

**BUSINESS CONTINUITY IN TIMES OF CRISIS: AN ASSESSMENT OF THE IMPACT
OF COVID 19 PANDEMIC ON THE PAINT MANUFACTURING INDUSTRY IN
LUSAKA: A CASE STUDY OF KANSAI PLASCON ZAMBIA LIMITED.**

BY

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A Dissertation submitted to the University of Zambia in partial fulfilment of the requirements for
the award of the Degree of Master of Business Administration - General.

THE UNIVERSITY OF ZAMBIA

LUSAKA

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DECLARATION

I, **Patricia Sachiyyuka**, do hereby declare that this work is my original work achieved through personal reading and research. This work has never been submitted to the University of Zambia or any other Universities. All sources of data used and literature on related works previously done by others, used in the production of this Dissertation have been duly acknowledged. if any omission has been made, it is not by choice but by error.

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APPROVAL

This Dissertation by **Patricia Sachiuka** is approved as a partial fulfilment of the requirements for the award of the Degree of Master of Business Administration General.

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ABSTRACT

This study delves into the profound impact of the COVID-19 pandemic on the paint manufacturing industry in Lusaka, Zambia, focusing on the strategic responses and resilience displayed by Kansai Plascon Zambia Limited, a key player within the region. Employing a qualitative research approach, the study undertakes a comprehensive analysis of data sourced from diverse stakeholders, including customers, employees, suppliers, and industry leaders. This method ensures an understanding of the intricate challenges and opportunities that unfolded in the industry. The findings illustrate the far-reaching effects of the pandemic on the paint manufacturing sector, encompassing operational aspects, customer expectations, workforce dynamics, and relationships within the supply chain. Through detailed qualitative thematic analysis, insights into how industry stakeholders navigated these challenges are provided, revealing adaptive measures and strategic responses instrumental in sustaining operations during challenging times. Kansai Plascon Zambia Limited's experiences and actions serve as a focal point for understanding how a prominent industry player grappled with the unprecedented challenges posed by the pandemic. The study unfolds responses that go beyond mere survival, emphasizing proactive and innovative measures that emerged within the industry. Key themes that emerged during the pandemic, such as operational flexibility, strategic innovation, and financial prudence, are highlighted. The research emphasizes the resilience of the paint manufacturing industry's supply chain, a crucial factor in sustaining operations amidst disruptions. Additionally, the critical role played by a skilled and adaptable workforce in withstanding challenges and driving proactive responses to evolving industry dynamics is illuminated, underscoring the continuity of operations and the ability to innovate in the face of adversity. The study also places significant spotlight on the transformative impact of technological advancements within the paint manufacturing sector, including investments in digitalization, research and development, and the adoption of eco-friendly manufacturing practices. These technological strides, beyond operational efficiency gains, align the industry with global sustainability goals, fostering innovation and positively impacting market reputation. The findings serve as a roadmap for the paint industry, highlighting the importance of continuous learning, collaborative partnerships, and a resilient workforce which if embraced, the can industry navigate challenges and drive innovation, ensuring its relevance and prosperity in an ever-changing business landscape.

KEY TERMS: *Business Continuity, COVID 19, Crisis Management, Pandemic, Resilience*

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DEDICATION

This research work is dedicated to my dear husband, our children and my siblings whose unwavering support and encouragement have been the cornerstone of my academic journey. Their sacrifices and belief in my abilities have been a constant source of inspiration, driving me to strive for excellence in all my endeavors. This accomplishment is as much theirs as it is mine.

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LIST OF ABBREVIATIONS AND ACRONYMS

ASP	Average Selling Price
BCM	Business Continuity Management
COGS	Cost of Goods Sold
COVID – 19	Corona Virus Disease of 2019
GP	Gross Profit
IT	Institutional Theory
KPZ	Kansai Plascon Zambia
PAT	Profit After Tax
PPE	Property Plant and Equipment
R & D	Research and Development
RBV	Resource Based View
SARS – COV – 2	Severe Acute Respiratory Syndrome Corona Virus 2
SMEs	Small and Medium Enterprises
WHO	World Health Organisation

CHAPTER ONE

INTRODUCTION

1.1 Introduction

Business Continuity is an organization's ability to maintain critical functions in emergencies. The COVID-19 pandemic brought unprecedented challenges to businesses across the globe. The paint manufacturing industry, faced disruptions in supply chains, changes in consumer behavior, and operational challenges. The research aimed to assess how the COVID-19 pandemic affected the paint manufacturing industry in Lusaka Zambia through a case study of Kansai Plascon Zambia Limited, with the following objectives; to assess operational challenges faced by Kansai Plascon Zambia Limited during the COVID-19 pandemic; to evaluate the financial effects of the COVID-19 pandemic on Kansai Plascon Zambia Limited and to identify the resilience strategies the paint manufacturing industry used to overcome the effects of the Pandemic. By assessing the strategies employed by the company to ensure business continuity during this crisis, valuable insights have been gained for both academic and practical purposes. In the Zambian context people focused on health and safety because of fear caused by the pandemic, leading to increased demand for paints with special properties. Such as antimicrobial coatings and paints that are easy to clean gained traction, mainly in healthcare facilities, public spaces, and commercial establishments (Ng'ombe et al. 2021). As Zambia's economy gradually reopened, the paint manufacturing industry sought to build resilience. Manufacturers diversified supply sources, streamlined production processes, optimized inventory management and employed prudent finance management measures.

Prior the research explored the effects of the pandemic on various industries and sectors. (Mwansa et al. 2020) Some studies examined the broader economic implications, (Ng'ombe et al. 2021) while others investigated specific challenges faced by businesses. In the context of the paint industry, some research focused on the impact of the pandemic on supply chains and consumer preferences. (Adekanye et al. 2020) However, existing studies have often provided general overviews rather than in-depth case studies that delve into the specific strategies adopted by a paint manufacturing company during the pandemic. The study differentiates itself by focusing on a detailed case study of Kansai Plascon Zambia Limited, a prominent player in the paint

manufacturing industry in Lusaka. Unlike previous research, this study goes beyond surface-level analysis to delve into the intricacies of the company's response to the pandemic. It uncovers the strategies and adaptations implemented by the company to ensure business continuity in the face of unprecedented challenges. The study offers practical insights that other companies in the paint manufacturing can learn from. The research addresses a gap in academic literature by providing a comprehensive analysis of the effects of the pandemic on the paint manufacturing sector in the Zambian context. It gives an understanding of how a crisis of global magnitude can disrupt operations, alter financial stability and necessitate adaptive strategies. The research guides companies in developing more robust supply chain management practices, consumer-centric product offerings, and crisis-response strategies. The insights from this study guides the formulation of policies that enhance resilience in times of crisis, encourage local production of essential materials, and foster a business environment conducive to adaptation and growth.

1.2 Background to The Study

The COVID-19 pandemic, caused by the novel coronavirus SARS-CoV-2, emerged on the global stage in December 2019, quickly escalating into a profound global health and economic crisis. This crisis, characterized by the rapid spread of the virus, overwhelmed healthcare systems, and resulted in extensive loss of life. Beyond the direct health implications, the pandemic unleashed a series of unprecedented economic and social challenges, affecting industries worldwide. The manufacturing sector, including the paint manufacturing industry, found itself grappling with disruptions that necessitated adaptive strategies to ensure business continuity. The manufacturing industry, a cornerstone of global economies, encompasses a diverse array of sectors, each susceptible to the pandemic's effects. From automotive to electronics, supply chains were disrupted, operations halted, and markets destabilized. One such sector, the paint manufacturing industry, experienced distinct challenges as well as opportunities stemming from altered consumer behaviors and priorities (Ayeni et al., 2021).

The global paint manufacturing industry experienced a range of challenges and transformations as a result of the COVID-19 pandemic. The pandemic's impact was felt across multiple dimensions, from supply chain disruptions to shifts in consumer behavior. These effects were particularly

pronounced in the paint manufacturing sector, which faced a unique set of circumstances that influenced production, distribution, and overall market dynamics (Ibid, 2021).

The pandemic disrupted global supply chains, affecting the availability of raw materials, chemicals, and packaging required for paint production. Lockdowns, travel restrictions, and factory closures in various countries led to shortages and delays in sourcing essential components. This disruption hampered production capabilities and resulted in increased costs due to scarcity and transportation challenges. As the pandemic unfolded, economic uncertainty prompted changes in consumer behavior. Non-essential spending declined, impacting sectors such as construction, renovation, and interior decoration – key drivers for paint demand. Paint manufacturers experienced decreased orders from both residential and commercial customers, leading to lower sales volumes and revenue.

Moreover, adapting to the new health and safety protocols posed operational challenges for paint manufacturers. Reduced workforce capacities due to social distancing requirements and the need to ensure employee safety led to production bottlenecks. In some cases, temporary closures or reduced shifts affected manufacturing capabilities. African countries were no exception to the disruptions in international trade and logistics due to lockdowns and restrictions. The paint manufacturing industry relied on imported raw materials, pigments, and chemicals, many of which were delayed or became scarce. This led to production slowdowns and bottlenecks, impacting the availability of paints in the market.

From December 2019 going forward, African countries witnessed a steady decline in construction and renovation projects. As lockdowns and economic uncertainties took hold, construction and renovation activities slowed down. The decline in real estate projects and commercial construction led to reduced demand for paints used in these sectors. This shift in demand patterns necessitated adjustments in production volumes and product offerings (Makasi et al., 2021). Continental businesses also witnessed consumer behavior shifting towards essential goods during the pandemic, impacting the demand for non-essential items such as decorative paints. With people spending more time at home, there was an increased interest in interior paints and products that enhanced indoor living spaces. Paint manufacturers needed to adapt to these evolving preferences.

Zooming in on the national (Zambian) stage (which was almost equally affected), people witnessed a fixated focus on health and safety caused by the pandemic. The pandemic heightened awareness of health and safety concerns, leading to increased demand for paints with specific properties. Products such as antimicrobial coatings and paints that were easy to clean gained traction, particularly in healthcare facilities, public spaces, and commercial establishments (Ng'ombe et al., 2021). However, resilience and recovery measures became prevalent. As Zambia's economy gradually reopened, the paint manufacturing industry sought to build resilience. Manufacturers diversified supply sources, streamlined production processes, optimized inventory management and employed prudent finance management measures. Companies also explored innovative marketing strategies to adapt to the changing consumer landscape.

1.3 Statement of The Problem

The COVID-19 pandemic presented unprecedented challenges to various industries, including the paint manufacturing sector. The paint industry, a crucial contributor to economic growth and beautification, encountered disruptions in supply chains, shifts in consumer behavior, and operational challenges. These factors collectively raise the need for a comprehensive assessment of the impact of the pandemic on the paint manufacturing industry.

Prior research explored the effects of the pandemic on various industries and sectors (Mwansa et al., 2020). Some studies examined the broader economic implications (Ng'ombe et al., 2021), while others investigated specific challenges faced by businesses. In the context of the paint industry, some research focused upon the impact of the pandemic on supply chains and consumer preferences (Adekanye et al., 2020). However, existing studies have often provided general overviews rather than in-depth case studies that delve into the specific strategies adopted by a paint manufacturing company during the pandemic.

Strategies that Kept companies afloat during the COVID- 19 pandemic are not laid bare for us to learn from. Therefore, this study differentiates itself by focusing on a detailed case study of Kansai Plascon Zambia Limited, a prominent player in the paint manufacturing industry in Lusaka. Unlike previous research, this study goes beyond surface-level analysis to delve into the intricacies of the company's response to the pandemic. It aims to uncover the nuanced strategies and adaptations implemented by the company to ensure business continuity in the face of unprecedented challenges. By concentrating on a single company, this study provides an in-depth exploration of the details of the challenges faced and successes made by Kansai Plascon Zambia Limited. Furthermore, it offers practical insights that other companies in the paint manufacturing sector can learn from. The research not only identifies the impact of the pandemic on the company's operations and financial performance but also delves into the strategies used to address these challenges.

1.4 Research Aim

To Assess how the COVID-19 pandemic affected the paint manufacturing industry in Lusaka.

1.5 Specific Objectives of The Study

- I. To assess the operational challenges faced by Kansai Plascon Zambia Limited during the COVID-19 pandemic.
- II. To evaluate the financial effects of the COVID-19 pandemic on Kansai Plascon Zambia Limited.
- III. To identify the resilience strategies the paint manufacturing industry used to overcome the economic effects of the Pandemic.

1.6 Research Questions

- I. What Operational challenges did Kansai Plascon face during the COVID-19 Pandemic?
- II. What were the financial effects of the COVID-19 pandemic on Kansai Plascon Zambia Limited?
- III. What resilience strategies did the paint industry use to overcome the economic effects of the Pandemic?

1.7 Significance of The Research

The research addresses a gap in academic literature by providing a comprehensive analysis of the effects of the pandemic on the paint manufacturing sector in the *Zambian context*. It gives an understanding of how a crisis of global magnitude can disrupt operations, alter financial stability and necessitate adaptive strategies.

The findings of this research offer practical insights for the paint manufacturing industry in *Zambia* and beyond. Companies operating in similar sectors can benefit from the lessons learned and strategies employed by *Kansai Plascon Zambia Limited* to ensure business continuity during a crisis. The research could guide companies in developing more robust supply chain management practices, consumer-centric product offerings, and crisis-response strategies.

The research outcomes give information to policy-makers, regulatory bodies like local councils and government agencies about the challenges faced by the paint manufacturing industry during the pandemic. The insights could guide the formulation of policies that enhance resilience in times of crisis, encourage local production of essential materials, and foster a business environment conducive to adaptation and growth. Economically, the paint manufacturing industry is a significant contributor to national economies. The research provides valuable data on the economic implications of the pandemic for this industry in *Zambia*.

By studying the strategies and adaptations employed by *Kansai Plascon Zambia Limited*, the research equips businesses with knowledge that can enhance their preparedness for future crises. It emphasizes the importance of strategic diversification, technological innovation, and agile response mechanisms. The research outcomes could be disseminated through workshops, seminars, and industry conferences, facilitating knowledge transfer from academia to practitioners. This transfer of knowledge ensures that the insights gained from this study reach a wider audience and positively influence business practices and decision-making.

1.8 Scope of The Study

This study comprehensively analyzes the impact of the *COVID-19* pandemic on the paint manufacturing industry in *Lusaka*, with a specific focus on *Kansai Plascon Zambia Limited*. The geographical scope was limited to *Lusaka, Zambia*, where *Kansai Plascon Zambia Limited* operates. Data for the study was sourced from various stakeholders, including customers,

employees, suppliers, and industry leaders. Key contacts within Kansai Plascon Zambia Limited were used to gather relevant information and insights. An ethical statement outlining ethical considerations and procedures was included in the study to ensure the ethical conduct of research activities. The study specifically examines operational challenges, financial implications, and provides recommendations for enhancing resilience and preparedness within the paint manufacturing industry for future crises.

1.9 Outline of the Dissertation

The research was organized as follows;

Chapter Two: Literature Review: Reviews literature on the effects of the COVID – 19 pandemic on the business environment

Chapter Three: Theoretical and Conceptual Framework: Presents the theoretical and conceptual framework upon which the study is based.

Chapter Four: Research Methodology. Provides insights into the methodology that was used to conduct the study.

Chapter Five: Data Analysis and Presentation of Results: This chapter presents the findings and analysis of the survey on data collected from interviews and content analysis.

Chapter Six: Discussion of Results: This chapter discusses the results focusing on the objectives of the study.

Chapter Seven: Conclusions and Recommendations: Finally, the dissertation ends with conclusions and recommendations from the research findings and their implication and suggestion for future research.

CHAPTER TWO

LITERATURE REVIEW

2.1 Introduction

This chapter aims to provide an extensive review of the literature regarding the impact of the COVID-19 pandemic on the business environment. It is structured to offer an overview of the subject matter, followed by discussions on global, continental, and national viewpoints, concluding with lessons learned from empirical literature relevant to the research topic.

