disruptions for SMMEs (*Gregurec et al., 2021*). Cash flow issues, declining sales, and rising operating expenses have been problems for many firms. However, SMMEs have demonstrated incredible resilience by putting clever management strategies into place in the face of financial disruptions brought on by the pandemic. Renegotiating contracts with lenders, suppliers, and creditors is one example of a diverse financial strategy. Other strategies include optimising the cash flow and re-evaluating their working capital (*Bai et al., 2021*). By utilising government assistance programmes and seeking partnerships with financial institutions, many firms have increased their financing options (*Gregurec et al., 2021; Khan et al., 2023; Rajamani & Rekha, 2023*). To reduce the effects of economic uncertainty, SMMEs have also taken the initiative to update their financial models, improve cash flow management, and diversify their revenue sources (*Bai et al., 2021; Bocar et al., 2022; Gregurec et al., 2021*). These adaptive financial strategies have proven instrumental in stabilising SMMEs and positioning them for sustainable growth in the post-COVID-19 era.

SMMEs have demonstrated a heightened focus on cost-effectiveness and operational efficiency. They have streamlined operations without sacrificing quality or customer satisfaction by implementing strict cost-cutting measures and process optimisation (*Galanakis et al., 2021; Jaradat et al., 2023; Ufua et al., 2022*). SMMEs have improved their competitiveness and profitability by adopting technologies, such as automation and cloud-based solutions, which enable leaner operations (*Bocar et al., 2022; Ufua et al., 2022*).

Furthermore, SMMEs have recognised the value of agility in their supply chain management in addition to financial agility. To reduce the risks associated with global disruptions, they have adopted just-in-time inventory practices, diversified their supplier base, and explored local sourcing options (*Nyu et al., 2022*). Through developing a network of dependable and adaptable suppliers, SMMEs have created a robust supply chain framework that can swiftly adapt to unforeseen challenges.

### *5.3.5 Technological Innovation and Digital Transformation*

For SMMEs to remain competitive in the post-pandemic era, they need to accelerate their digital transformation initiatives. *Das et al. (2023)* assert that the pandemic has changed how business is done in different industries. SMMEs have accelerated their adoption of transformative technologies such as artificial intelligence, the Internet of Things (IoT), and data analytics because they recognise the necessity of digitalisation (*Bocar et al., 2022*). According to *Cugno et al. (2022)*, adopting Industry 4.0 technologies is essential for boosting resilience and accelerating production recovery. SMMEs have not only survived but have also prospered because they quickly embraced digital tools and e-commerce platforms. This transformation has enabled them to reach customers through online channels, maintain business operations with remote workforces (*Kolog et al., 2022*), and optimise their supply chain management (*Nyu et al., 2022*). This strategic shift towards digitalisation has enabled SMMEs to enhance their operational efficiency, optimise resource allocation, and unlock new avenues for growth (*Bilotserkivets et al., 2022*).

Many SMMEs are also concentrating on educating and improving their employees' skills so they can traverse the digital terrain effectively (*Bai et al., 2021*). To protect their digital assets and sensitive data, they have made cybersecurity measures their top priority *(Bilotserkivets et al., 2022)*. Furthermore, SMMEs have strengthened their resilience against cyber threats and data breaches by investing in strong cybersecurity infrastructure and staff training programmes (*Bilotserkivets et al., 2022*).

In addition, SMMEs have adopted innovation as a pillar of their corporate culture in reaction to the swift acceleration of digital transformation. They have collaborated with technology companies and startups, created cross-functional innovation teams, and promoted ideation and experimentation (*Ozen & Pala, 2022*). SMMEs have positioned themselves at the forefront of technological advancements in their respective industries by focusing purposefully on innovation.

### *5.3.6 Organisational Resilience and Adaptive Leadership*

The strategies of survival and resilience have been crucial to SMMEs' attempts to withstand the effects of COVID-19. According to *Agarwal et al. (2023)*, SMMEs' resilience must be increased by tackling issues with government assistance, global competition, and managerial effectiveness. Overcoming challenges associated with financial disruptions, changes in consumer behaviour, the quick speed at which digital transformation is accelerating, and the dynamics of remote work all depend on one's capacity to bounce back and adjust to changing circumstances. Agile, empathic, and capable decision-making are traits of adaptive leadership, which SME leaders have demonstrated (*Farjam et al., 2023; Munasinghe, 2020*). Within their companies, SME leaders have promoted a resilient culture that emphasises adaptability, education, and readiness for unforeseen events (*Munasinghe, 2020*).

