Investigating the contemporary management accounting practices used by small enterprises in Ntuzuma Township, Durban

Submitted in fulfilment of the academic requirements of the Master of Accounting in the Department of Management Accounting in the Faculty of Accounting and Informatics, Durban University of Technology, Durban, South Africa

By

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2024

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DECLARATION

I, Londiwe Thandazi Zulu, declare that this dissertation is a representation of my own work in conception and execution. This work has not been submitted in any form for another degree at any university or institution of higher learning. All information cited from published or unpublished works have been acknowledged.

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DEDICATION AND ACKNOWLEDGEMENTS

In deep reverence I, Londiwe Zulu, dedicate this academic achievement, of my master's degree, to the Almighty God – the Divine Triune, the Father, the Son, and the Holy Spirit. It is with the unwavering belief in his boundless faithfulness, wisdom, and support that I present this work. The Lord sustained me throughout my academic journey.

I would like to extend my sincere appreciation to my supervisor, Dr ZW Nzuza, for his invaluable guidance and support throughout my academic journey. I acknowledge the significant role he played in contributing to my academic growth.

I would also like to thank Dr Collin Pillay, MILE eThekwini Municipality for ensuring I obtained everything I needed for this study. To the study respondents, the Ntuzuma Township community for being part of my journey with this study, I am humbled. To psychologist Ayanda Ncebekazi, chiropractor Danica Strydom, statistician Thabo Lepoto, and the researchers beyond-borders team, thank you.

Tribute to my grandparents and moms, I offer this work as a symbol of respect for their support and sacrifices. My younger siblings may this work stand as evidence that any dream can be achieved with dedication. I honour Phumlani and Sfiso's lives. I heartfelt gratitude to Vuyo for the encouragement throughout my academic journey.

To Fanie N, Mbali M, Nobulala M, Anitha, Zweli M, Kuhlekonke N, Thabiso M, and Brian J,I am so thankful for your unwavering belief in my potential.

ABSTRACT

Despite the implementation of various managerial strategies, Small Enterprises (SEs) in South Africa continue to confront challenges in effectively managing their business, with cost management remaining a persistent struggle. The sustainability of SEs in a growing economy like South Africa is critical because of their significant contribution to the country's economic growth and job creation. Nevertheless, the high failure rate of SEs in the country has become the primarily concern for government. The adoption of management accounting practices (MAPs) presents potential solutions by providing techniques for efficient cost control and informed decision-making. Therefore, the current study seeks to identify the CMAPs used by SEs; examine their knowledge about these practices, investigate the perceived usefulness of CMAPs in Ntuzuma Township, and analyse the correlation between biographic data and CMAPs. To fulfil these objectives, a quantitative cross-sectional design was employed. The data used in the study was collected utilising a questionnaire instrument and involving 180 respondents. The research framework was guided by contingency theory, and data analysis was conducted using regression, tables, and standard deviation, which are derived from the SPSS software version 25. Despite the majority of respondents indicating limited extensive use of CMAPs, a significant portion recognised the benefits of CMAPs in making well-informed decisions relating to the management of costs. Notably, the sales budget and cash budget emerged as the most commonly employed budgeting practices. The study also brought to light that managers possessed varying levels of knowledge regarding CMAPs, with most of this knowledge acquired through previous work experiences. Biographical factors exhibited a detrimental influence on costing and budgeting practices, as evidenced by weak correlations and the absence of statistical significance. The study's recommendations emphasise the necessity for SEs staff training, CMAPs applications of tools programmes, knowledge sharing and further research and evaluation.

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LIST OF ABBREVIATIONS

SEs	Small Enterprises
INK	Inanda, Ntuzuma and KwaMashu
CMAPs	Contemporary Management Accounting Practices
TMAPs	Traditional Management Accounting Practices
GDP	Gross Domestic Product
CIMA	The Chartered Institute of Management Accountants
ABMA	Activity-based Management Accounting
ABCMA	Activity-based Costing and Management
AICPA	American Institute of Certified Public Accountants
SMEs	Small and Medium Enterprises
MAPs	Management Accounting Practice

CHAPTER ONE: INTRODUCTION

1.1 INTRODUCTION

This chapter commences with an exploration of the study's context, emphasising the research gaps and study importance. It presents the problem statement, research aim, objectives, hypotheses, and the significance of the study. The research design and ethical considerations are also addressed, followed by an exploration of the limitations of the research. Lastly, it outlines the upcoming dissertation chapters and concludes with a summary of the chapter.

1.2 BACKGROUND

Small businesses are considered crucial for driving economic progress and they play a significant role in promoting the growth of the South African economy. In South Africa, approximately 60% of the workforce is employed by small businesses. These businesses make a notable contribution to the country's Gross Domestic Product (GDP), with the Small Business Institute (SBI) reporting that they account for more than 50% of the GDP. Moreover, small businesses have played a vital role in empowering previously disadvantaged groups in the country, including women, youth, and historically marginalized communities (UNCTAD, 2021). However, the survival of small businesses in South Africa has been influenced by various economic factors. The COVID-19 pandemic, for instance, has had a significant impact on small businesses, resulting in closures, job losses, the need for digital transformation, and government intervention (Mishi et al., 2023). In addition to the devastating effects of the COVID-19 pandemic, South Africa experienced a wave of looting incidents in the KwaZulu-Natal province and other parts of the Gauteng region. These incidents had a profound impact on the country, including the destruction of property and infrastructure, disruptions in operations and supply chains, job losses, loss of life, and a decline in investor confidence (Visser et al., 2021). Furthermore, the conflicts between Ukraine and Russia led to trade restrictions and reduced investment flows, further exacerbating the challenges faced by South Africa (Ali et al., 2022). However, even prior to the pandemic and conflicts, emerging businesses in South Africa were already facing difficulties in achieving growth beyond average levels, as highlighted in reports from the (Treasury, 2019).

The situation for small businesses in South Africa has not shown significant improvement over the past two decades, as reported by Business Tech (2018). Mutezo

(2013) highlights that more than 75% of small businesses in the country collapse within four years of their establishment. These businesses also face stiff competition from both local and international large companies, as noted by (Krueger, 2022). Additionally, small businesses in South Africa confront the challenges posed by climate change. The increased occurrence of droughts and floods caused by climate change disrupts the production and transportation of goods, leading to scarcity and price hikes (WPF, 2021). Ndebele (2022) and IT-News-Africa (2023) report that while Fourth Industrial Revolution (4IR) technologies offer benefits, their implementation poses challenges for small businesses due to inadequate infrastructure, lack of skills, and the cost of adapting to newer technologies. Moreover, according to Paterson (2013), small businesses face challenges in neglecting their social responsibility to the communities in which they operate. Chimucheka and Mandipaka (2015) have identified a lack of business management skills as a significant challenge faced by small businesses while a study by Maduekwe (2015) revealed that small business owners often rely on unconventional decision-making methods, such as gut feelings and guesswork, due to a lack of supporting information. These findings underscore the importance of addressing skill gaps and providing relevant information resources to support effective decision-making in small businesses. A descriptive study conducted by Msomi and Olarewaju (2021) revealed that financial skills and access to finance have a significant impact on small businesses. Another quantitative study conducted in the Middle East by Ismail Albalushi and Naqshbandi (2022) found that factors such as a lack of managerial skills and education influence the survival of small businesses.

In addition to general studies on small business practices, specific research has been conducted on Management Accounting Practices (MAPs) in small businesses. Azudin and Mansor (2018) conducted a study in Malaysia titled "Management accounting practices of SMEs: the impact of organizational DNA, business potential, and operational technology." Their findings recommend the implementation of MAPs to enhance business operations and decision-making processes. Similarly, a study by Ahmad (2012) from Malaysia suggests that medium-sized businesses utilize strategic management accounting to a greater extent compared to simple systems, unlike small-sized businesses. In Italy, Alvarez et al. (2021) found that traditional MAPs remain prevalent in most medium-sized businesses. Furthermore, there is a positive relationship between MAPs and business performance, indicating that users of MAPs

tend to outperform non-users. Prihastiwi and Sholihin (2018) conducted a study in Indonesia, highlighting the persistence of traditional MAPs. They also identified factors such as the education level of internal accounting staff, management support, and business size as significant determinants influencing the adoption of MAPs in small businesses.

1.3 PROBLEM STATEMENT

Small businesses in South Africa play a crucial role in achieving the developmental objectives outlined in the African Indicative Strategic Development Plan (RISDP). These objectives include promoting sustainable economic growth, enhancing regional integration and infrastructure, improving human and social development, strengthening governance and security, and enhancing environmental sustainability (Regional-strategic-framework, 2022). To fulfil these objectives, it is essential for Africa as a developing continent to have a robust network of small businesses that are financially stable, among other factors. While small businesses play a crucial role in the economy of Africa, there is a notable research gap concerning the value added by Management Accounting Practices (MAPs) specifically in small businesses located in the Ntuzuma township. Ntuzuma is situated on the northern side of Durban in KwaZulu-Natal, under the eThekwini Municipality, which is one of the largest metropolitan municipalities in South Africa. Among the four "PINK" townships (Phoenix, Inanda, Ntuzuma, and KwaMashu), Ntuzuma is the youngest and was established by the Durban City in the 1970s. It has a population of over 125,000, with a majority facing unemployment and being severely affected by the recent looting incidents in KwaZulu-Natal. Additionally, the township has also experienced challenges due to floods and earthquakes that occurred between 2022 and 2023 (Ethekwini-Municipality, 2023). Thus, (Ethekwini-Municipality, 2023) conducting a study to explore the contemporary MAPs used by small businesses at Ntuzuma township of South Africa holds significance both in theoretical and practical domains. The study only focused on the retail small businesses also known as tuck shops. By investigating these aspects, the study seeks to provide valuable insights for improving the adoption and implementation of MAPs, ultimately contributing to the growth and success of small businesses in the Ntuzuma township.

1.4 RESEARCH AIM AND OBJECTIVES

1.4.1 Aims of this Study

This study aimed to identify MAPs applied by small enterprises.

1.4.2 The research objectives

To achieve the above aim, the following study objectives are set:

- Investigate the CMAPs used by small enterprises in Ntuzuma Township, Durban.
- Examine the amount of knowledge small enterprises have about CMAPs in Ntuzuma Township, Durban; and
- Explore the perceived usefulness of CMAPs in small enterprises in Ntuzuma Township, Durban.

1.4.3 Research Questions

The following research questions follow from the first 3 objectives:

- What are the CMAPs used by small enterprises in Ntuzuma Township, Durban?
- How much knowledge do small enterprises have on CMAPs in Ntuzuma Township, Durban?
- How useful are the CMAPs to small enterprises in Ntuzuma Township, Durban?

1.4.4 Hypotheses

For this study, two different hypotheses were generated: *to examine the correlation between the biographic data and CMAP systems.*

These hypotheses are stated below:

H1 - There is a significant correlation between biographic data and budget tools.

H2 - There is a significant correlation between biographic data and costing tools.

1.5 THE SIGNIFICANCE OF THE STUDY

This study holds significant importance as it contributes to the ongoing debate surrounding the relevance of CMAPs utilisation worldwide. This research will have significant implications for both theory and practice. In terms of theoretical implications, this study will advance the existing MAPs literature in two keyways. Firstly, it will provide fresh empirical evidence on the use of CMAPs in South Africa. Secondly, it will offer an

additional study in the unique context of the SA Townships, Durban, highlighting the contingent factors that impact the extent of SEs using the CMAPs. (AlKhajeh & Khalid 2018; Burgos *et al.* 2020; Carter 2021; Love & Roper 2015; Complete Controller, 2021) clearly articulate only one MAP tool in big specific industries and sectors this study investigates all 5 practices including budgeting, strategy, performance, decision-making and costing.

Practicing without such research would be difficult for future researchers, governments and institutions to overlook SEs adopting critical CMAPs for their survival. Therefore, this study is essential to inform the government and bid companies' intervention importance aimed at ensuring that township SEs are surviving and thriving. This research will also expose the usefulness of SEs adopting MAPs while surviving with bigger competitors; this enables them to benchmark their usage of practice tools and to potentially improve their performance. Without this study, decision-makers may continue to rely on unconventional techniques for managing their businesses while putting their businesses at risk. Finding the correlation will be essential in future studies between biographical information and used of CMAPs.

This research is crucial in the current academic and practical landscape as it not only advances academic knowledge by addressing gaps but also provides actionable insights that can empower and uplift SEs in Ntuzuma Township, contributing to the broader socio-economic development goals of the region.

1.6 RESEARCH DESIGN

To address the objective of the study a quantitative approach is used where questionnaires are close-ended questions. This study uses the research paradigm of a positivist approach. According to Albalaki *et al.* (2019: 7), the knowledge generated from positivist research is viewed as objective and quantifiable, making it fall under the scope of quantitative research and in addition, can be measured using methods that are independent of the researcher and research instruments.

The study concentrates on Small Enterprises situated in Ntuzuma Township, Durban, Kwa-Zulu Natal province of South Africa. The target enterprises were seven hundred and fifty-three (753). This study adopted the Cochran formula to determine the sample

size and simple random sampling was adopted. The sample size of 254 enterprises was determined from the Cochran formula out of 753 population size. Simple random sampling was used from the 254 sizes to collect the data.

To obtain reliable and objective information about the usage of CMAPs by SEs in Ntuzuma Township, the hand-delivery of a self-administered questionnaire was chosen as the data collection method, despite the disadvantages of it being costly and time-consuming (El-shishin 2017: 18). To ensure a clear questionnaire and clear interpretation, the questionnaire was sub-divided in sections (A-D) based on the three objectives and hypotheses. The questionnaire instrument presents the statement in the tables using the scaling of 3 or 5-point Likert. The collected data were recorded on an MS Excel sheet by the statistician. The quantitative data was analysed using descriptive statistics which included tables, measures of central tendencies, standard deviation, binominal test and the Spearman rho correlation to ensure the findings were well presented. SPSS Version 27® was utilised for the interpretation of the data collected from the respondents with a total of 180 non-defaults out of 250 questionnaires followed by a correlation strategy and regression analysis to find correlations between the variables identified.

1.7 ETHICAL CONSIDERATIONS

This research attention was given to ethical considerations to safeguard the rights, privacy, and well-being of the human participants, SEs owners in Ntuzuma Township. The approval to conduct this research was obtained from the Durban University of Technology, Faculty Research Committee (FRC) before commencing data collection. The participants are well informed about participation it be voluntary and informed of their right to pull out of participating in the study, should they feel uncomfortable with responding to questions. The participants are also kept anonymous, and analysis is conducted on aggregated data as a consent letter was signed for confidentiality. Conflicts of interest the researchers will maintain transparency and impartiality in their interactions with participants. The researcher strived to minimise any bias, ensuring that the study's findings are grounded in the participants' authentic experiences and perspectives. Additionally, measures were implemented to uphold the principles of justice and fairness in participant selection and engagement.

1.8 LIMITATION OF THE RESEARCH

This study was limited to only small enterprises that operate in the area of Ntuzuma Township, Durban. This was because the SEs within townships are less likely to adopt CMAPs compered to big enterprises (Armitage *et al*. 2016: 53). Only the business owners were deemed to be the participants as the decision makers of the SEs. In addition, the study analysed the usage of all five CMAPs including budgets, performance measurement, decision-making, pricing tools and strategies analysis as tools that are typically used by operating organisation.

1.9 STUDY AREA

Ntuzuma was established in the 1970s during the apartheid and was planned as an African township. During the 1980s, the area experienced significant political tension and violence, primarily due to issues surrounding service levels and tenure arrangements. According to the Inanda Ntuzuma KwaMashu Nanda Economic Development Profile (INKNEDP, 2018), Ntuzuma Township, located in KwaZulu-Natal, South Africa, is primarily a residential area situated about 20km northwest of the eThekwini (Durban) city centre. The growth prospects are closely tied to external areas, particularly Durban, as the township has low levels of internal economic activity. Most of the housing in Ntuzuma is formal, 52%, with informal housing accounting for 43%, and traditional housing for 5%. While the land is generally limited, some undeveloped tracts of land still exist. The estimated population of Nanda, KwaMashu and Ntuzuma is approximately 599 056 as of 2018. The population density in Ntuzuma is 125 394 persons. A significant portion, over 65%, of the population is under the age of 29. Additionally, 92% of the population speaks isiZulu as their first language. In this study, a probability sampling technique was employed, specifically simple random sampling. This ensures that subjects have an equal opportunity to be selected without any form of bias from the diverse groups, thus enhancing the generalisability of the findings. The population will be grouped through a random sampling process, and a random sample will be collected from each division. The study aims to collect data from 254 SEs.

1.10 DISSERTATION CHAPTERS OVERVIEW

The dissertation is structured into five chapters, including:

Chapter 1: Introduction and Summary

This first chapter briefly outlines the background of the study; the research problem statement; the significance of the study; the study aims, objectives, questions and hypotheses; the research design; ethical considerations; limitations of the research; study area; dissertation structure finally, and summary of the chapter. It is a brief of what to expect from the study entirety.

Chapter 2: Literature Review

This chapter discusses the small enterprise challenges and benefits, a conceptual framework for the study, an empirical review, based on the 4 objectives of the study, the CMAP tools, benefits, and knowledge of CMAPs.

Chapter 3: Methodology

This chapter details the methodology used in the study. The chapter focuses on what work was covered to achieve the research objectives of this study. The research design is explained, from the paradigms used to the instrument used for data collection. It provides information on the research paradigm, which is the quantitative approach; the research procedure; the sample and the data collection and analysis process.

Chapter 4: Data Analysis

This chapter is mainly focused on presenting and interpreting data derived from the questionnaires according to the objective of the study. It presents the results and reliability findings.

Chapter 5: Discussion, conclusions, and Recommendations

The chapter provides an overview, conclusion, and summary of the results obtained from the research study. It also provides recommendations to SEs based on the findings. This chapter discusses the implications, contributions, and limitations of the study. Finally, recommendations for further research in the field are made.

1.11 CHAPTER SUMMARY

This chapter highlighted the research problem, which states the continuous failure of SEs in SA despite various interventions by the government and support enterprises. This study aims to investigate the CMAP tools used by SE to assist business failure rate. The research process, design, ethical considerations, and significance of the study

were all discussed.

The next chapter will delve into the key concepts used in the study, provides a review of previous literature and theoretical framework.

CHAPTER TWO: LITERATURE REVIEW

2.1 INTRODUCTION

The previous chapter looked at the background of the study; background; problem statement; aim, objectives, hypotheses; significant of the study; research design; ethical consideration, delineation of the study and study area. This chapter presents a review of the relevant literature concerning SEs, the CMAPs with empirical reviews according to research objectives. Snyder (2019: 334) describes literature review as a good and diverse approach to comprehending knowledge of target aspects which derive from topic. Reviewing the literature allows researchers to determine whether the Ntuzuma has been inadequately or insufficiently explored, assess the methodology employed, identify the variables of the investigation, and examine the results obtained using those variables as a basis for the study (Nader 2012: 8). This chapter specifically concentrates on literature from various countries and industries regarding MAPs (TMAP and CMAP) in SEs.

2.2 ECONOMIC IMPACT OF SMALL ENTERPRISES

2.2.1 The Concept of Small Enterprises in South Africa

In recent years, significant emphasis on the development and expansion of the small, medium, and micro-sized enterprises (SMMEs) sector has been recognised in various countries, such as the US, UK, Brazil, Ghana, Zimbabwe, SA, Malaysia, and India (Karanja *et al.* 2013:7; Mafini & Omoruyi 2013: 146; Boadi *et al.* 2017: 2; Domeher *et al.* 2017: 37; Gartenstein 2019). According to the National Small Business Amendment Act (26 of 2003), SEs' definition differs across countries, due to many distinct definition factors used that includes number of employments, revenues, taxation. CIMA (2018) states that SEs are "different distinct business enterprises including co-operative entities, organisations managed between one or more entrepreneurs, where it does not exclude their branches or subsidiaries and are predominantly required to carry on in any sector or subsector of the economy". Government Gazette (2019: 8) divides SEs into four categories: size, industry, number of workers and revenue. Cele (2020: 20) posits that SEs exist in various sizes and perform various economic activities, including agriculture, manufacturing, mining or construction services, and retail. The table 2.1 below represents the definition of SEs in South Africa as per the National Small Business Amendment Act (26 of 2003) the Act of 1996.

Table 2. 1: SEs definition

Industry definition	Sizes	Full-time employees	Total Sales p/a >Million	Total Asset gross value >Mil
Agriculture	Small	11 to 50	R0.51 to R3	R0.51 to R3
Manufacturing	Very small	0 to 10	R0.0 to R0.5	R0.0 to R0.5
	Small	11-50	R5.1-R13	R2.1 - R5
industry	Very small	0-10	R0.0-R0.5	R0.0 - R2
Power, gas and	Small	11-50	R5.1-R13	R1.91 - R5
water industry	Very small	0-10	R0.0 -R0.5	R0.0 - R1.9
Construction	Small	11-50	R3.1 - R6	R0.51 - R1
industry	Very small	0-10	R0.0 - R3	R 0.0 - R0.5
Retail, motor trade	Small	11-50	R4.1 - R19	R0.61 - R3
and repair services	Very small	0-10	R0 - R4	R0.0 - R0.6
Wholesale trade,	Small	11-50	R6.1 - R32	R0.61 - R5
commercial agents	Very small	0-10	R0 – R6	R0 - R0.6
Catering and	Small	11-50	R5.2 - R6	R1.91 - R1
accommodation	Very small	0-10	R0 - R5.1	R0 - R1.9
Transport, storage	Small	11-50	R3.1 - R13	R0.61 - R3
and communication	Very small	0-10	R0 - R3	R0 - R0.6
Finance and	Small	11-50	R3.1 - R13	R0.51 - R3
business services	Very small	0 -10	R0 - R3	R0 - R0.5

Source: Government Gazetie: National Small Business Act No. 102 of 1996

Numerous researcher findings show substantial evidence for the positive impact of SEs on the economic growth of all countries worldwide (Chinniah, 2016: 56). SEs have emerged as a prominent topic of interest among business managers and researchers globally which led to an increased emphasis on SEs and MEs research (Mafini 2013: 147). In addition, Maziriri *et al.* (2018: 12) reported that South Africa has slightly over 2 million SE and MEs combined, which generate over 57% of the nation's GDP and employ over 80% of the workforce. Statistics of South Africa (2018: 8) reported that 63% of SE registered in the year 2018, compared to (Gov UK 2022) show 63% of UK SEs. CIMA's (2018: 3) SEs contribute 70% of all employment, and 50% country's GDP, further stated that "it is no doubt that SEs play a significant role in the economy". The above findings strongly indicate that SEs are the backbone of the country.

According to the National Small Enterprise Act (2022: 661), SEs tend to have strong ties to their local communities as they source goods and services locally, thereby

supporting other SEs in the supply chain. SEDA (2020: 4) reported the vital role contributed by SEs in promoting community development through various social initiatives such as skills training, sustainable growth, poverty alleviation, unemployment reduction, and socio-economic. SEs also contribute to a country's growth and sustainability as they assist local economies by keeping money close to home and helping township communities. Cele (2020: 21) stated that SEs drive development in rural and underdeveloped regions of South Africa. Furthermore, these businesses contribute to reducing regional disparities and promoting inclusive growth. Dlamini & Schutte (2021: 4) noted that SEs touch the community deeper compared to big enterprises, which includes community issues, poverty, drugs, motivation, and student empowerment.

These enterprises must be nurtured and supported to assist in bringing the economy back into alignment and ensure stability. Governments recognise the importance of developing and strengthening SEs ensuring sustainability to promote national growth since 1994 (GreggU 2019). However, there is a notable prevalence of SEs failures in South Africa, as reported by EDGE (2013: 4). This high failure rate not only reduces their GDP contribution but also contributes to elevated community crises.

2.2.2 Challenges SEs Face in South Africa

Dlamini and Schutte (2021: 2) reported that in the first 4 years, only 37% of SEs survive. Project Clue (2020) reported that in developing countries, SEs often face many challenges, and those challenges can make it difficult for SEs to grow and compete with larger enterprises. Erokhinet *et al.* (2019: 7) argue that access to finance is a major challenge for SEs, as they often lack the collateral and credit history to secure traditional bank loans which can lead to a limited ability to invest in new equipment, technology, or other growth opportunities.

Difficulties SEs encounter have been investigated by many researchers worldwide including Giroux (2008) in Canada, Cant *et al. (*2013) in UK and Cele (2020) in SA. In the context of Canada, Giroux (2008: 126) examined the survival rates of SEs and discovered that the lack of managerial skills, among other challenges, contributed to their failure. In Malaysia, Dorasamy *at al.,* (2010: 39) conducted a study on the MAPs challenges encountered by SEs. Through a survey, they investigated the accounting

and found a significant correlation between outsourcing accounting functions and the two contributing challenge factors of risks and operation management (Dorasamy *et al.* 2010: 39). In South Africa, Cele (2020: 14) study the success effect of MAPs in SMEs, findings show that SMEs employed planning and control methods like sales budgeting and production costing. The utilisation of MAPs was influenced by factors such as a deficit in MA knowledge and the data show a favourable correlation between MAPs and both planning and performance.

Smit and Watkins (2012: 6328) conducted a review of risk management practices in South African SMEs. They argued that barriers to the success of SMEs in SA are diverse and include inherent challenges such as a lack of management skills, and inadequate education and training. Similarly, Abor and Quartey (2010: 31) asserted that the development of SEs in SA and Ghana is significantly hindered by challenges like limited access to appropriate technology, restricted international market access, insufficient financing, a lack of management skills, and unfavourable laws and regulations impacting their operations.

Rwanda *et al.,* (2013: 13) observed that SEs face various skills gaps in specific business areas, including information and communication technology, technical and industrial knowledge, finance, and MA. Marembo's (2013: 31) findings revealed that SEs in SA lack adequate general management skills and human resource capabilities, which negatively impact their growth. The study indicated that 55% of the SEs identified a lack of resources as a major challenge, while 28.3% acknowledged a deficiency in management expertise (Marembo, 2013: 32). In a separate investigation by Cant *et al.* (2013: 71) on challenges faced by SEs in SA, macro-environmental factors such as crime, government legislation, unemployment, inflation, and interest rates were found to significantly affect SA SEs. AlKhajeh and Khalid (2018: 22) in Gauteng, SA, examined the MAPs. The finding reveals that business performances are sustained by utilising accurate MAPs. Msomi *et al.* (2019: 319) conducted a study in Durban, SA on 'Factors Influencing the adoption of MAPs by Manufacturing, findings show technology part of influence.

According to the South African Institute of Chartered Accountants (SAICA) (2016), SMEs insight report outlined various challenges faced by the whole SEs, including

financial crime, staff recruitment and retention, adopting new technology, competition, regulations, accessing funds, economic uncertainty, and rising costs. Mwanza and Benedict (2018: 4) examined budget utilisation challenges among SMEs in the Cape Town, SA manufacturing. The study revealed that 74.5% of SEs found using MAPs expensive, and 70.6% indicated a lack of necessary resources, such as computers.

Cele (2020: 18) investigated the role of MAPs in the success of SMEs and the findings of the study indicate that the high rate of SME failure is largely attributable to a lack of management skills. Msomi, *et al.*'s (2019: 320) investigation into the rate of survival of SMEs revealed that among the other difficulties, poor management skills attributed more failure rates. Kefasi (2019: 9) argues that many SEs fail as a result of difficulties with the internal management systems rather than because of external challenges.

Mathye *et al*. (2022: 1), conducted a study on SA townships and their literature shows historically townships segregated areas created during apartheid where black Africans were forced to live; additionally, a significant increase in population rise due to rural-to-urban migration. The increase in population over the years led to an increase in various challenges and issues including poor infrastructure, limited access to basic services, and a lack of economic opportunities. When apartheid ended many challenges persisted, but these issues affect both small and medium operating in the area.

SEDA (2020: 8) listed the internal challenges SEs experience mostly which includes a lack of management skills, lower education and trainee levels, financial difficulty, poor system of managing accounts, the inappropriate application of MAPs, limited innovation, scarce funding to invest, poorly skilled labour and poor technical advice. In addition, the list included the external challenges SEs experience that include poor sufficient technological access, restricted expansion to foreign markets, increasing interest rates and inflation, the location of the enterprises, crimes and unemployed, poor product demands, and competition inside the SEs (SEDA 2020: 9). Skilled management teams using correct MAPs are advantageous to sustaining the business regardless of the challenges by using strategic and decision- making systems. The table 2.2 below represents the challenges SEs face as they operate.

Table 2. 2: Challenges faced by SEs.

Access to finance	Many SEs struggle to secure funding from traditional lending institutions, making it difficult for them to start or grow their businesses, which can limit their ability to grow and expand.
Bureaucracy and red tape	The process of registering and complying with regulations can be time-consuming and costly for SEs.
Limited access to markets	SEs may have difficulty reaching customers and competing with larger companies' skilled labour and training opportunities can be a challenge for SEs in South Africa.
Lack of skills and training	SEs may not have the resources or expertise to develop the skills needed to succeed in their industries.
Limited technology adoption	Many SEs may not have access to the latest technology, which can make it difficult to remain competitive.
Competition	SEs are often at a disadvantage when competing with larger, more established firms.
Economic instability	South Africa's economy has been facing challenges for many years, which has made it difficult for SEs to plan and invest for the future. The South African economy has been struggling in recent years, with high unemployment and low growth, which can make it difficult for SEs to survive and thrive.
Corruption	Corruption remains a major problem in South Africa, and SEs may be at a disadvantage when competing with larger firms that have greater access to political connections and influence. SEs are often targeted by criminals and corrupt officials, which can be a major obstacle for businesses trying to operate in the country.
Social Unrest and violence	Many regions in South Africa have high crime rates and social unrest which leads to insecurity and uncertainty, affecting the business environment.
Power and energy costs	South Africa has a power crisis and high electricity costs which can be a significant burden on SEs. The energy crisis in the country has affected the cost of production and operations for many companies, including SE.

Source: Chimucheka *et al*. (2015: 786-789)

Despite these challenges, many SEs continue to grow and contribute to the country economy. As of 1994, government initiatives and NGOs are there to support, such as providing access to funding and mentorship programs (World Bank 2018a).

2.3 MANAGEMENT ACCOUNTING

2.3.1 History and Development of Accounting

According to Trevor and John (2006), MA was introduced as cost accounting. The development of cost accounting was highly examined by Edwards (1937) and Solomons

(1950), by reviewing early text that focused on recording processes, calculating cost per unit, and maintaining bookkeeping records for stock and raw materials. The primary aim of the text was on the financial reporting aspect of accounting work. Their findings show that cost accounting was not recognized until the 1870s when the important shift occurred from cost recording to cost control. However, Boyns and Edwards (1997) argue this perspective and provide evidence of the reason, as stated these practices remained obscured because the cost records had a lower chance of being maintained compared to financial records; as a result, cost accounting got separated from the financial accounting requirements.

According to Boyns *et al.* (2004), the first British text on costing was published in 1887 by Garcke and Fells, titled "Factory Accounting." Boyns and Edwards' (1997) research on cost accounting discovered evidence that traditional MA techniques were present in firms much earlier than suggested by some scholars (Ashton *et al.*1995; Chandler, 1977; Johnson & Kaplan, 1987). The use of cost and MA techniques can be traced back as far as 1690 at the Staverly iron works (Boyns & Edwards, 1997). Boyns and Edwards (1997) found evidence in their study of the Coal, Iron, and Steel industries that cost and financial accounting records were maintained within a single bookkeeping system that demonstrates the allocation of the overheads to cost centres and the use of transfer pricing. The Institute of Cost and Work Accountants (ICWA) was established in 1919. The ICWA aimed to enhance cost accounting professionalism through education, examinations, and the transformation of cost into a more scientific discipline (Bromwich and Bhimani, 2012 :61). Manufacturing companies became dissatisfied with these systems in 1952 (Pears, 1952). Due to developments in various industries, the rules introduced to control monopolistic practices were viewed as anti-competitive (Ahmed & Scapens, 2003).