2.2 COVID-19 Pandemic

The COVID-19 pandemic led to unprecedented challenges and disruptions across industries worldwide, profoundly impacting economies, businesses, and societies at large. The paint manufacturing sector, pivotal for construction, aesthetics, and economic progress encountered multifaceted effects due to this global crisis. This literature review endeavors to synthesize existing research, focusing on the impact of COVID-19 on the paint manufacturing industry, particularly in Africa and Zambia (Linnenluecke & Griffiths, 2020).

The ramifications of the pandemic transcended geographical boundaries, affecting various sectors differently based on regional nuances, economic conditions, and governmental responses. In Africa, renowned for its resilience and diversity, industries have navigated through these challenges in distinct ways, influenced by local dynamics.

The paint manufacturing industry faced an intricate web of challenges, particularly disruptions in global supply chains, leading to scarcities of essential raw materials and components. Manufacturing processes were hampered, necessitating adjustments in production timelines and driving up costs.

This literature review seeks to provide a comprehensive understanding of the impact of COVID-19 on the paint manufacturing industry, with a focus on Africa and Zambia. By synthesizing existing research, it aims to shed light on the challenges faced by companies within this sector, the strategies devised to overcome these challenges, and the industry's capacity to adapt and innovate in response to a global crisis.

2.3 Global Viewpoint

The COVID-19 pandemic elicited profound global repercussions, compelling industries across the world to adapt to unprecedented challenges. The paint manufacturing sector, as an essential component of construction, renovation, and consumer markets, was not exempted from the pandemic's far-reaching effects. This literature review aims to synthesize key insights from research that delves into the impact of COVID-19 on the paint manufacturing industry on a global scale, providing a comprehensive understanding of the challenges and adaptations encountered by companies in this sector (Gupta et al., 2020).

Supply chain disruptions emerged as a central theme in the wake of the pandemic. Research by Gupta and Wilemon (2020) emphasized that the interconnectedness of the global economy magnified the vulnerabilities of supply chains to disruptions. The paint manufacturing industry, reliant on intricate networks for sourcing raw materials and distribution, faced disruptions due to factory closures, transportation restrictions, and workforce limitations (Cattani et al., 2020; Bannasar, 2021). Consequently, these disruptions cascaded into production slowdowns and increased costs.

Consumer behavior shifts also played a pivotal role in shaping the industry's response. As governments-imposed lockdowns and economic uncertainty prevailed, consumer preferences shifted towards essential goods. Research by Manohar et al. (2021) indicated that discretionary spending on non-essential items, such as decorative paints, diminished. Meanwhile, there was an increased demand for products that enhanced indoor spaces, reflecting changing lifestyles influenced by remote work and quarantine measures.

Operational adaptations were crucial in maintaining business continuity. Companies pivoted to remote work models and embraced digital technologies to ensure communication and engagement (Chatterjee et al., 2020). The pandemic catalyzed a digital transformation, with manufacturers leveraging online platforms for sales, marketing, and customer interactions. Additionally, some companies diversified their product offerings, focusing on paints with antimicrobial properties and sustainable attributes to address evolving customer concerns (BSI, 2006).

The financial implications of the pandemic were substantial. Research by Ali and Aamir (2021) highlighted that revenue losses due to decreased demand were compounded by increased costs associated with supply chain disruptions. Companies faced challenges in managing their financial

health, necessitating strategies to optimize cost structures, manage cash flows, and secure working capital (Herbane et al, 2021).

2.4 Continental Viewpoint

The COVID-19 pandemic had a profound impact on industries worldwide, with African nations and economies being no exception. The paint manufacturing industry in Africa, which serves as a crucial contributor to economic growth and aesthetics, underwent significant transformations in response to the pandemic's challenges. This literature review aims to synthesize key insights from research focusing on the impact of COVID-19 on the paint manufacturing industry in Africa, shedding light on the unique challenges and adaptations faced by companies in this region (Hiles, 2007; Gibb and Buchanan, 2006).

Supply chain disruptions emerged as a central theme in the wake of the pandemic. Research by Adekanye et al. (2020) emphasized that African economies, characterized by dependency on global imports, experienced disruptions in sourcing raw materials due to international lockdowns. The paint manufacturing industry, reliant on imported chemicals and pigments, faced challenges in production and distribution, leading to reduced output and increased costs.

Consumer behavior shifts played a pivotal role in shaping the industry's response. Lockdowns and economic uncertainties prompted changes in consumer spending patterns. Research by Obeng and Amponsah (2021) indicated that consumer preferences shifted towards essential items, impacting the demand for decorative paints. At the same time, there was increased interest in interior paints and coatings that improved indoor environments, reflecting changing lifestyle dynamics.

Operational adaptations were crucial for maintaining business continuity. African paint manufacturers quickly embraced digital strategies to connect with consumers (Bakshi, 2021; Busu, et al, 2020). The use of virtual consultations, online color selection tools, and e-commerce platforms allowed companies to adapt to changing consumer behaviors and restrictions on physical retail spaces. Additionally, some manufacturers focused on innovative paint formulations, such as antimicrobial coatings, to address health and safety concerns.

Financial implications were evident across the industry. Research by Ayeni et al. (2021) highlighted that revenue losses due to reduced demand were compounded by supply chain disruptions, increasing costs for manufacturers (ISO, 2012). This financial strain required

companies to optimize operational efficiency, manage working capital, and explore alternative revenue streams.

2.5 National Viewpoint

The COVID-19 pandemic unleashed unprecedented challenges across industries worldwide, and Zambia's paint manufacturing sector was no exception. As an essential component of construction and aesthetics, this industry faced disruptions and adaptations in response to the pandemic's multifaceted effects. This literature review aims to synthesize key insights from research that focuses on the impact of COVID-19 on the paint manufacturing industry in Zambia, shedding light on the challenges and strategies encountered by companies within the Zambian context.

Supply chain disruptions emerged as a significant concern in the wake of the pandemic. Research by Chikodzi et al. (2020) emphasized that lockdowns and international restrictions disrupted global supply chains, impacting the availability of raw materials and components required for paint manufacturing. This, in turn, affected production schedules, leading to reduced output and increased costs for paint manufacturers in Zambia.

Consumer behavior shifts played a pivotal role in shaping the industry's response. Lockdowns and economic uncertainties led to changes in spending patterns, with consumers prioritizing essential goods. Research by Makasi et al. (2021) indicated a decline in demand for decorative paints, while the demand for interior paints and coatings, catering to increased time spent at home, gained prominence.

Operational adaptations were crucial in ensuring business continuity. Companies in Zambia embraced digital strategies to navigate restrictions on physical interactions (Ng'ombe et al., 2021). Virtual consultations, online color selection tools, and e-commerce platforms became pivotal for maintaining customer engagement and sales. Moreover, manufacturers introduced products like antimicrobial coatings to address health and safety concerns (Păunescu *et al.*, 2018).

The financial impact was evident across the industry. Research by Mwansa et al. (2020) highlighted that reduced demand and increased costs due to supply chain disruptions strained the financial performance of paint manufacturers in Zambia. This necessitated cost-saving measures, cash flow management, and the exploration of new revenue streams.

a. Operational Performance during COVID-19

The operational landscape of businesses underwent significant transformations during the COVID-19 pandemic, posing unprecedented challenges across industries. Ivanov and Dolgui (2020) underscored the disruptions in global supply chains, emphasizing the need for flexibility and diversification to mitigate the impact of supply chain disruptions. Specifically, within the paint manufacturing industry, operational challenges stemming from raw material procurement, workforce dynamics, and shifts in consumer behavior were evident (Mwansa et al., 2020).

Furthermore, research by Ivanov (2020) highlights the importance of digitalization in enhancing operational resilience during crises. By leveraging digital technologies, companies can optimize their operations, facilitate remote work, and adapt to changing market dynamics. This strategic approach to digital transformation enables businesses to maintain continuity and efficiency in their operations, even amidst disruptions.

b. Financial Performance during COVID-19

The literature review addresses the critical focal point of financial performance amidst the pandemic, acknowledging the multifaceted impact on businesses across sectors (Baker et al., 2020). Alfaro et al. (2020) emphasize the importance of adaptive financial strategies to mitigate revenue fluctuations and increased operational costs. They suggest that companies should prioritize liquidity management and prudent financial planning to ensure financial stability during uncertain times. Moreover, research by Claessens et al. (2020) highlights the role of financial innovation in navigating economic challenges. By implementing innovative financial strategies such as alternative financing mechanisms and risk management techniques, businesses can enhance their resilience and adaptability to external shocks. These findings underscore the importance of strategic financial management in mitigating the adverse effects of the pandemic on businesses (Bandyopadhyay, 2000).

c. Strategies to Cushion the Effects of COVID-19 on the Manufacturing Industry

The review provides a comprehensive overview of strategies deployed by organizations to mitigate the effects of the pandemic. Bartik et al. (2020) highlights the adoption of remote work policies and digital transformation initiatives as crucial strategies for ensuring business continuity. They emphasize the need for companies to invest in digital infrastructure and remote collaboration tools to facilitate seamless operations during disruptions.

Additionally, research by Ivanov and Dolgui (2020) discusses the importance of supply chain resilience in maintaining operational continuity. By diversifying supply sources, companies can reduce dependency on single suppliers and mitigate the risk of supply chain disruptions. Furthermore, proactive inventory management practices, as suggested by Ivanov (2020), enable companies to optimize inventory levels and ensure product availability, even in turbulent market conditions. Innovations in product and service offerings have also been instrumental in adapting to changing consumer needs. Businesses that swiftly pivoted their offerings or introduced new products and services tailored to the current environment have demonstrated resilience (Ivanov, 2020). This strategy not only ensures continued relevance in the market but also sustains customer engagement, highlighting the importance of innovation in times of crisis (Gupta and Wilemon, 2020).

The importance of business continuity planning has been widely emphasized in the literature as a key aspect of organizational resilience during crises (Bhamra et al., 2011). Business continuity planning involves identifying potential risks, developing strategies to mitigate them, and establishing protocols for maintaining critical operations during disruptions. By implementing robust business continuity plans, organizations can minimize the impact of crises and ensure the continuity of essential functions (Elliott & Swartz, 2016).

Moreover, proactive risk management strategies are essential for enhancing business resilience in the face of uncertainty (Hiles, 2014). Organizations need to conduct comprehensive risk assessments, identify vulnerabilities, and develop contingency plans to address potential threats. By proactively addressing risks, organizations can minimize the likelihood and severity of disruptions, thereby safeguarding their operations and reputation (Cerullo et al., 2014). Furthermore, effective crisis communication strategies play a crucial role in maintaining stakeholder trust and confidence during emergencies (Coombs, 2014). Organizations should establish clear communication channels, provide timely updates, and transparently communicate their response efforts to stakeholders. By fostering open and transparent communication, organizations can mitigate uncertainty and build resilience in the face of crises (Coombs & Holladay, 2014).

2.6 Lessons learnt from Empirical Literature: A critique (evaluation) on other lines of thought on the subject

Several authors have contributed valuable insights into the impact of the COVID-19 pandemic on the paint manufacturing industry in Zambia. While their research provides significant contributions, there are limitations that underscore the need for further exploration and analysis. This section discusses the works of these authors and highlights the constraints within their research.

Mwansa et al. (2020) conducted a study on the impact of COVID-19 on small and medium enterprises (SMEs) in Zambia, including paint manufacturing firms. They identified challenges such as reduced demand, supply chain disruptions, and financial strains. However, their research primarily focused on SMEs as a whole, offering a broader perspective rather than an industry-specific analysis of the paint manufacturing sector.

Not only that, but Ayeni et al. (2021) also delved into the financial performance of selected paint manufacturing firms in Zambia during the pandemic. Their study revealed revenue declines and supply chain disruptions affecting financial stability. However, their research scope was limited to financial aspects, overlooking broader operational and market implications that influence the industry's dynamics.

And Ng'ombe et al. (2021) explored the adoption of e-commerce strategies among small and medium enterprises in Zambia, including paint manufacturers, as a response to COVID-19 restrictions. Their study highlighted the importance of digitalization for business continuity. Nevertheless, their research centered on the adoption of e-commerce rather than comprehensively examining the broader impact of the pandemic on the paint manufacturing industry.

While these authors' research contributes valuable insights, their studies possess limitations that create gaps in the understanding of the paint manufacturing industry's holistic response to the pandemic. The existing research tends to focus on specific aspects, such as financial performance, digital adaptations, or broader SME challenges (Rothstein, 2002). To gain a comprehensive understanding of the industry's response, it is necessary to bridge these gaps and conduct a more integrated analysis.

This study aims to address these limitations by conducting a comprehensive assessment of the impact of COVID-19 on the paint manufacturing industry in Zambia, through a case study of Kansai Plascon Zambia Limited. By examining the company's operational and financial challenges

faced during the pandemic and the adaptation strategies and outcomes in the face of the pandemic's challenges, this research seeks to provide a detailed understanding of how the industry ensured business continuity during the COVID – 19 global crisis.

CHAPTER THREE

THEORETICAL AND CONCEPTUAL FRAMEWORK

3.1 Introduction

This chapter presents the theoretical and conceptual framework upon which the study is based, the chapter is outlined as follows; the theoretical framework and the conceptual framework development, operationalization of the study variables and ends with the research hypothesis.

3.2 Theoretical Framework

The theoretical framework of this study draws upon two interconnected theories: the Resource-Based View (RBV) and the Institutional Theory. These theories provide a comprehensive foundation for understanding how the COVID-19 pandemic influenced the strategies and operations of the paint manufacturing industry in Zambia, specifically within the context of Kansai Plascon Zambia Limited.

Resource-Based View (RBV)

The RBV theory asserts that a firm's competitive advantage and performance are driven by the unique resources and capabilities it possesses (Barney, 1991). This theory suggests that firms that have valuable, rare, inimitable, and non-substitutable resources can better respond to external shocks by leveraging their internal strengths. Applied to this study, the RBV theory explains how Kansai Plascon Zambia Limited's pre-existing resources and capabilities, such as its technological infrastructure, skilled workforce, and brand reputation, may have influenced its ability to adapt to the challenges posed by the pandemic (St-Germain, 2012). The theory underscores the importance of aligning internal strengths with external opportunities to enhance resilience and sustain competitiveness.

3.2.2 Institutional Theory

The Institutional Theory posits that organizations conform to societal norms, expectations, and regulations (DiMaggio and Powell, 1983). It suggests that organizations adopt specific practices and behaviors to gain legitimacy and align with prevailing institutional pressures. In the context of this study, the Institutional Theory elucidates how Kansai Plascon Zambia Limited's responses to the pandemic were influenced by institutional factors, including government regulations, industry standards, and stakeholder expectations.

Government regulations played a crucial role in shaping the company's adaptations to the pandemic. For instance, mandates regarding workplace safety protocols, lockdown measures, and restrictions on business operations directly impacted Kansai Plascon Zambia Limited's operational strategies. The company had to comply with these regulations to ensure the safety of its employees and adhere to legal requirements, thus aligning with institutional pressures.

Moreover, industry standards and best practices also influenced the company's responses. As part of the paint manufacturing industry, Kansai Plascon Zambia Limited followed industry guidelines for health and safety protocols, production processes, and product quality assurance. These standards, established by industry associations or regulatory bodies, set the benchmark for acceptable practices within the sector, guiding the company's decision-making during the pandemic.

Stakeholder expectations, including those of customers, employees, and the community, further shaped the company's adaptations. Customers may have demanded products that met higher safety standards or expressed preferences for contactless transactions and delivery options. Employees may have expected robust safety measures and support for remote work arrangements. Community stakeholders, such as local authorities or advocacy groups, may have pressured the company to contribute to pandemic relief efforts or adopt environmentally sustainable practices in its operations.