To retain their staff's flexibility and capability of navigating ever-changing business environments, SMMEs have placed a high priority on workforce development and upskilling programmes (*Islam et al., 2021*). SMMEs have enhanced their internal capabilities and promoted a sense of organisational loyalty and commitment by investing in employee training programmes, mentorship, and career development opportunities (*Islam et al., 2021*).

Furthermore, to proactively identify and mitigate potential threats to their operations, SMMEs have implemented frameworks for scenario planning and risk assessment (*Das et al., 2023*). Through thorough risk assessments and stress tests, SMMEs have strengthened their organisational frameworks, guaranteeing their capacity to adjust to unanticipated obstacles. SMMEs are engaging with government agencies and industry associations to advocate for support and incentives, as well as diversifying their customer bases and exploring international markets (*Farjam et al., 2023*).

### *5.3.7 Adaptation of Sustainable Business Models and Social Responsibility*

The COVID-19 pandemic has necessitated the re-evaluation of business models to ensure sustainability in the SME sector (*Gregurec et al., 2021*). To respond to disruptions effectively, SMMEs, especially those in service-oriented industries, have had to rethink their business models (*Das et al., 2023; Gregurec et al., 2021; Ufua et al., 2022*). This kind of adaptation entails evaluating supply chain risks, broadening the range of products offered, and guaranteeing business continuity. Furthermore, incorporating sustainable practices, such as environmentally friendly procedures and ethical sourcing, have emerged as a crucial tactic (*Ozen & Pala, 2022*). Establishing long-term, sustainable business models is the goal of these adaptations.

Importantly, SMMEs have made sustainability a principal component of their business strategies in the post-COVID-19 era. They have made efforts to reduce their environmental impact, such as switching to renewable energy sources, implementing waste reduction practices, and exploring sustainable supply chain alternatives (*Asriati et al., 2022; Rasit et al., 2023*). In addition, SMMEs have positioned themselves as socially conscious businesses and have contributed to environmental conservation by aligning their operations with sustainable practices (*Rasit et al., 2023; Ufua et al., 2022*).

Furthermore, by offering assistance and resources to address social issues exacerbated by the pandemic, SMMEs have engaged actively in their local communities (*Kolog et al., 2022*). Accordingly, they have shown a commitment to the welfare of their stakeholders and the larger community through initiatives such as skill-building programs, charitable donations, and community outreach programs (*Kolog et al., 2022; Ufua et al., 2022*).

### *5.3.8 Remote workforce management*

In contemporary SME management, remote work dynamics have taken center stage (*Islam et al., 2021*). The pandemic has created the need for innovative approaches to efficiently managing remote workforces. SMMEs have concentrated on using different digital tools to improve collaboration and communication (*Chanda et al., 2023*). *Moretto and Caniato (2021*) assert that many firms are leveraging digital tools for project management, communication, and teamwork. To attract and retain a talented workforce, flexible work schedules and remote work choices are being implemented.

In order to meet the demands of remote work, they have also placed a strong emphasis on employee training and upskilling (*Islam et al., 2021*). Since working remotely can make distinguishing between personal and professional life difficult, there is a greater emphasis on employee well-being and mental health (*Asriati et al., 2022*). In order to address this, SMMEs are providing tools for mental and physical health support, organizing online team-building events, and enhancing communication amongst remote teams (*Bai et al., 2021*). According to *Islam et al. (2021*), solutions, such as remote online classes have proven crucial in tackling workforce problems, such as high employee turnover and trust issues.

## 6. A Conceptual Framework for Addressing Contemporary Management Challenges for SMMEs in the Post-Covid-19 Era

The conceptual framework presented here outlines how SMMEs can employ various management processes strategically to tackle the following contemporary challenges in the post-COVID-19 era: financial disruptions, shifts in consumer behaviour, resilience and survival, the rapid acceleration of digital transformation, and the dynamics of remote work (*Fig. 1*).

In the wake of financial disruptions, SMMEs can navigate these challenges by integrating emotional intelligence into their decision-making processes. This entails understanding and managing emotions within the organisation, allowing leaders to make empathetic decisions during financial crises. Additionally, fostering financial resilience and adaptation strategies will be crucial. SMMEs need to be agile in adjusting their financial strategies to withstand disruptions. Moreover, organisational resilience and adaptive leadership will play a pivotal role in steering SMMEs through financial turmoil, ensuring the organisation's stability and longevity.