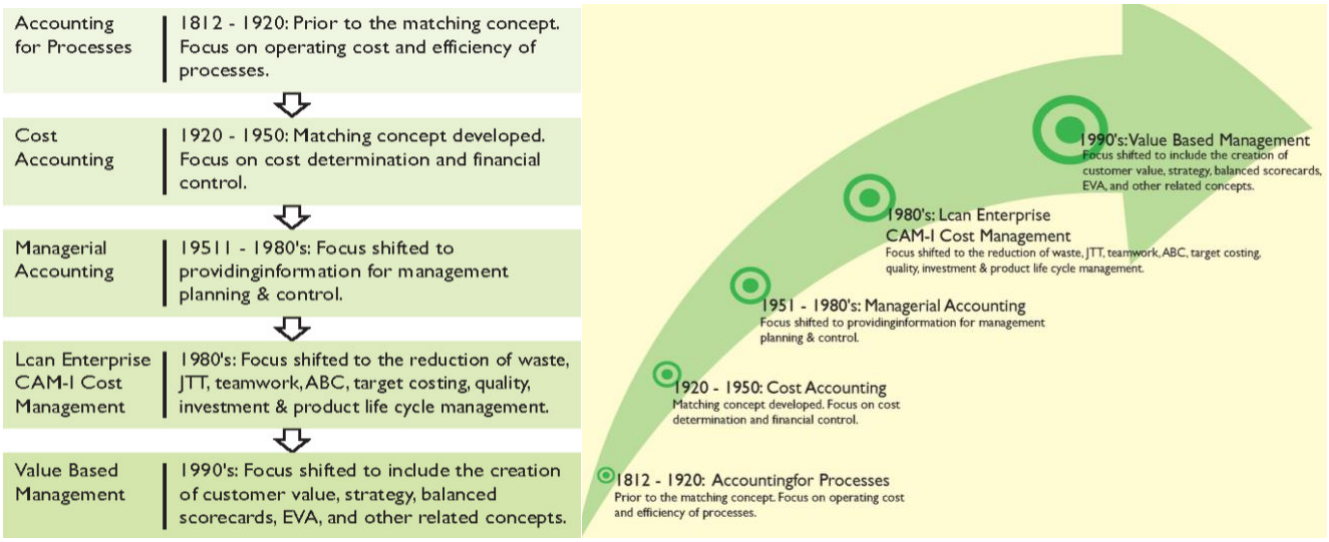
2.3.2 Historical evolution of Management Accounting

In 1998, the International Federation of Accountants (IFAC) presented four stages in the development of MA (Lorenz 2015: 18). The first stage, pre- 1950, was described as a "technical" activity primarily focused on product costs. During this period, the costing systems were slowly getting developed in the UK and remained the primary form of management control in organisations.

The second stage between the 1950s and 60s involved the production of information for management control. However, the continued emphasis on product costing resulted in reactive controls with limited influence on management decision-making. By the mid-1980s, the third stage was reached due to major world events such as the 1973 oil price shock and increased global competition in the early 1980s (Abdel-Kader & Luther, 2006). During this period there was an increase in the use of technology to streamline manufacturing processes and enhance information processing within organisations (Lorenz, 2015).

The decline of the UK manufacturing industry and the rise of the service sector, particularly in leisure and tourism, led to contemporary cost accounting being adopted (Lorenz, 2015: 18). The final stage of IFAC, established in 1995, highlights the continued influence of technology and flatter organisational structures, shifting the focus of management accountants toward creating value through efficient resource utilisation (Lorenz, 2015: 18). The following figure present evaluation of MA as of 1812s to 1990s.

Figure 2. 1: Evolution of management



(IFAC 1998; Lorenz 2015: 18)

Since 1812 MA has undergone a significant transformation from a narrow to a broader function. This evolution has been loaded with criticism from academics regarding the role of MA and utilisation of the practices (Hutaibat, 2005). The main criticism of this evaluation is that MA has failed to adapt to changes in the technological and competitive landscape, resulting in internal accounting information that is often inaccurate and misleading (Drury 2018).

2.3.3 Management Accounting Professional Bodies Input

Professional bodies had played a significant role in shaping the practice of MA over the period as of Chandler (1977) till to date. In particular, the Chartered Institute of Management Accountants (CIMA), formerly known as the Institute of Cost and Work Accountants (ICWA) has been actively involved in supporting research and introducing CMAPs tools into their syllabus. Notably, CIMA has published works by Bromwich and Bhimani (2012 :78), which were commissioned to present the UK perspective on the assertions made by Johnson and Kaplan (1987). Additionally, several other works, such as Dugdale (1994), Dugdale *et al.* (2006), Scapens *et al*. (1996), and Ross and Kovachev (2009), have analysed the changes in MAPs.

In more recent years CIMA (2011), has established a joint venture with the American Institute of Certified Public Accountants (AICPA) to enhance the global profile and development of MA. This collaboration resulted in the creation of a new designation, the Chartered Global Management Accountant (CGMA), which is open to CPA members with qualifying MA experience and associate members of CIMA. The aim of this joint venture is to promote MA and facilitate advancement worldwide (CIMA, 2011).

2.3.4 Definition of Management Accounting

According to Lorenz (2015: 36), no conclusion has been reached on a universally accepted definition of MA. While several definitions exist, some are to an extent broad and lack a suitable framework while others focus on specific research approaches following the innovation (Msomi, 2021: 17). Maziriri and Mapuranga (2018: 12) define MA as a practice of accounting that provides financial information to managers and other internal users to assist in decision-making for the organisation.

According to CIMA (2020), the fundamental idea underlying MA is that it must deliver information to the management within three strategies that include those in the table 2.3 below.

Table 2. 3: Definition components of MA by CIMA

Plans	Consists of making sure that the enterprise strategies have enough resources.

Making decisions	Consists of collecting and analysing data to come to long-term and short-term decisions that will maximise the productivity and efficiency of the business.
Control	Enable management to ensure that their strategies are followed, the enterprise is in control of expenses and processes, and the staff is working effectively.

Source: Selva and Prabhu (2020)

2.3.5 The Traditional Management Accounting Practices (TMAPs) vs Contemporary Management Accounting Practices (CMAPs)

Mihaylova *et al*. (2022: 310) define TMAPs focuses on keeping costs low and tracking historical financial data where old generation used these methods when running business years ago. This tool is useful in businesses controlling their spending and maintain stable profits, furthermore, using this practice is simple that include budgeting and cost control were more effective in previous industrial revolutions (Ekbatani *et al*, 2008: 5). TMAPs focusing only on costs, it may miss out on opportunities for innovation and growth and as time changes TMAPs encounter challenges adapt well to changes in the market or unexpected events (Lohan, 2013: 82).

According to Alzoubi (2018: 139) CMAPs is adopted in modern currently where more tools are adapting to what happening now and planning for the future. Janudin *et al.,* (2019: 131) pointed out that adopting CMAPs assist in real-time reporting which making it more possible to making decisions faster and respond to changes in the market. In additional, this practice considering factors like customer satisfaction and employee engagement helps create a more well-rounded business. Mihaylova, and Papazov, (2022: 311) stated that adopting CMAPs is expansive as the technology and systems need real-time reporting and may seem more complex due the considered all broadly. MA has evolved over time, and the below table present distinct differences between TMAPs and CMAPs.

Table 2. 4: TMAPs vs CMAPs

Aspect	**Traditional Management Accounting Practices**	**Contemporary Management Accounting Practices**
Cost Focus	Emphasizes cost control and reduction.	Shifts from cost control to value creation.

Historical Financial Reporting	Primarily concerned with historical data.	Emphasizes real-time or frequent reporting.
Departmental Silos	Often department-centric and segmented.	Promotes cross-functional collaboration.
Single-Dimensional Metrics	Focuses on financial metrics (e.g., ROI).	Considers both financial and non-financial metrics.
Fixed Performance Metrics	Uses fixed budgets and predetermined metrics.	Adopts flexible budgeting and adjusts to changes.
Strategic Focus	Less focused on supporting organizational strategy.	Aligns with organizational strategy and goals.
Real-Time Reporting	Relies on periodic reports after the fact.	Utilizes advanced information systems for real-time reporting.
Cross-Functional Collaboration	Limited communication between departments.	Promotes collaboration and recognizes interconnectivity.
Multidimensional Metrics	Primarily financial metrics (e.g., cost per unit).	Includes a balanced scorecard with diverse metrics.
Flexible Budgeting	Less adaptable to changes in the business environment.	Adapts to changes through flexible budgeting.
Risk Management	Limited integration of risk management.	Integrates risk management into decision-making.
Activity-Based Costing	Traditional costing methods like absorption costing.	Uses activity-based costing for more accurate allocation.
Focus on Customer Value	Less emphasis on creating value for customers.	Emphasizes creating value for customers.
Cost Focus	Emphasizes cost control and reduction.	Shifts from cost control to value creation.
Historical Financial Reporting	Primarily concerned with historical data.	Emphasizes real-time or frequent reporting.
Departmental Silos	Often department-centric and segmented.	Promotes cross-functional collaboration.
Single-Dimensional Metrics	Focuses on financial metrics (e.g., ROI).	Considers both financial and non-financial metrics.

Source: Adopted by Wilson and Chua cited by Ashfaq *et al.* 2014, Mihaylova *et al.* 2022)

2.3.6 Traditional Management Accounting Practices

TMAPs is defined above as old vision of CMAPs. TMAPs are inadequate to deliver the information required in this 21st century (Shah *et al.* 2011). Kefasi (2019: 15) states that a majority of the scholars are against TMAPs as they focus more on previous events ignore the environmental challenges and when managers are planning, analysing, and

generating business decision-making in the emerging period it becomes a challenge.

Johnson and Kaplan (1987); Kefasi (2019: 15); Maduekwe (2016: 43); Alzoubi (2018: 369) argue on what practices tools are included in TMAPs that delivering important and accurate information for making-decisions regardless current rapid technology development and intense competition. These techniques, originating from the industrial age of 1812s to 1915s are categorised as TMAPs within the context of Johnson and Kaplan (1987) study.

Empirical studies on TMAPs

Boyns *et al.*'s (1968) study of TMAPs show the significance adoption of TMAP tools in supporting management to make accurate decisions and the capability to determine total costs and profit. Boyns and Edwards (1997) discovered in their study that standard costing was used in businesses considerably early as 1960 when cost accounting methods were first applied (Boyns & Edwards, 1997).

Abernethy and Brownell (1997) studied the behavioural implications of traditional budgeting systems. The findings of their show budgeting are less utilised. Cooper and Kaplan (1991) studied traditional costing systems and introduced the concept of ABC. The findings of their study show the importance of better understanding cost drivers and enhancing aspects of cost control. Johnson and Kaplan (1987) conducted a seminal study where they found that TMAPs fail to adapt to changing business environments. Researchers argued that traditional practices lacked relevance and did not provide the necessary information for effective decision- making. The importance shifts toward more CMAPs that includes advanced tools flexible budgets and other (Johnson & Kaplan, 1987). Ragazou (2021) studied the TMAPs of SMEs in the UK. Findings showed that mostly SEs rely on TMAPs, such as absorption costing and budgeting, due to their perceived. Bawaneh (2018), study the MAPs used by manufacturing companies and the study found that TMAPs, including job costing and standard costing, are still relevant in the manufacturing sector. Chand and Sharma's (2021) findings show that TMAPs such as cost-volume-profit analysis and budgeting are prevalent in the hotel industry globally.

Hsu's (2006) study on costing and price decision. The findings reveal that traditional

costing methods, such as absorption costing and job costing, are widely used in pricing decisions in California hospital. Zweni (2017) studied the factors affecting the management of the budget. The results showed that traditional budgeting, such as incremental budgeting and top-down budgeting, provide stability and control but may hinder adaptability in rapidly changing environments. Beusch (2020) studied MA and control for sustainability and the study's findings show the growing trend of incorporating sustainability measures into MA systems. Examining previous data evidence indicates that various TMAPs were adopted from the late 1800s aiming to support organizations and managers. Broadly in the above courted studies its noted that entrepreneurs find TMAPs useful as they utilising few till date despite being old. This finding shows that worldwide still preferer the inexpensive tools as they are simpler stated by Msomi (2019: 18). This study intended gather specific tools which are being adopted as the records show lower adoption on previous studies.

2.3.7 Contemporary Management Accounting Practices

Kefasi (2019: 77) CMAPs as define above is a new vision of TMAPs as CMAPs serve a critical role for any successful leading organisation by controlling tasks and reducing the risk of business failure. Marivate (2014: 67-68) posits that CMAPs have a longer-term focus as they assist in achieving entrepreneurial strategies and significantly improve performance to world-class levels, compared to TMAPs, they are more relevant in the current dynamic business environment.

Kefasi (2019: 78) also emphasises the importance of organisations being impacted by technological change, globalisation, and customer expectations. Managers must have management skills to enable enterprises in keeping up with global market competitiveness which as a result, several CMAPs and approaches have been created due to technological advancements that includes (strategic management accounting (1980s), life cycle costing (1980s), balance scorecard(1990s), target costing(1960s), Activity based costing (1980s) (Armitage *et al.* 2016: 48). As innovations complicate production worldwide, organisations are vulnerable to change and become the most inventive (CIMA, 2013: 13; Kefasi, 2019 Lohan, 2013).

The more volume and speed of data distribution increase, the concept of long-term economic progress becomes questionable (CIMA, 2019: 2; Neziraj *at. al,* 2018: 22).

Most significantly, businesses respond appropriately to the potential threats and preserve the generated economic assets when data is scarce, difficult to grasp or necessitates in complicated technology (CIMA, 2019: 6; Neziraj & Shaqiri, 2018). According to Drury (2018), CMAPs are concerned with the supply of information to enhance the enterprise's internal decision-making, performance, and affiance of strategy. Cele (2020: 34) advocates for the utilisation of CMAPs in the organisation to assist in combat social and climate changes and intervene in the global crises that businesses are confronting.

For all enterprises to function better, CMAPs is crucial for better operations (Adu-Gyamfi & Chipwere 2020). However, some SEs believe that CMAPs are only necessary and suited for large businesses, which is why there is limited uptake of CMAPs, particularly in developing nations (Ahmad 2012: 43; Dlamini & Schutte 2021: 8). CMAPs also build sustainability values through innovative decision-making (CIMA, 2014: 5). Additionally, CMAPs make it easier to access relevant and accurate information to support business activities and support decision-making (Van der Poll and Nartey, 2021). CMAPs are relevant and expensive but needed by enterprises as they are easy the process of managing the accounts.

According to Nuhu *et al.* (2016: 109), there are several functions of CMAPs in the organisation. Some of the are:

- Improved decision-making - CMAPs provide accurate and relevant financial and non-financial information to managers, enabling them to make informed decisions.
- Cost control - CMAPs help organisations identify and control costs, which can lead to increased efficiency and profitability.
- Budgeting and forecasting - CMAPs help organisations plan by setting financial goals and forecasting future financial performance.
- Performance measurement - CMAPs help organisations track and measure performance, which can be used to identify areas for improvement and track progress.
- Strategic planning - CMAPs provide information that can be used to support strategic planning and decision-making.
- Competitive advantage - Organisations that effectively use CMAPs are better equipped to identify and take advantage of opportunities for growth and improvement.
- Compliance - CMAPs help organisations comply with financial and legal regulations, which can reduce the risk of financial penalties or legal action.
- Improved communication - CMAPs can be used to communicate financial information to stakeholders, which can improve transparency and trust.
- Risk management: CMAPs help organisations identify and manage risks, which can help to reduce potential losses.

- Resource allocation: CMAPs help organisations allocate resources effectively, which can lead to increased efficiency and better use of resources.

Development in CMAPs

Armitage *et al.* (2016: 35) stated that cost accounting has evolved through the significant changes that organisation began to operate in a more challenging and competitive environment utilising CMAPs to assist managers make innovative decisions. Maksoud (2010: 136) stated that development emergence of management science and operations research in the 1950s and 1960s that introduced new mathematical and statistical techniques for analysing and solving business challenges led to the creation of CMAPs tools such as linear programming, network analysis, and decision theory. Maduekwe (2016: 11) significant strategic and decision-making approach which was driven by the increasing recognition of long-term planning and the need to align the objectives of the organisation lled to such tool's ABCs, target costing, and strategic MA.

Empirical Studies on CMAPs

Ndwiga (2011: 16) investigated strategic practices adopted by SEs in East Palestine in Bangladesh. Findings showed that SMEs only utilise the following tools: quality cost, process costing, job costing, just-in-time costing, cost management, brand evaluation, strategic pricing and competitor accountant. Karanja *et al.* (2013: 16) investigated the Kenyan SEs where the findings showed that CMAP tools are under-adopted and hardly documented including cost volume pricing, process costing, and absorption costing.

Cele (2020: 20), in SA noted that in recent years, there has been a significant growth in the role of MA in providing information to support environmental and social reporting, this has led to the development of new approaches such as triple- bottom-line accounting and sustainability accounting. Kefasi (2019: 77), in SA states that CMAPs are constantly evolving new tools and techniques being developed to help managers make better decisions, planning and controlling purposes in an ever-changing business environment. "CMAP techniques had blended all capabilities of both old and new practices" (Kefasi, 2019: 63). Kefasi (2019: 103) show that in Cape Town manufacturing SEs, SA majority used costing, budgeting and performance measurement tools. This study seeks deeper the background check on what skills management obtained to operates the business in the township area and what extent business owners they have

gone for their businesses. Despite the advantages of adopting CMAPs as the updated compares to TMAPs it noted not many companies are not utilising them. Reasons of not utilising this tool includes lack of expensive educational skill, the expensive software and expansive skilled labours in study of Cele (2020). Numerus studies has been conducted in MAPs where tools seem to be utilised more frequently and due to numbers of reasons. These findings show that in developed, developing countries have lower use rate of CMAPs even for bigger industries and sectors which rase a gap in SEs.

2.4 MA PRACTISE TOOLS

This section presents detailed discussion of the tools for CMAPs and TMAPs.

2.4.1 Budgeting

Over time, the concept of a budget has changed, and the majority of scholars accepted the definition that summarises budgeting as a quantitative crucial planning tool (Albalaki *et al.* 2019; Cele 2020). Prime Minister and Chancellor of the Exchequer Sir Robert Walpole may be the first to utilise the term "budget" in England in 1733 (Walpole, 1733). Budgeting plans have been existing and been adopted for future planning for more than a century (Lorenz *et al.* 2015). Since the 1980s, traditional budgeting has been a major source of positivity in an organisation, which has grown bigger as organisations kept evolving and as market grows the competition with unpredictable increase (Cele, 2020: 74). Even though the budget is indeed regarded as a crucial practice for the planning process, Abogun (2012: 179) argues that the budget process is expensive, warped by strategies adopted, and primarily concerned with cost reductions which can lead organisations to view budgeting plans as not crucial for business existence and avoid utilising budgeting as a result.

According to Akmeşe and Bayrakçı (2016: 14), budgeting can be created independently either for business or individual purposes. Janudin *et al.* (2019: 130) research highlighted and observed that the majority of organisations do not divide their budgeting into various divisions and detail the budgets which may be labour, inventories, and overheads but instead do combined budgeting like the productions and operations budgeting. Due to insufficient information on budgeting for materials, labour and overheads, the organisations face difficulties on those expenditures (Pavlatos & Paggios, 2009: 87). Every size of enterprise, including SMEs, can succeed or fail based on the amount of knowledge they have on manage business finances (Dladla 2016: 9).

According to studies conducted in a variety of nations of SEs, formalised controlling systems and organisation growth are positively correlated (Berry, 2011: 77).

Advantages of budgeting

Almost all organisations consider budgeting as a crucial controlling tool (Hansen *et al.* 2021: 12). The fundamental advantages of budgeting and durability come in the associated capacity to fulfil many organisational responsibilities (Akmeşe & Bayrakçı, 2016: 14). Crucial research papers (Drury, 2018) pointed out that on the business front, budgeting tools serve as indispensable instruments for organisations to navigate the complex terrain of financial management. Moreover, these tools enable businesses to monitor cash flow, allocate resources efficiently, and make informed decisions crucial for sustainable growth. Beyond financial control, budgeting tools facilitate effective goal setting, financial planning, and risk management, providing individuals and businesses alike with the means to navigate uncertainties and make strategic decisions (Ahmed *et al.* 2017: 181).

Shim *et al.,* (2011: 26) textbook state that budgeting tools play a pivotal role in both personal finance and business management, highlighting benefits that contribute to financial control and strategic planning. Prior studies emphasize the key goals of budget tools in the organisation as to plan periods' performances, plan the cash for the business and plan for the period everyday productivity (Sulaiman *et al.* 2004; Fruitticher *et al.* 2005; Abdel-Kader e*t al.* 2006. Researchers noted that traditional budgets have become less relevant with the period (Hope *et al.* 1999; Pilkington *et al.* 2007; Banham, 2012). The "traditional budget" method was launched by Fraser and Hope during the mid-1990s and then proceeded by developed by their conference rounded table as a subject which has garnered more attention (Ahmed *et al.* 2017: 181).

Empirical Studies on Budgeting

Prominent past research noted a rise in the academic investigation of the utilisation of the budget as it was simply lacking (Akmeşe & Bayrakç 2016: 16). Very limited studies that are published are undertaken primarily in developed states. The first of these investigations, done in the manner of the survey questionnaires conducted in 2015 by Lorenz, looked into contemporary MA in the UK within the servicing industry. According to data, servicing industry pays close attention to cash budget (78%), rolling forecast

(59%), and extensive sales predictions. Ahmad (2012) investigated the use of MAP by SEs in Malaysia and findings indicated that almost 70% of participants utilize production budgeting, cash-flow and financial statement.

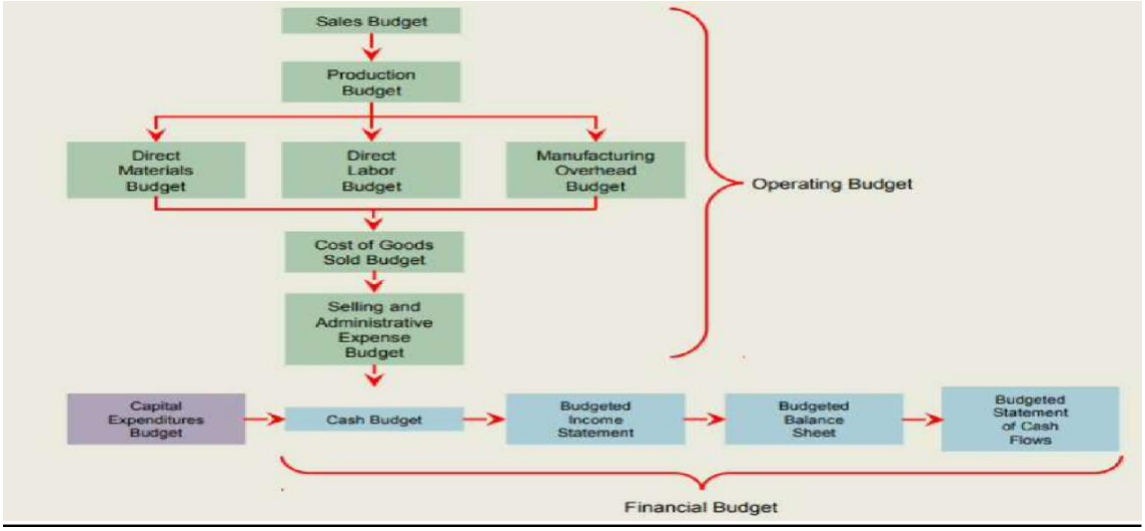
Ekholm and Wallin (2000) surveyed 650 Sweden enterprises and then discovered that most participants (60.70%) supported modifying the budgets. Furthermore, according to Dijkman (2008), in British-Dutch companies listed, 71% of participants were satisfied with the budget processes. 85.01% of companies in the US continued utilising traditional budgets, according to Libby's (2010) observation, among 346 companies thereof, over 50% have planned on the processes.

Mbogo in 2011 researched MA methods that affect the manufacturing performance of Kenya SEs where budgeting was one of those methods with 53%. Gichaaga (2013: 39) came to the general conclusion that budget methods were extensively applied in Kenya. The study findings showed a total of 87% of the manufacturing utilise zero-based budgets, 85% apply controlling costs, 84.0% apply flex-budget, 82% apply activity base, 83% apply budget analysis and 82% apply budget to plan. Additionally, 91% of SE manufacturing applies the budget for strategic purposes planning for the long term. Alleyne and Marshall (2011: 53) examine the budgeting practice utilisation by SEs and finds that budgeting control plans the effectiveness of budgeting and assists businesses on achieving their goals in Barbados.

Approximately 52% of the participants in the study done by Chimucheka *et al.* (2015) at Tshwane utilised formalised financial plans, compared to 68% of participants use traditional budget tools. To improve the survival rate of SEs in Tshwane, SA indicated that financial control systems are essential that includes budgeting tools. McLellan (2013), SA examines the effects of strategy and MA practices alignment on organisational performance. Using the questionnaires, information was gathered across 215 manufacturers where the findings show that all business budget tools to control costs, 98.2% apply it to managing the flow of cash, 96.1% apply it to coordinating activity among the manufacturing division, 91.01% apply it to plan everyday activities, and 65.0% apply it to plan financial statements. The finding on budgeting show higher adoption rate worldwide which rase curiosity in SEs. The above result proves Msomi *et al.* study that stated majority understand the importance and inexpensive on tool which led mostly utilised as is well understood in all sectors. To create the master budget all

budgeting must be completed, the following below figure present all the budgeting tools make up the master budget.

Figure 2. 2: Component of master budgets



Source: Ekbatani, Iran and Sangeladji (2008: 104)

2.4.2 Sales Budget

The academic studies of the sale budget specific are low (Maduekwe 2016:20). According to the CIMA (2020), a sales budget is a financial plan that outlines the projected sales levels and revenue for the period. Prior scholars claim that the key component which are sales, productions, expenditure and incomes an organisation's overall budget is used to plan and control the activities of a business (Maduekwe 2016: 21). Lohan (2013: 18) elaborate the sales budgets calculation where sales forecast are units to be sold during the budget period; selling price is the price used to sell; sales volume is the total units to be sold lastly promoting expenses (includes advertising, commissions, and sales salaries). Prominent scholars (Drury, 2018; Jones *et al.* 2012; Hilton, 2001) stated that when the budget tool is utilised properly, a variety of responsibilities inside the organisation can be fulfilled, including the planning capacity whilst also serving as a source of effectively controlling, enabling cross-organisational coordination, and enabling communication to provide a resource of motivating and allowing the analysis of management performances. Manyuchi (2021: 423) reported that the significance of the sales budget ensuring target sales are achieved as a basis for performance evaluation and cost management.

Empirical Studies on sales budgeting

Ahmed *et al.* (2017: 179) found that over 91.1% of Malaysian businesses analysed utilised sale budgeting. According to Ilias *et al.* (2010: 85-86), 62.1% made by 58 SMEs out of the 60 SEs used sale budgeting in Malaysia study investigated the uses of MAPs. Maduekwe (2016: 188), in Cape Town, SA study the utilisation of the MAPs. Findings show about 84.5% of enterprises utilised sales budgeting. Similarly, Cele's (2020) findings on the study investigating the use of MAPs by SEs in Durban, SA revealed sales budget adoption rates of 70.5%. Sales budgeting seem to get less attention by researchers as few researchers have look in the sales budgeting aspect. International and SA study shows high percentage of using this tool which make since as all business operates with sales or service. The noted reasons business does not use this tool is due to lack of knowledge and some enterprises might be using the tool but not using formal terms. Further studies on sales budgeting by researchers in all industries should be taken into consideration to further the scholar's discussion.

2.4.3 Production Budget

Janudin *et al.* (2019: 130) noted that the majority of production budget is investigated under big manufacturing enterprises. Manyuchi (2021: 442) defines the production budget as a financial plan that outlines the projected production levels and associated production costs per unit and in total with costs separated into variable and fixed components costs for the period. Ahmad (2012: 178) explains that the key aim of the production budget is to control the production activities and costs of the enterprise. Lewis *et al*. (2021: 2) give a different definition of the following elements: units to be produced finished goods, direct materials needed, direct labour budget and manufacturing overhead (Fixed and variable).

Armitage *et al.* (2016: 48) posit that the production budget is prepared based on the sales forecasts, planned inventory levels and production costs that include raw materials, labour, and manufacturing overheads. Sunarni (2013: 619) stated that the significance of the tool is to control production costs, ensure that production goals are met based on performance and cost management. Ilias *et al.* (2010: 85) states that for cost control purposes, the actual production results are compared to the budgeted figures, and the variances are analysed to identify areas that need improvements. Akmese (2016: 106) stated the importance to align the production budget with the

overall budget of the enterprise, where the enterprise objectives and strategies are reflected in the budget.

Empirical Studies on Production Budgeting

The production budget is still widely used, according to most studies including Ahmad (2012), Sunarni (2013), Cele (2020), and Armitage *et al.* (2016). Argument for the innovative budget in the US, Hansen *et al*. (2021) presented an extensive list of concerns for enterprises in continuing to utilise a traditional budget. Dugdale and Lyne's (2006) findings indicate that production budget is still currently used and concluded by mentioning that this tool is more likely to be used in conjunction with other non-financial indicators which are lead time, quality metrics, customer satisfaction, production efficiency and utilisation. Janudin *et al. (*2019: 130) highlighted and observed that most SEs do not divide their budgeting into various divisions and detail the budgets which may be labour, inventories, and overheads but these enterprises instead do a combined budget like the production and operations budgets.

Ahmad's (2012: 178-179) investigated the utilisation of MAPs by SEs in Malaysia which included the production budget. The researcher found that the production budgeting was utilised by 89.7% of participants. The findings aligned with research results by Armitage *et al.* (2016: 49) studies the use of MAPs in Australia and Canada. The results of the study show about 73% of SEs in Canada using production budget, compared to 91% of SEs in Australia. Sunarni in 2013 at Indonesia researched the MAPs and the role of MA in manufacturing enterprises. The study found production department are using budgeting for MA, where medium-scale enterprises use 56.7% and big-scale enterprises use 100%. Cele (2020) investigated the use of MAPs by manufacturing SEs in Durban, SA. The study found that 53% of the surveyed SEs used production budgets. The conclusion of production budgeting imperial international and SA locally are being widely used by all scale's enterprises but mostly by manufacturing sector. This imperial makes sense as manufactures need more monitoring and control over production to prevent fraud and benefits in the utilisation of this tool. Despite the fact of being a traditional tool the benefits of using it enterprises still recognises them. The ferly empirical study for this current study is Cele, with the SEs with 53% utilisation rate.

2.4.4 Capital Budget

According to Siziba and Hall (2021: 2) capital budgeting as the “process of evaluating long-term investments which are expected to generate future cash flows or savings and assisting in the decision-making process to determine the best capital projects worth investing”. Moreover, this budget aims to determine the NVP by comparing the cost of investment and the future cash flows that will be generated if investing, collaborating with both NPV method and IRR method to calculate the value of the investment (Manyuchi 2021: 424). According to Sunarni (2013: 619), capital budgeting is a crucial process for the enterprise as it assists them to make informed decisions about resource allocation and achieving long-term growth. Malenko (2019: 1749) stated that adopting this tool, it done at the planning stage, after which the project is accepted and implemented or rejected.