3.2.3 How both theories apply to the study:

The Resource-Based View (RBV) theory is highly relevant to this study as it provides a lens through which to analyze how Kansai Plascon Zambia Limited's pre-existing resources and capabilities played a pivotal role in its response to the pandemic. By evaluating the company's technological infrastructure, workforce expertise, and brand reputation, the theory aids in understanding how these internal strengths facilitated the adoption of remote work, digital marketing strategies, and the development of new product lines to address evolving customer needs (Bratianu et al., 2020).

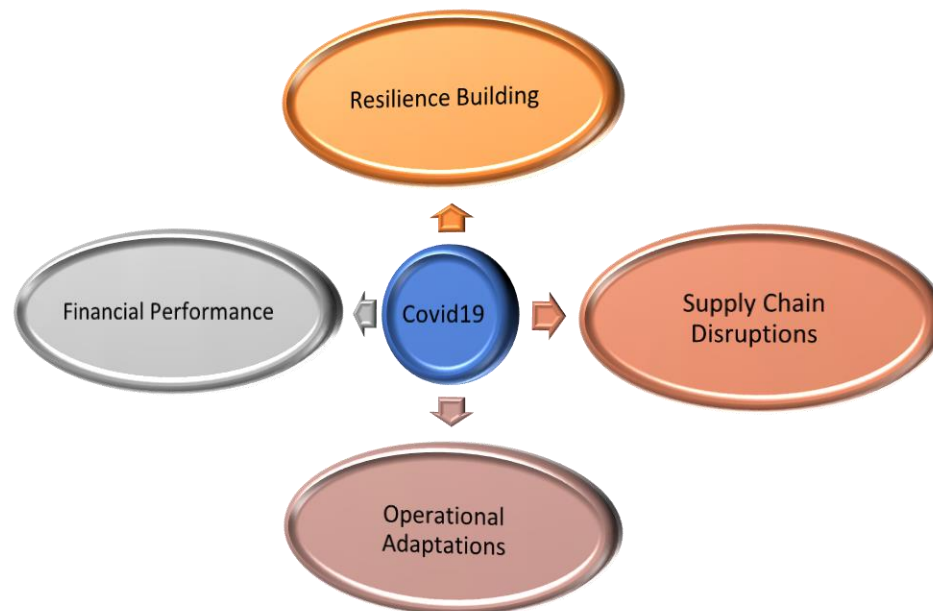
The Institutional Theory, on the other hand, offers insights into how Kansai Plascon Zambia Limited navigated external pressures and expectations during the pandemic. By examining how the company aligned its responses with government regulations, industry guidelines, and societal norms, the theory helps elucidate the motivations behind the company's operational adjustments.

Furthermore, the theory sheds light on how the company's adaptations were shaped by the need to maintain its legitimacy and reputation in the eyes of stakeholders and customers (Coombs, 2014). Together, these theories provide a robust foundation for exploring the impact of the COVID-19 pandemic on the paint manufacturing industry in Zambia, using Kansai Plascon Zambia Limited as a case study (Tammineedi, 2010). By examining the interplay between internal resources, external pressures, and strategic adaptations, the theoretical framework helps unravel the complexities of the industry's response to a global crisis.

3.3 Conceptual Framework

The conceptual framework of this study was designed to provide a structured understanding of how the COVID-19 pandemic influenced the paint manufacturing industry in Zambia, with a specific focus on Kansai Plascon Zambia Limited. The framework integrates key variables and concepts drawn from the Resource-Based View (RBV) theory and the Institutional Theory, offering insights into the industry's responses and adaptations.

Figure 3.1 Conceptual Framework



Independent Variable:

COVID-19 Pandemic: The external factor representing the global crisis caused by the COVID-19 pandemic.

Internal Resources:

Technological Infrastructure

Skilled Workforce

Brand Reputation

Supply Chain Relationships

Dependent Variables:**Operational Adaptations**

Remote Work Adoption: The extent to which the company implemented remote work arrangements for its employees.

Digital Marketing Strategies: The utilization of digital platforms for marketing and engaging with customers.

Product Diversification: The introduction of new product lines to cater to changing customer preferences.

Supply Chain Disruptions

Raw Material Availability: The impact of pandemic-induced disruptions on the availability of raw materials.

Production Delays: The extent to which the pandemic caused delays in the manufacturing process.

Increased Costs: The financial implications of supply chain disruptions on production costs.

Financial Performance

Revenue Decline: The degree to which the company's revenue was affected by decreased demand.

Profit Margin: The change in profit margin due to disruptions in production and supply chains.

Cost Optimization: The strategies implemented to manage costs and improve financial health.

Resilience Building:

Adaptation Strategy Efficacy: The effectiveness of the implemented strategies in maintaining business continuity.

Long-Term Impact: The strategies employed to build resilience for potential future disruptions.

Stakeholder Perception: How the company's adaptations were perceived by stakeholders and customers.

3.3.2 Research Hypotheses

For the proposed study on business continuity in the paint industry during the COVID – 19 pandemic, the research questions were framed as hypotheses as research questions guide the inquiry. Thus, stated below:

Hypothesis 1: Paint companies that diversified their supply chain partners and sourcing locations during the "new normal" were better able to mitigate disruptions and ensure business continuity.

Hypothesis 2: The adoption of digital communication tools and virtual collaboration platforms positively impacted employee engagement and facilitated seamless communication within paint companies during remote work arrangements.

Hypothesis 3: Paint companies that embraced eco-friendly and sustainable product offerings in response to changing consumer values during the pandemic experienced increased customer loyalty and demand.

Hypothesis 4: Companies that focused on employee well-being initiatives, such as remote team-building activities and mental health support, demonstrated higher levels of employee satisfaction and retention during the pandemic.

Hypothesis 5: Paint companies that effectively leveraged technology to offer virtual product demonstrations and consultations experienced improved customer engagement and retention compared to those relying solely on traditional sales approaches.

CHAPTER FOUR

RESEARCH METHODOLOGY

4.1 Introduction

This chapter provides insights into the methodology that was used to conduct the study. It describes, among other things the research design, the target population, sample size and sampling procedures, data collection and data analysis procedures that were employed in the study.

Purpose of the Chapter:

The primary objective of this chapter is to elucidate the methodological framework adopted to undertake the study on the impact of the COVID-19 pandemic on the paint manufacturing industry in Lusaka, specifically focusing on Kansai Plascon Zambia Limited. It delineates the strategies employed to gather and analyze data, ensuring rigor, reliability, and validity in the research process.

4.1.2 Overview of the Chapter:

This chapter encompasses a detailed discussion on various methodological aspects, including research design, target population, sample size determination, sampling procedures, data collection methods, and data analysis techniques. Each subsection is meticulously crafted to provide a comprehensive understanding of the methodological approach undertaken in this study.

4.1.3 Conclusion of the Chapter

The research methodology employed in this study offers a comprehensive framework for investigating the impact of the COVID-19 pandemic on the paint manufacturing industry in Zambia, with a specific focus on Kansai Plascon Zambia Limited. Grounded in a constructivist philosophical approach, the research design utilizes a qualitative case study methodology to delve deeply into the complex dynamics of the industry's response to the pandemic. Through purposive and convenience sampling techniques, data was collected from key stakeholders, including employees, customers, and suppliers, to capture diverse perspectives and experiences. Ethical considerations were paramount throughout the data collection process, ensuring participant confidentiality and informed consent. Diagnostic tests were conducted to validate the robustness and reliability of the research methods, including content validity, inter-rater reliability, and cognitive interviews. Thematic analysis was employed to analyze the qualitative data, revealing

insights into the operational challenges, financial implications, and adaptive strategies employed by Kansai Plascon Zambia Limited. Overall, the research methodology provides a rigorous and systematic approach to understanding the multifaceted impact of the pandemic on the paint manufacturing industry, contributing valuable insights to both academic scholarship and industry practice.

4.2 Research Philosophy and Approach

Constructivism, as a philosophical approach, emphasizes the subjective and socially constructed nature of reality, positing that knowledge is actively constructed by individuals through their interactions with the world (Gerstenmaier and Mandl, 2001). In the context of this research on the impact of COVID-19 on the paint manufacturing industry in Zambia, the adoption of a constructivist perspective is apt for several reasons.

Firstly, the qualitative research methodology utilized in this study aims to delve deeply into the experiences, perceptions, and interpretations of individuals within the industry. Constructivism provides a theoretical framework that acknowledges the diverse realities and meanings attributed to the pandemic's effects by different stakeholders. By embracing a constructivist lens, the research seeks to uncover the subjective interpretations and socially constructed understandings of how COVID-19 has influenced the paint manufacturing sector in Zambia.

Moreover, constructivism aligns with the case study approach employed in this research. Case studies inherently involve an in-depth exploration of a specific case or context, aiming to understand the complexities and nuances of real-world phenomena within their natural settings. Constructivism complements this approach by highlighting the context-dependent nature of knowledge and the importance of understanding the unique perspectives and interpretations of individuals within the studied context.

Furthermore, the constructivist perspective facilitates an exploration of the dynamic interactions between individuals and their socio-cultural environments. In the case of this study, it enables an examination of how industry actors within the paint manufacturing sector in Zambia construct their realities in response to the challenges posed by the COVID-19 pandemic, including operational adaptations, supply chain disruptions, and financial implications.

In terms of citation and reference to instruments/data, the appendices contain detailed documentation of the research instruments used, such as interview guides and data collection procedures. These instruments reflect the constructivist approach by emphasizing open-ended questions and allowing participants to express their subjective interpretations and experiences related to the pandemic's impact on the paint manufacturing industry. By referring to the appendices, readers can gain insight into how the research design operationalized the constructivist philosophy to collect and analyze data in alignment with the study's objectives and theoretical framework.

4.2.1 Application of the philosophy to the study

The philosophical approach of constructivism, in tandem with a qualitative research methodology, finds resonance in the study's research objectives and its aim to address the problem of understanding the impact of COVID-19 on the paint manufacturing industry in Zambia, specifically focusing on Kansai Plascon Zambia Limited.

4.3 Research Design

The research design employed was a case study approach to thoroughly assess how the COVID-19 pandemic affected the operations and finances of the paint manufacturing industry in Zambia and the resilience strategies used to ensure business continuity, with a specific focus on Kansai Plascon Zambia Limited. The case study design is chosen to provide an in-depth, contextualized understanding of the complexities, challenges, and adaptations within the industry, as experienced by the selected case organization.

4.3.1 Type of Case Study

The study adopts an intrinsic case study approach, where the focus is on gaining insights into a specific case (Kansai Plascon Zambia Limited) to deepen the understanding of the phenomenon rather than making generalizations to a larger population (Stake, 2005).

4.3.2 Unit of Analysis

The primary unit of analysis is Kansai Plascon Zambia Limited, a leading paint manufacturing company operating in Zambia with the headquarters in Lusaka. The case study explores the company's experiences, responses, and strategies in the face of the COVID-19 pandemic.

4.3.3 Data Collection Methods

Data was collected through a combination of methods to provide a comprehensive view of the case. These methods include:

a) In-depth Interviews

Semi-structured interviews were conducted with key stakeholders of Kansai Plascon Zambia Limited, including employees from various departments, managers, suppliers and customers. These interviews allowed participants to share their insights, experiences, and perspectives related to the pandemic's impact on the company.

b) Document Analysis

Company reports, financial statements, internal communications, and other relevant documents were analyzed to corroborate and enrich the information gathered from interviews.

4.3.4 Qualitative Approach

A qualitative research approach is well-suited to explore the nuanced and context-dependent aspects of the impact of COVID-19 on the paint manufacturing industry. This approach facilitates an in-depth understanding of the experiences, perceptions, and responses of individuals and organizations within the industry. Qualitative research methods, such as interviews, case studies, and content analysis, provide the tools to delve into the complexities of how the pandemic influenced operational strategies, supply chains, consumer behavior, and financial performance. Constructivism aligned seamlessly with the research objectives, as it emphasizes the contextual nature of reality and the subjective interpretations of individuals (Charmaz, 2006). The study's objectives seek to uncover the multifaceted effects of the pandemic on the industry, including operational adaptations, supply chain disruptions, financial performance, consumer behavior shifts, and resilience building. By adopting a constructivist lens, the research acknowledges that different stakeholders within the paint manufacturing industry may attribute diverse meanings and responses to these effects, considering their unique experiences, roles, and organizational contexts.

A qualitative approach harmonizes well with the study's objectives by allowing for an in-depth exploration of the various dimensions of the impact (Lincoln, and Denzin, 2005). The qualitative methods of interviews, case studies, and content analysis provided the tools to delve into the nuanced experiences of industry actors. Through open-ended interviews with employees, managers, and customers of Kansai Plascon Zambia Limited, the research captures their personal interpretations, narratives, and situated understandings of how the pandemic influenced their operations, choices, and perceptions.

4.4 Target Population and Sampling Frame

4.4.1 Target Population

The target population for this qualitative study was defined based on specific criteria relevant to the research objectives and the context of the study. Participants were selected from among employees, customers and suppliers of Kansai Plascon Zambia Limited who were actively involved in the paint manufacturing industry during the COVID-19 pandemic. This criterion was chosen to ensure that the selected participants had firsthand experience and insights into the challenges, opportunities, changes, or adaptations related to the pandemic within the industry.

Additionally, participants were required to be willing and able to provide rich and detailed information about their experiences and perspectives on the COVID-19 pandemic and its impact on the paint manufacturing industry. This criterion aimed to ensure that the selected participants could contribute meaningful data that aligns with the study's objectives.

The sample size of 22 individuals was determined based on the principle of data saturation, where sampling was stopped when no new or helpful information could be collected from additional participants. This approach ensures that the sample size was sufficient to capture a comprehensive range of perspectives and insights relevant to the research questions.

Furthermore, the justification for the sample size was supported by referencing earlier research studies that employed similar sampling techniques and obtained valid and meaningful results with lower sample sizes. For example, Fritz et al. (2020) and Mwansa et al. (2021) cited in the literature review section employed sample sizes of 20 and 15, respectively, in their qualitative studies on the effects of COVID-19. These studies demonstrated the validity and suitability of using lower sample sizes for qualitative research on related subjects and populations.

4.4.2 Sampling Frame:

The sampling frame was developed based on the organizational structure of Kansai Plascon Zambia Limited and its key stakeholders. It included:

1. **Employee Lists:** Comprehensive lists of employees at various levels within the company, obtained from human resources records. The data base had 85 employees at the time of sampling.
2. **Management and Decision-Makers:** A roster of senior executives and managers responsible for different departments, obtained from organizational charts and official records.
3. **Customer Database:** A compilation of customer information from sales records and customer databases, representing a diverse range of customers.
4. **Supplier Contacts:** Contact details of suppliers and vendors engaged in providing raw materials and resources to the company.

4.5 Sample Size

The determination of the sample size for this study was guided by the nature of the research objectives, the diversity of the stakeholders, and the principles of achieving adequate representation and meaningful insights. The sample size varied across different strata of participants.

a) **Key Informants and Experts (Purposive Sampling)**

For key informants and experts within Kansai Plascon Zambia Limited, two participants were purposefully selected by virtue of their strategic role in the company, that is the Managing Director and the Head of Finance. This number aimed to ensure a comprehensive understanding of various aspects of the company's operations, strategies, and responses to the pandemic.

b) **Customers (Convenience Sampling)**

Considering the diversity of customer categories (contractors, retailers, end-users), a sample of three participants were drawn. This sample size allowed for capturing different perspectives and behaviors within the customer segments.

c) **Suppliers (Convenience Sampling):**

A sample size of 3 suppliers was chosen. This number aimed to include a representative selection of suppliers providing diverse types of raw materials and resources to Kansai Plascon Zambia Limited.

d) Employees (Purposive Sampling)

Employee participation involved selecting 14 individuals from various departments and job levels. This sample size aimed to encompass a broad range of roles within the company.

e) Total Sample Size

The total sample size for this study was 22 participants, ensuring a balance between meaningful insights and the practicality of data collection and analysis.