With shifts in consumer behaviour becoming increasingly prevalent, SMMEs should focus on customer-centric adaptations. This involves closely monitoring changing customer preferences and swiftly adjusting products or services to align with evolving demands. By prioritising customer-centric approaches, SMMEs can address the shifting landscape of consumer behaviour proactively and maintain a competitive edge in the market.

Resilience and survival are paramount in the post-COVID-19 era. To fortify their position, SMMEs must embrace financial resilience and adaptation measures. This entails maintaining financial stability during disruptions, ensuring the business can weather unforeseen challenges. Simultaneously, fostering organisational resilience and adaptive leadership is crucial. By constructing resilient organisational structures and adapting swiftly to change, SMMEs can survive and thrive in dynamic environments. Furthermore, the adaptation of sustainable business models and a commitment to social responsibility will be pivotal in ensuring long-term sustainability.

In the face of the rapid acceleration of digital transformation, SMMEs must prioritise innovation risk management. This involves identifying and mitigating risks associated with the adoption of innovative technologies. By carefully managing these risks, SMMEs can leverage technological advancements to drive innovation and remain competitive in the digital landscape. Additionally, embracing technological innovation and digital transformation is essential. This allows SMMEs to harness the full potential of digital tools and platforms, enabling them to effectively enhance their operations and reach new markets.

Navigating the dynamics of remote work requires adept remote workforce management. SMMEs must implement strategies to ensure that employees can work effectively in remote settings. This includes providing the necessary resources, tools, and support systems to facilitate seamless remote work experiences. Additionally, organisational resilience and adaptive leadership will be critical in guiding SMMEs through the changes in work dynamics. Leaders must be well equipped with contemporary management skills to navigate the challenges and opportunities presented by remote work, fostering a cohesive and productive virtual work environment.

This framework provides SMMEs with a comprehensive approach to addressing contemporary challenges in the post-COVID-19 era. By integrating these management processes into their strategies, SMMEs can enhance their resilience, adaptability, and competitiveness in an evolving business landscape. This approach emphasises the importance of strategic thinking, adaptability, and a customer-centric focus to ensure the long-term success of SMMEs in a rapidly changing environment.

## 7. Conclusions and Recommendation

In conclusion, the post-COVID-19 era has presented SMEs with unique management challenges that require innovative and adaptive strategies. The study developed a robust conceptual framework to guide SMEs to achieve success by examining these challenges and their corresponding management processes. Understanding the importance of emotional intelligence, financial resilience, and adaptive leadership in addressing financial disruptions is crucial for maintaining financial stability. Additionally, customer-centric adaptations are vital for staying attuned to shifting consumer behaviours. To excel in this new landscape, SMMEs must actively manage innovation risks and embrace technological innovation and digital transformation, with remote workforce management as a key component. Furthermore, by integrating sustainable business models and social responsibility, SMMEs can bolster their resilience and make a positive impact. This framework not only outlines the management processes required but also encourages SMMEs to be forward-thinking, innovative, and adaptable, equipping them to thrive in the post-COVID-19 era.