According to Lowry (1990), this method was first adopted by railroad designers in the mid-1800s in the US. Magni (2015: 16) explains this approach as providing the enterprise with the capability to make decision about capital project and enhance long-term decision-making through the adoption of various instruments such as IRR, MIRR and payback. According to Habib (2020: 69) and Akmese (2016: 106), several methods correlate with the adoption of capital budgeting, including NPV in calculating the present value of the future cash flows generated by an investment, and subtracts the initial investment to determine the NPV of the investment and the IRR which calculates the rate at which the net present value of an investment is equal to zero.

Although the theoretical basis for all these tools can be traced back to the beginning of the 20th century, they gained significant recognition and established a longstanding tradition due to the contributions of Fishers and Hick (1930) and subsequent developments by Young (1946). The concept of NVP was first applied to the financial statements in the service industry during the 14th century, as noted by Chatfields in 1977. Designers and economists during the industrial revolution of the 19th century began recognising the challenges of capital budgeting, albeit with a focus on "naive" concepts such as payback and accounting rate of return. Researchers, including Chatfields (1997), categorise these methods as either "naive" or "sophisticated" based on their level of academic rigour. In this context, rigour refers to how effectively a particular method achieves the goal of capital maximisation for shareholders using the most conservative assumptions possible. Some examples of naive strategies include

ARR, and Payback.

Empirical Studies on Capital Budget

Many studies of this tool were undertaken over several years throughout the globe, defining the techniques utilised and how DCF was already applied, such as Graham and Harvey (2001) in the US and Drury and Tayles (1996) in the UK study both reveal significant usage payback, while Ryan and Ryan, (2002) found NPV to have the most frequent used techniques in the US and Kesters *et al. (*1999) studies confirmed that in developed countries and big enterprises use the NPV technique.

Clintons (2012) discovered that the capital budget tool was applied less frequently during 2012 compared to 2003 in the US, and Ross *et al.* (2008) demonstrate that NPV is the most utilised tool for making capital investment decisions in about 80% of the participants, payback is the second most popular tool in companies which is being influenced by CIMA globally. Sulaiman (2004) highlighted that the capital budget is less used in China. Akmese (2016) investigated the main MA tools used and key MA issues in the accommodation industry in Konya/Turkey. The findings of the study indicated that capital budgeting is extremely important, 50% (12 enterprises), very important, 25% (6 enterprises), and somewhat important, 25% (6 enterprises). Armitage, Webb and Glynn (2016) determined the extent to which common MAPs and tools are being used by Small and Medium Enterprises. The results of the 22 participating companies regarding the use extent of the 19 MAPs were examined in this study. The study found that capital budgeting utilisation was 23% lower in SEs than all other MAPs, and 27% Medium enterprises adopting the tool.

Siziba and Hall (2021) conducted a study in examining the evolution of the application of capital budgeting techniques in selected developing countries (SA and India) and developed countries UK and US) in recent decades. The study found that South African and India firms has the similar correlation as each county are increasingly using NPV technique and less of ARR. However, there is no significant difference between the use of these techniques by firms in SA and firms in the UK and the USA. Kefasi's (2019) study in Cape Town, SA found that in few SEs use the NVP as they used few IRR (6%) and few ARR (6%). Inconclusion based on this analysis the capital budgeting is mostly used international developed countries compare to local developing county. SA studies

have less usage rate on capital budgeting tool, while globally enterprises have more usage rate. Hence the importance of using this tool is highly noted by Akmese of 2016 study. This proves the gap which this current study will fill In SEs, SA.

2.4.5 Kaizen Costing

According to Ogunjuboun (2009: 283), Kaizen is an approach that originated in Japan and is based on the principles of continuous improvement. Lorenz (2015: 33) stated the goal of kaizen as to reduce costs and improve efficiency by identifying and eliminating waste in all areas of the enterprise's operations and this is achieved through a series of small, incremental improvements. CIMA (2013: 99), supports and explains kaizen as a method of accounting that is used to improve the efficiency and effectiveness of an enterprise operations by reducing costs and increasing quality. The continuous improvement approach is based on the principles of kaizen, a Japanese term that means "improvement" or "change for the better".

Kaizen costing requires detailed enterprise operations data to able identify and track the costs associated with specific activities, and the ability to identify opportunities for cost savings (Alzoubi 2018: 369). According to Dubey *et al.* (2019: 343), kaizen is used in manufacturing and service industries globally by developing at Jordan developed countries that includes (UKs, US, and Japan), as well as in budgeting, performance evaluation, and cost management. The researchers stated that it is particularly useful for companies that operate in industries where efficiency and quality are critical success factors (Ahmad 2012: 178). The Kaizen costing tool concentrates on continual innovations towards the production costs during the manufacturing of the production and having management establishing reducing costs target (Alzoubi 2018: 369). Despite the substantial evidence that scholarly emphasis has been focused on replicating Japanese concepts, there is scant scholarly evidence about how broadly the concepts of Kaizen have gone across Japanese enterprises as a legitimate program (Akmese 2015: 54). Furthermore, (Akmese 2016: 55), made the case that an enterprise restructuring will be required to completely incorporate the practices inside the UK due to sociological contrasts between both the UK and the Japanese.

Empirical studies on kaizen costing

Studies of adoption kaizen costing are limited. Alzoubi (2018) investigated use of MAP

in the Jordanian, and findings shoe that majority used the tool. From the 25 industrials of the period of 2013-2016. The finding shows the kaizen costing have the 80% adoption rate, Target Costing Medium 53%, Activity Based Costing 32% and Balanced Scorecard lowest 21% when comparing the rankings. Miranda (2020) study target costing and kaizen costing in Japanese automobile. The research found that the overall average adoption of cost-costing tools ranges from 50.0% to 73.0%. In conclusion, from the limited studies above the utilisation rate is high in the developed countries where in developing countries that includes SA's the is no studies look in kaizen utilisation. Which shows a gap for the current study in this ongoing conversation of kaizen costing.

2.4.6 Product Lifecycle Costing

Product Life Cycle (PLC) costing tool tracks and accumulates costs associated with goods from the time it is developed until it is discontinued (Bhimani, 2012 :63). Bassily and Elamer (2020: 3) support and define PLC costing as a method that traces the costs of a product transition lifecycle stages. PLC origins linked to a 1964 paper by the Logistic Managements Institution regarding equipment, and starting in 1974, the US government adopted it in this context (Dahiya *et al*. 2020: 3). Numerous academic studies have emphasised how the accelerated pace of technology innovation and shorter lifespans of product cycles have rendered PLC essential to the success of enterprises (Dahiya *et al.* 2020: 7).

El-Shishini (2017: 81) claims that PLC is widely used in manufacturing and PLC costing requires a detailed enterprise operations information, to be able to identify and track the costs associated with specific activities, and the ability to identify opportunities for cost savings. Habib (2020: 18-19) and Ruviaro *et al.* (2020: 2) agree and further explain that PLC consists of 4 stages which include the introduction stage, the growth stage, the maturity stage and the decline stage. Habib (2020: 19) noted that using the PLC tool enterprises can benefit from better understanding the financial performance of a product, identifying areas for cost reduction, and making more informed decisions about product development and marketing (Habib, 2020: 19).

A study by (Dahiya 2020: 4) presents comments upon the lifecycle costing and recommends several advantages of adopting the tool including the capability to obtain better decision-making information for pricing. Lorenz, (2015: 41) explain that improve

production profitability by focusing on short-term perception of decision-making and enables the damage of the environment to be considered. According to Atia *et al.* (2020: 5), regardless of the advantages, insufficient evidence supports the adoption in the enterprise environment.

Empirical studies on product Life Cycle costing

In Pakistan, Fowzia (2010: 59) researched the enterprise strategy and the strategy effectiveness of industrial companies. In Bangladesh, 81% of the SEs surveyed adopted the PLC according to Fowzia (2010: 59). Nevertheless, Yalcins (2012: 107), found only 19.1% of SEs examined the adoption of PLC in Turkey. The investigations lead to the conclusion that PLC is used by SEs; however, this costing tool may not recommend being applied to enterprises in developing countries like S.A as its costly. A study by Karanja (2013) in SEs in Kenya PLC only 3 using the tool at 2.5%, businesses using the tool at 2.5%.

Atia *et al.* (2020) conducted a study on PLC and decision-making towards sustainable development. The study found that out of 209 participants' responses, 70% agreed that LPC supports decision-making, 20% did not adopt the tool as it was not useful for their enterprise while 10% was in neutral. In 2017, El-Shishini investigated the adoption of MAPs in 37 hotels in Bahrain. The results of the study indicated that the use of product PLC about 46% were not using the tool and sometimes used the tool 35.1%, often used the tool (13.5%) and used very often the tool (5.4%). Findings show a lower utilisation rate of PLC. Lino and Tenucci (2007) study the use of Strategic MAPs in Italy. The findings reveal that out of the 79 respondents, a total of 42 companies adopted the PLC 53% and only 47% did not adopt the tool. Karanja (2013) study the adoption of MAPs in SMEs in Kenya. The study shows the finding of only 2.5% (3 enterprises) using PLC.

Based on the imperial review the PLC, SA locally have limited study on PLC under the costing toll as an CMAPs tools compare to globally usage. Globally only Bangladesh has a high usage rate on PLC the rest have a lower use rate on the tool which rage between 50% to 2.5. Based on the prior studies this tool is expansive and requires the big enterprises that can affords skilled labours, and this create a gap on SAs entrepreneurs, and this study will investigate the SEs. The study found that enterprises lack the background knowledge on using the MAPs which lead to limit ability to compare

various tools suitable for each enterprise.

2.4.7 Quality Costing

According to Grobler *et al.* (2019: 5), quality costing is used to determine the cost of producing goods that meet a certain level of quality, and it involves identifying the costs associated with preventing, and correcting quality problems, as well as the costs of implementing quality control measures. Akmeşe and Bayrakç (2016: 13) highlighted the goal of quality costing as to minimise the overall cost of producing goods while improving their quality. Bhimani *et al.* (2012: 29) and CIMA (2013: 90) stated that the quality costing tool separates the total cost of quality into four groups: those associated with issue prevention; evaluation cost incurred in recognizing quality issues; internal failures cost involved when defects are discovered before the customers receiving the products; and extent-failing cost incurred to address the quality issues afterwards the customer has received the products. After evaluating the research on the adoption of this tool in practice, Sunarni (2013: 619) concludes that although the quality costing may not broadly utilised, it is extremely effective in the limited situations where it has been adopted, in preventing, appraisal, and failure method being the most popular.

Maduekwe (2016: 53) posits that the main advantage of quality costing is that it assists the enterprise to identify and understand the costs of producing a product with a specific level of quality. Caplan (2012: 73) stated that by understanding these costs, enterprises can then make informed decisions about cost reduction while improving the quality of their products. Ashfaq, *et al.* (2014: 107) state that this tool is widely used in manufacturing industries. According to Akmese (2016: 14), it is particularly useful for enterprises that operate in industries where quality is a critical factor in customer satisfaction and success. Quality costing requires detailed data on the enterprise's operations, the ability to identify and track the quality costs associated with specific activities, and the opportunities for cost savings (Armitage *et al.* 2016: 36).

Empirical studies on quality costing

Akmeşe and Bayrakçı (2016) investigated the use of MAPs in fast food in Kenya. The study revealed that Kenyan enterprises using more TMAPs and less using CMAPs that include "the cost of quality". Sunarni in 2013 investigated the uses of MAPs in Indonesian manufacturing. The study shows only 46 manufacturing companies using

the quality tool. Lino and Tenucci (2007) investigated the adoption of MAPs and finding show that about 43.3% medium-sized companies and 25% large companies used the quality costing. Armitage *et al.* (2016) looked the extent to which common MAPs and tools are being used by SMEs in Canadian and Australian. Findings showed that from the 22 participating, about 73% do not using the quality costing and 27% use the tool. In conclusion SA enterprises have limited studies in utilising quality costing based on the imperial analysis as majority are globally studies. Quality costing is less used shown above with the utilising rates of less than 44%, in which are boosted by being a large manufacturing enterprise. The current study will fill the gap for SA adoption rate on where enterprises are standing with the usage rate on the quality costing for SEs, and which will led to providing the deep knowledge level of owners on the quality tool.

2.4.8 Target Costing

According to Akmese and Bayrakc (2016: 13), target costing is a tool for evaluating the cost at which a good with a specified amount and capability needs to be produced to maximise revenue. When developing new products this method is very helpful throughout the phases of designing and developing stated by (Bhimani *et al.* 2012: 32), before the manufacturing process commences, target costing establishes the accepted limits of a production cost. This entails the selection of goods that may be in higher demand, assessing a potential price, and subtracting the anticipated profit margin (Cele, 2020: 22).

According to Monden (2019: 25), target costing is mostly used in manufacturing industries to determine the price at which a product must be produced to achieve a desired profit level. The process involves setting a target cost for a product and then working backwards to determine the necessary costs of materials, labour, and overhead to achieve that target cost. Alzoubi (2018: 369) states that the goal of target costing is to create a product that meets the needs of customers while also achieving the desired level of profitability for the enterprise. This method was developed among the Japanese (Lorenz 2015: 57) and is frequently adopted in combination with other techniques like Kaizen cost, value-analysis costing, and value engineering to lower the total cost down to the desired value.

Benefits

Target costing has been shown to have several advantages, which include a long- term method of costs control, focus on the customer, connections with suppliers, and values contributed, according to several studies including those of Kefasi (2019: 77), Cele (2020: 20), Lorenz (2015) and Schutte and Dlamini (2021: 5). According to Alzoubi (2018: 369), the main advantage of target costing is that it assists enterprises to design and develop products that are affordable for customers and assisting in identifying opportunities for reducing costs in the product development process. According to Cele (2020: 22), target costing is particularly useful for enterprises that operate in highly competitive industries where the ability to offer products at competitive prices is critical to success. Almatarneh *et al.* (2022: 14) support this and add that it requires detailed information on the enterprise's operations, the ability to identify and track the costs associated with specific activities, and the ability to identify opportunities for cost saving.

Empirical studies on target costing

According to Ansari (2015), using the Institute of Management Accountants (IMA) target costing tool have been rated 10th in a scale of up to 11th as target costing is reportedly extensively applied among top companies all around the globe. Sunarni (2013) posits that target costing is an effective MAPs that every single enterprise in Indonesia adopted and is believed to be relevant. Target costing was adopted by 41.2% of the Small-sized enterprises surveyed in Turkey (Akmeşe & Bayrakçı 2016). Moreover, Karanja *et al*. (2013: 12) state that target costing was adopted by 19.30% of the SEs examined in Kenya. Alzoubi investigated the use of CMAPs in the Jordanian between 2013 and 2017. Out of 25 corporations, the study's results show that target costing, activity- based costing and balanced scorecards were the lowest utilised tools when comparing the budgeting and performances tools. Armitage *et al.* (2016) determined the extent to which common MAPs are being used by SMEs in Canadian and the results on target costing showed 72% do not adopting the tool and 28% adopted the tool.

Kasa and Epoka (2016) study the use of MAPs in manufacturing companies at Albania, and the findings showed that none of the surveyed companies use target costing. Sunarni (2013) study the MAPs and MA role in Indonesia in manufacturing enterprises. Findings reveals that about 33.9% use the target costing in Medium-Scale enterprises use 22.3% and big-scale enterprises use 43.8%. Karanja (2013) researched the adoption

of modern MAPs in SMEs in Kenya. The result of the study shows that firms utilising target costing was 19.20% of a sample of 23 firms. Cele (2020) investigated the use of MAPs in SEs at Durban, SA, and the results indicated that 21.2% of the surveyed SEs use target costing. In conclusion developed countries have unlimited studies of target costing utilisation compered to developing counties that includes SA have a limited study. In the available studies the utilisation rate of South Africans is only 21%the highest in Durban compere to international where the observed study shows about 50% utilisation rate. This revolution shows that majority do not find this tool as worthy to invest as one of the reasons tools are not utilising. This study will bridge the gap and proceed with the continuances debate on MAPs worldwide.

2.4.9 Value Chain Costing (VCC)

Porter created the value chain in 1985 to study cost factors and cost drivers while splitting each enterprise's operations among strategically important activities (Lorenz 2015: 36). Authors further update the models over the period to demonstrate their relevance to the management team, including Shank and Govindarajan's (1992-1993) study, which developed a cost strategy utilising the model (Lorenz 2015). Ashfaq *et al.* (2014: 107) highlighted that VCC must consider the connections between the enterprise's customers and suppliers to offer an exterior examination that could otherwise become an interior linkage.

According to Alzoubi (2018: 369), VCC is a tool that traces the costs of a product to the various activities that are performed to produce it, and this includes all the activities that are involved in the production process, from the sourcing of raw materials to the delivery of the final product to the customer. CIMA (2013: 104) highlighted that by analysing the costs associated with each activity, an enterprise can identify opportunities to improve efficiency and reduce costs, which can ultimately lead to increased profitability. According to Abdullah and Senana (2019: 1544) VCC involves identifying the specific activities that are performed to create value for the customer and then assigning costs to those activities and the costs are then passed on to the products that consume the activities. In addition, the tool is a model that describes the series of activities that an enterprise performs to design, produce, market, deliver, and supports the product.

According to CIMA (2013: 104), the VCC tool assists in understanding the cost of each

activity for each product. Lorenz (2015: 58) further explains that by identifying the cost of each activity, companies can identify areas where costs can be reduced, and efficiency improved. This tool is widely used in manufacturing industries and have complicated processes and a large number of indirect costs (Abdullah & Senana 2019: 8), this tool is a sophisticated method and requires significant information in data collection and analysis and also requires detailed data on the enterprise's operations and the ability to identify and track the costs associated with specific activities.

Abdullah *et al.* (2019: 1544) reported that by analysing each activity in the value chain, companies can identify areas where they can improve efficiency, reduce costs, and create a competitive advantage. The researcher made clear examples of companies that may find outsourcing certain support costs and free up resources for more important activities. Lino and Tenucci (2007: 9) stated that the value chain analysis tool also allows companies to identify opportunities for differentiation. According to Jack (2009: 4), VCC analysis can be applied to a single product, a product line, or an entire enterprise and it is an important tool for strategic planning and decision-making and can be used to develop a cost-effective business model that creates value for customers while also generating profits for the enterprise.

Empirical studies on value chain costing

Lorenz (2015) investigated MAPs adoption for cost methods where the costing adoption rate varied from 34.1% to 52.2%. The findings show VCC usage rate of 34% in comparison with 44% usage rate of ABC. Lino and Tenucci (2007) study the adoption of MA techniques. The findings showed that out of the 84 respondents, a total of 56 (66%) enterprises adoption of the VCC and only 28 (33%) not adopting the tool. In conclusion the majority enterprises do not use VCC tool, only about 35% utilising the tool international, where SA do not use this too. These revels the limited studied on this topic of utilisation rate of the tool even international. More work needs to be done filling the academic gap, educating the enterprises on benefits of tools, as the finding show that enterprises do not find this tool suitable for their organisation, hence this tool is less benefitable in the targeted cited enterprises.

2.4.10 Throughput Accounting

CIMA (2013: 90) defines Throughput Accounting (TA) as a system of measuring and

managing the flow of materials and information through an enterprise with the intention of maximising the flow of goods to customers. TA aim is to maximise sales through "bottleneck processes" and determine the rates where the enterprises generate more profit (Islam (2015: 19). Habib (2020: 29) states that TA is a method that focuses on identifying the constraint, rather than on managing cost and intend to maximise the enterprise contribution per limited factor. According to Kadhim *et al.* (2020: 763), Goldratt's objective was to improve and simplify MA and focus more on performance.

Islam (2015: 19) claims that this method is often used in manufacturing enterprises and is part of the Theory of Constraints which is a management philosophy that focuses on identifying and eliminating bottlenecks in a system to improve overall performance. Islam (2015: 22) explains how Eli Goldratt originated the term phrase "Theory of Constraints (TOC)" which was recorded in several books and academic articles. TA was never regarded as a problem within the beginning stages of Goldratt's work and neither was contemporary accounting search as a solution (Islam 2015: 21). Although Noreen *et al*. (1995), argue and point out that in Europe and the US MA involve practices and should discover their own tools to assess the effectiveness of their activities. Dugdale and Jones (2006) claim that the adaption of TOC to accounting is what is referred to as throughput accounting.

According to Kadhim *et al.* (2020: 765), the main advantage of TA is it provides a clear focus on generating revenue and managing the constraint while assisting in identifying the activities that are critical to generating revenue and prioritising efforts to improve performance. SAACCA (2011: 3) stated that TA is often particularly useful for enterprises that operate in fast-paced, highly competitive industries where the ability to generate revenue quickly is critical to success. Hayes and Brown (2020: 15) further point out that TA may not widely used but works best when combined with other management tools such as constraint management and lean principles.

Empirical studies on throughput accounting

Lorenz (2015) posit that after the implementation of the tool, follow up studies on the tool show that TA declined as several enterprises finds the tool complicated with many limitations for SEs which made this tool more suitable for large enterprises manufacturing. Dugdale and Jones (2006) revealed that it had been adopted into

teaching resources and the CIMA syllabus. Davies and Sweeting (1991) reported that 40.1% of the 677 UK manufacturing adopted TA. Burns and Yazdifar (2001) stated that almost similar situations occurred throughout Europe and discovered that just 31% of MA adopt TA, even though 39.1% thought it would be significant in the future. Innes *et al.* (2000) updated an initial article by Innes and Mitchel (1995) and reported a reduction in the percentage of enterprises that have adopted and considered implementing a TA system from 1994 to 1999. Drury and Tayles (2000) found a 15.1% take-up ratio in the UK companies they investigated. The study was carried out by Yazdifar and Askarany (2010) in the UK, Australia, and Zealand. The researcher finds that 75% of businesses not adopting the tool because it may not align with their businesses, 5% are not familiar with the tool and 9% are not valued by decision-makers. In conclusion TA tool is more suitable for large manufacturing and SEs find it expensive. Empirical show above shows that TA application rate has declined international and locally where enterprises find other costing more suitable for their business.

2.4.11 Activity-Based Costing

According to Alzoubi (2018: 370), ABC is a method of assigning costs to products, based on the activities that are required to produce them. The goal of ABC is to accurately relocate the true cost of production and to identify areas where costs can be reduced (Caplan 2012: 115). In additional, ABC is suitable for manufacturing, service, and government enterprises. Ashfaq *et al. (*2014: 107) explain the fundamental idea behind ABC is to provide an alternative to the contemporary absorption costing approach used by businesses.

According to the CIMA (2013: 90), the ABC tool was first defined in the late 1980s by Kaplan and Burns and can be considered as the new alternative to absorption costing, allowing managers to better understand the product and customer net profitability. Sunarni (2013: 620), enterprises find ABC sophisticated as it required time to apply while being pricey and taking so much in developing and maintaining. Since the Johnson and Kaplan, 1987, there was proof of a concept uptake; Sunarni (2013) demonstrated how they had been incorporated into teaching resources and the CIMA syllabus. According to Cooper and Kaplan (1991: 130), ABC can provide management teams with comprehensive information as to how goods, branded names, customers, amenities, distributing network each generating turnovers and manage resources. El-

Shishini (2017: 80) concedes that ABC reveals the linkage between performing important operations and the claims those actions end up making on the enterprise resources. According to Alzoubi (2018: 370), the profitable scenario revealed by the ABC analysis enables management to concentrate their efforts on strengthening the processes that will have the most positive effects on their bottom line. Lorenz (2015: 48) believes that from the early 1990s, there was a consistent scholarly concentration on the ABC tool. According to Karanja (2013: 7), the main advantage of ABC is that it provides more accurate information on the costs associated with producing a product. Kasa and Epoka (2016: 47) reported that ABC is widely used in manufacturing, and it is particularly useful for companies that produce a wide range of products with different costs and for companies that have complicated processes and many indirect costs. The tool requires detailed data on the enterprise operations and the ability to identify and track the costs associated with specific activities (El-Shishini 2017: 80).

Empirical studies on activity-based costing

Alzoubi investigated the use of CMAPs in the Jordanian industrial during 2013 and 2017. The finding in rankings ABC and Balanced Scorecard were the lowest utilised tool compered to budgeting and performance tools. Loren's (2015) findings about 67% of participants adopt the whole costing tools and specific about 35% adopt the ABC tool and 65% not using the tool, on the study of MAPS adoption. El-Shishini (2019) investigated MAPs usage in Hotels at Bahrain. The findings shows that about 81.1% do not use the ABC tool and 13.9% used the tool and on the rankings of lower used tool ABC came to 18 out of the 26 other tools. Kasa (2016), study the use of MA for decision making in Albania manufacturing enterprises and the findings indicated that none of the surveyed companies used ABC.

Armitage *et al.,* (2016) researched the common MAPs tool used by SMEs in Canadian. The results of the study show that 95% enterprises do not use the tool and 5% adopt the tool. Akmeşe and Bayrakçı (2016) researched the use of MAP in fast food business in Kenya. The findings of the study showed that out of the total of 37 participants, 31 finds ABC important but only 30 use the tool. Karanja (2013), study the utilisation of the MAPs and findings show that only 5 (4.1%) businesses in Kenya used the ABC tool while Cele (2020) investigated the use of MAPs by SEs in SA, and the study found that the ABC adoption rate was 16.7%. In conclusion ABC have less the 50% adoption rate

worldwide, where the adoption rate international is slightly high with around 40% and local lesser with around 17%. ABC is CMAPs tool, expansive and advances the developing counties have more SEs as it founded more expansive for them.

2.4.12 Standard Costing

According to Habib (2020: 15), standard costing is cost system in which an enterprise predetermines an expected cost for a product and compares the actual costs incurred to the standard. According to Kaplan (2012: 99), standard costing is commonly used in manufacturing industries but can also be applied to other industries such as construction and it is often used in conjunction with other cost management techniques, such as activity-based costing. According to Sunarni (2013: 618), standard costing is a tool that uses predetermined costs to evaluate the performance of an enterprise. The system involves setting a standard cost for each product and comparing that cost with the actual cost incurred during production delivery. Tuan *et al.* (2022: 215) asserts that standard costs are predetermined costs that are based on historical data or estimates of future costs, and they are used to establish a benchmark for evaluating the efficiency of an enterprise operations. Hansen *et al.* (2022: 445) define the tool as system that makes use of variances to control costs. Variances are the differences between the actual costs incurred and the standard costs and they are categorised as favourable or unfavourable depending on whether the actual costs are less or more than the standard costs.

In the US and the UK, the industrial revolutions established CMAPs are credited with the development of standard costs (Fleischman and Tyson, 1998). Standard costs and budget control frequently operate side by side, according to Boyns *et al.* (2006: 265). Although the application of standard costing during the industrialisation period was primitive, it is obvious that the information that resulted during the period was helpful in cost control to many enterprises (Fleischman *et al.* 1998). Boyns *et al*. (2006) also provide compelling evidence of standard costs within the Great British chemicals industries at the beginning of the 20th century. Lorenz (2015) state this cost is limited used in both developed countries and developing countries, as well as in a variety of industries.

Habib (2020: 15) highlighted one of the main application benefits of standard costs as

being the capability for planning. Pham *et al. (*2020: 78) states that standards costs are used to estimate budgeted costs of materials, labour, and factory overheads necessary to produce one unit of goods. Korhonen *et al.* (2016: 263) agree and added other advantages of the tool it provides a means of measuring and evaluating performance and by comparing actual costs to standard costs, it is possible to identify areas where costs can be reduced, and efficiency can be improved. Hansen *et al.* (2021: 446) view standard costing as widely used in manufacturing industries and the tool can be useful in identifying and addressing problems with service delivery and in making decisions about cost control and efficiency improvement.

Empirical studies on standard costing

El-Shishini (2017), investigated the use of MAPs in the 37 hotels in Bahrain. Results indicate a rate of 94.6% hotel do not using the tool and 5.4% used the tool. In the ranking of lowest used tool standard costing come at number 23 at a total of 26 tools compared. Sunarni (2013) researched the role of MA and MAPs in manufacturing enterprises in Indonesia. The finds shows that tool in Medium-Scale enterprises uses 33.3%, Big-scale enterprises uses 50%, and Small- scale enterprises use 16.7%. In conclusion the is limited study on this tool international and locally. Most enterprises find less suitable for small and medium excepted for manufacturing large. The above information highlights the gap for the current study, as part of the ongoing conversation worldwide.

2.4.13 Full production /Absorption costing

Over the period, the definitions of an absorption cost remained constant, and MAPs have set a level of quality for the costing data to be disclosed in accounting records (Abdel-Kader *et al.* 2006). Full production costs are comprised of the variables and fixed production costs. According to Maziriri *et al, (*2018: 12), this tool is used in both manufacturing and service industries to determine the true cost of a product, and can be useful in pricing decisions, budgeting, and cost control. Kefasi (2019: 36) notes that absorption costing calculation includes not only the direct costs such as materials and labour, but also indirect production costs such as rent, insurance, and depreciation.

Lorenz (2015) stated that during the early 1950s, Kaplan stated the purpose of a cost-accounting system was to provide the analysis and categorisations of necessary expenditures for an acceptable accuracy level in determining the total cost of a product.

Between the 1960s and 1970s a study was conducted on the adoption of absorption costs, to either include or not the fixed factory overheads in enterprise production cost (Abdel-Kader and Luther, 2006). As a result, the full production tools of determining the costs of labour, materials, and factory overheads using labours to be absorbed overheads have persisted across time to provide data that will assist in making better decisions and exercising control.

Hansen *et al.* (2021: 443) the absorption cost is to provide accurate information on the costs associated with producing a product and as it is useful for financial reporting, budgeting and decision-making for pricing and production planning. Lorenz (2015: 26) added that absorption costing helps in identifying the profitability of a product. According to CIMA (2013: 80), this tool is an accepted method of accounting under the Generally Accepted Accounting Principles (GAAP) and International Financial Reporting Standards (IFRS).

Empirical studies on full production/ absorption costing

Abdel-Kader and Luther (2008) found that enterprises regarded absorption costs as essential in UK. Chenhall and Langfield (1998) found that 81% of Australian manufacturing firms used absorption costing. Clinton and White's (2012) study in the US demonstrate sustained comprehensive utilisation of the technique, and so does Ross and Kovachev (2009) work base on the CIMA members globally. According to Armitage *et al.* (2016: 48), approximately 37% of the SMEs investigated in Canadian and 19% of those in Australia adopted a variable costs tool.

El-Shishini (2017) investigated the Use of MAPs at Hotels in Bahrain. Results of the study indicated that the use of absorption costing rate is 91.8% and under ranked of highly used to 2 in the total of 26 tools. Ahmad's (2012) study the MAPs in Malaysian SEs examining the total of 46 MAPs. The finding shows that absorption costing about 46% enterprises using the tool where medium - 49% and 51% are small enterprises. Cele (2020) investigated the adoption rate of MAPs in SME at Durban. The findings show that the adoption rate for absorption costing was 54%. This empirical analysis shows not enough studies on abortion /full production costing. International studies show the high usage rate on the tool in all size, industry and sector. Base on this analysis the current researcher noted the importance of this study for the ongoing

conversation.