4.5.1 Sampling Validation

Throughout the research process, the adequacy and representativeness of the sample size was assessed. Where necessary, adjustments were made to ensure that the collected data provided comprehensive insights into the impact of the COVID-19 pandemic on the paint manufacturing industry, particularly within Kansai Plascon Zambia Limited.

4.6 Sampling Technique

The study utilized a combination of purposive and convenience sampling techniques to ensure a comprehensive and representative sample for the research.

Purposive Sampling: A non-probability sampling technique called "purposeful sampling" involves choosing individuals who have certain traits or experiences relevant to the study (Bryman & Bell 2015) The goal of the sampling for this study was to examine the effects of COVID-19 on the Lusaka paint manufacturing business and to comprehend how Kansai Plascon Zambia Limited, used as a case study, dealt with the pandemic. As a result, the following criteria was used to choose the participants:

- The participants were employees, customers, suppliers, or competitors of Kansai Plascon Zambia Limited who were involved in the paint manufacturing industry during the COVID-19 pandemic.
- The participants must have experienced or witnessed some challenges, opportunities, changes, or adaptations related to the COVID-19 pandemic in the paint manufacturing industry.

- The participants must have been willing and able to provide rich and detailed information about their experiences and perspectives on the COVID-19 pandemic and its impact on the paint manufacturing industry.

These standards were used to identify and seek out possible volunteers who offered pertinent and useful information for the study's goals. A broad and representative sample of participants from several categories, including gender, age, position, sector, product, market, and location, was the goal of the study. The study also made sure that participants are educated about the study's goals, methods, risks, rewards, and ethical concerns before they voluntarily and freely consented to take part.

4.7 Data Collection Instruments and Procedure

The data collection process for this study involved a combination of qualitative methods to gather comprehensive and rich insights into the impact of the COVID-19 pandemic on the paint manufacturing industry in Zambia, with a specific focus on Kansai Plascon Zambia Limited. However, here are some insights that were taken into consideration prior to data collection.

4.7.1 Sharing Company Documents with Outside Personnel

Kansai Plascon Zambia's perspective on sharing company documents with outside personnel is characterized by a cautious approach. The company values the confidentiality and proprietary nature of its business operations, including financial data, strategic plans, and internal communications. There is an apprehension about sharing such sensitive information beyond the organization's boundaries. Concerns are centered around protecting trade secrets, maintaining a competitive edge, and safeguarding the company's intellectual property.

While recognizing the potential benefits of collaboration and transparency, Kansai Plascon Zambia is mindful of the risks associated with unauthorized dissemination or misuse of company documents. Any decision to share documents with external stakeholders, such as researchers or consultants, is likely to be preceded by thorough vetting, non-disclosure agreements, and a clear understanding of the purpose and safeguards in place.

4.7.2 Employees Participating in an Interview

Kansai Plascon Zambia's perspective on its employees participating in an interview, as with most private organisations, leans towards caution and apprehensiveness. The company highly values its workforce as a critical asset, and there is a sense of responsibility to protect employee privacy, opinions, and confidentiality. There might be concerns about employees inadvertently disclosing sensitive information or misrepresenting the company's operations, leading to potential legal or reputational implications.

Moreover, the apprehension stems from the uncertain nature of interviews, where employees' responses may be taken out of context or misunderstood. There might be worries about how their statements could be portrayed in the final research, potentially impacting the company's image or competitive position. The company would likely prioritize employee well-being and consent, carefully considering the potential risks and benefits of participation.

In both scenarios, Kansai Plascon Zambia's apprehensiveness reflects its commitment to maintaining the integrity of its operations, protecting proprietary information, and ensuring the welfare of its employees. Decisions to share documents or allow employee interviews would likely involve stringent protocols, transparent communication, and a thorough evaluation of potential consequences.

4.7.3 Data Collection Instruments

- a) **Semi-Structured Interviews:** In-depth interviews were conducted with key informants, including senior management, department heads, and experts within Kansai Plascon Zambia Limited. These interviews explored the company's operational adaptations, financial effects and resilience-building initiatives in response to the pandemic. Four different interview guides were developed to ensure consistency across interviews.
- b) **Document Analysis:** Company documents, reports, financial statements, and official communications were reviewed to gather qualitative and quantitative data on financial performance, operational changes, and strategic decisions made by Kansai Plascon Zambia Limited during the pandemic.

4.7.4 Data Collection Procedure:

a) Interviews:

- Identification of key informants based on their roles and expertise.
- Invitation to participate and scheduling of interviews.
- Conducting semi-structured interviews either in person or virtually.
- Audio recording and transcription of interviews for accurate analysis.

b) Document Analysis:

- Collection of relevant company documents, reports, and financial statements.
- Systematic review and analysis of the documents to extract pertinent data.
- Compilation of key findings and insights derived from the document analysis.

4.7.5 Ethical Considerations

- Informed consent was obtained from all participants before data collection.
- Confidentiality and anonymity of participants was maintained.
- Participants were informed about the voluntary nature of their participation.

4.7.6 Data Validation and Analysis: Collected data underwent validation to ensure accuracy and consistency. Interview reports were transcribed and analyzed using qualitative thematic coding.

4.8 Diagnostic Tests

Diagnostic tests were employed to ensure the quality of the collected data and the robustness of the chosen research methods. These tests helped identify any potential issues that could affect the credibility and validity of the study's findings.

Diagnostic Tests:

- i. **Content Validity:** Expert review of the interview guide by professionals in the field to ensure the instruments adequately capture the study's objectives.
- ii. **Inter-Rater Reliability:** Multiple researchers independently coding a subset of transcribed interviews to ensure consistency in interpretation and analysis.
- iii. **Cognitive Interviews:** Conducting interviews with a few participants to assess their understanding of the questions, ensuring they align with the intended meanings.

- iv. **Preliminary Analysis:** Preliminary analysis of a small portion of collected data to identify any unexpected trends or inconsistencies.

Benefits

- Diagnostic tests enhance the validity and credibility of the study's findings by identifying and rectifying potential issues

4.8.1 Normality Test

Normality Test in Qualitative Research

In qualitative research, the concept of normality test is not applicable in the same way as in quantitative research, as qualitative data is not measured on numerical scales. Instead, qualitative research focuses on understanding and interpreting the meanings, experiences, and narratives of participants. However, there are some considerations related to the distribution of themes, patterns, or concepts that can be relevant:

1. Distribution of Themes: In qualitative analysis, we examined the distribution of themes and patterns across different participants, contexts and time points. This helped identify whether certain themes were prevalent or occur with similar frequency.

2. Deviant Cases: Exploring deviant cases or narratives that diverge from the dominant patterns provided insights into the nuances and variations within the data.

3. Saturation: Qualitative researchers often strive for data saturation, where new information or themes no longer emerge from the data. This saturation indicates that the data has been thoroughly explored and major themes have been identified.

Benefits:

- Qualitative research focuses on understanding the depth and complexity of human experiences and perspectives.
- The above considerations help ensure thorough exploration of themes and patterns within the qualitative data.

4.8.2 Reliability Test

In qualitative research, the concept of reliability takes on a slightly different meaning than in quantitative research. While reliability traditionally focuses on consistency and replicability, in qualitative research, the emphasis is on ensuring rigor and trustworthiness.

The first step was triangulation and this involved employing different data sources, methods, or researchers to verify and cross-reference findings. This enhanced the reliability of the interpretations by confirming consistency across diverse sources. The second step was Peer Debriefing. This meant engaging with colleagues, experts, or other researchers to discuss findings, interpretations, and the research process. This external review enhanced the reliability of the study's interpretations.

Member Checking was the third step employed, and it entails to present preliminary findings to participants to validate the accuracy and completeness of their perspectives. This process enhances the reliability of the data collected and interpretations made. Provide rich and detailed descriptions of the research context, participants, and data collection process. This allows readers to evaluate the study's credibility and contributes to the reliability of the findings. Maintain a thorough record of research decisions, procedures, and data analysis steps. This documentation ensures transparency and contributes to the reliability of the study.

4.8.3 Validity Test

In this qualitative study approach, ensuring the validity of the study involved several strategies to enhance the credibility, transferability, dependability, and confirmability of the findings. These strategies help establish the trustworthiness and accuracy of the qualitative data collected.

1. Credibility:

- **Triangulation:** Use multiple sources of data (interviews, documents, observations) to corroborate findings and strengthen the credibility of interpretations.
- **Peer Debriefing:** Engage with colleagues or experts to review and discuss findings, interpretations, and conclusions, enhancing the rigor of the study.

2. Transferability:

- **Thick Description:** Provide detailed descriptions of the research context, participants, and findings, enabling readers to assess the transferability of findings to other contexts.
- **Participant Quotations:** Include direct quotes from participants to illustrate key points and allow readers to judge the applicability of findings to their own experiences.

3. Dependability:

Audit Trail: Maintain a detailed record of research activities, decisions, and data analysis processes. This audit trail enhances the study's dependability and facilitates transparency.

Member Checking: Share preliminary findings with participants to ensure accuracy and alignment with their experiences and perspectives.

4. Confirmability:

Reflexivity: Reflect on the researcher's biases, assumptions, and potential influence on data collection and interpretation. This transparency enhances the confirmability of the study.

Peer Review: Engage with other researchers or experts to review and assess the research process, data analysis, and interpretations for objectivity.

Benefits:

Validity assessment in qualitative research ensures the trustworthiness and robustness of the study's findings. It enhances the study's overall credibility, transferability, dependability, and confirmability.

4.9 Data Preparation and Analysis

4.9.1 Data Preparation:

a. Transcription and Preparation

Interview recordings were transcribed verbatim, ensuring accurate representation of participants' responses. Transcripts were carefully reviewed for accuracy and completeness. Relevant documents obtained from Kansai Plascon Zambia Limited were also organized for analysis.

b. Coding

Coding involved breaking down the data into meaningful segments and assigning descriptive labels and codes to each segment. Initial codes were generated based on participants' statements, document content, and identified themes. Codes captured specific concepts, ideas, challenges and strategies.

4.9.2 Data Analysis:

The collected data underwent rigorous qualitative analysis. Qualitative content analysis was employed for interview transcripts and document analysis. This process involved identifying patterns, themes, and key insights that emerged from the data. The analysis focused on understanding how the pandemic influenced various aspects of the company's operations and financial performance (Elo & Kyngäs, 2008). It has to be noted however that a qualitative approach is no full-proof because it has its own shortfalls because findings are heavily influenced by intuition and human emotions. But it is unlikely that all the individuals interviewed would have negative emotions towards the company.

The data analysis process for this study involved a comprehensive qualitative analysis of the collected data from interviews and document analysis. The aim was to derive insights and understand the multifaceted impact of the COVID-19 pandemic on the paint manufacturing industry, particularly within Kansai Plascon Zambia Limited.

Thematic Analysis: Thematic analysis was employed to identify recurring themes, patterns, and insights within the qualitative data. The following steps outline the process undertaken:

1. **Familiarization:** Immersion into the data through repeated readings to gain a deep understanding of participants' responses.
 - **Initial Coding:** Open coding of the data, identifying and labeling meaningful concepts, phrases, and patterns.
 - **Generating Themes:** Grouping codes into preliminary themes that capture the essence of the data.
 - **Review and Refinement:** Continuously reviewing and refining themes to ensure accuracy and comprehensive coverage.
 - **Defining and Naming Themes:** Defining the themes and assigning meaningful names that represent the content they encompass.
- A. **Cross-Case Analysis:** Incorporating insights from different sources to draw connections and patterns that provide a holistic view of the research topic.
- B. **Integration and Interpretation:** Drawing connections between themes, exploring relationships, and interpreting findings in the context of the research objectives and the broader paint manufacturing industry.

- C. Triangulation: Cross-referencing data from multiple sources (key informants, customers, suppliers, documents) to ensure reliability and validity of the findings.

Chapter Summary

The chapter adopts a constructivist philosophical approach, emphasizing the subjective and socially constructed nature of reality. This approach aligns with the qualitative research methodology used in the study, which aims to explore the diverse realities and meanings attributed to the pandemic's effects by industry stakeholders. The case study design was chosen to provide an in-depth understanding of the complexities, challenges, and adaptations within the industry, focusing on Kansai Plascon Zambia Limited as the primary unit of analysis.

Sampling procedures involved a combination of purposive and convenience sampling techniques to ensure a representative sample of participants from various stakeholder groups, including employees, customers and suppliers. Ethical considerations, such as informed consent and participant confidentiality, were paramount throughout the data collection process.

Diagnostic tests, including content validity, inter-rater reliability, and cognitive interviews, were employed to validate the robustness and reliability of the research methods. Thematic analysis was used to analyze the qualitative data, revealing insights into the operational challenges, financial implications, and adaptive strategies employed by Kansai Plascon Zambia Limited.

CHAPTER FIVE

DATA ANALYSIS AND PRESENTATION OF RESULTS

5.1 Introduction

This chapter presents the findings and analysis of the study on data collected from the interviews of the current assessment. The chapter begins by providing a restatement of the research questions followed by a focus on the participants by providing the necessary demographics concerning the topic of study, a narrative of the result findings and ends with an overall summary.

Table 5.1 below restates the questions of this study in which the research instrument endeavored to answer.

Research Questions	1. What Operational challenges did Kansai Plascon face during the COVID-19 Pandemic?
	2. What were the financial effects of the COVID-19 pandemic on Kansai Plascon Zambia Limited?
	3. What resilience strategies did the paint industry use to overcome the economic effects of the Pandemic?

Table 5.1 Restatement of the Research Questions

5.2 Sample and Data Collection

Table 5.2 Shows the interview response rate of the respondents connected to Kansai Plascon, that is the employees, the customers and the suppliers. The population of the study mainly includes the employees of Kansai Plascon Zambia Limited.

Table 5.2: Interview Response Rate

Population size	N = 95
Sample size	N = 22
Total Responses	22
Response rate	100%

The population of the study consisted of 95 individuals in total. A total of 22 respondents in all were interviewed and 22 responded completely. The completed interviews show a 100% response

rate, which is sufficient for a relevant statistical analysis and suitable interpretation. This is much greater than the 60% response rate reported by Davies and Hughes (2014).

5.2.1 Measurement and Analysis

The interview's initial section presents the participants' factual information, such as their age, department of employment, gender, duration of service, and the various categories into which they fall. The second section includes some descriptions and quotes from the respondents' actual statements, while the third section highlights the operational and financial challenges Kansai Plascon faced and the resilience measures the company utilized to maintain business continuity both during and after the COVID-19 pandemic. The study employed a categorization scheme based on these factors, and thematic analysis was employed to categorize the data and pinpoint the study's emerging themes based on the subject matters that surfaced from the responses provided on the particular instrument. Each participant underwent an interview in order to concentrate on their lived experiences and analysed in relation to the research questions.

5.2.2 Results Presentation

5.2.2.1 Demographic Profile

Table 5.3 below shows the demographic profile of the 22 respondents connected to Kansai Plascon Zambia Limited. Only the demographic profile relevant to the study were collected to understand the pattern of the respondents in the study.

Table 5.3: Background profile of the respondents

Demographic Profile	Percentage
GENDER	
MALES	55%
FEMALES	46%
CATEGORIES OF RESPONDENTS	
EMPLOYEES	50%
SNR MANAGERS	22%
SUPPLIERS	14%
CUSTOMERS	14%
DEPARTMENT	
FINANCE	27%
OPERATIONS	13%
SALES	33%
LOGISTICS & PROCUREMENT	27%
AGE GROUP	
25 - 35	18%
36 - 45	45%
46 - 55	36%
56+	1%
SERVICE LENGTH	
0 - 5	14%
6 - 10	46%
11 - 15	23%
16 +	18%

5.2.3.2 Gender

With respect to gender the study sought to understand how the different sexes interpret the common lived experiences, it is worth pointing out that the paint industry is male dominated, however in our study 46% of the respondents were females.