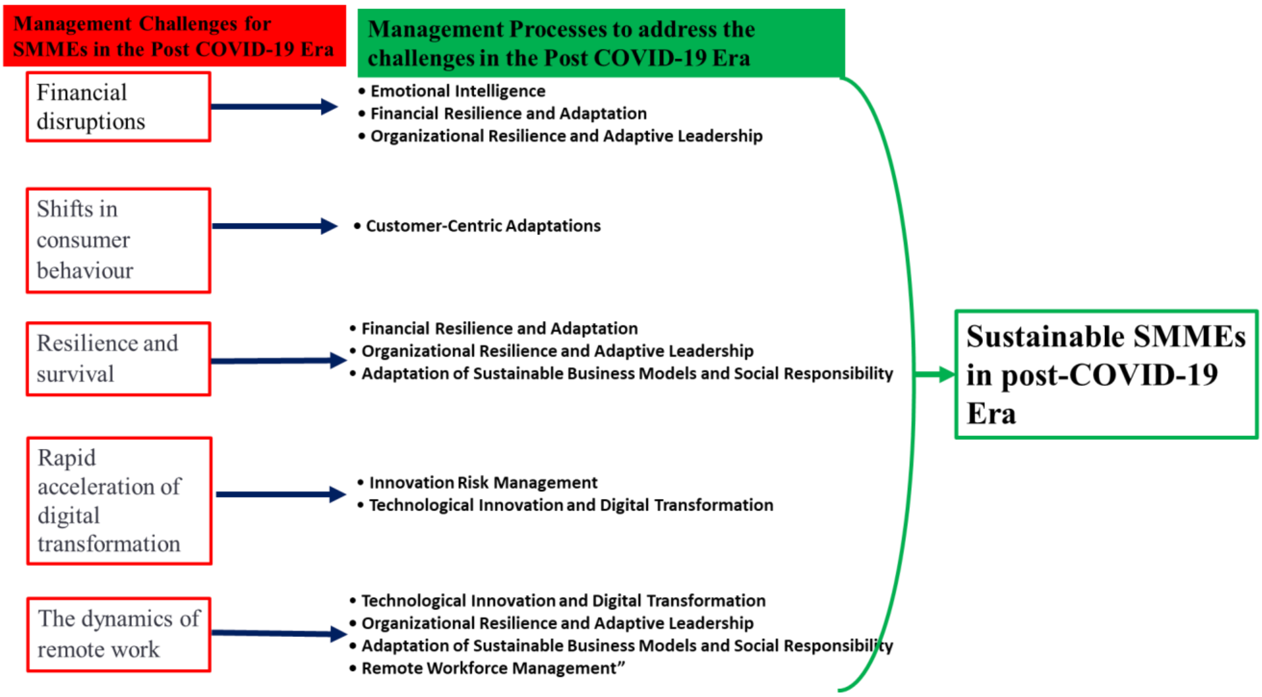


**Figure 1:** Conceptual framework for addressing contemporary management challenges for SMMEs in the post-COVID-19 era

***Source:*** *Research results, 2023*

Considering the comprehensive analysis presented in this manuscript, it is imperative for stakeholders, including policymakers, industry leaders, and academics, to recognise the pivotal role of SMMEs in navigating and thriving in the post-COVID-19 era. The conceptual framework outlined in this article offers a strategic roadmap for SMMEs to address contemporary management challenges by integrating emotional intelligence, fostering financial resilience, embracing adaptive leadership, and implementing customer-centric adaptations, among other key strategies. Policymakers can leverage these insights to design targeted interventions and support programs tailored to the specific needs of SMMEs, thereby creating an enabling environment for their sustained growth. Furthermore, industry associations can use these findings to develop best practice guidelines and capacity-building initiatives that empower SMMEs to navigate the dynamic business landscape. By implementing the recommendations derived from this study collaboratively, stakeholders can contribute to the creation of a resilient, adaptable, and sustainable future for SMMEs, ensuring their continued contribution to economic growth and innovation.

As organisations and governments grapple with the profound impacts of the COVID-19 pandemic, this manuscript's conceptual framework emerges as a valuable resource for shaping strategies that will propel South African SMMEs into a thriving post-pandemic landscape. The study not only unravels the intricacies of contemporary management challenges faced by SMMEs, but also provides actionable recommendations grounded in a thorough literature review and systematic analysis. Policymakers can draw upon these insights to craft informed policies that facilitate the recovery and growth of SMMEs. Additionally, business associations can utilise the conceptual framework to develop targeted training programs that enhance the adaptive capabilities of SMME leaders and managers. The proposed strategies, encompassing areas such as financial resilience, customer-centric adaptations, and innovation risk management, offer a holistic approach to navigating the complexities of the post-COVID-19 era. By incorporating these recommendations into their operations, South African SMMEs can survive and thrive, contributing significantly to the nation's economic resurgence and fostering a robust entrepreneurial ecosystem.

Through a comprehensive understanding of these strategies, stakeholders can collaborate to build a more resilient, adaptable, and sustainable future for SMMEs, by ensuring their continued contribution to economic growth and innovation. The prescripts of this study can assist policymakers and the government in developing targeted interventions and programs that can address the specific needs of SMMEs. This can help create an enabling environment for SMMEs to thrive and lead to increased economic growth and job creation.

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The authors declare that they have no competing interests.

## Contributions of Authors

Nwosu L. I. – performed all the research by developing the research case study and completed the research methodology and data analysis based on different references; involved in drafting the article.

Enwereji P. C. – performed all the research by developing the research case study and completed the research methodology and data analysis based on different references; involved in drafting the article.

Obokoh L. – performed all the research by developing the research case study and completed the research methodology and data analysis based on different references; involved in drafting the article.

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