2.4.14 Attribute Costing

Hansen *et al.* (2021: 228) attribute costing is a tool for assigning the cost of a product based on the specific attributes of the product, rather than using a single cost for all products of the same type. Hansen *et al.* (2021) this tool is used to assign all the costs associated with producing a product or providing a service, including both variable and fixed costs. In additional, this tool is good for manufacturing and service provision where a wide range of costs are associated with production delivery.

According to Guilding *et al*. (2000s), attribution cost is predicated by Lancaster (1966s to 1979s) where explain goods as just a bunch of qualities that attract customers. In the restructuring of strategic MA, Bromwich was responsible for placing attribution costs at the forefront. Costing actual advantages that good offers to customers is the primary objective of attribute costing (Roslender & Hart, 2003). Guilding *et al*. (2000: 118), state that good qualities of products include elements such as "stability, operational performance dimensions, warranties conditions, the level of finishing and trimming, as well as service aspects like the guarantee of supplies even after providing the customers."

Lino and Tenucci (2007: 7) state that attribute costing helps the business to understand the full cost of a product which can be useful in pricing decisions, budgeting, and cost control. Marlina (2020: 279) highlighted that it also helps in identifying the cost behaviour and cost-volume-profit relationship, and it also assists in identifying the break-even point and helps in identifying the profitability of a product. Pham *et al.* (2020: 78) explain that attribute costing is complicated than variable or marginal costing because it involves identifying and allocating both variable and fixed costs to a product. According to Nuhu *et al. (*2016: 109), this requires a detailed understanding of the costs associated with production delivery and the ability to accurately track and assign those costs.

Empirical studies on attribute costing

According to Roslender and Hart (2003), a framework will be required to compare features valued for customers with additional costs in delivering them. Researchers

highlighting the connection between both attribute costs and strategy costing management. This method is justifiable as an SMA tool since it demands an outside viewpoint and a connection to the markets. Lino and Tenucci (2007), researched MAPs and role of MA within the firms in Italian. The findings show a total of 80 firms (89%) adopted tool and only 10 (11%) not adopting the tool. Huge gap on the limited studies of the adoption of this tool which align the importance of this study.

2.4.15 Marginal Costing

Habib (2020: 16), marginal costing, also known as variable costing, is a tool of costing that only includes the variable costs of production in the cost of a product. Further state how this tool varies with the level of production, such as materials, direct labour, and direct expenses while the fixed costs, such as rent, are not included in the calculation of marginal costs. During the early 1950s, certain processes for making decisions were developed (Habib 2020). According to Ogunjuboun *et al*. (2009: 243), the application of marginal costs and an examination of how costs interact with activities are key components for decision-making tools for a shorter term and assist with elements in making short-term decisions, some related tools, like make or buy product decisions. In UK where the terminology "marginal costs" was developed then the US followed adopted (Beyer, 1955s; Halford, 1959s).

Hansen *et al.* (2021: 55), point out the advantage the tool which are provides more accurate information on the costs associated with producing a product, which can assist in decision-making, such as pricing and production planning. Harris (1936), cited by Dugdale and Jones (2006) and Anthony (1989) as the beginning of the ongoing argument over absorption and marginal costs. Following Harris' study, investigations in the USA revealed that direct costs tools were used around the 1920s and they continued to be effective there until the 1960s, among both professionals and researchers participating. While researchers remained confused over the duration origin of fixed costing and the requirement of putting into account for them in inventories, managers were almost all satisfied by the possibility of adopting direct costing techniques (Neilson, 1954; Hepworth 1954). This study continues with the conversation still go-on worldwide as SA have limited study in detailed about MAPs, this study fills that gap.

Empirical studies on marginal costing

Different nations revealed continuous adoption of MA tools. A study by Chenhall and Langfield-Smiths (1998) revealed that 76.6% of companies adopted a type of marginal costing system. An investigation from Asian revealed a lower application of CVP analysis by Sulaiman *et al. (*2004). While in the UK, Abdel-Kader and Luther (2006) research of the sector of food and beverages revealed over 83.02% of participants considered it essential to be capable of distinguishing fixed costing and variable costing, but that only 48.7% frequently apply this data to make decisions. Kovachev's (2009) study, finding show the approach is hardly common where 40.04% using the tool. Break-even analysis was applied lesser frequently in the USA between the 2003 and 2012s (Clinton & White, 2012).

Only about 62.1% of mEs in Malaysia considered adopting the variable costs technique according to Ilias *et al.* (2010: 85). The findings vary from the findings of Armitage *et al.* (2016: 48), who reported that just 18.2% of the MEs analysed in Australia and 27.0% of the mEs analysed in Canadian adopted variable costing. El-Shishini investigated the Hotels in Bahrain in 2017 and the results indicate 75.6% not using the tool and 24.4% using the tool. In the raking of lowest used it take 21 out of 26. Maduekwe's (2016) study MAPs adoption in SA, the findings show 30.66% rate of enterprise using the tool. In conclusion marginal costing is one of the most utilised tools especial international compered to local of SA interposes. Base on the empirical analysis the developed countries used more the marginal costing compered to developing counties especially food and manufacturing industries. Enterprises on the analysis noted to utilise and understand the benefits of the tool, but SEs are not studied which this study will fill.

2.4.16 Just-in-time Costing (JIT)

Ogunjuboun *et al*. (2009: 63) JIT aligned with the principles that focusing on producing goods precisely when needed. This method emphasizes real-time cost accumulation, providing accurate insights into production expenses, as minimizing inventory holding and fostering continuous improvement, JIT Costing aims to optimise operational efficiency and successful implementation requires holistic changes in production methods, supply chain management, and cost accounting systems (Ogunjuboun *et al*. 2009: 63). Sunarni (2013: 622) JIT production is a manufacturing strategy that focuses on producing goods only as they are needed by customers, with minimal inventory on

hand. Tuan *et al.* (2022: 215), this tool calculates the cost of a product based on the actual costs incurred in producing it, rather than using an average cost or predetermined cost. (Alvarez *et al.* 2021: 24) reported that JIT costing is closely tied to JIT production because it requires accurate and timely information about the costs of production. According to Karanja (2013: 7), this information is used to make decisions about production, and pricing in real-time, so that the enterprise can respond quickly to factors that may affect production costs. According to Kasa *et al,* (2016: 48), JIT costing can be beneficial for companies that operate in fast-paced, highly competitive industries where the ability to calculate costs quickly and accurately is critical to success. Korhonen *et al.* 2016: 261), highlighted JIT helps in reducing inventory costs and increasing the efficiency of the production process.

Empirical studies on just-in-time costing

The is limited studies on JIT. Yalcin (2012: 106) found that approximately 78.1% of the SE examined in Turkey use JIT in the production process. According to Fowzia (2010: 59-50), none of the SMEs evaluated in Bangladesh used JIT. In Malaysia, 53.1% of SEs were investigated using the just-in-time tool. Karanja (2013) study the SEs adoption of modern MAPs in Kenya. The findings of the study showed that 13.3% of 16 businesses used JIT. Sunarni (2013: 622-624) examined the utilisation of MAP and the role of MA in Indonesia. The findings show that JIT tool is used by 70.1% of the SEs. In Karanja *et al.* study (2013) in Kenya of SEs only 13.1% adopted the JIT tool. Kasa and Epoka (2020) investigated manufacturing enterprises in Albania. Where the findings show out of 10 uses only 3 use JIT tool. Cele (2020) investigated the use of MAPs by SEs in Durban, and the study's results showed that only 16.7% of the surveyed SEs used JIT. In conclusion, JIT seems to be more popular in the Kenya as empirical review shows the adoption rate ranking up to 70% where in Bangladesh and SA have 17% adoption rate. Developed countries mostly manufacturing organisations use MAPs tools better then developing countries that include SA.

2.4.17 Process Costing

El-Shishini (2017: 80), process costing is a tool assign to products that are produced using a series of repetitive operations. According to Habib (2020: 16), this method is commonly used in industries such as chemical manufacturing, food, beverage production, and oil refining. Karanja (2013: 7) reported the total cost of the product is

calculated by adding together the cost per unit from each department moreover, process costing is different from job costing where costs are assigned to specific jobs. According to Yalcin (2012: 106), process costing is appropriate when products are identical, as the process is continuous. Ahmad (2012: 175) point out advantages of the tool which allows accurate measurement of the cost of goods sold that important for financial reporting and tax purposes. The tool also assists in identifying the cost behaviour of each process and helps in identifying cost inefficiencies (Ahmad 2012: 175). According to Ogunjuboun *et al.* (2009: 138) process costs are described as "an approach utilised in a circumstance whereby manufacturing involves a variety of specific phases". In addition, the same technique is implemented to determine how much goods will cost in every phase of manufacturing, assembly, or processing. The researchers are convinced that some goods might be managed to sell immediately at the split-off point while others might be managed to sell after furthering processing costs.

Empirical studies on process costing

Ahmad (2012) conducted a study on the use of MAP in Malaysian SMEs. The findings show that 66% of the small and 75% medium businesses use process costing tool with a combined SMEs usage of 73%. Yalcin (2012: 106) claimed about 59.1% of Turkish SMEs evaluated use process costing. According to Ilias *et al.* (2010: 85), about 63.1% of the Malaysian SEs under investigation adopted process costing. Kefasi (2019: 55) state that manufacturing 36% of SEs in Cape Town, SA use process costing. Limited studies base on this tool where manufacturing majority uses the tool locally and internationally. This provides assumption of lesser SEs will use the tool based on the empirical analysis. SA presented SEs adopt only around 36% process costs.

2.4.18 Job Costing

According to Ilias *et al.* (2010: 85), job costing is a tool of accounting in which the costs of a specific project are tracked and recorded separately from the costs of other projects. Erokhin *et al.* (2019: 8) this tool is commonly used in industries such as construction, engineering, and manufacturing, which allows a more accurate accounting of the costs associated with each project, that can assist in pricing, budgeting, and decision-making. Ahmad (2012: 174), this costing involves the following steps: identification of the specific job or project, measurement of the costs incurred in the project, recording and tracking of the costs in a job cost sheet, comparison of the actual costs with the budgeted costs

and determining the profit or loss on the job or project. Jamal *et al. (*2020: 4) reported that one of the advantages of job costing is that it allows for the accurate measurement of the profit or loss on specific projects, which is important for project management to decision-making. Der-Poll (2021: 1124) this tool help in understanding the cost behaviour of each job, identifying cost inefficiencies and more useful in industries where products are customised since costs vary from one job to another. Job costs allocating costs to different tasks carried out by an enterprise as they are completed (Alvarez et al. 2021: 24), while requires entitle a comprehensive accounting of manufacturing costs to be attributed to a number of units.

Empirical studies on job costing

Erokhin *et al.* (2019: 5), investigated Russian MA and Economic Development Strategy in 2019. The researchers looked at the 2014 to 2018 period and the 2000 to 2013 period in the use of MA tools. The utilisation of job costing was at 3% from 2000 to 2013 and from 2014 to 2018 period it increased to 7%. The researcher believes that the result percentage changed due to the increased of numbers of businesses of the period from 2014 to 2018. In the study of MAPs in Malaysian SEs, Ilias *et al.* (2010: 85) found that Job costing was adopted by 44.1% of the SEs investigated. Yalcin (2012: 106) discovered that 54.1% of the SEs examined in Turkey adopted the job costs tool. Fowzia (2010: 59), 80.2% of the SMEs examined in Bangladesh adopted the job costs. While it is accurate that SMEs often adopt job costs tools, a similar for South Africa small enterprises will not be assumed.

Ahmad (2012) conducted a study on the use of MAPs in Malaysian SEs. The use of 46 specific MAPs was an evaluation test. The finding shows utilisation of the Job costing from the SEs use 60% and MEs use 58%. Kefasi (2019: 55) found that 69% of manufacturing SEs in Cape Town, SA use Job costing. Cele (2020) investigated the use of MAPs used by SEs in Durban, SA and the study found that 23.5% of the surveyed SEs used job costing. Yalcin (2012: 106) discovered that 54% of the SMEs examined in Turkey adopted the job costing tool. According to Fowzia (2010: 59), 80.0% of the SMEs examined in Bangladesh adopted the job costs. While it is accurate that SMEs often adopt job costs tools, similar trends for SA SEs, will not be assumed since majorities are not applying this tool that included studies of Cele (2020) and Erokhin *et al.* (2019). Job costing adoption have unlimited studies international and locally in SA.

Analysis shows the higher adoption rate in developed and developing countries which make the current study good for the ongoing topic of job costing.

2.4.19 Performance Measurement

Neely *et al*. (1995: 80), performance evaluation is "a useful tool for determining the effectiveness of the set targets performance and overall collection of measures included to evaluate the productivity or effectiveness of activities". The description of the tools has been expanded by several other researchers, who contend it is connected to the accomplishment of enterprise objectives and strategies (Khan & Shah, 2011). The history of the tool may be traceable to the invention of double-entry accounting in the 13th century (Johnson, 1981). (Ghalayini & Noble 1996), note that it was in 2 stages before it was included in the financial accounting system. The first stage commenced in the mid-1800s, while the second stage started in the 1980s after traditional measurements started to face pressure. Previous accounts of measuring performances were connected to the effectiveness and productivity in which budgeting and standard costs controlling systems were involved (Habib 2020).

Performance evaluation is a crucial MA method, according to (Habib 2020: 17), as management can use measuring performance data to assist an enterprise goal to get accomplished. According to Pham *et al.* (2020: 78), enterprises have been attempting to create less-sophisticated Performance Measurement Systems (PMS) in recent years and provide management and employment records to assist in productivity management. The researcher observed that an expanded array of performance measurement methods and metrics linked to the organizational strategy constitutes an integral component of a comprehensive and precise Performance Management System (PMS). Hall (2008) emphasised that the PMS (Kaplan & Norton, 1996), tableau de bord (Epstein & Manzoni, 1998), and productivity hierarchy are common examples of performance measurement tools for giving a larger variety of measurements (Lynch & Cross, 1992). Nevertheless, among the most critical issues confronting businesses seems to be the selection of measurements to direct and assess product line performances (Ittner D Larcker, 1998; Ahmad, 2012).

Empirical studies on performance measurement

Many businesses have indicated that they employ various performance measurement

methods, incorporating multiple performance metrics. The adoption rates across different sectors reportedly range from at least 61.1% to approximately 79.4%, as revealed in Ahmad's (2012) research on the utilisation of MAPs in Malaysian SMEs. In comparison, small-sized enterprises apply these techniques far more frequently, but most performance evaluation metrics are significantly used by both small-sized and medium enterprises. Profitability, revenue growth, and deliveries on time are the top 3rd performance metrics from the 13th that are included, with about 80.2% of the enterprise utilising performance indicators confirming the utilisation of these. Comparatively, just 61.1% of participants who claimed to have used performance-based compensation acknowledged using the frequency of warranty coverage.

Financial measurements based on operational revenues are generally commonly adopted. A total of 85.2% and 86.2% of responders utilised those tools occasionally. The return on investment in comparison is the financial measure that is less utilised, from just 36.2% of all participants who reported frequent use in SA, Durban by Cele 202 study. El-Shishini (2017) examined the utilisation of MA Techniques in Italy, Bahrain. The findings of the study revealed that the application of MA techniques for performance measurement do not use the tool 81.1% and 18.9%. This tool was ranked top 6 out of 26 tools on most used comparison. In conclusion non-financial and financial measurements are the most tools used in most sectors, industries and sizes as noted in the empirical studies above. Financial measurements noted as the most utilised compared to non-financial measurements.

2.4.20 Benchmarking

Benchmarking is a performance measurement tool that focuses on an external perspective and tries to enhance business performance (Elnathan *et al*.1996). Jack (2009: 2) noted that the benchmark tool is essential for enterprises dealing with the abovementioned socioeconomic, technical, and enterprise developments. El-Shishini (2017) noticed that despite benchmarking having long been utilised, it had never been given an official term or been coordinated. Benchmarking is a process of comparing an enterprise performance and practices against the competitors with the aim of identifying areas where the enterprise can improve the performance and gain a competitive advantage (Der-Poll, 2022: 1123). El-Shishini (2017: 81), explain the several types of benchmarking, including Internal benchmarking which is comparing different

departments within the same enterprise, competitive benchmarking which is comparing the enterprise performance to that of the direct competitors, functional benchmarking which is comparing the enterprise performance in a specific area, such as customer service, to industry leaders and generic benchmarking which comparing the enterprise performance to best practices across different industries.

The tool is beneficial for enterprises that perform well with strong product diversification initiatives, (Pham *et al.* 2020: 68). According to McNair *et al.* 1994s, benchmarking has several advantages for an entire enterprise, such as concentrating managerial attention on overall business practices, the potential to enhance managerial strategies thru global best practices and promoting consistent employee engagement because priorities are focused on certain people experiences. According to Jack (2009: 2), benchmarking can be used to improve a wide range of areas, such as quality, productivity, customer service, and efficiency and it can also be used to identify best practices and innovative solutions that can be adopted by the enterprise. El-Shishini (2017: 81) highlighted the importance of noting what benchmarking should be an ongoing process, as the enterprise should regularly measure the performance against the competitors and industry leaders to ensure that it stays competitive.

Lino and Tenucci (2007: 7) reported that benchmarking originally operated as a production tool, but the systematic assessment of practice asserts it has gained widespread application within the services industry. This research continues by claiming that all gained popularity alone among the "blue collars" services sector including engineer maintenance and transportation and that it took longer for "white collars" service sectors like financial institutions and retailing businesses to adopt it (Tenucci 2007). (Lino & Tenucci 2007) study included a section that examined how the study was fully implemented. While the author demonstrates that benchmarking tool was used or intended to be used in the early 1990s with research surveys, but also points out that most of the task is focused on individual case studies instead of surveys. Another source of information presented by Davies and Kochhar (1999) on UK manufacturing enterprises revealed that, despite the existence of benchmarking efforts, internal processes had not been impacted as a result. As an outcome, the benchmarking findings were not utilised in the research analysis (Lino & Tenucci 2007).

Empirical Studies on Benchmarking

Lino and Tenucci (2007) study the MAPs in Italy found that out of 84 respondents, a total of 63 companies adopted the Benchmarking tool 77% and only 19 (23%) not adopting the tool. El-Shishini (2017) in Bahrain study the used of MAPs and finds show that total hotel of 8.1% not using the tool, 54% sometimes used the tool, 37.6% used the tool. Benchmarking tool despised the advantages it holds fewer studies studied that includes African continent. Empirical studies show that other countries used the tool that include the hotel and manufacturing industries. This gave a gap for this current study.

2.4.21 Integrated Performance Measurement (IPM)

According to Cadez and Guilding (2008), IPM typically refers to tools of measuring performance that incorporate both non-financial and financial measurements and are connected to strategies and customers. There are several similar methods currently in use that came about because of Johnson and Kaplan (1987) criticisms of financial performance measurement systems for failing to capture the evolution of strategy and competitiveness in contemporary enterprises.

Sardi *et al.* (2021: 591) state that IPM is a performance management system that integrates multiple performance measures to provide a comprehensive view of an enterprise performance and assist in measuring and managing performance that goes beyond traditional financial measures, such as return on investment or profit margin. Aad *et al.* (2019: 39) agree and highlight that IPM also involves the use of key performance indicators (KPIs) to track performance over time and identify areas for improvement. The KPIs are chosen based on their relevance to the enterprise overall strategy and their ability to measure performance in a specific area (Anil & Satish 2019: 1120). IPM is often used in conjunction with a balanced scorecard, a performance management system that uses a balanced set of financial and non-financial measures to evaluate an enterprise performance (Shad *et al.* 2019: 418).

Kaydos (2020: 80) defines the benefits of IPM to provides a completer and more accurate view of an enterprise performance, to helps identify areas for improvement that may not be apparent from financial measures alone and enhancing strategic decision-making by aligning performance measures with the enterprise overall strategy and

encourages a culture of continuous improvement by regularly monitoring and evaluating performance. It is important to note that the success of IPM depends on the quality of data, data analysis, and communication of the results and is also necessary to have a consistent method of data collection and analysis to ensure the results are accurate and useful (Lino *et al.* 2007: 8). Furthermore, the results should be communicated effectively to all stakeholders so they understand the enterprise performance and can work together to improve it (Dubey *et al.* 2019: 342)

Empirical Studies on Benchmarking

Lino and Tenucci (2007) study the adoption of Strategic MAP. Data for sectors stated that out of 83 Italian manufacturing, a total of 62 (66%) companies adopted the IPM tool and only 32 (38%) did not adopt it. El-Shishini (2017) study the used of MAPs in Bahrain. Findings show that 40.5% not used the tool, 32.5 sometimes-used the tool and total of 27.7% used the tool. Benchmarking tool is popular in the developed compared to the developing countries based on the prior studies above where even 66% manufacturing industries use this tool. Base on the limited study request current study.

2.4.22 The Balanced Scorecard

Karanja (2013: 7), Balanced Scorecard (BSC) is a performance management system that uses a set of financial and non-financial measures to evaluate an enterprise performance. Ogunjubouns et al. (2009: 87), stated that this tool was developed by Robert Kaplan and David Norton in the early 1990s. According to Bhimani *et al. (*2012: 47), the non-financial measurements are applied to scorecards to complement financial performance measures in four main category that includes shareholder value, customer loyalty, enterprise innovation, and training. The BSC has evolved over the years with both the creation of several publications and papers by the original writers, (Kaplan & Norton 1993 to 2004). According to Bhimani and Bromwich (2012 :42), the BSC has given MA a transition from performance evaluation systems to a complete scorecard connected to strategies.

CIMA (2013: 38), the BSC uses four perspectives to evaluate an enterprise performance which includes the financial measures the financial performance like revenue; customer measures the customer satisfaction; internal process measures the internal processes like efficiency; and learning and growth which measures employee

engagement. CIMA (2013: 39), further claims that each perspective is associated with a set of key performance indicators (KPIs) that are chosen based on their relevance to the enterprise overall strategy and their ability to measure performance in a specific area. The BSC also involves the use of a cause-and-effect relationship, linking financial performance to non-financial performance, which allows us to understand the relationship between the different indicators (CIMA 2013: 40).

Empirical Studies on the Balanced Scorecard

Bhimani *et al.,* (2012) observed 1,221 global enterprises, in which 66.1% of the enterprises adopt the BSC, which provides further validation of the BSC widespread adoption among big enterprises globally. In the analysis of earlier Polls *et al*. (2005) study of MAPs results shows the adoption percentages in the USA from between 50.1% to 60.05%, 42.3% in Italian, and 31.02% in Finland.

Erokhin *et al.* (2019: 5), examined the use of MA tools during two distinct periods: 2014 to 2018 and 2000 to 2013. They discovered that the use of the BSC increased from 28% in the 2000 to 2013 period to 36% in the 2014 to 2018 period. Alzoubi (2018: 371), found that the BSC was the lowest utilised tool compared to kaizen costing and target costing. El-Shishini's (2017) results show that the use of BSC for never used are (13.5%) rarely used are (27%), sometimes used are (40.5%), used often are (16.3%) and used very often are (2.7%). This was ranked number 10 out of a total of 26 tools compared. Sunarni (2013) conducted research on manufacturing companies in Indonesia and discovered that the utilisation of the BSC tool was reported at 26.7% for medium-scale and 25% for large-scale enterprises. In conclusion international studies fairly used the tool while developing counties as SA have limited studies that point how unimportant this tool is for academics/industries. This study will fill the gap and even study deeper the township.

2.4.23 Economic Value Added

According to Ogunjuboun *et al.* (2009: 243), Economic value-added (EVA) assesses the annual wealth generation of the enterprises while represents the after-tax profit derived from operations. Habib (2020: 16), define EVA as a financial performance measure that calculates the economic profit or loss of an enterprise, and while assess the true profitability of an enterprise by considering both the financial performance and

the cost of the capital. Shad *et al.* (2019: 418) explain that EVA formula is calculated by subtracting the cost of capital from the net operating profit after taxes (NOPAT) and the cost of capital represents the opportunity cost of the funds invested in the enterprise and includes the cost of debt and equity. (Vipond & Schmidt, 2020) stated the formula for EVA = NOPAT - (Cost of Capital x Capital Employed).

According to (Vipond & Schmidt, 2020: 11), a positive EVA indicates that an enterprise is generating economic profit, while a negative EVA indicates loss value in calculations means capital that is greater than the cost of that capital, while an enterprise with a negative EVA is the opposite. Shad *et al.* (2019: 418) noted that EVA is used because it considers the cost of capital and is therefore considered a better indicator of true profitability than traditional measures like net income. This tool is widely used in financial analysis, performance management, and strategic planning which is used by managers, investors, and analysts to evaluate the performance of an enterprise over time (Sunarni 2013: 619).

Empirical studies on the Economic Value Added.

According to Sumkaew *et al*. (2012), 50.1% of the SMEs in Thailand considered the EVA to be irrelevant. According to Sunarni (2013) in Indonesian, 83.3% of SMEs do not use EVA. Approximately 88.2% of the SMEs examined in Malaysia, (Ilias *et al*. 2010: 85), do not use EVA. Yalcin (2012: 108-109) revealed that EVA was adopted by 32.2% of the SMEs in Turkey; only 28.0% of SMEs in Greece, 71.2% of the SMEs in Finland, and only 20.0% of the SMEs examined in India.

Erokhin e*t al.* (2019) examined MAPs in Russia, the adoption of EVA increased from 7% in the period from 2000 to 2013 to 14% in the period from 2014 to 2018. El-Shishini (2017) investigated the use of MAP at Hotels in Bahrain. The findings reveal that EVA utilisation breakdown with a never-used rate of 21.6%, a sometimes-used rate of 62.2%, a used often rate of 10.8%, and a used very often rate of 5.4%. In comparison with 26 tools, EVA was ranked at number 19. Sunarni (2013) researched Value added analysis tools in the Indonesian manufacturing companies based in Yogyakart, results show that adopting a rate was 25% in small enterprises and a big enterprise adopting rate was 10%. Lino and Tenucci (2007) researched on whether the adoption of MAPs in Italian manufacturing. The results indicate that out of 85 respondents, a majority of 70 (82%), use the tool. Conversely, only 15 firms, constituting 18%, did not adopt the tool. In

conclusion locally in South Africa have limited studies on EVA while international have are adopting the tools as highlighted in Italian manufacturing more the 80% uses EVA. This highlights the importance of this study to fill the ongoing conversation of CMAPs.

2.4.24 Strategic Cost Management

In 1981, Simmonds published work on strategy accountancy, and then Kaplan (1988) and Bromwich (1990) followed the discussion. Shank (1993) invented the phrase "Strategic Cost Management" (SCMs). John commented about the change between the costing system to MA, and John argued in considering SCM at the period, the first presentation of SCM in 1989. Limited studies of SCM in South Africa.

A definition of SCMs was given by Shank (1989: 49), who defines it as "the manager use cost data oriented towards one or more of 4 phases of the strategic management phase". Furthermore, the clear linkage to strategies became the main departure in MA which includes trying to formulate a strategy, communications strategy, creating and putting into practice strategies, and tracking the effectiveness of strategies are the phases of the strategic management phase. Shank (1989) proposed 3 main concepts for the SCM framework: costs driver evaluation, value chain analysis and study of strategic planning. Although the potential within the 1990s and the number of enterprises testing the technique, Shank (2006) notes that all were unsuccessful in taking off and numerous of the launched programs barely moved past the pilot phase. However, it is emphasised that components like value chain analysis and ABC that Shank claimed came "within the cover" of SCM have performed better.

According to CIMA (2013: 32), SCM is the process of identifying, measuring, analysing, and managing the costs associated with an enterprise operation. Furthermore, it involves the use of cost management tool, such as ABC, target costing, and VCC analysis, to understand the costs of an enterprise operations and to identify opportunities for cost reduction. Sunarni (2013: 619) highlighted the goal of strategic cost management as aligning an enterprise cost with the strategic goals and objectives. According to Lino and Tenucci (2007: 8), SCM also involves identifying and managing the costs associated with an enterprise value chain, which includes all the activities involved in creating, producing, and delivering a product. Ashfaq *et al. (*2014: 107) add the importance of understanding the costs associated with activities such as research

and development.

Lino and Tenucci (2007) study the MAPs in Italy manufacturing firms. The findings of the study indicated that out of the 85 respondents, a total of 70 (82%) firms adopted the SCM tool and only 15 (18%) do not adopt the tool. The conclusion few studies have been published in African SCM as whole, but studies attend the other SCM like SMA.

2.4.25 Strategic Management Accounting (SMA)

According to Sunarni (2013: 619), SMA tool adoption is generally not quite as large as one may expect. When Chenhall and Langfield-Smith (1998: 253) conducted their study, the target costs tool and the benchmarking tool were the only other methods that provided some empirical support. Chenhall and Langfield-Smith (1998: 242) noted that among all the contemporary practices, ABC had obtained far more media exposure, though nevertheless there the percentage of application became slower. Excluding the CPA, the minimal uptake of SMA approaches was surprising to Abdel-Kader and Luther (2006) in their survey.

Lino and Tenucci (2007) discovered the widespread application of SMA methods, particularly attribute costs, customer accounting, strategy pricing, and competitive position analysis. They discovered that life-cycle pricing and integrative performance indicators were the lowest utilised. The findings are remarkably similar to those made by Guilding *et al*. (2000), who discovered that competition accountancy and strategy price were among the most often employed methods in research of UK, US, and Zealand businesses.

Empirical studies on the Economic Value Added.

According to Lino and Tenucci (2007: 5), SMA is a relatively new field of study and there is limited empirical evidence available on the effects and outcomes. However, some studies have been conducted in recent years to investigate the use and effectiveness of SMA in enterprises. Study by Lorenz (2015: 67) found that the use of SMA practices, such as CPA and target costing, was positively associated with a firm financial performance. Another study by Nuhu *et al.* (2016: 111) found that the use of SMA practices, such as ABC, was positively associated with a firm overall performance. Research by Vilakazi *et al.* (2020: 379) conducted on the manufacturing industry found

that the use of SMA practices, such as ABM and target costing, was positively associated with a firm profitability. Additionally, the study found that firms that used SMA practices were more likely to achieve their strategic goals and had a better understanding of their cost structure Alvarez *et al.* (2021: 26).

The study by Roodbari and Kordestani (2020: 200) found that firms that used SMA practices, such as ABC, had better cost management capabilities and were more likely to achieve their strategic goals. Despite the limited empirical evidence available on SMA, these studies suggest that the use of SMA practices can have a positive impact on a firm financial performance and overall performance (Marlina 2020: 275). It is important to keep in mind that these studies may not be generalisable to all enterprises and industries, and more research is needed to provide a more comprehensive understanding of the effects and outcomes of SMA (Lino *et al.* 2007: 5).

2.4.26 Strategic Pricing

Simmonds (1982) used a research method to connect Strategic Pricing (SP) to the earlier work on SMA. The author showed that a typical SP that relies on internally oriented and traditionally based data could lead to a sub-optimal SP, while an SMA tool that adopts competition-oriented investigations could assist the management to make more accurate pricing decisions. Guilding *et al*. (2000) indicate that two aspects that must be considered in SP are planned business expansion and rival pricing reactions. Foster and Gupta (1994) investigated, and subsequent studies by Roslenders and Harts (2003, 2010) explore the influence of financial information on the pricing decisions made by market managers.

According to Roodbari *et al.* (2020: 200), SP is the process of setting prices for an enterprise product based on a variety of factors like enterprise overall business strategy. Lino *et al.* (2007: 8) note the crucial part of an enterprise overall business strategy, as pricing plays a significant role in determining an enterprise profitability and competitiveness. The goal of SP is to set prices that will maximise an enterprise profit while also considering factors such as market conditions, customer demand, and the value that the product provides to customers (Lorenz 2015: 63). Shad *et al.* (2019: 417) stated that there are several key components of SP, includes market research, cost analysis, value perception pricing strategies and monitoring and adjusting prices. Lino and Tenucci (2007: 8) noted that SP involves considering all these elements, as well as

other factors, such as distribution channels, branding, and marketing, to set prices that will help an enterprise achieve the overall business goals and objectives.