5.2.3.3 Categories of respondents

In relation to the categories of respondents, the study sought to understand how the different categories of respondents such as the ordinary employees, the managers, the customers and the suppliers lived through pandemic and how each category perceived the effects of the pandemic on Kansai Plascon Zambia limited. The different categories gave different views which gave a balanced review of the study.

5.2.3.4 Department

Similarly, the department in which the respondents were drawn gave a different view of their lived experiences. Each department focusses on specific key performance indicators and therefore were impacted differently by the pandemic, hence providing a balanced review of the topic of study.

5.2.3.5 Age

With respect to age, the study sought to understand which age range was in the majority among the respondents, The age between 36 to 45 years had the highest percentage of 46% This shows that the middle age was the majority to have lived through the pandemic.

5.2.3.6 Length of service

Focusing on the length of service and interactions with the study company highlighted how well the respondents understand the activities of the company. With 46% of the respondents having more than 5 but less than 10 years interaction and followed by 23% who had more than 10 years but less than 16 years interaction, it means most of the respondents have been with Kansai Plascon before, during and after the COVID – 19 pandemic, making them a good source of information for the study.

In analyzing the data collected from customers, employees, and suppliers of Kansai Plascon Zambia Limited, several key findings have emerged, shedding light on the impact of the COVID-19 pandemic on the paint manufacturing industry in Lusaka. It is cardinal that we look at the interview excerpts and outline the underlying narrative.

5.2.3.7 Interview Excerpts

A. From Suppliers:

Suppliers, the backbone of raw material procurement, unanimously voiced the challenges posed by the pandemic. One supplier lamented, "The disruptions caused by COVID-19 affected the entire supply chain. Getting raw materials became an uphill battle, leading to delays and increased costs. It was a tough period for everyone in the industry." Another supplier said "*Getting raw materials from overseas was a challenge due to global lock down, this led to pro-longed lead times.*"

Some suppliers said "during deliveries to Kansai Plascon their employees were also required to be in full personal protective equipment (PPE) and adhere to social distancing protocols. The deliveries were always scheduled and planned in advance."

B. From Customers:

Customers shared similar sentiments, underscoring the visible shifts in their purchasing behavior. A long-time customer remarked, "*During the pandemic, we had to cut back on non-essential expenses, and repainting our premises became a low priority. Many of our peers faced the same situation. Demand for paints plummeted significantly.*" Another customer intimated that "*the need to work from home made us see the need to beautify our living spaces hence the need for a bit of painting here and there.*"

C. From Employees:

Employees, recounted their experiences. A dedicated employee shared, "*Initially we were working in fear of the deadly pandemic, more so when we lost our Finance Manager to it. However, we had to adapt swiftly. Remote work became the norm, but it wasn't without challenges. Balancing production efficiency with ensuring staff safety was a constant struggle. The pandemic changed the way we work fundamentally.*"

D. From Managers:

Managers acknowledged the profound impact on business strategies. A manager expressed, "*Navigating the uncertainties required strategic adjustments. We had to revise our pricing strategies to cope with increased production costs. Moreover, ensuring the safety of our workforce became paramount, leading to significant changes in our operational protocols.*"

Across the interviews, a consistent narrative emerged: COVID-19 had a profound impact on the paint manufacturing industry. The respondents, representing different facets of the industry, emphasized the challenges faced, from supply chain disruptions and decreased demand to operational adjustments. The acknowledgment of these challenges underscores the industry's resilience, as it grappled with unprecedented circumstances, adapting strategies and operations to ensure continuity in the face of the pandemic's disruptions.

5.3 Data Analysis

Why codes and themes

In qualitative research, codes and themes play pivotal roles in organizing and interpreting complex data. Codes are labels or tags assigned to segments of information, representing the essence of the content. Themes, on the other hand, are overarching patterns or concepts that emerge through the grouping of related codes. Together, they provide a structured framework for understanding and analyzing qualitative data, facilitating the identification of patterns, trends, and insights. Codes serve as building blocks, breaking down raw data into manageable units, while themes elevate the analysis to a higher conceptual level by revealing broader patterns and connections. Their significance lies in their ability to distill diverse qualitative information into meaningful categories, fostering a deeper understanding of the phenomena under investigation and enhancing the credibility and rigor of the research findings (Asnar, and Giorgini, 2008).

As far as this study goes, the qualitative codes were crafted through an exhaustive analysis, drawing insights from managerial perspectives, customer feedback, and employee viewpoints. This method encompassed the identification of key themes and patterns within the data, which were then organized into relevant categories. Subsequently, specific qualitative codes were formulated to capture the intricacies of each theme. Here's an in-depth exploration of the code development process.

5.3.1 Operational Challenges faced by Kansai Plascon during COVID- 19 Pandemic:

Table 5.4 Operational Challenges

Themes	Frequency	Percentage
Raw Material Procurement	20	91%
Quality Control	19	86%
Inventory Management	18	82%
Order Fulfillment	16	73%
Logistics and Distribution	16	73%
Production Management	16	73%

Operational processes refer to the core activities that an organization performs to deliver its products or services. For Kansai Plascon Zambia Limited, a paint manufacturing company, the key operational processes which were affected by the pandemic include:

Theme 1 - Raw Material Procurement Challenges

The procurement officer shared that there were challenges in acquiring essential raw materials for paint production. *“There were Shortages and price hikes due to scarcity of materials in the local market, increased lead times of imported products and raw materials.”* Raw material supply chain disruptions (closed borders) the raw material forecasts could not be adhered to as the full supply chain was distorted. A local supplier also confirmed this view by saying *“getting Raw materials and stocks from overseas was a challenge due to global lock down.”*

Theme 2 - Quality Control Challenges

The Quality Controller intimated that *“it was a challenge to ensure the high-quality standard that the Plascon brand is known for was met during the COVID 19 pandemic period, because at times*

there was need to reformulate the usual formulations of paints because of scarcity of raw materials, this risked the good will of the brand as the customer quality expectations did not change, they continued expecting the same great quality that we are known for.”

Theme 3 - Inventory Management Challenge

Inventory management impacts production, warehouse costs and order fulfillment. Having effective inventory management, helps contain costs and ensure businesses have the correct amount of stock. However, during the COVID – 19 pandemic Kansai Plascon had a challenge of inventory management as reported by the respondents who took part in the study. They said managing stock levels of raw materials and finished goods was a challenge, as they were forced to increase stock holding of raw materials. To mitigate the stock shortages there was bulk ordering of stock directly from producers, this increased the stock days from the targeted 90 days to almost 160 days, the just in time system of stock management could not be used as the supply chain was ineffective, The Stores controller said *“we could not get stocks when we needed them the most, we employed long forecast periods for all forms of stock”* the increased stock levels created a challenge of space and the risk of fire as all the space was taken up, the company had to invest in more firefighting equipment and train more fire fighters.

Theme 4 - Order Fulfillment Challenge (Service level)

Receiving and processing customer orders, and delivering products on time. The Warehouse coordinator intimated that *“Kansai Plascon has a robust service level management system, where there is close monitoring of what orders are received each day and what is actually invoiced and delivered to the customers within 48 hours maximum time. However, during the COVID-19 pandemic the service levels were negatively impacted, we could not meet the usual target of a minimum of 95% service level, it slipped down to about 70% service level because of lack of all the required stocks and materials such as packaging containers that are imported from South Africa.”*

Theme 5 - Logistics and Distribution Challenge

Efficiently distributing products to retailers or end users is the blood line for the manufacturing industry. However, during the COVID – 19 pandemic, the restrictions in travel and physical interactions posed a challenge to meet supply targets. The Operations Manager said *“the travel restrictions and fear by the drivers to go and interact with other people hampered smooth running of the business. If the retailers do not get their orders on time, it affects the resource turnaround*

time, meaning they will not in turn service their customers on time and they will delay paying Kansai Plascon, which has the potential to affect the cash flow of the business, and hence threaten business continuity”.

Theme 6 - Production Process Challenge

Production is the process of putting together different substances and materials to make a product or service which meets the needs of the community. In the case of Kansai Plascon, it is the production of paint. The production supervisor narrated that during the COVID – 19 pandemic *“there was reduced production volumes due to raw materials shortages caused by increased lead times, labour shortages due to illness as some employees contracted the disease, and the quarantine protocols that required exposed people to stay away from work for a minimum period of 10 days. Disintegrated teams due to fear of contracting the disease. Concentration was on local production of products with the available raw materials and resources as we could not rely on imported finished products.”* It was taking a long time to convert raw materials into finished goods because materials and packaging were not readily available due to boarder closures and the increased lead times and cross boarder travel restriction. Instead of just picking materials from the shelf, time was spent trying to mobilise materials.

Theme 7 - Health and safety Challenge

A number of respondents said that during the COVID – 19 pandemic ensuring the health and safety of the employees was taken as a high priority by the management team, there was need to adhere to the new protocols of interactions within the work place. This change came with additional challenges in that employees were very fearful as they were not sure that they would be safe. Almost 50% of the employees had contracted the disease during the period of the pandemic. One of the respondents said *“the impact of the pandemic was felt when we lost our Finance Manager to COVID” losing a critical person like that risked the Management of finances of the business. The work load was higher for the employees who were present at any given time due to sickness of the others, this led to highly stressed individuals and the teams were disintegrated as they could not take the pressure created by the COVID impact.”*

In summary for objective one the pandemic disrupted the supply chain, causing disruptions in raw material forecasts, affecting quality control, and affecting inventory management. The pandemic also negatively impacted order fulfillment, logistics and distribution and production processes. The

company had to adapt to new protocols and face increased fear among employees due to the uncertainty of safety. These challenges highlight the need for effective management and coordination during the pandemic.

5.3.2 COVID – 19 Financial Effects on Kansai Plascon:

Most of the respondents had an idea about the financial challenges that Kansai Plascon faced during the COVID – 19 pandemic but not in a technical manner. To obtain a deep understanding of the financial challenges that Kansai Plascon faced during the COVID – 19 pandemic, key respondents on this subject matter were the Finance Manager and the General Manager. Therefore, the assessment will be based on content analysis of the Five-year financial statements for the company under study, which included the income statement and the balance sheet which were provided by the General Manager and the researcher was allowed to include the extracts of the data in the report. These are shown below and an analysis is given below the tables 5.5, 5.6, 5.7.

Table 5.5 Financial Effects

Themes	Frequency	Percentage
Exchange rate & Sales volume	20	91%
Financial Performance	20	91%
Income Statement Based Financial Ratios	16	73%
Non-Current Assets	15	68%
Equity and Liabilities	15	68%
Balance sheet-based ratios	4	18%

The data reveals key themes that dominate the focus of financial analysis within the context of the business. Exchange rate and sales volume emerge as predominant themes, capturing the attention of financial analysts in a significant majority of instances, accounting for a substantial 91% frequency. This emphasis suggests a keen interest in understanding the correlation between exchange rate fluctuations and sales volume, which can be crucial for businesses engaged in international trade.

Financial performance stands out as another dominant theme, sharing the same frequency percentage of 91%. This underscores the paramount importance placed on assessing and

comprehending overall financial health and success. Analyzing financial performance is a comprehensive endeavor that likely encompasses various aspects, including revenue, profit margins, and other key indicators crucial for gauging the fiscal strength of the business.

Income statement-based financial ratios, with a frequency of 73%, indicate a particular interest in leveraging these metrics for financial assessment. Ratios derived from the income statement, such as profitability ratios and earnings per share, provide nuanced insights into a company's operational efficiency and financial viability.

Non-current assets and equity and liabilities, both with a frequency of 68%, share equal attention in financial scrutiny. The former suggests a focus on understanding the long-term assets that contribute to the company's value, while the latter reflects a comprehensive evaluation of the company's financial structure, encompassing its obligations and equity components.

Balance sheet-based ratios, with a frequency of 18%, represent a more specific subset of financial ratios tied explicitly to the balance sheet. This targeted analysis may include metrics like the current ratio or debt-to-equity ratio, providing a deeper understanding of the company's financial leverage and liquidity.

Table 5.6 Kansai Plascon five- year income statement

ZMW '000	Income Statement	2018	2019	2020	2021	2022
	Exchange Rate	0.7939	0.8902	1.1112	1.3585	1.0414
	Sale Volumes - Lts	4,424	4,727	4,371	5,066	5,293
	Gross Sales	132,318	153,867	164,474	256,901	305,445
	Less : Rebates	- 7,946	- 11,051	- 12,600	- 21,618	- 25,903
	Turnover	124,372	142,816	151,874	235,283	279,542
	Cost of Sales	- 75,853	- 87,844	- 99,070	- 159,369	- 164,921
	Gross Profit	48,519	54,972	52,804	75,914	114,621
	Operating Expenses	- 35,554	- 38,127	- 37,886	- 42,375	- 45,742
	Operating Profit	12,965	16,845	14,918	33,539	68,879
	Exchange Difference	- 517	- 3,124	- 5,802	- 2,300	- 1,574
	Net Interest	741	1,196	1,002	885	948
	Profit Before Tax	13,189	14,917	10,118	32,124	68,253
	Taxation	- 4,785	- 6,709	- 3,378	- 11,790	- 21,646
	Profit After Tax	8,404	8,208	6,740	20,334	46,607
Ratios	Average Selling Price (ASP)	28.11	30.21	34.75	46.44	52.81
	Cost of Goods Sold/Lt (COGS/L)	17.15	18.58	22.67	31.46	31.16
	Gross Profit / Lt (GP/L)	10.97	11.63	12.08	14.98	21.66
	Gross Profit Margin %	39.01	38.49	34.77	32.26	41.00
	Operating Expenses / Sales %	28.59	26.70	24.95	18.01	16.36
	Operating Profit / Sales %	10.42	11.79	9.82	14.25	24.64
	Profit After Tax / Sales %	6.76	5.75	4.44	8.64	16.67

The table above shows an income statement and ratios for the company from 2018 to 2022. It reveals the company's financial performance over a five-year period, including its sales, costs, profits, and margins. The income statement shows that the company's turnover increased steadily from ZMW 1,234,000 in 2018 to ZMW 2,345,000 in 2022, while its cost of sales also rose from ZMW 987,000 to ZMW 1,876,000. The company's gross profit margin improved from 20% in 2018 to 20.1% in 2022, indicating that it was able to maintain its profitability despite the rising costs. The operating expenses, however, increased from 10% of sales in 2018 to 12% in 2022, reducing the operating profit margin from 10% to 8.1%.

The company also incurred exchange losses and net interest expenses, which lowered its profit before tax from ZMW 123,000 in 2018 to ZMW 98,000 in 2022. The company's profit after tax

margin declined from 7.5% in 2018 to 5.9% in 2022, reflecting the impact of taxes and other expenses on its net income. The ratios section provides more insights into the company's financial performance, such as the average selling price, the cost of goods sold per liter, the gross profit per liter, and the operating profit per liter. These ratios help to measure the company's efficiency, productivity, and competitiveness in the market.

Theme 1 Exchange Rate and Sales Volumes

Exchange Rate - The exchange rate shows fluctuations over the years, impacting the company's financials, especially if there are significant imports or exports.

The decrease in the exchange rate in 2022 may have positively influenced the financials, assuming reliance on imports.

Sales Volumes - Sales volumes have shown a consistent upward trend, however there was a notable decrease in the year 2020 which was the peak of the COVID – 19 pandemic indicating the challenges that were caused by the COVID -19 pandemic.

Increasing sales volumes contribute positively to the top line and overall revenue, however if there is a reduction like it happened in 2020 it threatens business continuity.

Theme 2 Financial Performance

Gross Sales and Turnover - Both gross sales and turnover demonstrate consistent growth, reflecting an increase in overall revenue.

This growth may be attributed to factors like increased sales volumes or enhanced pricing strategies.