Empirical studies on strategic pricing (SP)

Sunarni (2013) study the MAPs and MA role in manufacturing enterprises in Indonesia the study shows that medium-scale enterprises use 23.2% and big-scale enterprises uses 25%. Lino and Tenucci (2007) delved into whether the adoption of MAPs in Italian manufacturing, the results revealed that 76 (89%) the use of the SP tool, while only 10 firms (11%) do not to adopt the tool. In conclusion SP is more popular in the international counties as only 11% do not use the SP. This analysis will assist the current study with utilisation rate regardless the broadness of international.

2.4.27 Competitor Cost Assessment

Customer cost assessment (CCA) is a process that automatically updates competitor's cost data and compares it with the enterprise data for decision-making (Guilding, 1999; Ward *et al.,* 1992. Simmonds, 1981; Jones, 1988; and Bromwich, 1990). According to Lino and Tenucci (2007: 7), CCA is a specific aspect of competitor accounting that involves analysing the costs of an enterprise competitors to understand their pricing strategies and cost structures. El-Shishini (2017: 79) noted the main objective of CCA is to identify the key cost drivers that are used by competitors to set their prices, as well as to understand how these costs compare to an enterprise cost. Lorenz (2015: 65), pointed out how using this tool can be done by using different methods such as cost benchmarking, cost modelling, cost management and break-even analysis.

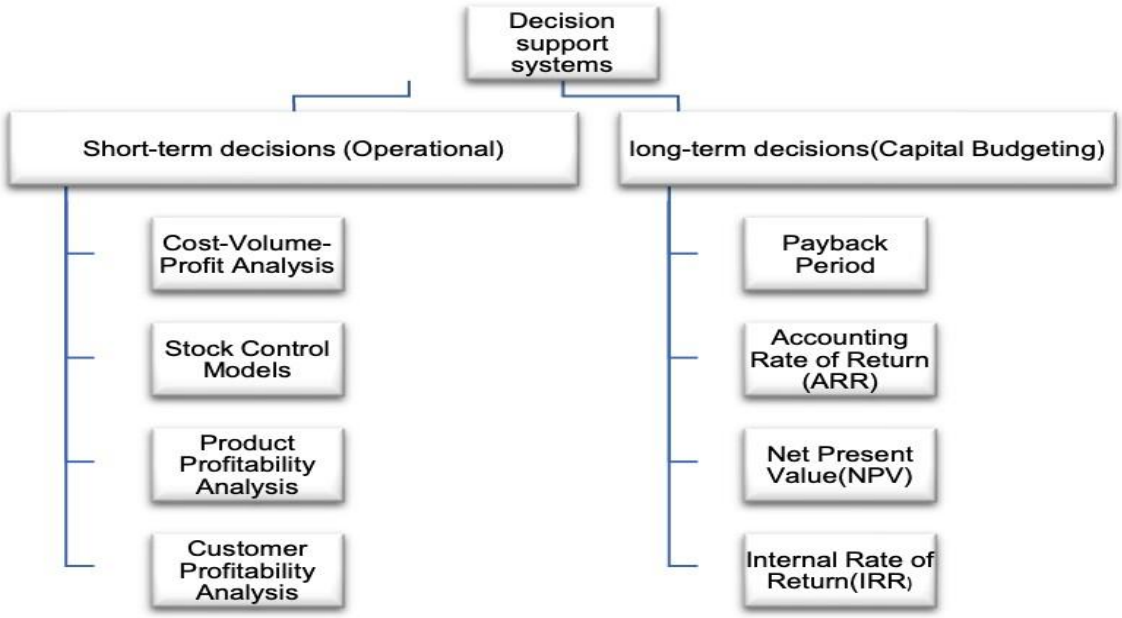
Empirical Studies on Competitor Cost Assessment

According to Roodbari *et al.* (2020: 200), the results of CCA can be used to inform an enterprise pricing strategy, cost management efforts, and overall competitive positioning. It is important to note that CCA should be conducted regularly and updated as needed, as the cost structures of competitors can change over time (Roodbari *et al,* 2020). Lino and Tenucci (2007) study the Strategic MAPs in Italian. The findings show that out of the 86 firms, a total of 74 companies adopting the CCA tool which is 86% and only 12 (14%) do not adopting the tool.

El-Shishini (2017) investigated the use of MAPs in 37 hotels in Bahrain. The results of

the study indicated that the use of CCA at hotels is positively associated with the intensity of competition. The adoption rate for never is 62,3% (16.3%), a rarely is 17 (46%), and sometimes is 14 (37.8%). This was ranked number 22 at a total of 26 tools compared. Inconclusion based on the limited studies on CCA its noted that international that includes Bahrain and Italians utilises the tool compere to the locally enterprises. Figure below present the decision-supporting systems.

Figure 2. 3: MA decision-supporting systems



Source: Lino and Tenucci 2007

2.4.28 Activity-Based Management

Johnson was the first to use the terminology of "Activity-Based Management" (ABM) in the 1991s. During this period, Kaplan focused on the implementation of ABC and John shifted the focus to ABM instead of cost. According to Covey (1990), ABM enables management to have a distinct perspective on expenses and profits. ABM also enables decisions-maker in using quick and pertinent data. Covey further asserts that several enterprises have regarded ABM as a genuine source of competitive advantage. Gosselin (2005) argued that Activity Analysis (AA) is the very first, Activity Cost Analysis (ACA) is the second, Activity-Based Costing (ABC) was the third and Activity-based management (ABM) final step.

According to Baird *et al*. (2004), enterprises do not utilise all 3 phases but implement ABM after the costs analysis phase if the aim is to reduce costs. Nanni *et al*. (1992) shared

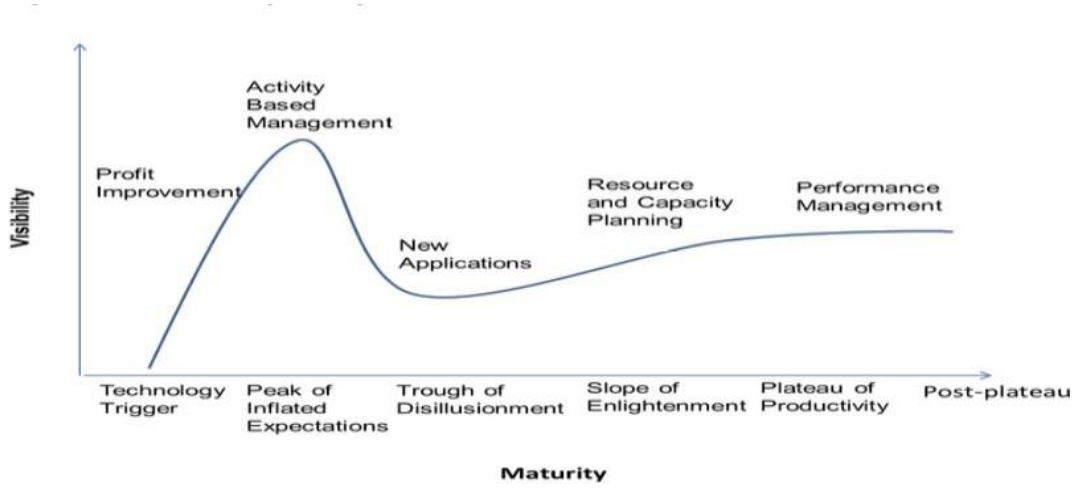
the same opinion and discovered that enterprises did not adopt ABC since they benefited from ACA. According to Phan *et al*. (2014), prior research failed to consider the application of ABM at various phases, which results in an incorrect view of the utilisation and effectiveness of ABM in practical implementation. The following table present the ABM procedure to adopt the tool.

Table 2. 5: ABM steps to adopt the tool.

> Identifying and categorising activities: This step involves breaking down the enterprise operations into specific activities. Activities are grouped into categories such as product-related, customer-related, and support activities.
> Measuring the cost of activities: Once activities are identified and categorized, the costs associated with each activity are measured. This includes direct costs, such as materials and labour, as well as indirect costs, such as overhead. Analysing the data: The data collected in the first two steps are analysed to identify opportunities for cost savings and process improvements.
> Implementing changes: Based on the analysis, changes are made to the way activities are performed to reduce costs and improve overall performance.
> Monitoring and evaluating results: Once changes have been made, the results are monitored and evaluated to ensure that the desired improvements have been achieved.
>
> (Rundora, Ziemerink, and Oberholzer 2013: 487)

According to Rundora *et al.* (2013: 449), the goal of ABM is to reduce costs and improve efficiency by identifying and managing the activities that consume the most resources, this tool can be applied to a wide range of industries manufacturing and service operations. TQM is often used in conjunction with other management strategies, such as process improvement and Lean Management (Rundora *et al.* 2013). According to Ramljak *et al.* (2012: 95), ABC is the most adopted tool. As innovation has enhanced the quantity of data accessible, Figure 2.4 below present the ABC transition to ABM.

Figure 2. 4: The transition of ABC into ABM using the legendary cycle.



Source: Turney 2010: 34

Empirical studies on activity-based management.

Innes *et al.,* 1995) on investigating the ABC usefulness about 88.1% affirmative use the tool and additionally 29.2% from the 88.1% claimed to have applied it for share value. Karanja *et al.* (2013) from the adoption of MAPs in SMEs in Africa (Kenya) only 4.10% enterprises find the tool ABM usefulness. Erokhin *et al.* (2019), study the period of 2014 to 2018 period and the 2000 to 2013 the use of MAPs. They discovered that ABM gained widespread attention due to their orientation on the current activities of an enterprise and responsiveness, the two characteristics crucial in the vulnerable economic environment. The utilisation of ABM was at 18% from 2000 to 2013 and from 2014 to 2018 period it gains to 29%. Akmeşe and Bayrakçı (2016) researched and finds the total of 36 believe that ABM is important in the enterprise. El-Shishini's (2017) results indicate used by business by 13 (35.1%). This was ranked number 14 at a total of 26 tools compared. Inconclusion this tool is used by the majority enterprises worldwide as empirical highlighted less adopted in Africa with 4% compared to international with over 88%. Analysis suggests that while ABM may not be universally embraced, it holds significant importance for a substantial portion of enterprises, particularly those valuing its responsiveness to current activities and economic dynamics.

2.4.29 Cost-Value-Profit Analysis

According to Ashfaq, Younas *et al.* (2014: 109), cost-volume-profit analysis (CVP analysis) is a method of analysing the relationship between costs, revenues, and profits. The tool is used to understand how changes in costs and revenues affect an enterprise

profit and to determine the break-even point, which is the level of sales at which an enterprise revenue equal total cost. Examining the correlation among total costs, total sales, and gross revenue in relation to the total units sold is commonly referred to as the CVP tool (Ogunjuboun *et al.* 2009: 261). According to Sunarni (2013: 622) CVP analysis involves several steps that includes identifying the relevant costs and revenues, estimating the break-even point, determining the profit or loss at different levels of production and analysing the sensitivity of profits to changes in costs and revenues.

Empirical studies on Cost-Value-Profit analysis

Kefasi (2019) conducted a study investigating the MAPs and the performance of manufacturing SMEs in Cape Town. The utilisation of decision support systems findings of CVP or Break-even analysis showed 51% not utilising the tool and 49% utilising the tool. According to Sunarni (2013: 622), 96.70% of the Indonesian small enterprises who were surveyed adopted price analysis and CVP analysis as key tool. In 2013, Sunarni conducted a study on MA and discovered that when it comes to the CVP tool, about 40.1% utilises the tool in the medium-scale companies, while 50% utilises the tool in the large-scale companies. According to Lucas *et al*. (2013), CVP analysis is widely applied in the U.K. McLaren *et al. (*2012) noticed that the SMEs they researched in Thailand commonly employed a cost-volume-profit analysis. El-Shishini (2017) study the use of MAP at Hotels in Bahrain and the results indicated that the use of CVP rate is 6%. Inconclusion CVP noted to be one of the most utilised tools in the studies above that includes locally in Cape Town and internationally Bahrain. In conclusion, CVP is one of the most utilised tools in the studies above, both locally in Cape Town and internationally in Bahrain. The varying adoption rates indicate that while CVP analysis is prevalent in some regions, the usage may differ based on industry, scale, and local business practices.

2.4.30 Customer Profitability Analysis

In accordance with Innes and Mitchell (1995), Customer Profitability Analysis (CPA) utilises the Activity-Based Costing (ABC) tool, with a specific focus on customers rather than cost objects. This approach results in enterprises discovering varied degrees of costs associated with their connections to customers. Additionally, researchers make the scholastically well-supported argument that strategy permits making decisions regarding price, distribution and services as well as an improved understanding of customer personalities (Cooper and Kaplan, 1991; Raaij *et al.* 2003; Cotton, 2005).

According to Dalci *et al.* (2010) and Kaplan and Narayanan, (2001), CPA is incredibly valuable in a services environment given customer attitude significantly influences as to how much it costs to provide services. Zeithaml and Bitner (1996) are cited by Dalci *et al.* (2010) in their claim that "the costs of seeking and winning a new client in service businesses is 5 times more expensive than the costs of retaining existing clients." To maintain mutually beneficial relationships with present customers, service enterprises must successfully use CPA. Ashfaq *et al* (2014: 109) state that CPA is a method of identifying and evaluating the profitability of individual customers. Lino *et al.* (2007: 5) noted that the goal of CPA is to understand which customers are most profitable and to allocate resources and efforts accordingly.

According to Kefasi (2019: 20), the process of CPA typically includes the following steps: Identifying the costs associated with serving each customer: This includes both direct costs, such as materials and labour, and indirect costs, such as marketing and customer service. Determining the revenue generated by each customer: This includes both the revenue from the customer initial purchase and any additional revenue from repeat business or upselling. Calculating the profit or loss for each customer: This is done by subtracting the costs associated with serving each customer from the revenue generated by that customer. Analysing the data to identify patterns and trends: This step involves looking for patterns in the data to identify which customers are most profitable and which are least profitable. And identifying strategies to increase profitability: Once you have identified the most and least profitable customers, you can develop strategies to increase profitability. This might include increasing prices for higher-profit customers or reducing costs associated with low-profit customers. Lino and Tenucci (2007: 5) argue that CPA assists in identifying the reasons for such profitability differences and take corrective actions and the tool can be a valuable tool for an enterprise to improve their bottom line by identifying the most profitable customers and focusing on those customers while reducing efforts on the unprofitable ones.

Empirical Studies on customer profitability analysis

According to survey results from Innes and Mitchell (1995) within the UK, 51.2% of participants utilised ABC data for CPA reasons. Participants furthermore regarded the tool as being significant and beneficial, and another 12.2% find businesses planned to

utilize the tool. Innes *et al*. (2000) demonstrated the continued usage effectiveness of such an instrument by a replication of the research work done in 1999. The study by Ross and Kovechev (2009) revealed a comparable percentage of participants utilising tools and a substantial number preparing to adopt them. Participation in CPA has persisted throughout the period. Lino and Tenucci (2007), study show the findings of 89 enterprises in total, about 81 companies adopted the CPA and only 8 not adopting the tool.

Erokhin *et al.* (2019: 9), investigated the MA Change as a Sustainable Economic Development Strategy during Pre-Recession and Recession Periods: Evidence from Russia in (2019) The researchers looked at the 2014 to 2018 period and the 2000 to 2013 period uses of MA tools. The utilisation of CPA was at 16% from 2000 to 2013 and from 2014 to 2018 period it gains to 22%. While Kefasi conducted a study in 2019 investigating the MA practices and the performance of manufacturing SMEs in Cape Town. The utilisation of decision support systems found 44% utilising the tool.

2.4.31 Valuation of Customers or Customer Groups as Assets

According to CIMA (2013: 108), the Valuation of customers is a tool for evaluating the financial value of a customer or group of customers to a business and it is like lifetime customer profitability analysis, but it places an actual monetary value on the customers or customer groups. (Lorenz 2015: 67), the process of valuing customer groups as assets typically includes identifying the costs associated with acquiring and serving each customer group which includes both direct costs, such as marketing, sales expenses and indirect costs. Determining the lifetime revenue generated by each customer group which includes the revenue from the customer initial purchase, as well as any additional revenue from repeat business, upselling, and referral business. When calculating the net cash flows for each customer group the cost is subtracted associated with acquiring and serving each customer from the lifetime revenue. Determining the customer group NPV this process is done by discounting the future cash flows from the customer group back to their present value using a discount rate.

According to Jamal *et al.* (2020: 3), valuing customers allows companies to understand the financial value of their customers and to make strategic decisions about how to allocate resources and efforts to maximise profitability. Additionally, Alvarez *et al.* (2021:

24) reported that it can be helpful when making investment decisions, such as when acquiring other companies or making strategic partnerships, by providing a clear understanding of the financial value of the customers or customer groups being acquired.

Empirical studies on the valuation of customers or customer groups as an asset

According to Gupta and Lehmann (2003), no study has succeeded in establishing a link between the customer and the business worth, as a result, lifetime value for customers has only had a restricted effect on businesses attributable to the challenging nature of modelling. Stuart (2004), researcher investigated the future value of intangible resources of may be evaluated to illustrate additional value to the enterprise that uses scholarly articles and data that was freely accessible to the general public. According to their research, only 1% gain in customer loyalty has an effect on an enterprise's worth. Researchers claim that findings demonstrate that it is equally feasible and informative for strategic management to connect marketing techniques to value for shareholders.

Kefasi (2019) study the MAP and manufacturing SMEs performances Cape Town. The findings that 86% value their customer which banded by contractions. Guerola-Navarro (2021) study the relationship of customer and the management where from 2015 to 2019 and 17 business uses for the valuation of customers from the total of 130 survived business in Politècnica de València. The universal adoption of customer valuation tools underscores the centrality of customers as the foremost priority for businesses, given their pivotal role in revenue generation. Empirical evidence further reinforces this perspective, notably in South Africa where 86% of businesses actively utilise customer valuation tools. In conclusion, the empirical evidence across these studies suggests a growing acknowledgment of the importance of customer valuation for businesses. While challenges persist in directly linking customer worth to overall business value, there is a consensus on the critical role customers play in influencing enterprise worth and strategic decision-making. The widespread adoption of customer valuation tools, as evidenced in both SA and internationally, underscores the continued relevance of these practices for businesses seeking effective decision support systems.

2.4.32 Conclusion of MA Practice Tools

Previous studies of MAP tools show clear evidence from these empirical results that

businesses in developing countries including South Africa have low adoption rates of MAP tools especial SMEs. The review of existing literature underscores the positive intentions of tool creators, highlighting the potential benefits that enterprises can derive from tool application. The emphasis on tool adoption is particularly crucial for enterprises aiming to enhance profitability. In this context, various tools have been developed, catering to the needs of large manufacturing enterprises by simplifying the MA processes, as evidenced by Kefasi in 2019. Simultaneously, specific tools have proven beneficial for Small and Medium Enterprises (SMEs), streamlining lengthy procedural tasks associated with MA.

2.5 MANAGERS' KNOWLEDGE OF MAPS

Examining the entrepreneurs understanding of CMAPs is instrumental in assessing their likelihood to adopt these tools. As highlighted in chapter 1, entrepreneurs do not aspire for business failure when superior tools are available for use (Msomi 2020: 7). Pavlatos and Paggios (2020) conducted a study to examine the level of adoption and benefits derived from traditional and CMAPs in the Greek hospitality industry. The study used an empirical survey of 85 hotel managers who were knowledgeable about MA. The results indicated that many participants had less knowledge of recently developed practices. Overall, traditional MA techniques such as budgeting practices, profitability measures, and nonfinancial measures for performance evaluation were more widely adopted than recently developed tools. The study concluded that TMA practices are still widely adopted in the industry.

While Nuhu *et al.* (2016) study the success adoption of CMAPs in the public sector in Australia. The study emphasised the importance of knowledge in MA in this developed country. The main objective of the study was to examine the level of knowledge and adoption of MAPs in the public sector. The researchers surveyed a total of 740 management accountants in businesses. The results indicated that by increasing the use of management control systems (MCSs) in a more interactive and diagnostic manner, public sector enterprises are more likely to adopt CMAPs to a greater extent, leading to increased success in these practices.

Hussein (2017) research aimed to investigate the adoption, importance, and barriers to implementing CMAPs that support managers' decision-making processes in a

complicated Egypt business environment. A survey was conducted on 40 MAPs, and factor analysis was used to group variables into main factors that contribute to MAPs. Results indicated that TMAPs are relatively more adopted than CMAPs, but Egyptian companies are realising the importance of many CMAPs. The study identified nine factors that contribute to MAPs adoption and ten factors that contribute to their importance. The key barriers to implementing CMAPs were the length of time it took to change societal values and practices, high uncertainty avoidance, and high costs of implementing advanced practices.

Ahmad (2012) analysed the adoption of MAPs in Malaysian small-sized enterprises (SMEs) in the manufacturing sector based on data collected from a postal survey of 160 accountant managers. The results indicate that traditional MAPs such as conventional budgeting, traditional costing, and financial performance measures are widely used, while recently developed techniques such as ABC, non-financial performance measures, decision support analysis, and strategic MA are only adopted by a minority of respondents. The study suggests that due to some constraints and the relatively small size of the firms, SMEs are unlikely to adopt a comprehensive MAP in their operations.

When it comes to improving MA practice there is substantial evidence that various innovations and adjustments to contemporary MA methods occurred since Johnson and Kaplan (1987) published the book (Lorenz, 2015: 71). Sabir *et al*. (2015: 85) and Burns and Scapens (2000: 3) believe that the question of whether MA has improved or should improve has been a popular issue for a while. Internal and external business changes, including information technology improvements, increasingly competitive and customer-driven marketplaces, changes in enterprise structures and modern management techniques, have been contended to get a direct impact on MA methods (Sabir *et al*, 2015: 87; Lapsley and Pettigrew, 1994; Ezzamel *et al*. 1996; Akbar, 2010).

In conclusion, the literature review on managers' knowledge of MAPs provides valuable insights into the current state of adoption and understanding of CMAPs. The findings suggest that knowledge plays a crucial role in the adoption of CMAPs, and understanding the current state of awareness and familiarity with these practices among SEs in Ntuzuma is essential. In additional, recognizing the challenges and factors

influencing the adoption of CMAPs, the study can provide valuable insights for enhancing the utilisation of CMAPs in the targeted business community.

2.6 BIOGRAPHICAL FACTORS SHAPING BUDGETING AND COSTING ADOPTION

Khuboni et al., (2023: 3) stated that adoption of the CMAPs within an organisational context are inherently shaped by a myriad of biographical factors. Shemon (2018: 3) experience reflected in the depth of an enterprises acumen as plays a pivotal role in influencing the inclination towards adoption new skills. According to Fillis (2006: 199), those with extensive business experience are likely to recognize the strategic value as based on their past encounters, while those with limited exposure may necessitate additional educational efforts.

Educational background further delineates this landscape, with those possessing a robust financial education being better poised to comprehend and integrate budgeting practices into their business strategies (Shemon, 2018: 2). As posited by Fillis (2006: 198) established businesses with years of operation tend to have refined budgeting processes, while small businesses may grapple with resource constraints affecting the implementation of comprehensive budgeting strategies. In conclusion, these biographical factors collectively shape the organisational landscape, influencing the adoption and efficacy new skills.

It suggests that biographical factors, including experience and educational background, collectively shape the organisational landscape, influencing the adoption and efficacy of CMAPs skills in budgeting and costing. Understanding these factors is crucial for exploring the correlation between biographic data and the utilisation of budget and costing tools in the context of the current study. The findings underscore the importance of considering individual and organisational characteristics when examining the adoption of CMAPs, providing a nuanced understanding of the factors that contribute to the shaping of MAPs.

2.7 THEORETICAL FRAMEWORK FOR THE STUDY

A contingency theory would be used in this research investigation. The contingency theory of management is situated in managing performance or depends on how management behaviours interact with major events. In all other terms, management

style should alter based on the situation. The situation of ‘one size fits all’ does not exist in the contingency theory (Hayes 1977: 23). Contingency theory explains that no CMAP is universally appropriate for all businesses, but managers are to choose for themselves which MAPs are suitable for their respective businesses (Otley, 2016).

Contingency theory offers valuable insights into enterprise dynamics by emphasizing the situational and contextual nature of management practices (Grimsley, n.d.) The primary benefits lie in its ability to provide a nuanced understanding of how various factors, such as organisational structure, leadership style, and external environment, interact to influence the effectiveness of managerial decisions. Otley (2016) acknowledging the complexity and uniqueness of each organisational setting, contingency theory offers a flexible framework that allows businesses to tailor their CMAPs based on specific circumstances. This adaptability is particularly beneficial in dynamic environments, enabling organisations to navigate uncertainties and respond effectively to diverse challenges.

Woodward (1965) established the concept of contingency while studying enterprise behaviour. This is predicated on the concept that there is no single optimal approach to manage an enterprise to achieve the greatest results. Regarding MA research, and particularly the utilisation of MA tools in practice, there has been an attempt to demonstrate how closely associated practices are with enterprise contingent variables such as size, deconcentrating, utilisation of technology, and so on (Kader and Luther, 2008; Lorenz, 2015: 106).

This contingency approach to MA is rooted in the concept that neither universally utilisation of CMAPs applies similarly to all enterprises across all situations (Otley, 2016: 49). However, according to this view, the characteristics of an acceptable accounting information system will be determined by the exact conditions in which an enterprise finds itself (Otley, 2016: 48). Contingency theory must however uncover or prove various aspects of the accounting information system that relate to these specified conditions. Research has looked at designs that perfectly suit contingent elements such as the nature of an environment, technologies, scale, structure and strategies to explain the formation or evolution of MAPs. Internal and external influences, for instance, are seen as contingent variables by (Amara and Benelifa, 2017: 47). Although interior

contingencies are defined as including technologies, enterprise factors and strategies, external factors are defined as the characteristics of an external environment at accounting and finance levels that impact the internal network. The research on such factors will be examined in subsequent sections (Ahmad, 2012: 100).

Contingency theory has been embraced by scholars such as Ahmad (2012), Lorenz (2015), Kefasi (2019), Thango (2022), Cele (2020), Maduekwe (2016), Msomi (2020), Msomi (2021), among others contingency theory owing to its fundamental principles in their research. This theory is relevant and aligned with the study since it seeks to address the question of "why" various CMAPs are adopted in one enterprise over another (Otley, 2016: 47-49). Contingency theory aims at identifying certain components of MA procedures to make a connection between factors and external variables. As a result, the best method to understand MAP application in a certain context would be to examine the underlying contingency variables.

2.8 CHAPTER 2 SUMMARY

This chapter aimed to provide a comprehensive overview of previous studies conducted on the utilisation of CMAPs by businesses. It began by explaining history of MA and MAP tools: budgeting tools, costing tools, performance measurement tools, and strategic analysis and decision-making tools. Additionally, the chapter defines SMEs and highlights their significance in the South African economy. The literature review examined prior studies conducted in different countries regarding the types of CMAPs employed by SMEs. The chapter also reviewed prior studies that identify knowledge management about MAPs. The chapter aimed to identify research gaps in the existing literature, emphasising the need for research to investigate the usage of MAPs.

The subsequent chapter (Chapter Three) will discuss the research design, methodology, data collection methods, and statistical analyses employed to address the objectives of this study.

CHAPTER THREE: RESEARCH METHODOLOGY

3.1 INTRODUCTION

The previous chapter reviewed the literature relating to study hypothesis and objectives that includes:

- Investigate the CMAPs used by small enterprises in Ntuzuma.
- Examine the amount of knowledge small enterprises have about CMAPs in Ntuzuma.
- Explore the perceived usefulness of CMAPs in small enterprises in Ntuzuma.

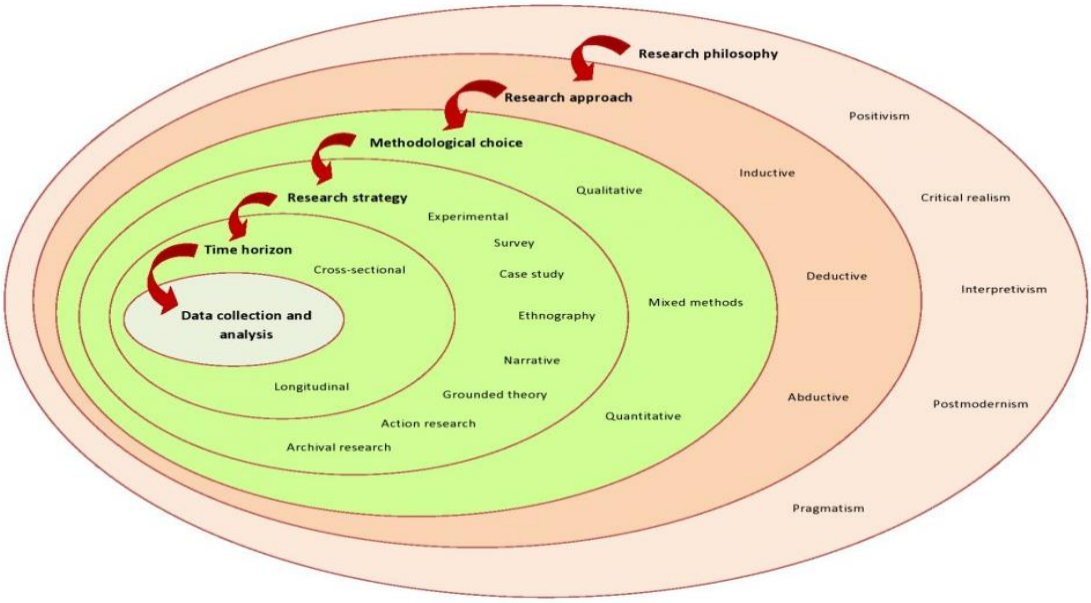
(H1) - There is a significant relationship between biographic data and budget tools.
(H2) - There is a significant relationship between biographic data and costing tools.

In this chapter, the rationale behind the chosen research design is elucidated, followed by an exposition on the targeted population from which data was collected. The study methodology is then presented, encompassing the approach to sampling, design of data collection, including its structure and administration. Additionally, this chapter delves into the rigorous processes of reliability and validity testing, the piloting of the questionnaire, and addresses the ethical considerations integral to the research endeavour.

3.2 RESEARCH DESIGN

To address all four research questions in the study, the researcher meticulously planned and strategically organized the design methodology (Kumar 2019: 208). This section presents the main aspects of the research design adopted (Hair *et al.* 2019). Firstly, the applied approaches, their appropriateness for this study, and the underlying philosophical assumptions are considered. The methodology is subsequently defined with time horizon, detailing the strategy for data collection, sampling techniques, and the chosen data collection instrument (Kumar 2019: 208). The figure below presents the research onion.

Figure 3. 1: Research onion



Source: Melnikovas (2018) adopted from Saunders and Thornhill (2016).

The research onion concept by Saunders *et al.,* 2016 provides a metaphorical framework to understand the layers of research methodology in a hierarchical and interconnected manner. Research philosophies are presented below.

3.2.1 Research philosophy

Saunders *et al., (*2016), research philosophy is the foundation of a study, influencing how researchers perceive and approach knowledge. Three principal research philosophies direct the comprehensive planning and implementation of research: positivism, interpretivism, and critical realism, each grounded in considerations of ontology, epistemology and methodology (Melnikovas 2018).

3.2.1.1 Interpretivism philosophy

In the exploration of interpretivism, a paradigm embraced by researchers such as Creswell (2015) and Maziriri (2018), the philosophy is distinct from positivism. According to this approach, reality is considered subjective and socially constructed. The emphasis lies in understanding the nuanced meanings that individuals attribute to their experiences, reflecting the importance of context in qualitative research methods such as interviews and participant observation (Smith 2008; Creswell 2018). This ontological perspective contends that there is no single, objective reality, and instead, reality is a product of individual and shared interpretations.

3.2.1.2 Critical Theory

Critical theory, championed by influential thinkers like (Benhabib 1990) and (Honneth 1995), operates as a lens through which to scrutinize power structures, inequalities, and the role of ideology in shaping societal norms. The transformative agenda of critical theory seeks to move beyond observation, actively challenging existing norms and advocating for societal change (Babbie, 2007: 5). In this paradigm, researchers are positioned as advocates for social justice, examining the underlying assumptions and power dynamics that contribute to inequality. The methodology resonates with critical theory, aspiring to uncover and critique the systemic injustices and power imbalances inherent in the researched phenomena.

3.2.1.3 Pragmatism philosophy

Pragmatism, a philosophy advocated by researchers such as (Putman 2002) and (Haack 2007), takes a pragmatic and practical stance, emphasizing the utility of ideas and the importance of achieving desired outcomes. This paradigm encourages a flexible approach, permitting researchers to blend methods and theories to achieve optimal results (Hair *et al.,* 2007). The primary determinant in pragmatism is the researcher's perspective on advancing knowledge and effective research methodology (Hair et al., 2007). As highlighted by Sukamolson (2008), pragmatism suggests that the chosen philosophy should be grounded in an assessment of practical realities. Following this approach, the pragmatic paradigm allows for adaptability and a tailored selection of methods based on the.

3.2.2 Positivist Philosophy

In this study, a positivistic paradigm was used in social sciences and has been followed by Ahmad (2012), Creswell (2015), Maziriri (2018), Cele (2020), Thango (2022). The objective to examine the amount of knowledge SEs possess about CMAPs in requires the collection of quantifiable data, which resonates with positivism's emphasis on empirical observation and measurable outcomes. Additionally, examining the relationship between biographic data and CMAP systems involves quantitative measurements, making positivism well-suited to uncover patterns and correlations within the data Creswell (2015). Babbie (2011: 35) highlighted that a central feature of the positivist approach revolves around the presumption that reality exists independently of observers and can be subjected to specific laws. The other assumption

of this paradigm is that reality can be independently observed, and the observer can extract data from the observations. Creswell (2015) argues that the positivist approach in accounting research is essential since it can enable a researcher to analyse quantitative data to explain any accounting phenomenon. Therefore, the methodology of this study is guided by this positivistic paradigm given that the research questions can be best answered by obtaining data independently from the population and analysing it to make inferences and reach conclusions (Neuman, 2014: 96). This aligns with Bhattacherjee's (2012: 39) claim that the research question typically involves quantitative analysis.

Hair *et al.* (2019), primary determinant is the researcher's perspective on a meaningful advancement of knowledge and an effective research methodology. These philosophical assumptions enable a researcher to clearly understand how to undertake research (Saunders *et al.* 2012: 128) and research paradigm refers to the broader view of philosophical knowledge and the world to establish an informed research process. The chosen philosophy should be guided by an assessment of practical realities, as emphasized by (Sukamolson 2012: 62). The following section presents the approach that this study follows. Positivism is characterized by an empirical and scientific approach, the objective observation and measurement of phenomena to derive valid and generalisable knowledge. In the context of this study, the positivist philosophy aligns with the goal of obtaining precise, quantifiable data on the utilisation and knowledge of CMAPs. Employing a structured questionnaire and statistical tools like regression analysis, the study adheres to the positivist tenet of empiricism, aiming to collect objective and observable information.

3.2.3 Quantitative method

The study followed a quantitative approach due to the nature of the instrument used for data collection to determine the SE owners' and managers' opinions, attitudes and experiences about MAPs (Coy 2019: 73). A quantitative approach is appropriate for this study as it facilitates a systematic exploration of CMAPs in SEs. Numerical data, gathered through structured surveys and questionnaires, will provide a comprehensive overview of the types and prevalence of CMAPs. This method allows for precise measurement when examining knowledge levels and the perceived usefulness of CMAPs, supporting statistical analyses to identify trends. Additionally, a quantitative

approach enables the exploration of relationships between biographic data and CMAP systems correlations. A quantitative research approach is a systematic and objective process that involves utilising numerical data from a specifically chosen subgroup of a population to generalise findings to the entire population under study (Creswell, 2015). It encompasses numerical data collection and the use of mathematical models as data analysis (Williams 2007: 66). (Kothari (2004: 3) noted that a quantitative research approach is founded on the measurement of quantities, and it applies to any phenomenon that can be expressed in terms of quantity.

The quantitative method plays a pivotal role in unveiling the perceived usefulness of CMAPs within SEs in Ntuzuma Township. Employing a structured questionnaire and collecting numerical data from 191 respondents, the quantitative approach facilitated a systematic and objective assessment of the utilisation and knowledge of CMAPs among SEs. This method allowed for a precise measurement of the extent to which CMAPs are employed, providing quantifiable insights into the specific practices that are most commonly utilised, such as sales and cash budgets. Additionally, statistical tools, including regression analysis and standard deviation derived from SPSS software, were instrumental in identifying patterns and correlations within the dataset. The quantitative method's inherent ability to quantify perceptions and relationships between variables enabled a rigorous analysis, shedding light on the perceived usefulness of CMAPs in the management of costs within the unique context of Ntuzuma Township's SEs.

The preference for a quantitative method over a qualitative one in this study stems from the specific research objectives and the nature of the inquiry into the perceived usefulness of CMAPs within SEs in Ntuzuma Township. A quantitative approach was chosen due to its ability to systematically collect and analyse numerical data on a large scale. The study aimed to identify specific CMAPs used by SEs, examine the knowledge about these practices, investigate the perceived usefulness, and analyse the relationship between biographic data and CMAPs.

3.2.4 Descriptive Research

This study follows descriptive research which is focused on making observations and comprehensive documentation of a phenomenon of interest. A descriptive study intends to methodically analyse a problem or phenomenon, provide information about the

problem, and describe the attitudes towards a subject or problem (Kumar 2019: 30). It also provides data about the dynamics of the phenomenon being studied, including the frequency that something occurs (Glazunov 2012: 126). The two common data collection methods of descriptive research are observations and surveys (Ogunjuboun *et al.* 2009: 283).

The observations made in this approach are mostly founded on scientific methods and therefore tend to be more reliable (Bhattacherjee 2012: 6). Descriptive research designs help to provide answers to the questions of who, what, when, where, and how associated with a particular research problem; a descriptive study cannot conclusively ascertain answers to why (Ogunjuboun *et al.* 2009: 283). Descriptive research is related to describing the characters of a specific individual, or group (Kothari 2004: 37). For this study the descriptive research design met the need to provide the relevant information to answer the four research questions regarding knowledge SEs have about MAP tools for them to succeed. The descriptive data also provided information on the benefits and impact of the use of MAPs by SEs in Durban.

3.2.5 Reasoning Approaches

Two distinct approaches with variations in research methodology and philosophies are commonly adopted in academic research: inductive and deductive approaches. The deductive approach follows a fixed framework by utilising quantitative methods for data collection, while the inductive approach is more flexible and often associated with qualitative methods (Swain, 2017: 38). The deductive approach stands in contrast to the inductive approach as it starts with existing theories and hypotheses before data collection and analysis. It is a hypothesis-testing method that aims to determine whether the theory or generalisation corresponds to empirical instances through experimentation. Hence, the deductive method aligns closely with the positivist research paradigm discussed earlier (Hair, Page, and Brunsveld, 2019: 306). On the other hand, the inductive approach is a reasoning method that involves identifying correlations within a dataset to draw conclusions and develop hypotheses. Researchers employing the inductive approach construct their hypotheses or logical frameworks based on the evidence they gather, leading to the development of the grounded theory (Hair *et al*. 2019: 306).

The notable distinction between deductive and inductive theories lies in their utilisation of existing literature and philosophical underpinnings to guide the research (Swain, 2017: 38). Considering the discussion, the deductive approach was deemed suitable for the present study, which aimed to investigate the adoption of MAPs. To achieve this objective, a questionnaire was distributed to small enterprise owners, specifically targeting a total of 753 owners in Ntuzuma. Ultimately, a sample of 254 small enterprise owners was obtained through the sampling process.

3.2.6 Research Strategy

There is a variety of research strategies each researcher may use in collecting research evidence that includes case studies, surveys, action research, experiments, participative enquiry, ethnography, archival research, grounded theory, cross- sectional studies and longitudinal studies (Welch 2000: 197 and Kolb 2012: 83). A survey questionnaire was employed as the research strategy in this study. This research random approach entails a thorough, in-depth data collection incorporating various sources of information over a period to investigate a constrained system by time, context, and location (Schell 1992: 102).

3.3 POPULATION AND SAMPLING

3.3.1 Population

Study population refers to the sources from which data will be collected. These sources for this study are the SEs owners who will provide responses to the research questions being investigated (Kumar, 2019: 138). To effectively address the research problem and achieve the study objectives, the researcher must initially comprehend the relevant group that is closely connected to solving the problem. This group represents the sample, which serves as the basis for drawing conclusions from the study findings. Ideally, the research aims to generalize the results to this population (Kumar, 2019: 139).

The target population for this study is small enterprises located in Ntuzuma Township, which is the focus of the research and the source from which results were generated. The research questions centred on small enterprises and included all sectors and all industries with minimum limitations. According to MILE and SEDA (2022), total 753 small enterprises in Ntuzuma. The choice of investigating CMAPs in small enterprises

within Ntuzuma Township, is driven by the recognition of the unique socio-economic and business landscape of this specific locality. Ntuzuma presents an underexplored and distinctive environment where SEs navigate challenges and opportunities that may differ from those encountered in national and bigger enterprises. Looking at this specific area, the researcher seeks to uncover nuanced insights into the CMAPs adopted by SEs within the township. Furthermore, the study aims to contribute practical knowledge that can directly benefit the local community which can lid to government interventions. The focus on Ntuzuma aligns with a more granular understanding of MAPs and fostering sustainable economic development within this specific community. Knowing the use of MAP tools can assist in sustaining this business; however, no studies in Ntuzuma township had investigated MAPs therefore this gap had to be filled. This approach not only enhances the academic relevance of the research but also underscores its potential for meaningful impact on the ground.

3.3.2 Sampling techniques

Probability sampling methods and non-probability sampling methods are the two broad categories used for sampling in research (Sekaran and Bougie, 2010). Non-probability sampling does not require a random selection of the respondents (Etikan and Alkassim, 2016). Probability sampling methods aim to provide each element in the population with a known and non-zero chance of being selected for the sample (Etikan and Alkassim, 2016). The method allows researchers to calculate the sampling error and make statistical inferences about the population.

The probability sampling method is adopted as it fits the study, and no restriction can occur in the process. There are three types of probability sampling methods, namely simple random, stratified random and cluster random sampling. Stratified random sampling involves dividing the population into homogeneous subgroups (strata) based on certain characteristics (Taherdroost 2016: 23). A sample is then randomly selected from each stratum in proportion to the represented in the population; this method ensures representation from different subgroups of the population. Cluster random sampling involves dividing the population into clusters or groups and randomly selecting some of these clusters while ensuring that all individuals within the selected clusters are included in the sample. Simple random sampling is a probability sampling method where each element in the population has an equal chance of being selected (Taherdroost

2016: 23); this method is unbiased and straightforward to implement.

Based on the research objectives, this study adopted the simple random sampling. This method allows the researcher to randomly select participants from the population, ensuring fairness and reducing potential bias. Additionally, Cochran formula is adopted to determine the appropriate sample size in situations where the target population is too large (Hoaglin, 2016). This formula estimates the necessary sample size needed to achieve a desired level of precision and provide reliable and valid results.

The study employs simple random sampling as the chosen technique, primarily selected for its unbiased representation, fairness, and compatibility with the study's objectives. This method ensures that each member of the SEs population has an equal chance of inclusion, reducing the risk of selection bias and allowing for valid statistical inferences about the broader population. The advantages of simplicity and ease of implementation make it suitable for the study's context, especially when facing constraints in time and resources. The method offers statistical rigor and unbiased selection, researchers acknowledge potential challenges related to resource intensity, the need for a comprehensive sampling frame, and limitations in capturing diversity in heterogeneous populations.

S = required sample size

Z = value of the selected alpha level (e.g. for 95% confidence, Z = 1.96)

p = estimated proportion of the population that has the attribute of interest

q = complement of p (i.e. q = 1 - p)

E = desired margin of error (expressed as a proportion, e.g. 0.05)

Substituting the values:

S = Z^2 × p × q / E^2

S = (1.96) ^2 × 0.5 × 0.5 / (0.05) ^2

S=384.16

The sample size is 384.16 ≈ 385.

This study requires a modified version of the Cochran formula, which is specifically designed for determining sample size in small populations. The sample size for small enterprises in Ntuzuma Township based on this formula is calculated in the table below.

S = Cochran sample size recommendation (already calculated S= 384.16)

N = population size 753

Z = Z-score for the desired level of confidence (1.96)

p = estimated proportion of the population with the attribute of interest (0.5)

q = 1 – p (0.5)

E = margin of error (0.05)

Substituting the values:

ASS = S / [1 + ((S - 1) / N) * Z^2]

ASS = 384.16 / [1 + ((384.16 - 1) / 753) * (1.96) ^2]

ASS ≈ 254

Therefore, the adjusted sample size for small enterprises is 254.

3.4 DATA COLLECTION

Data collection involves the utilisation of measurement tools to gather information from a sample of SEs, addressing specific research questions (Swain, 2017: 141). Data collation can be executed as: (i) primary data is original data collected in the field under the supervision of an investigator (Srivastava and Rego 2011: 5); (ii)secondary data is the data that has already been gathered in some way as described by Coe *et al*. (2017: 122). This study collected and used primary data and the detailed process, method, measurement, scaling, and structure of the instrument are addressed below.

3.4.1 Research Instrument

The term "research instruments" pertains to various methodologies employed to gather data from the sample. To ensure the accuracy of the data collected, the research instrument should be well designed, incorporating clear and unambiguous questions. Piloting the instrument with a small sample can help identify and address any ambiguities or misunderstandings (Sekeran and Bougie 2016: 223). This research exclusively relies on a questionnaire as the only research instrument for gathering data due to potential language barriers and cultural nuances. To improve data accuracy, the researcher adopted a more comprehensive approach by translating questionnaires. This method was chosen for its efficiency, especially during the COVID-19 pandemic. The subsequent analysis explores the nature and utilisation of the questionnaire as a means of data collection. Furthermore, the study delves into the specifics of the instrument structure and components, while also providing a comprehensive discussion of the content.

3.4.2 Questionnaire as a Method of data collection

A questionnaire is a written set of questions that respondents are expected to answer. In a questionnaire, respondents read the questions, comprehend the expected information, and provide their responses in writing. The primary distinction between an interview schedule and a questionnaire lies in the manner in which the questions are presented, and responses are recorded (Kumar 2019: 285). Questionnaires can be understood in various ways, including instances where people record their answers. Different perspectives exist regarding other approaches may involve oral responses during interviews, online survey submissions and even through interactive discussions in focus groups (Saunders *et al*. 2012: 416).

By utilising a questionnaire, this research ensures anonymity as there is no direct interaction between the researcher and the respondents. This measurement instrument enhances the collection of reliable data, particularly when sensitive questions are posed. Questionnaires offer the advantage of reaching a large and biographically diverse group of individuals. Respondents have the opportunity to carefully consider their responses or verify details before answering, while administration costs remain low (Swain 2017: 141).

In this study, a questionnaire was adopted as the research instrument, facilitated through the questionnaire hand delivery. The distribution of the questionnaires took place from May 2022 to January 2023. This distribution method was chosen because of the inclusivity it contains and minimising the complications for small enterprise owners as they faced challenges in being innovative. The questionnaire got printed in A4 size and packaged along with the necessary documents such as the consent form, information letter, and ethical clearance. The statements within the questionnaire were designed to gather sufficient data to address the research problems and achieve the research objectives. To avoid confusion for respondents, the instrument was divided into distinct sections. These sections are structured based on demographics, and each one specifically addresses the research questions at hand.

3.4.3 Piloting and Pretesting

In the process of conducting the pilot study for our research, a carefully designed approach was taken to assess the questionnaire's effectiveness. Thirteen small enterprise owners were purposively selected, representing diverse sectors such as service salons, retail, service loan lenders, and a bakery, amounting to 5.1% of the final target sample size. The participants were provided with hard copies of the questionnaire, and the pilot study focused on testing the readability, comprehensibility, and completion time of the survey. During this phase, the researcher actively observed participants, noting instances of confusion or hesitation, and may have utilised feedback forms or interviews to gather qualitative insights on their experience.

The pilot test, feedback from participants became a crucial component in refining the questionnaire. Data insights were analysed to identify patterns and common issues faced by participants. Subsequent changes were then implemented to address any

identified shortcomings. Specifically, adjustments were made to statements that were unclear or difficult to understand, ensuring that the final questionnaire would be both valid and reliable. It is worth noting that the 13 participants involved in the pilot study were not included in the final sample of 254 for the main study. The changes made during the pretesting process were deemed permissible as they aimed to enhance the overall quality of the research instrument, ensuring its effectiveness in capturing relevant data during the main study.

3.4.4 Questionnaire Structure

To effectively capture the aims of a study, it is crucial to design a questionnaire that aligns with those objectives. For this study, the questionnaire was created by directly using the study objectives to formulate the questions. Additionally, the questionnaire was adapted from previous research questionnaires used in similar studies on MAPs and then modified to fit the purpose of this study, as done by Kefasi (2019), Maduekwe (2016), and Maziriri *et al.* (2017). Denscombe (2010: 156) highlights the effectiveness of questionnaires in collecting data from many respondents in various locations.

The questionnaire for this study was structured into four sections (A-D), consisting of six pages in total. Each section collected data that directly corresponded to the research questions posed. The first research question focused on the frequency and types of CMAPs used, which were covered in section B (Parts A - E) of the questionnaire. The second research question examined the business owners' understanding of CMAP tools, which was covered in section C (Parts A - B), which measured their knowledge sources and level of understanding. Lastly, the third research question investigated the benefits of MAPs, which was covered in section D of the questionnaire.

Section A examined the business profiles of the survey participants. The section used a nominal scale to identify different business profiles with the format of a closed-ended question.

Section B focused on the first objective of the study, which was to measure the types of CMAPs used and their frequency of use. This section was divided into five parts A to E. Respondents were asked to rate, on a 5- point Likert-type scale, the impact of various factors on their adoption or non-adoption of selected MAPs, ranging from "Never" to

"Always." A total of 48 individual tools and techniques across five categories of CMAPs were tested in this section, including costing systems (10 tools), budgeting systems (12 tools), performance measurements (14 tools), decision support systems (6 tools), and strategic MA (6 tools). This section provided insights into the types of CMAPs used by businesses and the frequency of their use.

Section C focused on the second research question which aimed to assess business owners' understanding of the CMAPs tools. This section included two parts - Part A asked about the source of the owner knowledge about the tool and included five possible statements. Part B asked about possible facts related to CMAPs to measure knowledge and included a total of 5 statements. Only ordinal measures were used for both parts and all statements in this section.

Section D dealt with the third research question which aimed to measure the usefulness of the CMAP tools by SEs. This had a total of 16 benefit statements to ensure that respondents are asked to select one or more sources of their understanding. Only nominal measures were applied to all statements in this section.

3.4.5 Data Collection Process

Human research centers on small enterprise owners since they are the focus of the researcher observations. Participation was voluntary, and those who qualified to participate were owners or representatives of small enterprises with at least one employee across various sectors. To protect the participants' welfare and rights, anonymity and confidentiality were ensured and noted in a letter of consent. The researcher recruited participants by approaching them in person based on a biographical plan that expressed the research intentions of the study. Since many SEs in the Ntuzuma township had issues with access to email and outdated phone numbers, the researcher had to conduct the recruitment process in person, which was challenging, even when participants had to sign a consent form.

The survey package included a cover letter explaining the purpose of the survey, a copy of the questionnaire, and permission letter from the government for the protective interaction of the community (which can be found in the Appendix). A total of 250 copies were printed and the questionnaires were written in English. The researcher worked full-

time and expected to collect data within five months. However, the process ended up taking eight months due to various challenges. The data collection began by visiting the locations of business owners provided by SEDA to explain the study and request their participation. Alternatively, appointments were set up directly with the business owners at their most convenient time, and any issues regarding consent were addressed. While most participants agreed to complete the questionnaire in the presence of the researcher, others preferred to complete it on their own time. The researcher took the telephone numbers of willing participants to confirm the collection time to prevent any confusion. The data collection process was time-consuming and expensive as the. transportation costs (using Uber) needed to be covered to clarify the total number of willing participants from the start.

The next stage involved visiting the willing participants at their agreed time and place, allowing them to complete the questionnaire in the presence of the researcher to clarify any confusion they had. While this strategy worked in some cases and motivated respondents to complete all the questions, those who chose to complete the questionnaire on their own time required more time and follow-up. The follow-up was done via phone calls and visits, which added to the time and cost of the data collection process.

Participants who declined to participate in the survey did not see any direct benefit in taking part. To address this issue, most participants were promised a summary of the results and recommendations which they could use in their business. However, some participants refused, and the researcher respected their opinion. Research saturation was another reason given by some participants, as they were frequently approached by university students and the government to participate in various community studies.

3.5 DATA MANAGEMENT PROCESS

The researcher collected the hard copies of the questionnaires from the participants which was a total of 191, then took out the error questionnaires. The researcher recorded the data in an Excel sheet of 180 error-free questionnaires after administrating them carefully using the guideline. Excel was selected because it is faster and easier to identify errors during data entry. In ensuring accuracy, every tenth captured response data was verified and compared with the second-person statistician. All data were

disposed of following instructions from the DUT Ethical Clearance Committee to ensure the safety and integrity of the data set. This means the researcher followed the guidelines provided by the committee for disposing of the data.

The data of 180 participants were analysed using SPSS (Version 25) with descriptive statistics, such as frequency distribution tables, mean for central tendency and standard deviation for the spread of data. The frequency tables showed the percentage of respondents who selected a particular response for each question. Bivariate statistical analysis with Spearman rank coefficient tests to determine the associations in the relationship between biographical and MAPs was done A comprehensive analysis of the data, and the study results is presented in Chapter Four.

The data management process encompassed meticulous cleaning, secure storage, and thorough preparation of the dataset for analysis, all while adhering to ethical guidelines. The systematic cross-verification process and the choice of analytical tools contributed to the overall accuracy, reliability, and depth of insights derived from the research data.

3.6 RESPONSE RATE

The questionnaires were distributed to the owners of the business and 191 questionnaires were returned. A total of 11 questionnaires were not properly completed and were discarded. The remaining 180, which constituted a 71% response rate, were coded and analysed for this study. Section 4.3 presents an analysis of the demographics section of the research instrument.

A total of 250 questionnaires were administered to the study sample. The target sample of small enterprises is 254. Table 3.1 shows the process of achieving the targeted sample, 250 questionnaire copies were made. Exactly 250 questionnaire packages were hand-delivered to small enterprises in Ntuzuma, Durban using simple random sampling, business owners who participated and others requested the appointments. Most participants agreed and completed the questionnaire in the presence of the researcher and therefore the researcher could collect the questionnaires at the same time. Follow-up was made as stated in Chapter 3.

Table 3. 1: Respondent rate.

	Number of Respondents	**Percentage (%)**
Targeted respondents (Total)	254	100%
Response Received	191	75%
Unusable responses	(11)	(4.3%)
(Incomplete and spoiled)		
Usable responses	**180**	**71%**

3.7 DATA ANALYSIS AND INTERPRETATION

To summarise the data, the following descriptive statistics were used.

3.7.1 Frequency Tables

All sections of the questionnaire were analysed with the use of absolute frequency and relative frequency to reflect the actual number of responses for each question out of the total number of studied small enterprise, plus a percentage of those owners. A summary of the percentages of ranges of values are variable (Bhattacherjee 2012: 122).

3.7.2 Measures of Central Tendencies

Measures of central tendency or statistical averages are indicators of the point about which items have tendencies to cluster (Kothari 2004: 132). The measures (mean and mode) are the most popular averages which are considered to be the most representative figures for the entire mass of data (Cele 2020: 54). Therefore, the mean and mode were calculated and used to analyse the data in this study.

3.7.3 Standard Deviation

Standard deviation is the square-root of the average of squares of deviations, when such deviations for the values of individual items in a series are obtained from the arithmetic average (Bhattacherjee 2012: 122). Therefore, together with the means, the standard deviation was calculated and shown in the tables where relevant.

3.7.4 The Binominal Test

The binomial test was applied to this study, and it refers to a perceived distribution to the anticipated distribution when there are only two groups (MacDonald 2014). For this study, this analysis was used to test variables on the impact of MAPs of SEs in Durban and the factors that affect SEs' demographical information analysis was based on the p-value.

3.7.5 Spearman Rho Correlation Test

Spearman correlation analysis, also known as Spearman rank correlation coefficient, is a statistical method used to measure the strength and direction of the relationship between two variables when one or both variables are measured on an ordinal scale (Kathleen *et al.* 2017). In addition, it is a nonparametric measure of correlation, meaning that it does not make any assumptions about the distribution of the variables. A Spearman correlation tests relationship between demographical information and budgeting tools. Secondly, it tests the relationship between demographical information and budgeting.

3.8 CONSTRUCT OF VALIDITY AND RELIABILITY

Although the questionnaire used in this study aligned with the research questions, the structure, content, and wording had to fit the study context and the prevailing business culture. It is crucial to assess the questionnaire reliability and validity before collecting primary data. Validity and reliability measures ensure that the research design, methodology, and sample techniques are used to provide accurate and consistent results and can be generalised to a broader population. According to Neuman (2014: 212), reliability is the degree to which a research instrument produces consistent results when used repeatedly to measure the same variable in the same manner. In contrast, Coy (2019: 76) explain that reliability means that an instrument is standardized, uses the same scale to measure a variable, and can produce consistent results when used repeatedly to measure the same variable if the variable has not changed. However, this does not necessarily mean that the measurement is accurate, and validity must also be established to ensure that the instrument accurately measures what the researcher intends to measure (Babbie, 2011: 157).

To ensure reliability in this study, Cronbach alpha test was used to assess the internal consistency of the research instrument. This test rates the reliability of all items on a scale of 0 to 1, with values lower than 0.7 indicating inconsistencies in the instrument reliability (Bryman, 2012: 174). In this study, the average Cronbach alpha coefficient was 0.814, and Table 3.2 indicates that the instrument was reliable. The Cronbach alpha results for individual items in the questionnaire are shown in Appendix. Content validity, which refers to the extent to which an instrument captures all aspects of a concept, was also considered. To achieve validity, the questionnaire's questions were

designed in a way that aligned with the study objectives and covered all relevant areas of the research topic (Coy 2019: 74). Overall, both reliability and validity were established in this study, indicating that the research design and instrument used were suitable for obtaining accurate and generalisable results. The following table present the reliability scor 1.

Table 3. 2: Reliability score

Section	**Cronbach Alpha**
B - Budgeting tools	0.827
B- Duration of budgets	0.594
B - Costing tools	0.915
B - Financial measures	0.761
B - Decision-making	0.789
B- Strategic analysis	0.852
D – Usefulness	0.963

It is clear from the table that all parts within section B, and section D, have acceptable Cronbach Alpha coefficients, except for part B, with a coefficient value equal to 0.594 resulting in this value being low due to few questions in the section. Therefore, there is internal consistency within statements in each of the questionnaire parts and sections.

The integral aspects of construct validity and reliability within the study is pertinent to delve into the specific measures taken to ensure the validity of the data collection instrument, given the emphasized focus on reliability. The study ensured construct validity by aligning the questionnaire structure, content, and wording with the study context and business culture, a fundamental step to ensure that the instrument effectively measured the intended variables. Additionally, content validity was considered by strategically designing questions to comprehensively cover all relevant aspects of the research adjectives.

3.9 DELIMITATION OF THE SCOPE OF THE STUDY

This study was conducted in only small enterprises within the Ntuzuma township. The study was conducted with owners, and management staff dealing with decision- making for the enterprise. This was because of resource constraints. Other enterprises were not included in this study. The geographic area of this research study was Ntuzuma township, Durban, South Africa. The reason for the selection of these participants was

due to the gap prior studies had created by excluding township and rural areas in investigating MAPs. These SEs enterprises are important as big companies are for the economy as they all pay taxation while employing community and GDP contributors as decision-makers of the enterprises.

3.10 ETHICAL CONSIDERATIONS

The researcher complied with the ethics policy and guidelines of the Durban University of Technology, which ensured that any unethical issues that arise during the study were addressed appropriately. This study adheres to the ethics policy, which included the protection of the rights of participants, ensuring their safety and well-being, maintaining confidentiality and anonymity, and ensuring their voluntary participation. The research will be guided by these ethical principles:

- Before the administration of the questionnaire survey, the researchers obtained unambiguous consent from all participants who took part in the study.
- During the data collection process, utmost care was taken to ensure that any information shared by the respondents was kept strictly confidential.
- Respondents who wished to remain anonymous were allowed to do so.
- Participants were informed that their involvement in the study was voluntary, and they had the option to withdraw at any point.
- The researchers provided a detailed explanation of the study objectives, procedures, and any potential risks to the participants.
- The researchers took all necessary measures to ensure that the participants were not exposed to any physical harm.

Additionally, before the commencement of data collection, the research proposal underwent an internal ethics clearance process, which was conducted by the University. The Ethics Committee was required to issue a certificate of clearance before any data collection could proceed (refer to Appendix A for further details).

3.11 CHAPTER SUMMARY

This chapter discussed the research methodology utilised for the study, including the overall study design, data collection methods, target population, sampling methods, reliability and validity checks, and ethical considerations. The next chapter will focus on the study findings, including the analysis of results to gain a deeper understanding of the subject studied.

CHAPTER FOUR: ANALYSIS PRESENTATION, DESCRIPTION AND DISCUSSION OF RESULTS

4.1 INTRODUCTION

The previous chapter of this study focused on the methodology adopted, outlining the process of data collection, which involved using a questionnaire as the primary instrument. After the collection and analysis of the data, this chapter presents the findings and results of the research. This chapter delves into a comprehensive discussion of the results, organised according to the study objectives, ensuring that the research aim is achieved, and all the research questions are addressed.

The aim of this study was to examine the contemporary MAPs utilised by small enterprises in Ntuzuma Township. To establish a solid foundation of data collection, several research objectives were established. These research objectives were formulated to generate relevant research questions, which in turn facilitated the accomplishment of the study main aim. By adhering to these objectives, the study initially sought to ascertain the understanding of CMAPs from the perspective of small enterprises. Subsequently, the results revealed the extent to which these practices have been adopted by small enterprises. The findings offer insights into the factors influencing the adoption of CMAPs. This description is presented in the same order as the questionnaire (Appendix 2).

Findings are presented as follows:

- Demographic data
- The use of CMAPs (Research Objective 1)
- The amount of knowledge of CMAPs (Research objective 2)
- The usefulness of CMAPs (Research objective 3).
- The correlation between the biographic data and CMAPs (Hypotheses).