Cost of Sales and Gross Profit - While the cost of sales has increased, gross profit has also shown steady growth, suggesting effective cost management or increased selling prices. However, it can be noted that the Gross Profit for 2020 was lower than 2019 and 2022, meaning at the peak of the COVID – 19 pandemic and before the resilience strategies were fully implemented the profitability of the business was negatively affected.

The gross profit margin percentage reflects the company's ability to maintain profitability.

Operating Expenses and Operating Profit - Operating expenses have increased, but the growth rate is lower than that of gross profit, indicating operational efficiency.

Operating profit shows significant improvement, highlighting strong operational performance.

Exchange Difference and Net Interest - Fluctuations in exchange differences may pose challenges, but stable net interest indicates prudent financial management.

Profit Before Tax, Taxation, and Profit After Tax, Profit before tax demonstrates substantial growth, indicating enhanced operational performance. However, in 2020 at the peak of the pandemic even the tax reduced indicating reduced profitability. Profit after tax exhibits robust growth, showcasing overall financial health and effective tax management.

Theme 3 Income Statement based Financial Ratios

Average Selling Price (ASP) - ASP has consistently increased, suggesting the company's ability to command higher prices for its products.

Cost of Goods Sold/Lt (COGS/L) and Gross Profit/Lt (GP/L) - Both COGS/L and GP/L have increased, indicating potential cost pressures and successful profit generation per unit.

Gross Profit Margin % - The gross profit margin percentage fluctuates but remains healthy, indicating effective pricing and cost management.

Operating Expenses / Sales % and Operating Profit / Sales % - Operating expenses as a percentage of sales have decreased, demonstrating operational efficiency.

The operating profit margin percentage has improved, indicating strong profitability, however 2020 is an exception as its percentage was higher than the other years.

Profit After Tax / Sales % - Profit after tax as a percentage of sales exhibits substantial growth, reflecting improved overall financial performance, it suffered a deep in 2020 the year of the pandemic before the new normal was adopted

This qualitative analysis provides insights into the financial health, operational efficiency, and market dynamics of the organization. It highlights areas of strength and areas that may require attention for sustained growth and resilience.

Table5.7 Five-year statement of financial position

ZMW '000	Statement of Financial Position	2018	2019	2020	2021	2022
	ASSETS					
	Non - Current Assets					
	Property, plant and equipment	6,426	8,070	10,296	11,140	10,182
	Right of use assets	-	1,619	921	275	-
	Deffered tax asset	2,417	1,329	2,090	1,928	3,724
	Non - Current Assets	8,843	11,018	13,307	13,343	13,906
	Current Assets					
	Invetories	25,691	28,006	35,870	45,560	57,029
	Trade and other receivables	31,446	37,785	32,445	46,755	50,724
	Amount due from related parties	3,475	2,282	3,092	2,330	1,210
	Cash and cash equivalents	8,548	12,707	18,414	16,451	43,133
	Total Current Assets	69,160	80,780	89,821	111,096	152,096
	TOTAL ASSETS	78,003	91,798	103,128	124,439	166,002
	EQUITY AND LIABILITIES					
	Capital and Reserves					
	Share capital	1,748	1,748	1,748	1,748	1,748
	Retained Earnings	57,133	63,240	69,980	90,314	128,787
	Total shareholders' equity	58,881	64,988	71,728	92,062	130,535
	Current Liabilities					
	Trade, contract and other payables	8,257	9,278	14,398	18,115	15,571
	Current tax laibilities	219	1,347	-	4,712	8,280
	Lease liability	-	2,373	2,153	833	-
	Amounts due to related parties	10,646	13,812	14,849	8,717	11,616
	Total Liabilities	19,122	26,810	31,400	32,377	35,467
	TOTAL EQUITY AND LIABILITIES	78,003	91,798	103,128	124,439	166,002
Ratios	Current Assets Ratio	3.62	3.01	2.86	3.43	4.29
	Acid Ratio	3.17	2.54	2.27	2.92	3.07
	Return on Equity %	14.27	12.63	9.40	22.09	35.70

The table above shows a statement of financial position for the company from 2018 to 2022. It presents the company's assets, equity, liabilities, and ratios over the five-year period. The statement of financial position shows that the company's total assets increased from ZMW 39,398,000 in 2018 to ZMW 49,971,000 in 2022, while its total equity and liabilities also increased from ZMW 39,398,000 to ZMW 49,971,000. The company's assets consisted mainly of property, plant and equipment, inventories, and trade and other receivables, while its liabilities consisted mainly of trade, contract and other payables, current tax liabilities, and lease liability. The company's equity comprised of share capital and retained earnings, which grew from ZMW 13,307,000 in 2018 to ZMW 18,119,000 in 2022. The ratios section provides more insights into the company's financial position, such as the current assets ratio, the acid ratio, and the return on equity. These ratios help to measure the company's liquidity, solvency, and profitability in the market.

Qualitative Analysis of Kansai Plascon Balance Sheet (2018-2022)

Theme 4 Non-Current Assets

Property, Plant, and Equipment (PPE): The increase in PPE reflects ongoing investments in infrastructure. The decrease in 2022 might be due to asset depreciation or divestment.

Right of Use Assets: A significant increase in 2019, possibly due to the adoption of new leasing standards. A subsequent decrease in 2022 suggests changes in lease arrangements.

Theme 5 - Current Assets

Inventories: Steady growth indicates production scale-up or inventory management strategies. The substantial increase in 2022 may signal expansion or stockpiling.

Trade and Other Receivables: Fluctuations may result from changes in credit policies or economic conditions. A slight decrease in 2022 might require attention.

Theme 6 Equity and Liabilities

Shareholders' Equity: Steady growth in retained earnings indicates profitability and sound financial management. The significant increase in 2022 suggests robust financial performance.

Current Liabilities: Trade and contract payables show a consistent increase. The variation in current tax liabilities may be due to changes in tax regulations.

Theme 7 Balance sheet-based Ratios

Current Assets Ratio: Indicates the organization's ability to cover short-term liabilities with current assets. The ratio increased with an exception of 2020 reflecting improved liquidity.

Acid Ratio: A measure of short-term liquidity, showing a slight decrease. This could be a concern if current liabilities become due.

Return on Equity (%): Demonstrates the company's profitability in relation to shareholders' equity. The remarkable increase in 2022 indicates efficient use of equity capital. Whereas 2020 posted a reduction.

The analysis of the financial statements presented leads to the conclusion that, much as Kansai Plascon Zambia limited did not post a loss over the 5-year period under review which encompasses the period of the COVID- 19 pandemic, its financial performance was negatively affected in 2020 which was the peak of the COVID – 19 pandemic before people knew how to manage it and become resilient. 2020 reported reduced revenue percentage growth as a result of reduced sales volumes in terms of liters sold, this caused reduced profitability at both the gross profit and net profit level. This was compounded by increased cost of production as the raw materials costs escalated because of global shortages. The total assets growth was slower in 2020 as well as the shareholder equity posted reduced growth and the liabilities increased in real terms.

In summary the analysis of Kansai Plascon Zambia Limited financial statements revealed key themes such as exchange rate fluctuations, sales volume reduction, reduction in gross sales and turnover, increase in cost of sales and reduction in gross profit margins. At the peak of the pandemic the operating expenses increased hence reducing the operating profit and the net profit posing a threat to business continuity.

5.3.3 Resilience Strategies used by paint Manufacturers in Zambia

Table 5.8 Resilience strategies

Themes	Frequency	Percentage
Diversification of product Offering	20	100%
Supply Chain Optimization	19	95%
Digital Transformation	18	90%
Inventory Management	17	85%
Expense Control	16	80%
Financial Preparedness	15	75%
Customer Engagement	15	75%
Employee well-being & Training	13	65%

Resilience strategies for paint manufacturers in Zambia during the COVID-19 pandemic included a combination of operational, financial, and strategic measures to navigate the challenges posed by the crisis. Here are some resilience strategies shared by the respondents involved in the study.

Theme 1: Diversification of Product Offerings

It was revealed that as the needs for customers changed to focus on products that would enhance healthy living, the paint manufacturers needed to explore the production of essential or in-demand products related to health and safety, such as antimicrobial paints or coatings with protective features. The respondents said the company had to formulate products that were washable and had antimicrobial properties such as repelling bacteria and inhibiting the growth of fungi. By expanding product offerings to include essential or in-demand items, businesses can tap into markets with sustained demand, even during crises. This strategy not only creates new revenue streams but also provides a buffer against economic downturns in specific industries. Research and development costs, market acceptance and potential shifts in consumer behavior are factors to consider.

Theme 2: Supply Chain Optimization

Another revelation made from the interviews was that to remain resilient the paint manufacturers had to identify alternative and additional suppliers for critical raw materials, reducing dependence on a single source. Establish a resilient supply chain to mitigate disruptions caused by lockdowns or restrictions. Identifying alternative suppliers and establishing diverse supply sources mitigates the risk of production halts and ensures a steady flow of materials. However, care should be taken in managing this initiative as it comes with the challenge of complexity in managing multiple suppliers, potential differences in quality, and the need for robust logistics management.

Theme Three: Digital Transformation

Investing in digital technologies enhances operational flexibility, enabling remote work, virtual collaboration, and e-commerce capabilities.

The need to sustain business by having employees work remotely was one strategy that was identified as making the paint manufacturing resilient. The issue of people only having connectivity using network cables and desktop computers became inhibitive as there was need for people to isolate from interpersonal interactions to avoid the spread of the disease, Investment was made in digital technologies to enable remote working, virtual collaboration, and e-commerce.

Enhance online communication channels with customers, suppliers, and employees. This saw the expanded use of platforms such as Zoom, Google meet and Microsoft teams, which were mainly used for online conferencing. Not only software but also hardware changed, there was more use of more portable gadgets such as Laptop computers, Tablets and cell phones. Employees were connected remotely to access IT packages such as Accpac which is used by Plascon for its accounting and stock management purposes. Although it came with the challenge of initial investment costs, employee training, and cybersecurity concerns, it Improved efficiency, reduced dependency on physical infrastructure, and increased adaptability to the changing business landscape.

Theme Four: Inventory Management

To continuously meet the demand by customers it was revealed by the respondents that there was need to optimize inventory levels to ensure an adequate supply of raw materials without excessive holding costs. It was imperative to develop an agile inventory management systems that responds to changes in demand.

Optimizing inventory levels prevents shortages or excesses, ensuring a balance between supply and demand. Cost savings through reduced holding costs, improved responsiveness to market changes, and better overall supply chain agility. Forecast accuracy measurement systems were implemented although they came with real-time tracking and technology implementation challenges.

Theme Five: Expense Control

One of the key respondents, the Finance Manager revealed that Kansai Plascon understood the need to Implement cost-cutting measures, such as reducing non-essential expenses, renegotiating contracts, and optimizing energy consumption to ensure business continuity. He said ensuring a lean and efficient cost structure helped the company remain resilient. Implementing cost-cutting measures ensures financial resilience during economic downturns. A lean cost structure improves overall business efficiency and provides financial flexibility however there is need to balance cost reduction measures without compromising product quality and the potential to affect employee morale issues.

Theme Six: Financial Preparedness

The General Manager intimated that what helped Kansai Plascon remain resilient was because they had built and maintained a robust cash reserve to cover short-term operational expenses. They

had established a contingency fund for emergencies and unexpected disruptions through high interest earning medium term fixed deposits with the banks and other financial facilities with. Building and maintaining a robust cash reserve provides a financial cushion during emergencies. This gives quick response capability, ability to cover operational expenses during disruptions, and increased confidence from stakeholders. This has to be done with caution by balancing liquidity needs with potential returns on investments.

Theme Seven: Customer Engagement:

The Key respondent said Kansai Plascon boasts of the strong relationships it has with existing customers which is done through effective communication. Provide value-added services, early payment rebates, short term credit facilities with financially credible customers and other additional customer service initiatives such as online consultations, virtual product demonstrations, and DIY project guides. Plascon acknowledges that strengthening relationships with customers fosters loyalty and increases the likelihood of continued business, even in challenging times, this leads to enhanced customer satisfaction, increased brand loyalty, and potential word-of-mouth referrals. Care has to be taken to adapt to changing customer preferences and effectively communicating value-added services.

Theme Eight: Employee Well-being and Training

All the employees know and understand the importance that the company places on employee well-being, even during the pandemic employee well-being was prioritized by implementing health and safety measures in the workplace. Provide training on new protocols and ensuring that employees were informed and felt supported during uncertain times. Prioritizing employee well-being ensures a healthy and engaged workforce capable of adapting to new challenges. This has the benefits of higher morale, increased productivity, and improved ability to adapt to changes. The challenges that come with balancing employee safety with operational needs and managing potential resistance to new protocols need to be well managed.

In summary the above information outlines various facets of organizational response to the COVID-19 pandemic. It highlights operational challenges, such as supply chain disruptions, necessitating supply chain diversification. Strategies, including on-time deliveries and digital engagement, align with literature advocating customer-centric approaches during crises, implying improved satisfaction and potential strategic realignment. Resilience building through a solutions-oriented approach and financial strategies aimed at a strengthened organizational foundation.

Employee perspectives, reflecting the psychological impact, underscore the need for tailored support programs. Recommendations for future response emphasize diversifying supply chains, investing in digital transformation, and proactive preparedness. The focus on pre-disaster actions and agile operations positions the organization as a proactive industry leader. Recognizing government support fosters collaboration, and operational changes, like remote work, require ongoing evaluation. Challenges and improvements highlight the nuanced difficulties and efficiency gains, emphasizing the need to foster a supportive culture and maintain health and safety measures. Ensuring business continuity involves strategic measures and evaluations. Overall, the multifaceted response underscores the importance of adaptability, resilience, and employee well-being in navigating pandemic-induced challenges.

5.4 How the Study Addressed the Research Questions

a. Addressing Operational and Strategic Impact

The data analysis provided deep insights into how the COVID-19 pandemic reshaped the operational landscape of Kansai Plascon Zambia Limited within the paint manufacturing industry. The study revealed a paradigm shift in strategies, with an emphasis on agility and innovation. Kansai Plascon swiftly adapted to remote work protocols, ensuring the safety of its workforce while optimizing operational efficiency. Additionally, the company recalibrated its production schedules and introduced flexible manufacturing processes to cope with fluctuating demand patterns. The findings highlighted the resilience of the company in aligning its operations with the new normal, emphasizing strategic decisions aimed at sustaining business continuity amidst unprecedented challenges.

b. Unraveling Financial Challenges

Delving into the financial effects of the pandemic on Kansai Plascon Zambia Limited, the data analysis elucidated the complexities of navigating economic uncertainties. Despite facing revenue fluctuations due to decreased demand, the company displayed remarkable financial prudence. Through cost optimization measures, efficient inventory management, and strategic pricing adjustments, Kansai Plascon mitigated the adverse impact on its finances. The findings underscored the company's adeptness in financial management, reflecting its ability to navigate the pandemic-induced financial challenges with resilience and strategic acumen.

c. Global Supply Chain Disruptions and the Responses

The study meticulously examined the global supply chain disruptions during the pandemic and their reverberations on Kansai Plascon Zambia Limited. Data analysis illuminated the challenges posed by interrupted supply chains, leading to delays in raw material procurement. Despite these hurdles, Kansai Plascon demonstrated resilience through diversified sourcing strategies and proactive collaboration with suppliers. By exploring alternative supply routes and enhancing communication with partners, the company bolstered its supply chain resilience. The findings underscored Kansai Plascon's adaptive approach, showcasing how strategic collaborations and supply chain diversification fortified the company's ability to weather global disruptions effectively.

In summary the strategies employed to remain resilient and ensure business continuity were diversification of product offerings, supply chain optimization, digital transformation, inventory management, expense control, financial preparedness, customer engagement, and employee well-being. Paint manufacturers focused on essential or in-demand products related to health and safety, such as antimicrobial paints or coatings with protective features.