4.2 DEMOGRAPHIC INFORMATION

Several questions probed the background characteristics of the Ntuzuma Township respondents who owned small enterprises. This data covered profiles, including gender, race, age, education level, nature of the business industry, nature of business form, business premise, the year business has been operating and the total number of

employees in the enterprise. These findings are presented as followings from Table below presents biographical respondents in respect of their gender below.

Table 4. 1: Respondent Gender analysis

Gender		
	Frequency	**Percent%**
Female	98	54.4%
Male	81	45%
Other	1	0.6%
Total	**180**	**100.0%**

The result indicates that females who own businesses are higher at 54.4% compared to males at only 45% owned businesses and simply 1 (0.6%) respondent did not disclose their gender. Supporting this, this means that more females are willing to start business within the township community than males. Cele (2020) study finds the opposite in Durban as males were 58.8% and 41.2% were female respondents. Female-owned businesses in the township community is of paramount importance as not only challenges traditional gender norms but also indicates a potential shift in the entrepreneurial landscape. Table 4.2 below presents the respondent's race.

Table 4. 2: Respondent race analysis

Race		
	Frequency	**Per cent**
African	107	59.4%
Other	50	27.8%
Coloured	8	4.4%
White	8	4.4%
Indian	7	3.9%
Total	**180**	**100.0%**

The highest contributors in the study are Africans (59.4%), followed by the unnamed race (27.8%), followed by the White and Coloured races (4.4%) and lastly the Indians contributing (3.9%). The majority of SEs in the Ntuzuma were African respondents. That means Africans take seriously the township business opportunity compared to other races, supporting the DPLG study shows the majority of Ntuzuma residents are African. Conversely, the relatively lower representation of white, coloured, and Indian respondents raises questions about the factors influencing their lower engagement in

township businesses. Study findings align with Msomi (2019) as black race have higher % compeer to Ahmad's (2017) the black were second highest. Table 4.3 below shows the age group of the respondents.

Table 4. 3: Respondent age analysis

Age		
	Frequency	**Per cent**
26 to 35 years	52	28.9%
36 to 45 years	47	26.1%
46 years and over	42	23.3%
25 and below	38	21.1%
Total	**180**	**100.0**

The highest contributing respondents in the study are between 26-35 years with a total of 28.9%, followed by respondents between 36-45 years with a total of 26.1%. This is followed by respondents between the ages of 46 years and above with a total of 23.3%, and the lowest respondents between 25 years and below with a total of 21.1%. This means the majority of the respondents are youth in this study.

The pre-eminence of respondents in the 26-35 years age bracket aligns with broader trends emphasizing the entrepreneurial spirit and innovation often associated with younger age groups. The prevalence of youth participation in the study not only speaks to the current dynamics but also holds implications for the future trajectory of entrepreneurship in Ntuzuma. The age distribution reveals a vibrant and diverse entrepreneurial, with a notable emphasis on youth participation. Recognizing the unique needs and contributions of different age groups is essential for crafting tailored interventions that foster a thriving and inclusive entrepreneurial ecosystem within the township. This study findings oppose Ahmad's study 2017 where 26 to 35 years group were least majority and over 45 as the highest to owned business. Table 4.4 below indicates the respondents' education levels.

Table 4. 4: Respondent education level analysis

Education Level		
	Frequency	**Per cent**
High school level	66	36.7%
Tertiary level	53	29.4%

Secondary level	40	22.2%
Primary level	20	11.1%
Other	1	0.6%
Total	**180**	**100.0%**

The highest number of respondents have a high school level education background with a total of 36.7%, followed by respondents who have tertiary education obtained with 29.4%. Respondents with secondary education background total 22.2%, and lastly, respondents who have primary education background with 11.1%; 0,6% of respondents chose to not disclose their education level. This means that the majority of respondents have a high school level. The dominance of respondents with a high school level of education highlights the significance of this educational milestone within the entrepreneurial landscape of Ntuzuma. This finding aligns with the observations made by Maduekwe (2016), who reported a high school education level as the highest-ranking qualification in a similar context. The education level distribution highlights the diverse educational landscape of entrepreneurs in Ntuzuma, with a notable concentration at the high school level. Recognising the educational diversity among entrepreneurs is essential for developing comprehensive support mechanisms that cater to the varying needs of individuals across different educational backgrounds. Table 4.5 below shows the respondents' nature of the small enterprise industry.

Table 4. 5: Respondent nature of business industry analysis

Nature of Small Enterprise Industry		
	Frequency	**Per cent**
Retail and wholesale store	50	27.8%
Education and training	24	13.3%
Food and manufacturing	24	13.3%
Logistic and transport	21	11.7%
Safety and Security	14	7.8%
Medical and health services	13	7.2%
Legal and financial services	13	7.2%
Marketing and information technology	12	6.7%
Other	9	5.0%
Total	**180**	**100.0%**

The highest number of respondents (27.8%) are operating in retail and wholesale, followed by two industry respondents (13.3%) who are operating in food and manufacturing, then education and training followed by 11.7% of respondents operating in the industry of logistics and transport. Then, 7.8% of respondents operate in the

industry of safety and security, followed by two industry respondents with 7.2% operating in the industry of medical and health services then legal and financial services. In addition, 6.7% of respondents operated in the industry of marketing and information technology, and lastly, 5% of respondents operated in an industry other than those listed in the survey tool. The study findings show opposite then Alvarez *et al.* (2021) and Der-Poll (2022) indicates a recognition of the essential services offered within the healthcare and legal/financial domains, contributing to the overall resilience and sustainability of the local economy. The varied distribution across different industries emphasizes the dynamic is crucial for tailoring support programs and policies that address the specific needs and challenges faced by entrepreneurs across various sectors, fostering a resilient and thriving small business community. Table 4.6 below shows the respondents' nature of the small enterprise sector.

Table 4. 6: Respondent nature of the business sector analysis

Nature of the Small Enterprise Sector		
	Frequency	**Per cent**
Partnership	67	37.2%
Sole trader	61	33.9%
Joint venture or joint associates	15	8.3%
Co-operative	11	6.1%
Close corporation	10	5.6%
Franchise	9	5.0%
Private sector	7	3.9%
Total	**180**	**100.0%**

The highest-frequency respondents in the nature of the small enterprise sector indicate 37.2% of respondents operating in the partnership sector, follow by 33.9% of respondents operating in the sole traders' sector. In addition, 8.3% of the respondents are in a joint associate's sector, followed by 6.1% of respondents operating in the cooperative sector. This is followed by 5% of respondents operating in the franchise sector and, lastly, 3.9% of respondents operating in the private sector. Understanding the distribution across different business structures is pivotal for tailoring support mechanisms that cater to the unique needs and challenges faced by entrepreneurs operating within specific sectors. The prevalence of partnerships and sole traders, in particular, underscores the need for nuanced interventions that address both collaborative and individualistic entrepreneurial endeavours. Kefasi's (2019) findings show the highest business owned sole traders, underscores the entrepreneurial spirit

and individual initiative driving a significant portion while flexibility and autonomy may serve as a key driver for those seeking independent ventures. Table 4.7 below indicates the biographical data of the participants based on the business premise.

Table 4. 7 : Respondent business premise analysis

Business Premise		
	Frequency	**Per cent**
Leased space	114	63.3%
Home space	52	28.9%
Other	14	7.8%
Total	**180**	**100.0%**

The highest-frequency respondents in the business premise show that 63.3% are in leased spaces, followed by 28% of respondents who used home-owned premises and lastly, 7.8% of the respondents use other premises. Drury (2018) leased premises reflects a reliance on external locations for business operations, possibly indicating a flexible and cost-effective approach that aligns with the needs and resources of entrepreneurs. This dominant presence in leased premises reflects a reliance on external locations for business operations, possibly indicating a flexible and cost-effective approach that aligns with the needs and resources of small entrepreneurs. The varied distribution across different types of business premises showcases the adaptability and resourcefulness of entrepreneurs. The respondents' years of business operating analysis are presented in Table 4.8 below.

Table 4. 8: Respondent years of business operating analysis

Year Your Business Has Been Operating		
	Frequency	**Per cent**
1-5 years	97	53.9%
6-10 years	40	22.2%
1 year	28	15.6%
Over 10 years	15	8.3%
Total	**180**	**100.0%**

The highest frequency rate of 53,9% of respondents has been operating for 1-5 years followed by 22.2% of respondents whose business has operated for 6-10 years. In addition, 15.6% of respondents have operated for only one year, and lastly 8.3% of respondents have been in business for over 10 years. 1-5 years representation in the

early years of operation suggests a vibrant influx of new businesses into the local entrepreneurial scene, contributing to the dynamism of the small enterprise sector. The prevalence of businesses in their early years underscores the need for targeted support for newer enterprises, while acknowledging the presence of longstanding businesses highlights the resilience and accumulated expertise within the local small business community. Table 4.9 below shows the number of employees the respondents' enterprises employed.

Table 4. 9: Respondent total number of employee analysis

Total Number of Employees in the enterprise			
		Frequency	**Per cent**
	1-4 employees	98	54.4%
	5-10 employees	69	38.3%
	11-20 employees	12	6.7%
	Undisclosed	1	0.6%
	Total	**180**	**100.0%**

The highest rate of respondents in the total number of employees shows 54.4% of between 1 and 4 employees' significance of SEs as key contributors to employment within the township, possibly reflecting the resource-efficient nature of these businesses. Followed by respondents employed between 5 and 10 employees with 38.3%. Then, 6.7% of respondents with employees between 11 and 20 and lastly, 0.6% of respondents with undisclosed. El-Shishini (2017) findings show the highest number of employees being the more the 5, signifying a notable proportion of relatively newer enterprises. The diverse distribution across different employment sizes reflects the varied scale and impact of small enterprises in Ntuzuma. Acknowledging the contributions of businesses with smaller teams, as well as those with moderate-sized workforces, is crucial for fostering a holistic and inclusive approach to supporting the local entrepreneurial ecosystem.

4.2.1 Conclusion to Biographical information

The above presentation outlined the respondents' demographics of this study. The observation shows that a significant majority of the respondents were female raises questions about potential gender-related factors influencing the adoption of CMAPs in SEs. Research suggests that gender diversity can contribute to a broader range of

perspectives and decision-making approaches. Future research could explore whether gender dynamics play a role in shaping attitudes toward financial management practices within these enterprises. The majority of participants are between 26 to 35 years where the highest education level is a high school in the township small enterprise. Higher educational attainment is often associated with better financial literacy and management practices, but university is better. The respondents' highest nature of the small enterprise industry is retail and wholesale with the majority nature of the small enterprise sector being in partnership. Industries may have varying financial management needs, and CMAPs may need to be tailored to suit the specific requirements of the retail and wholesale sector. Exploring industry-specific best practices in CMAP adoption could offer valuable insights for enhancing financial management strategies. Furthermore, most participants operate their businesses in leased spaces where the majority of businesses had been operating for 1-5 years. This temporal aspect could impact the familiarity and comfort levels with sophisticated financial tools understanding the challenges faced by newer businesses in adopting CMAPs could inform targeted support mechanisms, potentially accelerating the integration of CMAPs. It was also noted that the majority of respondent employees in the enterprise were between 1 and 4 employees. Decision-making processes may be more centralized understanding the dynamics of decision-making within these small teams is crucial for identifying potential facilitators to the adoption of collaborative CMAPs that require collective input.

4.3 OBJECTIVE 1: TO INVESTIGATE THE CONTEMPORARY MAPS USED

This primary objective aimed to expose and establish the most contemporary MA practice tool used by the Ntuzuma township small enterprise. In this section, the results of all 5 broad systems of MAPs that include budgeting, costing, performance measuring, decision-making and strategy are presented to assess the adoption level of respondents. NandR represent Never and Rarely utilising the tool; Occasionally utilising the tool; and F&A represents Frequently and Always utilising the tool. The mean, mode and standard deviation are presented as additional statics. Note that a business may adopt multiple tools based on procedures, as explained in Chapter Two. Results of CMAP system utilisation and frequency are presented below according to their highest utilisation tool.

4.3.1 Part A: Budgeting Tools Results

This part of the section seeks to provide results on contemporary budgeting.

Table 4. 10: The contemporary costing MA practices results

Budgeting collection tools	Number of users (%)			other statics			Most used Rankings
	N&R	O	F&A	Mode	Mean	Mean - SD	
Sales budgets	9,5%	7,8%	82,8%	4	3.9	0.9	1
Cash budgets	17,7%	18,3%	63,9%	5	3.8	1.2	2
Purchases budgets	35,5%	32,2%	32,3%	3	2.9	1.1	3
Master budgeting	39,4%	31,1%	29,4%	3	2.8	1.1	4
Marketing budgets	36,6%	34,4%	28,9%	3	2.9	1.2	5
Inventory budgets	47,5%	30,2%	22,4%	3	2.6	1.1	6
Zero-based budgeting	57,8%	21,1%	21,1%	2	2.5	1.3	7
Flexible budgeting	63,9%	18,9%	17,3%	2	2.4	1.1	8
Capital budgeting	65,5%	21,1%	13,3%	2	2.2	1.0	9
Capital expenditure budgets	61,1%	26,7%	12,2%	2	2.3	1.0	10
Fixed budgeting	81,7%	9,4%	8,9%	2	2.0	0.9	11
Incremental budgeting	76,1%	15,6%	8,3%	2	2.0	1.0	12

N=Never R=Rarely O=Occasionally F=Frequently A=Always

The table above present the respondents' results ranked from the highest utilisation budgeting tools to the lowest out of the 180 respondents with mean 3.9 and mode 5-2 with approximate mode 3 and mean=2.5. Table 4.10 presents sales budgeting as the highest-utilised tool by 82% of respondents, followed by cash budgets by 63.9% of respondents, purchases budgets with the utilisation of 32.3% of respondents, master budgeting by 29%, marketing budgets by 28.9%, utilisation of inventory budgets by 22.4%, zero-based budgeting at 21.7%, flexible budgeting by 17.3% of respondents, capital budgeting by 13.3% of respondents, and the capital expenditure budgets with the utilisation of 12.2% of respondents. Lastly, the utilisation of fixed budgeting by 8.9% and the lowest utilisation tool is incremental budgeting by 8.3%.

The findings indicate that SEs in budgeting tools tend to prioritize sales budgeting, cash budgeting and purchases budgets. In contrast, there is less on the utilisation of fixed budgeting and incremental budgeting, especially within small enterprises. In Cape Town, a study conducted by Mwanza (2018) revealed that sales budgets are prepared frequently, accounting for 84.9%, while production budgeting is prepared at a rate of

58.9%, showing a discrepancy with the findings of the current study. In Mduekwe's study (2015), there is a consensus indicating a greater utilisation of operational budgeting, encompassing sales budgeting, purchasing budgeting, and production budgeting in SMEs when compared to the findings of the present study. The findings are aligned with those of Kefasi's (2019) who found that 75% of the surveyed SEs in Cape Town used sales budgets, 62% of the respondent uses the purchasing budget and about 65% uses incremental budgeting. Armitage *et al.*'s (2016: 19) findings show that 10 out of 11 of their respondents use operating budgeting and that even when small enterprise has limited recourses, operation budgeting assists with the planning on the limitation that benefit business in a developing economy. As a result, financial budgeting has a higher adoption rate of 82%. Cele's (2020) findings indicate that sales budget utilisation was 53.3%, production budget 47.7%, labour budget 36.7% and material budget 43.7% were frequently and always adoption rate. While the findings offer a snapshot of current trends, it is essential to acknowledge observed in Mduekwe's (2015) study, indicating the need for nuanced exploration of factors contributing to divergent adoption rates. This invites future research to delve into the evolving landscape of budgeting tools in SEs, ensuring our insights remain relevant in a dynamic business environment. Part B below presents and discusses the results on the contemporary duration budget.

4.3.2 Part B: Duration budget tools results

This part of the section seeks to present results on the contemporary duration budget.

Table 4. 11: The contemporary budgeting duration collection tools results

Budgeting duration collection	Number of users (%)			other statics			Most used Rankings
	N&R	O	F&A	Mode	Mean	Mean- SD	
Monthly budget	4,5%	6,7%	88,9%	5	4.4	0.8	1
Annual budget	43,9%	21,7%	34,5%	2	2.9	1.3	2
Rolling budgeting	82,8%	11,7%	5,5%	2	1.9	0.9	3

N=Never R=Rarely O=Occasionally F=Frequently A=Always

The table above details the respondents' results ranked from the highest duration utilisation budgeting tools to the lowest out of the 180 respondents with mean from 4.4 - 1.9 and mode 5 - 2. The frequently frame of financial planning is monthly, preferred by 88.9% respondents, followed by the annual budgeting tool at 34.5% and lastly, only 5.5% of respondents use rolling budgeting. This means that most of the surveyed 180 SEs in Ntuzuma Township use monthly budgets.

The results show that small enterprises in Ntuzuma prioritise use monthly budgeting

which also aligns with the findings of Manyuchi *et al.* (2021) in SA, and Akmese (2016) in Konya. where the findings also indicate the use of monthly budgets. However, Kefasi (2019) results are opposite with the highest budgeting periods annually at 68% the followed by monthly at 10%. Ahmad's (2017) results contrast to CMAPs where about 75% respondents using only 2 types of budgeting which are monthly and annually budgeting as they are essential for future focuses. Only 34.5% of the SEs use annual budgets in Ahmad (2017) respondents uses 15% using rolling. Maduekwe's (2016) findings show 47% in the SEs adoption rate annually budget and note that food and beverages industry contributed more as industries or sector have factor on utilisation of tools. Part C of the study presents results and discusses on contemporary costing tools used by SEs in Ntuzuma Township.

4.3.3 Part C: Costing Tools results.

This part of the section seeks to present results on contemporary costing.

Table 4. 12: The contemporary costing practises results

Cost duration collection	Number of users (%)			other statics			Most used Rankings
	N&R	O	F&A	Mode	Mean	Mean- SD	
Job costing	77,7%	11.7%	10,5%	2	2.1	1.0	1
Target costing	74,4%	16.1%	9,4%	2	2.1	1.0	2
Activity-based costing (ABC)	82,2%	8.9%	8,9%	2	2.0	1.0	3
Just-in-time costing	88,3%	6.1%	5,6%	2	1.9	0.9	4
Traditional costing	84,4%	10.6%	5%	2	1.9	0.8	5
Joint and by-product costing	84,5%	11.1%	4,5%	2	1.9	0.8	6
Variable costing	82,8%	12.8%%	4,5%	2	1.9	0.8	7
Absorption costing	86,7%	10%	3,4%	2	1.8	0.8	8
Process costing	85%	10,6%	4,4%	2	1.8	0.8	9

N=Never R=Rarely O=Occasionally F=Frequently A=Always

The table above details the respondents' results ranked from the highest utilisation costing tools to the lowest with approximate mode = 2 and mean = 2. Small enterprise respondents are not adopting much costing systems. The highest adopted costing tool is job costing with a utilisation rate of 10.5% of respondents, followed by target costing with 9,4% of respondents using it. Activity-based costing (ABC) with 8,9% of respondents ranks third, followed by just-in-time costing with 5,6% utilisation rate, traditional costing with 5% of respondents, joint and by-product costing with the utilisation of 4.5% of respondents, variable costing with the utilisation of 4.5% of respondents, absorption

costing with a utilisation of 3.4% of respondents and lastly, process costing with a utilisation of 4,4% of respondents. The result in Table 4.12 indicated that process costing is the lowest utilised system out of the 9. The study results are contrast those of Kefasi's (2019) who found that job costing adoption rate was 69% and absorption was 54%. Annan *et al,* (2016) show that 98% of Ghanaian SEs use job costing tool. Contrasting with other studies, Ahmad (2017) found that process costing was frequently used in developed economies than in emerging economies.

In Ntuzuma enterprises, the utilisation of costing tools is the lowest among the five methods by 10.5%, as compared to the investigations by El-Shishini (2017) and Atia *et al.* (2020). Their findings indicate that costing tools are more commonly employed in manufacturing and hotel industries. In Cele's (2020) study, it was found that 50% of the respondents do not use costing tools. Part D presents and discusses the results on contemporary performance measures.

4.3.4 Part D: Performance measures MAPs results

The section seeks to provide results on contemporary performance measures.

Table 4. 13: The contemporary performance measures tools results

Performance duration collection	Number of users (%)			other statics			Most used Rankings
	N&R	O	F&A	Mode	Mean	Mean- SD	
Financial measures							
Sales growth	6,7%	30%	63,3%	4	3.7	0.8	1
Cash flows	9,5%	31.1%	59,4%	4	3.6	0.9	2
Operating income	26,7%	31.7%	42,7%	3	3.2	1.1	3
Return on investment	76,7	17.2%	6,1%	1	1.9	1.0	4
Variance analysis	81,7	10.6%	7,8%	1	1.8	1.0	5
Net profit margin	77,2	16.7%	6,1%	1	1.9	1.0	6
Non-financial measures							
Customers' complaints and satisfaction	5,5%	13.9%	80,6%	5	4.2	0.9	1
Response time to customers	13,3%	21.7%	65%	4	3.7	1.1	2
Number of returned products	22,2%	15%	62,8%	5	3.6	1.3	3
Job satisfaction survey	69,4%	13.3%	17,2%	2	2.3	1.2	4
Staff competency rate	70%	13.9%	16,1%	2	2.3	1.2	5
Hours of employees training	69,4%	17.2%	13,4%	2	2.2	1.1	6
Employee turnover rate	73,8%	15%	11,1%	2	2.2	1.0	7

N=Never R=Rarely R=Occasionally F=Frequently A=Always

The table above details the respondents' results on performance measures divided into

two are financial measures and non-financial measures, ranking from the highest utilisation costing tools to the lowest with approximate mode=2 and mean=3.5. Sales growth rate is mostly utilised financial measure with a utilisation rate of 63.3%. That is followed by cash flows (59.4%), operating income (41.7%), return on the investment (6.1%), variance analysis (7.8%), and lastly, net profit margin (6.1%).

Customer complaints and satisfaction tools is mostly utilised non-financial measure with a utilisation rate of 80.6% of respondents. Followed by response time to customers (65%), the number of returned products (62.8%), job satisfaction survey (17.2%), staff competency (16.1%), the hours of employees' training (13.4%), employee turnover (11.1%), andlastly, employees' absenteeism (8.4%). Kefasi's (2019) findings show higher positive usage of non-financial measuring tools compared to financial measuring which contrasts the current study's findings. The current study's findings also contrast those of El-Shishini (2017) where the study utilises performance measures about 80% more. Armitage *et al.* (2016) recommend businesses to use a balance of financial and non-financial measuring to operate in best capabilities lowering failure rate of business. Business Report's (2016) findings show that employee turnover tool adoption rate is about 54.0% and 59.0% of respondents. Part E of the study presents results on the use of contemporary costing decision-making tools.

4.3.5 Part E: Decision-making tools results

The section seeks to present results on contemporary costing decision-making.

Table 4. 14: The contemporary decision-making practices results

decision-making collection	Number of users (%)			other statics			Most used Rankings
	N&R	O	F&A	Mode	Mean	Mean- SD	
Price decision making	15,60%	46.7%	37,80%	3	3.2	1.0	1
Margin of safety	48,40%	28.3%	23.3%	3	2.6	1.3	2
Relevant cost	37,70%	45%	17,20%	3	2.6	1.0	3
Activity base management	77,20%	12.8%	10%	2	2.0	1.0	4
Total quality management	82,80%	9.4%	7,80%	2	1.9	1.0	5
Back flush analysis	83,90%	10%	6,10%	2	1.8	0.9	6

N=Never R=Rarely R=Occasionally F=Frequently A=Always

The table above shows the respondents' results ranked from the highest utilisation decision-making to the lowest with approximate mode=2,5 and mean=2.5. Ntuzuma

Township SEs are not adopting many decision-making systems. The highest utilised tool is price decision-making with a rate of 37.8% of respondents using it. This is followed by the margin of safety tool with the utilisation of 23% of respondents. Then, the relevant cost with the utilisation rate of 17,20%, followed by the Activity base management (ABM) tool with the rate of 10%. The Total Quality Management (TQM) utilisation had a rate of 13.3% and the lowest is the back-flush analysis tool with a utilisation rate of 8.3%. As per the results, this means respondents focus more on price decision-making with less than 50% of respondents.

Cele (2020) found that 60% of respondents do not use decision-making tools. Similarly, Kefisi (2019) found that decision making tools are lowly used by SEs with stock controlling tool is the highest adoption by 27% followed by payback with adoption rate of 26%. Erokhin *et al.* (2019) findings on Russian SEs were an 1% utilisation rate of decision-making tools from 2000 to 2013 and 2014 to 2018 period which gains to 29%. The current study's finding also aligns with those of Erokhin *et al.* (2019). Oyerogba's findings (2015: 80) indicate that the adoption rate of ARR and IRR is higher compared to the payback period in Nigeria. Part F of the study presents and discusses the results on contemporary strategic analysis.

4.3.6 Part F: Strategic analysis results

The section seeks to present results on contemporary strategic analysis.

Table 4. 15: The contemporary strategic analysis

Strategic analysis collection tools	Number of users (%)			other statics			Most used Rankings
	N&R	O	F&A	Mode	Mean	Mean- SD	
Risk and uncertainty	32,8%	46.7%	20,5%	3	2.8	1.0	1
Profitability analysis	58,9%	26.7%	14,5%	2	2.3	1.1	2
Capital investment	72,2%	15.6%	12,2%	1	2.1	1.1	3
Value analysis	81,7%	11.1%	7,3%	2	1.9	0.9	4
Function analysis	83,3%	9.4%	7,2%	2	1.9	1.0	5
Balance scorecard	85,5%	11.2%	3,4%	2	1.8	0.8	6

N=Never R=Rarely R=Occasionally F=Frequently A=Always

The table above shows the respondents' results ranked from the highest utilisation strategic analysis to the lowest out of the 180 with approximate mode=2 and Mean = 2.5. The highest utilised tool is the risk and uncertainty tool with a utilisation

rate of 20.5% of respondents, followed by profitability analysis tool respondents utilising rate of 14.5%, capital investment analysis tool respondents utilising rate of 12.2%, value analysis tool respondents utilising rate of 7.3%, lowest is function analysis tool with 7.2% and the balance scorecard tool with utilising of 3.4%.

Kefasi's (2019) findings show that strategic practise was less frequently adopted compared to costing and budgeting. The most adopted tool in strategic practise was value chain analysis with only 7%. In comparison, the predominant tool in the strategic system of the current study is risk and uncertainty, accounting for the highest percentage at 20.5%. AlKhajeh and Khalid's (2018) findings, consistent with the current study, highlight the lowest utilisation of the strategic system in Gauteng. In contrast, Alvarez et al. (2021) and Der-Poll (2022) assert the greater significance of strategic tools compared to others, corroborating the present study's findings. However, these studies align with previous findings indicating low utilisation of strategic systems by few SEs owners.

4.3.7 Summary of Objective 1

This section concentrated on examining the utilisation of CMAPs among small enterprise owners in Ntuzuma Township. The adoption rates of these practices were measured, and it was observed that out of the five systems, budgeting was the most widely utilised tool, followed by performance-measured tools, then decision-making tools, strategic analysis and costing tools. The results suggest that small businesses in Ntuzuma Township prioritise financial planning, performance measurement, and informed decision-making. These practices may reflect a strategic mindset among SEs in the township, potentially contributing to their overall business sustainability and success. The findings indicate that the majority of the respondents do not make use of CMAP tools, suggesting that these practices have not been effectively introduced and implemented among the participants in this study carries profound implications for the operational long-term sustainability of these SEs.

SEs may find themselves at a competitive disadvantage, particularly when compared to businesses that embrace CMAPs more extensively, hindering their ability to innovate and adapt to changing market conditions. The absence of financial strategies may impact the financial stability, growth potential, and decision-making capabilities of SEs.

This deficiency in financial MA not only poses challenges for businesses but also reflects a potential gap in knowledge or awareness within the Ntuzuma entrepreneurial community. To address these concerns, targeted educational initiatives, support mechanisms, and community development efforts are crucial. Strengthening the FM capabilities of SEs not only contributes to their individual success but also holds the key to broader economic development, job creation, and the overall resilience of the local business ecosystem. The limited adoption of CMAPs thus underscores the need for strategic interventions aimed at empowering SEs with the tools necessary for their sustained success and long-term viability in Ntuzuma Township. The research question is achieved with lesser used of CMAPs in the Ntuzuma Township. The meaning of SEs not using the tool increases the SEs frailer and show that SEs Ntuzuma owners uses any tools for their business survive.

4.4 OBJECTIVE 2: THE AMOUNT OF KNOWLEDGE OF CMAPs

This objective aimed to expose the amount of knowledge the respondent small enterprise in Ntuzuma have about the CMAP tool. The source of knowledge and understanding is examined to answer the research question. The results are presented ranking from highest to the lower and note that businesses may have multiple sources of knowledge based on experiences, as explained in Chapter Two. Part A presents and discusses the results of the Respondents' sources of MAPs. Part A: Sources of Knowledge results. The section seeks to present results on CMAPs' Sources.

Table 4. 16: Respondents' sources of MAPs results

Sources of MAP tools	Number	Rank
Came with previous working experience	156	1
School background in MA	119	2
Enterprise conducts management programs	32	3
Online courses attended	28	4
Attending training programs (workshops) for management	26	5
Not applicable	4	6

The table above details the respondents' frequently used sources of MAP tools ranked from the highest to the lowest sources out of 180 respondents, ranking from 1-6. The (1) frequently source of MAPs knowledge comes from previous working experience with 119 respondents out of 180. Followed school background of MA (156 out of 180), enterprises conducting management programs (23 out of 180), online courses (28 out

of 180), training programs (workshops) (26 out of 180) and lastly, the unknown as not applicable (6 out of 180). This means the majority of SEs owners gain their MAPs knowledge from their previous experiences and also have an educational background that can be business study from high school. Part A presents and discusses the results of the Respondents' understanding of MAPs.

4.4.1 Understanding examination results.

The section seeks to present results on understanding of MAPs.

Table 4. 17: Respondents' understanding of MAPs.

Understanding of MAPs	Number	Rank
MAP concentrates on the business internal procedures to aid management tasks.	163	1
MAP helps to produce a report that allows management to develop decisions and give information for decision-making, monitoring and performance analysis.	157	2
MAP includes costing, budgeting, performance, decision-making, and strategic analysis.	156	3
Contemporary MAP records, summarizes, and analyses costs and spending behaviour, drivers and fluctuations.	155	4
Contemporary MAP is a system that addresses 21st-century problems.	154	5
Not applicable	12	6

The table above presents the respondents frequently used sources of MAP tools ranked from the highest to the lowest sources out of 180 respondents, ranking from 1-6. The highest rank statement (1) "MAPs concentration on the business internal procedures to aid management tasks" (163 out of 180). Following (2) "it helps to produce a report that allows management to develop decisions and give information for decision- making, monitoring and performance analysis" (157 out of 180), then (3) "its inclusions of costing, budgeting, performance, decision-making and strategic analysis" (156 out of 180). Then (4) "CMAP records, summaries, and analyses costs and spending behaviour, drivers and fluctuations" (155 out of 180), and lastly, (5) CMAPs are systems that address 21st-century problems (154 out of 180). These results collectively illustrate the varying degrees of emphasis placed by respondents on different aspects of CMAP tools, providing insights into the perceived significance and functionalities of these tools in the context of business management.