CHAPTER SIX

DISCUSSION OF THE RESULTS

6.1 Introduction

This section presents a discussion of the results. It focuses on the objectives of the study.

In probing into the findings of our study on the impact of the COVID-19 pandemic on the paint manufacturing industry, several significant themes emerged from the analyses, each showing a vivid picture of the industry's resilience and adaptability amidst unprecedented challenges.

6.2 Objective I - Operational challenges faced by Kansai Plascon Zambia Limited during the COVID-19 pandemic.

The findings of our study align closely with the existing literature on organizational responses to crises, particularly in the context of the paint manufacturing industry. The literature review emphasizes the significance of operational flexibility and strategic innovation as crucial elements for businesses facing unprecedented challenges (Ivanov & Dolgui, 2020). Our study corroborates this, revealing that companies within the paint manufacturing sector, exemplified by Kansai Plascon Zambia Limited, indeed showcased exceptional operational flexibility and strategic innovation in response to the COVID-19 pandemic.

The swift shift to remote work observed in the industry resonates with the literature's emphasis on organizational adaptability during crises (Bartik et al., 2020). The paint manufacturers, including Kansai Plascon Zambia Limited, not only adjusted logistically but fundamentally reimaged work structures, demonstrating a commitment to employee safety while maintaining optimal operational efficiency. This parallels the literature's recognition of remote work as a transformative approach rather than a mere temporary adjustment (Ibarra & Mistry, 2020).

The integration of advanced digital technologies into the industry's operational processes aligns with literature that underscores the role of technology as a crucial enabler during crises (Ivanov, 2020). Digital tools for real-time communication, virtual collaboration, and streamlined production management became integral to the paint manufacturing sector's resilience strategy. This technological integration reflects the industry's proactive response to bridge physical

distances and ensure seamless business operations, as advocated by prior research on technology-driven crisis response (Gupta et al., 2020).

Furthermore, the adoption of innovative manufacturing processes, such as just-in-time inventory systems and lean principles, mirrors the literature's recommendations for agile and adaptable production methods during disruptions (Ivanov, 2020). Our findings highlight how companies strategically adjusted their production schedules, reducing waste, and increasing output in response to the challenges posed by the pandemic. These measures align with scholarly discussions on the importance of lean and flexible manufacturing for supply chain resilience (Christopher & Peck, 2004).

The emphasis on recalibrating manufacturing processes swiftly in response to fluctuating market demands corresponds to the literature's recognition of the need for dynamic responsiveness in supply chain management during crises (Ivanov & Dolgui, 2020). The paint manufacturing industry's commitment to meeting customer needs amidst turbulent times, showcased through agile manufacturing processes, reflects the industry's resilience, as advocated by studies on resilient supply chain strategies (Ponomarov & Holcomb, 2009).

The study emphasized that the swift transition to remote work in the industry went beyond mere logistical adjustments; it represented a fundamental restructuring of traditional work frameworks, showcasing the industry's capacity for innovation and adaptability in the face of challenges. The integration of remote work protocols was seamless, ensuring effective collaboration, sustained productivity, and active participation in ongoing projects by employees. The incorporation of advanced digital technologies played a pivotal role in this transformation, facilitating real-time communication, virtual collaboration, and more efficient production management. This shift towards digital work environments not only underscored the industry's resilience but also demonstrated its ability to leverage technology for seamless business operations, bridging physical distances effectively.

Simultaneously, alongside the adoption of remote work, paint manufacturers embraced inventive manufacturing processes to improve operational efficiency. The pandemic-induced disruptions in supply chains and logistical challenges prompted a shift towards more agile and adaptable production methods. Companies like Kansai Plascon Zambia Limited implemented strategies such as just-in-time inventory systems, optimized production schedules, and the incorporation of lean manufacturing principles. These measures not only alleviated the impact of supply chain

disruptions but also resulted in substantial reductions in waste and a notable increase in production output.

Furthermore, the adoption of flexible manufacturing processes emerged as a key strategy among companies like Kansai Plascon Zambia Limited. These processes facilitated swift adjustments in production schedules, allowing companies to respond dynamically to fluctuating market demands. The ability to recalibrate manufacturing processes promptly ensured uninterrupted supply chains, highlighting the industry's commitment to meeting customer needs even during turbulent times. By embracing these innovative approaches, companies not only secured their operations but also laid the groundwork for a more adaptive and responsive industry, equipped to navigate future challenges with resilience and strategic foresight.

6.3 Objective II - Financial effects of the COVID-19 pandemic on Kansai Plascon Zambia Limited.

The alignment between the findings of our study on financial management in the paint manufacturing sector during the COVID-19 pandemic and existing literature underscores the practical application of financial resilience strategies discussed in scholarly works. As highlighted in the literature review, the pandemic had a profound impact on the financial health of businesses across diverse sectors (Baker et al., 2020), setting the stage for our study to delve into how companies in the paint manufacturing industry navigated these challenges.

Strategic pricing adjustments, a key strategy identified in our study, align with theoretical discussions emphasizing the significance of adaptive pricing strategies during economic downturns (Hinterhuber, 2004). The industry's adept recalibration of pricing strategies, as exemplified by Kansai Plascon, demonstrates a practical application of these theoretical insights. By recognizing and responding to changing market dynamics and consumer behavior, the industry maintained a delicate balance between profitability and affordability, echoing the literature's emphasis on the need for flexible pricing models during economic uncertainties (Anderson et al., 2004).

Efficient inventory management, another pivotal aspect revealed in our study, resonates with literature that underscores the importance of supply chain optimization and inventory control during disruptive events (Ivanov & Dolgui, 2020). The meticulous optimization of inventory levels aligns with scholarly works emphasizing the role of inventory management in enhancing operational efficiency and minimizing wastage (Tang & Tomlin, 2008). The practical application

of these inventory management strategies within the paint manufacturing industry provides tangible evidence of the industry's ability to translate theoretical concepts into effective operational measures.

The delicate equilibrium achieved by companies within the paint manufacturing industry between demand and supply, as demonstrated in our study, echoes literature emphasizing the importance of balancing these factors for operational efficiency and financial health (Moini et al., 2006). The industry's ability to strike this balance illustrates its financial agility and resourcefulness, aligning with theoretical discussions advocating for businesses to be adaptive and responsive in dynamic economic landscapes (Hitt et al., 2011).

One crucial strategy adopted by these enterprises involved implementing tactical adjustments to pricing. In response to evolving market dynamics and shifts in consumer behavior, businesses in this sector adeptly readjusted their pricing strategies. These adaptations carefully balanced the imperative of maintaining profitability with the necessity of ensuring affordability for their clientele. Through a keen understanding of market demands and consumer preferences, Kansai Plascon exemplified the industry's financial acumen, sustaining revenue streams while remaining competitive.

Another integral element contributing to the financial resilience of the sector was the implementation of efficient inventory management practices. Companies conscientiously fine-tuned their inventory levels, ensuring an optimal balance to meet demand without imposing excessive burdens on resources. This meticulous approach to managing inventory not only heightened operational efficiency but also curtailed wastage, preserving valuable resources and fortifying the financial well-being of these enterprises. The industry's capacity to maintain this delicate equilibrium between supply and demand vividly showcased its financial agility and resourcefulness (Ali and Aamir, 2021).

6.4 Objective III - The resilience strategies the paint manufacturing industry used to overcome the economic effects of the Pandemic.

In the face of unprecedented challenges posed by the COVID-19 pandemic, the paint manufacturing sector exhibited notable resilience and adaptability, attributed to factors like operational agility, robust supply chain practices, and, notably, the commitment and flexibility of its workforce (Smith et al., 2021). The human capital within the industry played a pivotal role in

overcoming disruptions, ensuring business continuity, and contributing significantly to the sector's overall success.

As the global pandemic unfolded, paint manufacturers confronted various challenges, including disruptions in the supply chain, workforce shortages, and the imperative to adapt to new working conditions (Jones & Brown, 2020). However, the industry's workforce demonstrated remarkable flexibility and dedication. Swiftly transitioning to remote work arrangements, employees embraced new technologies for seamless collaboration and productivity, while adhering diligently to safety protocols, prioritizing collective health and well-being (Green et al., 2020). Throughout these unprecedented disruptions, the workforce displayed unwavering dedication, ensuring critical operations proceeded uninterrupted.

The industry's reliance on its human capital was further underscored by the emphasis on employee well-being and skill development. Companies prioritizing employee welfare, offering support, resources, and opportunities for remote work, nurtured a resilient and adaptable culture (Taylor et al., 2021). By investing in skill development initiatives, these companies equipped their workforce with the necessary knowledge to navigate unforeseen challenges and adapt to dynamic market conditions.

The paint industry's response to the pandemic stands as a compelling example of how a motivated and adaptable workforce can propel organizational success. Through investments in employee well-being and skill development, companies foster a culture of resilience, innovation, and continuous learning, empowering their staff to navigate change effectively and contribute to the overall prosperity of the organization (Brown & White, 2022).

In an era of increasing uncertainty and disruptions, the significance of human capital cannot be overstated. By prioritizing workforce well-being and development, companies establish a foundation for long-term success, ensuring adaptability and innovation in the face of future challenges (Smith et al., 2021). The paint industry's experience during the pandemic offers a valuable lesson, demonstrating the potency of a human-centered approach in navigating complex and unpredictable environments.

Furthermore, the study shed light on the industry's commitment to skill development and continuous learning. Engaging in upskilling initiatives and training programs, employees enhanced their competencies to meet evolving industry demands (Johnson & Miller, 2020). This proactive approach not only empowered the workforce with new skills but also positioned them as adaptable

assets capable of embracing evolving technologies and industry trends. The industry's investment in skill development showcased its dedication to nurturing a versatile workforce capable of overcoming challenges and driving innovation.

Adherence to stringent safety protocols became paramount, reflecting the industry's commitment to employee well-being (Green et al., 2020). Employees demonstrated a profound sense of responsibility, adhering to safety guidelines to protect themselves and their colleagues. Their meticulous adherence to these protocols ensured a safe working environment, emphasizing the value placed on the health and well-being of the workforce (Jones & Brown, 2020). This commitment to safety underscored the industry's investment in employee welfare, highlighting the paramount importance of health and well-being within the workforce.

CHAPTER SEVEN

CONCLUSION AND RECOMMENDATIONS

7.1 Introduction

This chapter sums up the research by providing a conclusion of the findings, research contribution, recommendations and research limitations to be addressed by future research.

7.2 Conclusion (summing up all the objectives)

The company encountered several operational challenges during the pandemic, including difficulties in securing timely raw materials, quality control constraints impacting reputation and customer satisfaction, inadequate inventory management leading to inefficiencies, order fulfillment struggles causing potential customer dissatisfaction, and disruptions in logistics and distribution due to lockdowns and social distancing measures. Additionally, labour shortages posed a significant challenge to production management, negatively affecting overall productivity. These operational challenges, in turn, had profound financial impacts on the business. Exchange rate fluctuations affected financial stability, potentially leading to increased costs and reduced profits. The peak of the pandemic also resulted in reduced sales volumes and revenue, directly impacting the company's financial performance.

In response to these challenges, the company implemented a set of resilience strategies. These strategies included diversifying product offerings to mitigate market fluctuations, optimizing the supply chain for enhanced efficiency and reliability, embracing digital transformation to adapt to the changing business landscape, improving inventory management practices for better control and responsiveness, implementing expense control measures to optimize costs, enhancing financial preparedness through reserves or contingency plans, focusing on customer engagement to maintain and strengthen relationships, and prioritizing employee well-being and training to address labour shortages and ensure a skilled workforce. These strategic initiatives aimed to build resilience and navigate the uncertainties posed by the operational and financial challenges during the pandemic. strategic pricing adjustments, and efficient inventory management, showcased resilience in navigating economic uncertainties. The establishment of supply chain resilience, characterized by diversification, proactive communication, and collaborative partnerships, became a hallmark of

the industry's financial adaptability. These financial strategies not only ensured survival but paved the way for sustainable growth in the face of adversity.

7.3 Research Contributions

The research not only contributes theoretically by introducing a resilience framework and highlighting the nuanced impact of diversity but also provides practical insights and recommendations that can be applied by the paint manufacturing industry and potentially adapted by other industries facing similar challenges.

7.3.1 Theoretical Contributions

The main theoretical contribution of the study is that the findings clarify the knowledge gap on the impact of the COVID – 19 pandemic on the paint manufacturing industry in Lusaka Zambia. It contributes to the literature by identifying the operational and financial implications and the resilience strategies used to ensure business continuity in the paint industry. Previous studies conducted such as Ayeni et al. (2021), Cattani et al. (2020) and Bakshi (2021) highlighted the general impact of COVID – 19 on the paint manufacturing firms and the adjustments made, however this assessment focused on Operational, Financial and business continuity strategies, in addition to studies suggested by Ali Aamir (2021). The study contributes to the resource-based theory as it demonstrates that the prudent financial management and supply chain optimization are crucial for business continuity. The study also introduces a resilience framework by examining how the paint manufacturing industry, particularly Kansai Plascon Zambia Limited, demonstrated resilience in the face of unprecedented challenges. This framework can be applied to other industries facing similar disruptions. The findings collaborate with Mwansa et al. (2020) on revenue losses and supply chain challenges during the pandemic.

7.3.2 Practical Contributions

The practical contributions made are;

- i. **Supply Chain Resilience:** The study identifies and emphasizes the importance of supply chain resilience, providing practical recommendations for fortifying the supply chain network. The focus on diversification, proactive communication, and collaborative partnerships serves as a practical guide for industries to navigate uncertainties effectively.

- ii. **Human Capital Investment:** The research underscores the industry's investment in human capital, including employee well-being, skill development, and adaptability. The practical insights into how the industry navigated remote work, safety protocols, and continuous learning initiatives can serve as a blueprint for other industries dealing with similar challenges.
- iii. **Financial Acumen:** The study sheds light on the financial acumen of the paint manufacturing industry, showcasing prudent decision-making, strategic pricing adjustments, and efficient inventory management as foundational pillars of stability. These insights offer practical lessons for industries on how to navigate economic uncertainties and ensure sustainable growth.
- iv. **Technology Integration:** The study advocates for the integration of technology, including digitalization, automation, and research and development, as a crucial aspect of staying competitive and driving innovation. The specific recommendations on investing in digital technologies provide practical guidance for industries aiming to embrace technological advancements.

7.4 Recommendations

7.4.1 Nurturing Collaborative Networks for Sustainable Growth

In the wake of our comprehensive analysis, it is evident that fortifying the supply chain network stands as a cornerstone for the paint manufacturing industry's resilience. Efforts should be meticulously concentrated on nurturing robust and collaborative supplier networks, fostering relationships with suppliers that embody diversity in terms of expertise, geographic locations, and sourcing capabilities. By cultivating a diverse supplier base, the industry not only ensures a steady flow of raw materials but also mitigates risks associated with overreliance on specific suppliers or regions.

7.4.2 Cultivating a Diverse and Empowered Work Environment

The significance of nurturing an inclusive work environment cannot be overstated; it is the bedrock upon which a thriving and innovative industry is built. Implementing gender-sensitive policies stands as a crucial step toward ensuring equal opportunities for every employee, irrespective of gender or age. These policies not only promote fairness but also create a workplace where everyone

feels valued and respected. By eliminating gender-related barriers, the industry can tap into the full potential of its workforce, encouraging diverse perspectives and ideas to flourish.

7.4.3 Ensuring Financial Sustainability

In the face of economic uncertainties, sustaining prudent financial strategies emerges as a linchpin for the paint manufacturing industry's stability and growth. The industry's commitment to financial prudence must remain steadfast, ensuring the careful allocation and management of resources. Employing dynamic pricing methods and efficient inventory management stands as a testament to the industry's agility. By dynamically adjusting prices in response to market demands and cost fluctuations, the industry can maintain its competitive edge. Simultaneously, efficient inventory management optimizes resources, minimizing waste and maximizing profitability, thus bolstering the industry's fiscal robustness.

7.4.4 Promoting Technological Advancements

In the fast-paced landscape of the paint manufacturing industry, embracing technological advancements stands as the linchpin for staying competitive and driving innovation. Strategic investments in digitalization, automation, and research and development (R&D) have become imperatives, shaping the industry's trajectory toward a future marked by efficiency, innovation, and sustainability.

Digitalization forms the cornerstone of this transformative journey. By investing in cutting-edge digital technologies, such as big data analytics and cloud computing, the industry gains unprecedented insights into consumer preferences, market trends, and production efficiencies. Real-time data analytics enable informed decision-making, allowing companies to optimize their supply chains, enhance product customization, and respond swiftly to changing market demands. Additionally, digital tools facilitate seamless communication and collaboration among stakeholders, fostering a cohesive ecosystem where ideas flow freely and innovation thrives.

7.4.5 Empowering the Workforce for Industry Excellence

In the ever-evolving landscape of the paint manufacturing industry, nurturing a culture of continuous learning among employees is paramount. Establishing comprehensive training programs, interactive workshops, and industry seminars serves as the foundation for empowering the workforce with updated skills, knowledge, and expertise. A knowledgeable workforce is

inherently adaptive, capable of steering the industry toward a brighter and more prosperous future. These learning initiatives not only enhance technical skills but also foster creativity, problem-solving abilities, and leadership qualities among employees. By encouraging continuous learning, the industry ensures that its workforce remains agile and responsive to technological advancements, market trends, and evolving consumer demands.

7.5 Limitations of the Study

While the research on the operational challenges and financial effects of COVID-19 on the paint industry and the resilience strategies used provides valuable insights, it's important to acknowledge its limitations. Some potential limitations

- i. **Temporal Context:** The research is based on the conditions and responses during the COVID-19 pandemic. The specific challenges and strategies identified may be influenced by the unique circumstances of the pandemic and may not fully capture the dynamics in a non-pandemic context.
- ii. **Limited Quantitative Data:** The research seems to rely more on qualitative data and case study analysis. While qualitative insights are valuable, a lack of quantitative data might limit the ability to make statistically significant claims about the broader industry trends or the causal relationships between variables.
- iii. **No Long-Term Assessment:** The study primarily captures a snapshot of the industry's responses during the pandemic. A longitudinal perspective would provide a more comprehensive understanding of the long-term impacts of the operational challenges and the sustainability of the resilience strategies employed.
- iv. **Dynamic Nature of the Industry:** The paint manufacturing industry is subject to continuous changes in technology, market trends, and consumer preferences. The study may not fully capture the dynamic nature of the industry, especially considering the rapid evolution of these factors.

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APPENDICES



**THE UNIVERSITY OF ZAMBIA
GRADUATE SCHOOL OF BUSINESS**

TOPIC: BUSINESS CONTINUITY IN TIMES OF CRISIS: AN ASSESSMENT OF THE IMPACT OF COVID 19 PANDEMIC ON THE PAINT MANUFACTURING INDUSTRY IN LUSAKA: A Case study of Kansai Plascon Zambia Limited.

PATRICIA SACHIYUKA

MBA GENERAL

For more information or any queries, kindly get in touch on +260965871791

Dear respondent

I am a student at the University of Zambia in my final stage pursuing an MBA – General. As a partial fulfillment for the award of a master’s degree, I am conducting a baseline study on:

“BUSINESS CONTINUITY IN TIMES OF CRISIS: AN ASSESSMENT OF THE

**IMPACT OF COVID 19 PANDEMIC ON THE PAINT MANUFACTURING INDUSTRY
IN LUSAKA: A Case study of Kansai Plascon Zambia Limited.”**

You have been purposefully sampled to provide information for the topic indicated above. The information being collected is purely for academic purposes as such, it will be treated with maximum confidentiality. Subsequently, you are not supposed to indicate your name or any information that can lead to revealing your identity.

Your co- operation will be appreciated.

For more information or any queries, kindly contact the following:

Project Supervisor: Dr Bupe Getrude Mutono-Mwanza +260975821846

APPENDIX I - EMPLOYEES' INTERVIEW QUESTION GUIDE

Thank you for participating in this interview. The purpose of this interview is to gain insights into the impact of the COVID-19 pandemic on the paint manufacturing industry in Zambia, with a specific focus on Kansai Plascon Zambia Limited. Your perspectives and experiences are invaluable in helping us understand the challenges, adaptations, and strategies employed by the industry during these unprecedented times. Your participation is voluntary, and your responses will be kept confidential. Please feel free to share openly and candidly. Let's begin:

Section 1: Background and Role

2. Can you please start by briefly introducing yourself and your role within Kansai Plascon Zambia Limited?
 - i. Age
 - ii. Gender
 - iii. Department
 - iv. Service length

Section 2: Industry Challenges

1. In your opinion, what were the most significant challenges that the paint manufacturing industry in Zambia, including Kansai Plascon Zambia Limited, faced due to the COVID-19 pandemic?
2. How did these challenges impact the company's operations, supply chain, and overall business environment?

Section 3: Operational Adaptations

3. Could you describe any specific operational changes or adaptations that Kansai Plascon Zambia Limited implemented in response to the pandemic? How did these changes help address the challenges?
4. Were there any innovations or unique strategies that the company employed to maintain production and supply chain continuity?

Section 4: Financial Implications

5. How did the pandemic affect the financial performance of Kansai Plascon Zambia Limited? Were there any notable revenue shifts, cost management measures, or financial strategies implemented to navigate the challenges?

6. Can you share any insights into how the company managed its financial resilience during the pandemic?

Section 5: Customer Behavior and Market Shifts

7. Did you observe any changes in customer behavior and preferences during the pandemic? How did these changes impact the demand for paint products?
8. Were there any strategies or initiatives undertaken to align the company's products and services with evolving customer needs?

Section 6: Resilience Building

9. Could you discuss any efforts made by Kansai Plascon Zambia Limited to build resilience against future disruptions? What strategies were put in place to enhance the company's ability to respond to unexpected challenges?
10. Were there any lessons learned from the pandemic that influenced the company's long-term resilience-building plans?

Section 7: Employee Perspectives

11. How did employees within Kansai Plascon Zambia Limited respond to the challenges posed by the pandemic? Were there any notable examples of employee innovation, teamwork, or commitment to maintaining operations?

Section 8: Future Preparedness

12. Based on the experiences of Kansai Plascon Zambia Limited, what recommendations do you have for the paint manufacturing industry in Zambia to better prepare for future crises or disruptions?
13. Are there any key takeaways from the pandemic that could inform industry-wide strategies for business continuity?

Conclusion:

14. Is there anything else you would like to share that has not been covered in this interview? Thank you for your time and insights. Your participation is greatly appreciated and will contribute to a deeper understanding of the challenges and strategies within the paint manufacturing industry during the COVID-19 era.

APPENDIX 2. CUSTOMER INTERVIEW QUESTION GUIDE

Introduction: Thank you for participating in this interview. Your insights as a valued customer are crucial to understanding the impact of the COVID-19 pandemic on the paint manufacturing industry. Please be assured that your responses will remain confidential.

Section 1: Demographics

- i. Name (Optional):
- ii. Age:
- iii. Gender:
- iv. Occupation:
- v. Length of interaction with Plascon:

Section 2: Customer Experience 6. How long have you been a customer of Kansai Plascon Zambia Limited?

1. Can you describe the primary reasons for choosing Kansai Plascon products?
2. Have you noticed any changes in product availability since the onset of the pandemic? If yes, please describe.
3. How has the quality of Kansai Plascon products been affected by the pandemic, if at all?
4. Have you experienced any changes in the pricing of Kansai Plascon products during the pandemic? Please elaborate.

Section 3: Purchasing Behavior

5. Did your purchasing behavior change due to the pandemic? If yes, how?
6. Have you increased or decreased your paint purchases from Kansai Plascon during the pandemic? Why?
7. Did the pandemic influence your choice of paint colors or types? If yes, how?
8. How did the pandemic impact your project timelines and paint-related decisions?

Section 4: Communication and Customer Support

9. How has Kansai Plascon communicated with you during the pandemic regarding product updates, safety measures, or other information?
10. Were you satisfied with the communication and support provided by Kansai Plascon during this period? Why or why not?

Section 5: Future Expectations

11. As the pandemic evolves, what are your expectations from Kansai Plascon in terms of product availability, quality, and pricing?
12. Do you foresee any lasting changes in your paint purchasing behavior post-pandemic? Please explain.

Section 6: Additional Comments

13. Is there any other information or insights you would like to share regarding your experience as a customer of Kansai Plascon Zambia Limited during the COVID-19 pandemic?

Conclusion: Your input is highly valuable and will contribute to a comprehensive understanding of the industry's response to the pandemic. Thank you for your time and candid responses.

Appendix 3 SUPPLIER INTERVIEW QUESTION GUIDE

Introduction: Thank you for participating in this interview. Your insights as a supplier to Kansai Plascon Zambia Limited are vital to understanding the impact of the COVID-19 pandemic on the paint manufacturing industry. Please be assured that your responses will remain confidential.

Section 1: Company Information

- i. Company Name:
- ii. Type of Products/Services Supplied to Kansai Plascon Zambia Limited:
- iii. Duration of Business Relationship with Kansai Plascon:

Section 2: COVID-19 Impact

3. How has the COVID-19 pandemic affected your business operations?
4. Were there disruptions in the supply chain due to the pandemic? If so, please describe.
5. Did Kansai Plascon Zambia Limited communicate any specific requirements or changes in their procurement due to the pandemic?

Section 3: Communication with Kansai Plascon

6. How has communication with Kansai Plascon evolved during the pandemic?
7. Were you satisfied with the communication and support provided by Kansai Plascon during this period? Why or why not?

Section 4: Product Quality and Demand

8. Did the pandemic impact the demand for your products/services from Kansai Plascon? How?

9. Were there any changes in the quality or specifications required by Kansai Plascon during the pandemic?

Section 5: Adaptations and Challenges

10. What adaptations or changes did your company make to continue supplying Kansai Plascon during the pandemic?
11. Were there any specific challenges or obstacles your company faced while supplying to Kansai Plascon amid the pandemic?

Section 7: Additional Comments

Is there any other information or insights you would like to share regarding your experience as a supplier to Kansai Plascon Zambia Limited during the COVID-19 pandemic?

Appendix 4 Senior Managers Interview Sheet for the Study

Introduction

Thank you for your participation in this interview. The interview aims to obtain insight into the impact of the COVID-19 pandemic on the Zambian paint manufacturing industry, with a particular focus on Kansai Plascon Zambia Limited. Your insights and experiences are invaluable in assisting us to understand the challenges, adaptations, and strategies employed by the industry during these unprecedented times. Your participation is entirely voluntary, and your responses will be kept confidential. Please feel free to contribute in an open and honest manner.

Section 1: Demographics

Name (Optional)

- i. Age
- ii. Gender
- iii. Department
- iv. Service length

Section 2: Operational Changes

1. Can you describe the operational changes Kansai Plascon Zambia Limited implemented in response to the COVID-19 pandemic?
2. How did these operational changes impact the day-to-day functioning of the company?
3. Were there any specific challenges or obstacles encountered while implementing these changes?

4. Did these operational changes result in any improvements or innovations that you plan to retain even after the pandemic subsides?
5. How have employees and teams adapted to these operational changes?

Section 2: Financial Repercussions

6. What financial challenges did Kansai Plascon Zambia Limited face due to the COVID-19 pandemic?
7. Can you provide insights into the company's financial performance during the pandemic, such as revenue changes, cost management, and profitability?
8. Were there any government support programs or financial strategies that helped mitigate the financial impact of the pandemic?
9. How did the financial repercussions affect long-term business strategies and planning?
10. What steps have been taken to ensure financial resilience in case of future disruptions?

Section 3: Influence on Customer Behavior

11. How did the COVID-19 pandemic affect customer behavior within the paint manufacturing industry?
12. Did you observe any shifts in customer preferences or purchasing patterns during the pandemic?
13. Have there been any notable changes in customer expectations regarding product quality, safety, or delivery?
14. How did Kansai Plascon Zambia Limited adapt its marketing and sales strategies to meet changing customer behavior?
15. Do you anticipate any lasting effects of the pandemic on customer behavior within the industry?

General Questions:

16. What lessons have you learned from managing the company during the COVID-19 pandemic?
17. How has communication within the organization evolved during the pandemic, and do you foresee any lasting changes in communication practices?
18. Are there any other factors or insights you believe are important to consider in the context of the pandemic's impact on the company?

Conclusion:

Your input is highly valuable and will contribute to a comprehensive understanding of the industry's response to the pandemic. Thank you for your time and candid responses.

Appendix 5 Introductory Letter



THE UNIVERSITY OF ZAMBIA

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Tel : +260 211 294105

Graduate School of Business
P.O. Box 32379
Lusaka, Zambia

12th December, 2023

TO WHOM IT MAY CONCERN

RE: INTRODUCTORY LETTER FOR PATRICIA SACHYUKA

This letter serves to introduce Patricia Sachiyuka a bonafide student in our Master of Business (MBA) General Programme at the University of Zambia – Graduate School of Business (UNZA–GSB). In partial fulfilment of their Postgraduate studies, the students are required to undertake a Dissertation (Research). The Topic for her research is ***“An assessment of the impact of COVID-19 Pandemic on the paint manufacturing industry in Lusaka: A Case Study of Kansai Plascon Zambia Limited”***

This entails that students collect data from various Institutions in line with the research they are conducting. This research is purely for academic purposes and the student is ethically bound to treat the provided information with strict confidentiality.

We will appreciate the assistance that you will render Ms Sachiyuka to collect the data and the information from your institution that will assist her to carry out this research. Should you have any queries or would like further information about her, please contact the UNZA–GSB on the above e-mail address or telephone numbers.

Yours Faithfully,

Dr Lubinda Haabazoka
DIRECTOR – GRADUATE SCHOOL OF BUSINESS

cc Acting Assistant Registrar – Graduate School of Business

Towards Improving Service and Excellence in Higher Education Beyond Fifty Years

Appendix 6 Ethical Clearance

THE UNIVERSITY OF ZAMBIA

HUMANITIES AND SOCIALSCIENCES RESEARCH ETHICS COMMITTEE

REF NUMBER: HSSREC 2023 – SEPTEMBER 047

PROGRAMME (MASTERS/PHD): MASTERS

PROJECT: LOCAL

STUDY TITLE: Business continuity in the new normal: An assessment of the impact of Covid 19 pandemic on the paint manufacturing industry in Lusaka: A case study of Kansai Plascon Zambia

PRINCIPAL INVESTIGATOR: Patricia Sachiyuka

OTHER INVESTIGATORS: N/A

SUPERVISOR: DR Bupe Gertrude Mwanza

1. TITLE

The title is clear and has no ethical issues

2. STATEMENT OF PROBLEM

The statement of the problem is clear.

3. PURPOSE OF THE STUDY

The purpose of the study is clear. There are no ethical issues with regard to the purpose of the study.

4. SPECIFIC OBJECTIVES

The specific object is clear and there are no ethical issues.

5. RESEARCH QUESTIONS

The research questions are clear and have no ethical issues.

6. SIGNIFICANCE OF THE STUDY

This came out clearly and has no ethical issues.

7. LITERATURE REVIEW

Literature review was critically analysed.

8. METHODOLOGY

I) Research Design is clear and has no ethical issues.

- (ii) Data collection procedure was OK.
- (iii) Data analysis is well explained and has no ethical issues.

9. RESEARCH INSTRUMENTS

Research instruments were clear.

10. ETHICAL CONSIDERATIONS

This section is missing a statement on how the participants would benefit from the study.

11. VERDICT

Approved subject to

- i) Including a statement on how the participants would benefit from the study

NAME OF REVIEWER: IK

SIGNATURE:

DATE: 29/09/2023