4.4.2 Summary of Objective 2

This section exam of the level of understanding of CMAPs tools among SEs in Ntuzuma Township. The results depict a noteworthy scenario where a substantial portion of SEs

demonstrated a comprehensive background source of knowledge, showcasing a clear awareness of the facts and importance of CMAPs. This suggests that SE owners in Ntuzuma Township possess a foundational understanding of essential MAP tools. The diversity of sources contributing to this knowledge base is particularly significant. Many respondents draw on sustainable sources of knowledge, including practical experience with CMAPs and educational backgrounds, such as high school education. This diversity implies that SEs acquire knowledge from both experiential learning in the business environment and formal education, underlining the multifaceted nature of their understanding of MAP tools.

The implications of these findings on the positive side, the considerable level of awareness among SEs is signifies a potential strategic advantage as this is crucial for effective business management, financial decision-making, and performance evaluation. The discussion should also consider the gap between knowledge and application. While the respondents demonstrate a substantial level of understanding, it does not necessarily translate into widespread utilisation of CMAPs. The reasons behind this gap should be explored further, and strategies could be devised to enhance the practical implementation of CMAPs among SEs. Initiatives focusing on translating knowledge into action, such as targeted training programs and community support networks, could contribute to bridging this gap and fostering a more effective integration of CMAPs into the business practices of SEs in Ntuzuma Township. The research question is achieved where SEs understand the CMAPs in the Ntuzuma Township additionally majority having the background of the CMAPS from past experience and educational background.

4.5 OBJECTIVE 3: USEFULNESS OF MAPS

This objective centres on elucidating the benefits offered by CMAPs. It also evaluated the extent to which small enterprises recognise and acknowledge the advantages derived from utilising CMAP tools. The results are presented ranking according to the most agreed to the lowest agreed. Table below present results on CMAPs' usefulness or benefits.

Table 4. 18: The contemporary usefulness of MAPs

CMAPs tool benefits	Respondents (%)			other statics			Most used Rankings
	D	DK	A	Mode	Mean	SD	

For business process improvement	1.7%	10%	88.3%	3	2.9	0.4	1
Help owners and managers to run the business successfully	2.8%	9.4%	87.8%	3	2.9	0.4	2
Assist in developing business strategies	2.2%	11.1%	86.7%	3	2.8	0.4	3
Help with planning	2.2%	11.7%	86.1%	3	2.8	0.4	4
Help with decision-making	1.7%	12.8%	85.6%	3	2.8	0.4	5
Assists in choosing the best investment opportunities	2.8%	11.7%	85.6%	3	2.8	0.4	6
Guaranties profitability	2.8%	11.7%	85.6%	3	2.8	0.4	7
Helps in financial reporting	2.8%	12.2%	85%	3	2.8	0.5	8
Assist with controlling costs	2.8%	12.8%	84.4%	3	2.8	0.5	9
Yield advantage over competitors	2.8%	13.3%	83.9%	3	2.8	0.5	10
Guaranties business growth	3.9%	12.8%	83.3%	3	2.8	0.5	11
For problem identification	2.8%	13.9%	83.3%	3	2.8	0.5	12
Motivating employees	5.6%	12.2%	82.2%	3	2.8	0.5	13
Guaranties sustainability	3.3%	15%	81.7%	3	2.8	0.5	14
Assists with providing accountable business performances	3.3%	15%	81.7%	3	2.8	0.5	15
Assist in improving communication	3.3%	15%	81.7%	3	2.8	0.5	16

D-1 =Disagree DK-2 =Don't know A-3 =Agree

The table above presents the respondents results ranking from the highest CMAPs tool benefits to the lowest based on 180 respondents, mode=3 and mean =2,8 -2,9. More than 80.0% of the respondents find the CMAP tool beneficial to their business. The highest rate on the usefulness statement is "For business process improvement" agree percentage of 88.3%, following "Help owners and managers to run the business successfully" agrees percentage of 87.8%. Then, "Assist in developing business strategies" agrees percentage of 86.7%, following "Help with planning" agree percentage of 86.1% following "Help with decision-making" agree percentage of 85.6%. Then, "Assists in choosing the best investment opportunities" agree percentage of 85.6%, following "Guaranties sustainability" agree percentage of 81.7%, following, "Helps in financial reporting" agree percentage of 85%. Then, "Assist with control costs" with an agreed percentage of 84.4%, following "Yield an advantage over competitors" with an agreed percentage of 83.9%", following "Guaranties business growth" with an agreed percentage of 83.3%, following "For problem identification" agrees percentage is 83.3%". Then "For problem identification" agrees percentage is 83.3%, following "Motivating employees" agree percentage of 82.2%, following "Guaranties profitability" agrees percentage of 85.6%, following "Assists with providing accountable business

performances" with an agreed percentage of 81.7%, lastly "Assist to improving communication" agrees percentage 81.7%.

This finding means SEs in Ntuzuma find all the facts statements useful for the business, which is an impactful finding. This current study result aligned with other studies regarding the importance of all the fact-listed statements above for businesses to avoid failure rates (Drury 2018). Cele (2019) finds that SEs are fully aware of the advantages CMAPs contain as agree with the fact statement scores mean of 4.

4.5.1 Summary of objective 3

This section explores the usefulness of CMAPs tools among SEs in Ntuzuma sheds light on the significance and potential impact of these practices. The results suggest that a notable proportion of respondents are well-informed about the importance of CMAPs, indicating a collective awareness of the value these practices bring to business management. The implications of this finding extend to the potential enhancement of decision-making processes, financial planning, and overall business performance among SEs in Ntuzuma. While awareness of the usefulness 116of CMAPs is a positive aspect, the usefulness of SEs actively incorporate CMAPs into their daily operations is negative, what barriers or challenges may hinder their full utilisation. The research question is achieved in finding shows that majorities find the CMAPs useful in the Ntuzuma Township which only includes those 3 to 2 tools the SEs using at the period.

4.6 CORRELATIONS BETWEEN THE BIOGRAPHIC DATA AND CMAPS RESULTS

4.6.1 Introduction

This section is presented that levels of significance are denoted *(0.1), ** (0.05) and *** (0.01). All significant and positive correlations are highlighted in green, and all significant and negative correlations are highlighted in orange. Throughout this section, a correlation of **0 to ± 0.20** will be considered negligible, **± 0.21 to ± 0.40** as 'weak', **± 0.41 to ± 0.60** as 'moderate' **± 0.61 to ± 0.80** as strong **± 0.82 to ± 1.00** solid or 'very-strong' correlation (Prion & Haerling, 2014).

4.6.2 H_1: There is a significant relationship between biographic information and budgeting tools.

Table 4.20 below shows in detail the results of Spearman rho correlation test conducted to analyse the relationships between various biographic information (such as gender,

race, age, and education level) and budgeting tools (Sales budgets (SB), Master budgeting (MB), Purchases budgets (PB), Capital expenditure budgets (CEB), Capital budgeting (CB), Inventory budgets (IB), Marketing budgets (MB), Cash flow (CF), Flexible budgeting (FB), Fixed budgeting (FB), Incremental budgeting (LB) and Zero based budgeting (ZBB). The correlation coefficients and their associated p-values were examined to determine the strength and significance of these relationships.

Table 4. 19 : Correlations between biographic data and budget tools

Sales budgets (SB), Master budgeting (MB), Purchases budgets (PB), Capital expenditure budgets (CEB), Capital budgeting (CB), Inventory budgets (IB), Marketing budgets (MB), Cash flow (CF), Flexible budgeting (FB), Fixed budgeting (FB), Incremental budgeting (LB) and zero-based budgeting (ZBB)

		SB	MB	PB	CEB	CD	IB	MB	CB	FLB	FB	IB	ZBB
Gender	Correlation Coefficient	-0.091	-0.101	-0.037	0.027	0.056	-0.064	0.032	-.173*	0.061	0.127	0.090	0.022
	Sig. (2-tailed)	0.224	0.178	0.618	0.717	0.452	0.393	0.667	0.020	0.420	0.091	0.232	0.766
	N	180	180	180	180	180	180	180	180	180	180	180	180
Race	Correlation Coefficient	0.051	0.090	0.140	0.079	0.132	0.090	0.116	.179*	-0.082	0.001	-0.041	-0.100
	Sig. (2-tailed)	0.493	0.228	0.060	0.294	0.078	0.228	0.121	0.016	0.277	0.992	0.589	0.181
	N	180	180	180	180	180	180	180	180	180	180	180	180
Age	Correlation Coefficient	.185*	0.144	.210**	.177*	0.067	0.103	.162*	.163*	-0.143	-0.143	-0.145	-0.107
	Sig. (2-tailed)	0.013	0.054	0.005	0.017	0.374	0.169	0.030	0.029	0.055	0.056	0.052	0.152
	N	180	180	180	180	180	180	180	180	180	180	180	180
Education Level	Correlation Coefficient	0.038	0.184*	0.295**	0.166*	0.225**	0.075	0.213**	0.100	0.167*	0.306**	0.244**	0.091
	Sig. (2-tailed)	0.616	0.014	0.000	0.026	0.002	0.320	0.004	0.182	0.025	0.000	0.001	0.225
	N	180	180	180	180	180	180	180	180	180	180	180	180
Nature of Small enterprise Industry	Correlation Coefficient	0.075	-0.109	0.055	0.001	-0.044	0.050	-.165*	-0.070	0.024	0.050	0.061	0.019
	Sig. (2-tailed)	0.316	0.144	0.466	0.991	0.554	0.504	0.027	0.348	0.751	0.508	0.417	0.804
	N	180	180	180	180	180	180	180	180	180	180	180	180
Nature of Small enterprise Form	Correlation Coefficient	SB 0.184*	MB 0.212**	PB 0.138	CEB 0.181*	CD 0.088	IB 0.112	MB 0.234**	CB 0.203**	FLB -0.048	FB -0.020	IB 0.007	ZBB -.153*
	Sig. (2-tailed)	0.013	0.004	0.065	0.015	0.239	0.136	0.002	0.006	0.523	0.788	0.930	0.040

Starting with gender, the correlation coefficients ranged from -0.091 to 0.127, suggesting weak to moderate correlations with the budgeting tools. However, none of these correlations were found to be statistically significant, as indicated by the p-values ranging from 0.091 to 0.766. Therefore, gender does not appear to have a significant impact on the budgeting tools. Similarly, for race, the correlation coefficients ranged from -0.100 to 0.179, indicating weak correlations with the budgeting tools. Only one correlation, with a coefficient of 0.179, was found to be statistically significant at the 0.05 level (2-tailed). This suggests that race may have a modest influence on certain budgeting tools, as supported by the corresponding p-value of 0.016.

Moving on to age, the correlation coefficients ranged from -0.145 to 0.210, indicating weak to moderate correlations with the budgeting tools. Notably, two correlations, with coefficients of 0.185 and 0.210, were found to be statistically significant at the 0.05 level (2-tailed). This implies that age may have a meaningful impact on certain budgeting tools, as supported by the corresponding p-values of 0.013 and 0.005. Regarding education level, the correlation coefficients ranged from 0.038 to 0.306, suggesting weak to moderate correlations with the budgeting tools. Importantly, several correlations were found to be statistically significant at the 0.01 level (2-tailed), indicating a substantial relationship between education level and the budgeting tools. This is supported by the associated p-values ranging from 0.000 to 0.025.

Moving to the nature of small enterprise industry and form, the correlation coefficients ranged from -0.165 to 0.234, indicating weak to moderate correlations with the budgeting tools. One correlation, with > a coefficient of -0.165, was found to be statistically significant at the 0.05 level (2-tailed), suggesting a potential influence of the nature of the small enterprise industry on a specific budgeting tool. However, the p-values for other correlations did not reach statistical significance.

The result of this study's correlation analysis reveals varying, ranging from weak to moderate, between biographic factors and budgeting tools. The absence of statistically significant correlations between gender and most budgeting tools aligns with earlier research suggesting that gender may not play a significant role in shaping organisational budgeting practices. Notably, the statistically significant correlations found between age and specific budgeting tools resonate with existing literature that

underscores the impact of age and experiential factors on diverse approaches to budgeting. The robust relationship observed between education level and budgeting tools is consistent with prior research highlighting the pivotal role of financial education in influencing budgetary practices. The correlation results pertaining to small enterprise industry and form are in harmony with literature acknowledging the varied challenges encountered by businesses in implementing budgeting strategies. Overall, these findings align, a slight extent, with the perspectives presented by Fillis (2006), as they contribute to the broader understanding of the intricate relationships between biographic factors and budgeting tools within organizational settings.

4.6.3 H2: There is a significant relationship between biographic information and costing tools.

Table 4.20 below shows the result of the Spearman rho correlation test that was conducted to examine the relationship between various biographic information (i.e. gender, race, age, education level, nature of small enterprise industry, nature of small enterprise form, business premise, years the business has been operating, and total number of employees) and costing tools that are traditional costing (TC), process costing (PC), joint and by product costing (JBPC), target costing (TC), job costing (JC), Activity based costing (ABC), variable costing (VC), absorption costing (AC) and Just-in-time costing (JIT). The correlation coefficients and their associated p-values were analysed to determine the strength and significance of these relationships.

Table 4. 20: Biographical Information and costing tools

Correlations between biographic information and costing tools

Traditional costing (TC), process costing (PC), joint and by product costing (JBPC), target costing (TC), job costing (JC), Activity based costing (ABC), variable costing (VC), absorption costing (AC) and Just-in-time costing (JIT).

		TC	PC	JBPC	TC	JC	ABC	VC	AC	JITC
Gender	Correlation Coefficient	-0.042	-0.049	-0.023	0.008	-0.056	0.017	0.119	0.070	0.027
	Sig. (2-tailed)	0.572	0.512	0.757	0.910	0.459	0.818	0.112	0.351	0.715
	N	180	180	180	180	180	180	180	180	180
Race	Correlation Coefficient	0.095	0.123	0.075	0.006	0.090	0.078	0.058	0.099	0.008
	Sig. (2-tailed)	0.204	0.101	0.316	0.939	0.230	0.295	0.436	0.187	0.915
	N	180	180	180	180	180	180	180	180	180

Age	Correlation Coefficient	0.055	0.098	0.026	0.045	0.082	0.026	0.140	-0.006	0.004
	Sig. (2-tailed)	0.465	0.191	0.724	0.548	0.273	0.726	0.060	0.936	0.962
Education Level	Correlation Coefficient	0.140	0.055	0.130	.193**	.214**	.265**	0.145	.191*	.198**
	Sig. (2-tailed)	0.062	0.466	0.081	0.010	0.004	0.000	0.052	0.010	0.008
	N	180	180	180	180	180	180	180	180	180
Nature of Small enterprise Industry	Correlation Coefficient	0.081	0.125	0.039	-0.013	-0.074	-0.007	-0.064	0.039	0.030
	Sig. (2-tailed)	0.279	0.094	0.602	0.864	0.323	0.929	0.392	0.606	0.688
	N	180	180	180	180	180	180	180	180	180
Nature of Small enterprise Form	Correlation Coefficient	-0.081	-0.077	-0.061	-0.056	0.068	-0.011	0.011	-0.128	-0.144
	Sig. (2-tailed)	0.280	0.307	0.418	0.455	0.367	0.887	0.883	0.088	0.054
	N	180	180	180	180	180	180	180	180	180
Business Premise	Correlation Coefficient	0.064	0.126	0.004	0.059	0.092	0.020	0.055	0.034	0.010
	Sig. (2-tailed)	0.395	0.092	0.957	0.430	0.218	0.790	0.464	0.655	0.891
	N	180	180	180	180	180	180	180	180	180
Year Your Business Has Been Operating	Correlation Coefficient	0.048	.229**	0.053	0.129	.180*	0.111	0.132	0.092	0.067
	Sig. (2-tailed)	0.526	0.002	0.480	0.084	0.016	0.139	0.077	0.220	0.369
	N	180	180	180	180	180	180	180	180	180
Total Number of Employees in the enterprise	Correlation Coefficient	0.081	0.124	-0.003	0.058	.230**	0.137	0.009	0.031	0.060
	Sig. (2-tailed)	0.281	0.096	0.973	0.443	0.002	0.067	0.900	0.683	0.427
	N	180	180	180	180	180	180	180	180	180
**. Correlation is significant at the 0.01 level (2-tailed).										
*. Correlation is significant at the 0.05 level (2-tailed).										

Starting with gender, the correlation coefficient of -0.042 indicated a weak negative correlation between gender and the costing tools. However, the p-value of 0.572 indicated that this correlation was not statistically significant. This suggests that gender does not have a substantial influence on the costing tools. Similarly, the correlation coefficient of 0.095 between race and the costing tools indicated a weak positive correlation. However, the p-value of 0.204 indicated that this correlation was not statistically significant. Therefore, race does not appear to have a significant impact on the costing tools. Moving on to age, the correlation coefficient of 0.055 suggested a weak positive correlation with the costing tools. Nevertheless, the corresponding p-

value of 0.465 indicated that this correlation was not statistically significant. Hence, age does not seem to play a significant role in determining the costing tools.

In contrast, the correlation coefficient of 0.140 between education levels and the costing tools indicated a moderate positive correlation. Furthermore, the p-value of 0.062 was marginally significant, suggesting that there might be a meaningful relationship between education level and the costing tools. This indicates that individuals with higher education levels may have a stronger association with certain costing tools compared to those with lower education levels. Considering the nature of small enterprise industry and form, the correlation coefficients of 0.081 and -0.081, respectively, indicated weak positive and negative correlations with the costing tools. However, the p-values of 0.279 and 0.280 demonstrated that these correlations were not statistically significant. Therefore, the nature of the small enterprise industry and the form may not have a significant impact on the costing tools. The correlation coefficient of 0.064 between the business premise and the costing tools indicated a weak positive correlation. Nonetheless, the p-value of 0.395 suggested that this correlation was not statistically significant. Consequently, the type of business premise may not play a substantial role in determining the costing tools.

Moving on to the years the business has been operating, the correlation coefficient of 0.048 suggested a weak positive correlation with the costing tools. Importantly, the p-value of 0.526 indicated that this correlation was not statistically significant. Hence, the number of years a business has been operating may not significantly influence the costing tools. Finally, the correlation coefficient of 0.081 between the total number of employees in the enterprise and the costing tools indicated a weak positive correlation. Similarly, the p-value of 0.281 demonstrated that this correlation was not statistically significant. Thus, the total number of employees in the enterprise may not have a substantial impact on the costing tools.

The lack of a significant influence of gender on costing tools corresponds with research indicating a limited role of gender in financial decision-making. Similarly, the non-significant impact of race and age on costing tools resonates with prior studies highlighting the contextual nuances in these associations. However, the moderate positive correlation between education levels and costing tools, along with a marginally

significant p-value, reinforces the importance of education in shaping financial competencies. In contrast, these findings diverge from the perspective presented by Shemon (2018), which emphasizes the significance of educational background, particularly a robust financial education, in comprehending and integrating budgeting practices into business strategies.

4.6.4 Summary of correlations

When considering costing tools, the correlations between biographical information and costing tools were generally weak, with correlation coefficients ranging from - 0.056 to 0.214. Moreover, the majority of these correlations were not statistically significant, as indicated by the p-values above 0.05. This implies that biographical factors, such as gender, race, age, and educational level, have minimal influence on costing practices. Secondly, when examining budgeting tools, similar trends emerged. The correlations between biographical information and budgeting tools were mostly weak, with correlation coefficients ranging from -0.173 to 0.306. Although a few correlations were found to be statistically significant, such as age and education level, the overall impact of biographical information on budgeting tools appeared to be modest.

The implications of these findings suggest that Ntuzuma SEs characteristics may not be substantial determinants in the selection and utilisation of CMAPs, particularly in costing and budgeting practices. This aligns with the notion that the adoption of CMAP tools is often influenced by a myriad of organisational and contextual factors rather than individual demographics. It would be beneficial to explore potential reasons for the observed weak correlations. Additionally, considering the modest impact of biographical information, future research could delve into other organisational and environmental factors that play a more significant role in shaping CMAP adoption among SEs in the township.

4.7 CHAPTER SUMMARY

This chapter presented the results of the study. Descriptive and inferential statistics were used to present the findings. The comprehensive examination of CMAPs utilisation among SEs in Ntuzuma Township has provided valuable insights into the financial management of these businesses. The findings indicated a prioritisation of financial planning, performance measurement, and informed decision-making, with budgeting being the most widely utilised CMAP tool. Despite the evident awareness of the

importance of CMAPs, a substantial portion of SEs did not actively incorporate these practices into their daily operations, presenting challenges for their long-term sustainability and competitiveness. The identified gap between knowledge and application emphasizes the need for strategic interventions, such as targeted training programs and community support networks, to bridge this divide. Additionally, the weak correlations between biographical data and CMAPs utilisation suggest that individual demographics may have minimal influence, highlighting the significance of organisational and environmental factors in shaping the adoption of CMAPs among SEs.

The next chapter seeks to provide summary, recommendations, and conclusion.

CHAPTER FIVE: SUMMARY, RECOMMENDATIONS AND CONCLUSIONS

5.1 INTRODUCTION

The previous chapter presented and interpreted the findings obtained from the respondents. This chapter summarises the key findings of and concludes the study. The limitations of this study are outlined and suggestions for further research are presented in this chapter. Finally, the significance of this study is discussed, followed by concluding remarks.

5.2 MAIN OUTCOME OF THE STUDY

The main aim of the study was to investigate contemporary MA practice tools used by Small Enterprises in Ntuzuma Township, Durban, South Africa. The aim was achievable using the following objectives and hypotheses:

- To investigate the Contemporary MAPs used by small enterprises in Ntuzuma Township, Durban.
- To examine the amount of knowledge about contemporary MAPs in small enterprises in Ntuzuma Township and how this can be improved.
- To explore the usefulness of Contemporary MAPs used by small enterprises in Ntuzuma Township, Durban.
- To examine the correlation between the biographic data and CMAPs

The findings of the study, which were discussed in chapter four, are summarised below. The key findings are presented based on the research objectives, outlined in chapter one. The progression of the research questions was aligned with the research objectives, making it uncomplicated to present the findings in relation to the research objectives.

5.3 KEY FINDINGS OF THE STUDY

Objective 1: Investigate the Contemporary MAP tools used by Ntuzuma SEs

5.3.1 The CMAP tools utilisation

This objective was staged to investigate the CMAP tools used by small enterprises where all five MAPs were measured (i.e., costing, budgeting, strategic analysis, performance measuring and decision measuring) and the frequency utilisation scale

assisted to determine the adoption rate.

The results of the study indicated that budgeting system tools are the most adopted CMAP tools, which ranked 5 out of 5 with approximate mode 3 and mean=2.5. The results further show most of the CMAP tools are occasionally used by Ntuzuma SEs. These results indicate that more than 50% of respondents utilise only two budgeting tools. The results reveal variations in tool usage, contradicting the one-size-fits-all prediction of contingency theory. Notably, the sales budget had the highest adoption rate at 82%, followed by the cash budget at 63.9%, with a significant percentage of respondents consistently or frequently employing these tools. While budgeting tools most frequently used systems, the findings indicate that incremental budgeting is the least utilised, with only 8.3%, and fixed budgeting with 8.9% of respondents adopting these tools.

These findings contrast those of Cele’s (2020: 74) respondents who adopt budgeting tools occasionally, rarely and never used them while the production budgeting tool is mostly utilised Maduekwe's (2016) study findings resonate with the current research, highlighting a similar trend where 79.35% of participants utilized budgeting tools, while only 20.65% did not employ such tools. Kefasi's (2019) findings align with the present study, demonstrating a parallel pattern where operational budgets were frequently utilized by more than half of the respondents. Ahmad (2012) found that budgeting is used mostly in Malaysian SEs, while McLellan and Sherine (2013) revealed that 100% of the Egyptian companies surveyed used budgeting tools and Gichaaga (2013) revealed that 90.8% of the Kenyan SEs used budgeting tools. This suggests that budgeting tools are currently being utilised, much like in the past.

The researcher further tested budgeting systems’ duration and the result indicated that the most period selection is monthly budgeting with the majority of 88.9% and the least selected rolling budgeting by 5.5%. The results aligned with Manyuchi (2021) and Akmese (2016) study results where the findings show monthly budget duration periods as more important (i.e. sales budget, purchasing budget, and production budget). Ahmad's (2017) findings present a contrast, indicating that 75% of respondents favor long-term budgeting, whereas Kefasi (2019) reports about 68% opting for annual budgeting, and Maduekwe (2016) notes 47% adopting annual budgeting.

The researcher further tested costing systems as the last adopted CMAP used in this study whole section ranking (1 out of 5) with approximate mode=2 and mean=2. The findings show that the majority of SEs are not using this tool when compared to the other 5 systems. The findings show the most used tool are job costing at 10.5% and the target costing at 9.4%. The least utilised tools are absorption costing at 3.4% and process costing at 4.4%. This indicates that while the last adopted costing system had a relatively low ranking, job costing, and target costing also appear as the unfavoured tools among the surveyed small enterprises. The research findings agree with those of Cele (2020) as the study's results indicated that many of the costing systems are never or rarely adopted, resulting in benefits lost. Kefasi's (2019), South African manufacturing firms results show job costing adoption rate at 69% and absorption have 54%. Lorenz's (2015) results differ from those of the current study as the study found that Kaizen and environmental costing are the mostly used tools. Annan et al.'s (2016) study presents an opposing view, indicating that the job costing tool in Ghana is utilized by 98% of small enterprises. In contrast, El-Shishini's (2017) and Atia, Bassily, and Elamer's (2020) studies suggest that costing tools are more commonly employed in manufacturing and hotel industries, contradicting the findings of the current study.

The researcher further tested the performance measures that are the secondary adopted CMAP tools in the study which ranking (2 out of 5) with approximate mode=2 and mean=3.5. The results indicate a division between financial and non-financial measures, with the most widely adopted tool being customer satisfaction at 80.6%, followed by the number of returned products tools at 62.8%. The results show the least utilised tool was the employees' absenteeism rate tool of 8.4%. The results show that the performance measures tools utilisation rate is less than 50%. Maduekwe's (2015) study findings differ from those of the current research revelation shows that 82.61% of respondents practiced the tool, while 17.39% did not utilise the tools. Similarly, in Malaysia, Ahmad and Zibra (2014) reported that 49% of the SEs investigated used the internal rate of return. McLellan and Sherine (2013) reported that 77% of Egyptian SEs used the internal rate of return. El-Shishini (2017) 80% adopted the tool. It is only the researcher's study not using the tools.

The researcher further tested decision-making as the third most adopted CMAP tool which is ranked (3 out of 5) with approximate mode=2,5 and mean=2.5. The findings

showed that the highest adopted tool is price decision-making with 37.8% adoption rate and the margin of safety with an adoption rate of 23.3%. The results indicate respondents least utilised tool, is back flush analysis with 6.10%. Cele's (2020) findings differ from those of the current study as they indicate that decision support and investment appraisal techniques are never or rarely used by the respondents. Kefasi (2019: 62) presents findings indicating that decision support systems were underutilised as decision support tools in firms.

Current study show that strategic system is the fourth most adopted CMAP tool, receiving a rank (4 out of 5), with an approximate mode of 2 and a mean of 2.5. The results of the study show that the majority of the surveyed SEs do not use this tool. Furthermore, the findings show that the adoption of the risk and uncertainty tool is 20.5% and profitability analysis tool of 14.5%. The research findings are consistent with those of Kefasi (2019: 63) who found that value chain analysis was adopted at 7% and competitor position monitoring was adopted at 5%. This contrasts with the findings of Maduekwe (2015: 95), where results indicated that 82.61% adopted pricing tools, while 17.39% did not adopt these tools.

In conclusion, the findings revealed that budgeting is the most widely utilised tool, followed by performance-measured tools, decision-making tools, strategic analysis, and costing tools. However, the majority of SEs did not make use of CMAP tools, highlighting potential challenges and implications for their long-term sustainability. The limited adoption of CMAPs underscores the need for targeted educational initiatives and community development efforts to empower SEs with tools for success.

Objective 2: The CMAPs' knowledge and understanding within SEs

5.3.2 Amount of CMAP tools knowledge and understanding

This objective was to measure the amount of knowledge small enterprises contained. Limited knowledge of CMAPs is impactful in the business failure rate. The researcher identified the background source and examined the level of CMAP tools understanding small enterprises contained. Assumptions based on the small enterprise are that knowledge about CMAP tools is limited and as this study targets small-size businesses while filling the gap the knowledge examination is uncompromised.

In respect of CMAP tools source knowledge the following are rankings:

1. The MAPs understanding comes from previous working experience.
2. School background in MA.
3. The enterprise conducts management programs.
4. Online courses attended.
5. Attending training programs (workshops) for management. lastly, others not mentioned.

This ranking suggests that the majority of respondents did not have a university education, and even those with a school background in MA were primarily influenced by high school business studies.

The researcher further assessed knowledge of CMAP tools. The researcher employed the questionnaire instrument to measure the knowledge of the factual statements listed. Respondents indicated their agreement with these statements, which assisted in determining the level of knowledge about CMAPs among the respondents. The findings revealed that the majority selected the statement that CMAPs focus on internal business procedures to aid management tasks. This was followed by agreement on statements such as CMAPs helping produce reports for decision- making, monitoring, and performance analysis. Other agreed-upon statements highlighted the inclusion of costing, budgeting, performance, decision-making, and strategic analysis within CMAPs, as well as their ability to record, summarize, and analyse costs, spending behaviour, drivers, and fluctuations. Lastly, respondents agreed that contemporary CMAPs address 21st-century costing problems.

These findings align with previous studies by Kefasi (2019) and Cele (2020) which also emphasized the importance of examining SEs' knowledge of CMAPs. The results indicate that respondents' knowledge of CMAPs is influenced by the industries and sectors in which they operate, with a majority of respondents having a high school background rather than a university education. However, this study diverges from the present research findings regarding the impact of business nature on the adoption of CMAPs. This finding aligns with Lucas *et al.* (2013: 10), who found that business nature is a factor influencing the adoption of CMAPs. Additionally, the size of the business was also considered to have some influence on the adoption of CMAPs. Lastly, Ahmad

(2012: 101) found that technology plays a role in the adoption of MAPs, as evident from the study results.

In conclusion, the results indicated a significant awareness of the facts and importance of CMAPs among SEs. The diverse sources of knowledge, including practical experience and educational backgrounds, contribute to a multifaceted understanding of CMAP tools. While the awareness is positive, a gap between knowledge and application was identified. Strategies to bridge this gap, such as targeted training programs and community support networks, were recommended. The discussion should focus on translating knowledge into action for effective CMAP utilisation.

Objective 3: Examine the usefulness of MAPs.

5.3.3 Usefulness of MAP

The objective was to elucidate the benefits offered by CMAPs and evaluate the extent to which SEs recognise and acknowledge these advantages. The results are presented in ranked order, based on the agreement levels from the highest to the lowest with a mode of 3 and a mean range of 2.8 - 2.9. These findings indicate that over 80.0% of the respondents find CMAPs beneficial for their businesses.

The highest agreement percentage was found for the statement "For business process improvement," with 88.3% of respondents in agreement. This was closely followed by the statement "Help owners and managers to run the business successfully," with 87.8% agreement. Other highly agreed-upon statements include "Assist in developing business strategies" (86.7% agreement), "Help with planning" (86.1% agreement), and "Help with decision-making" (85.6% agreement). Furthermore, the respondents agreed with statements such as "Assists in choosing the best investment opportunities" (85.6% agreement), "Guarantees sustainability" (81.7% agreement), "Helps in financial reporting" (85% agreement), and "Assist with cost control" (84.4% agreement). The findings also revealed agreement percentages above 80% for statements related to gaining an advantage over competitors, ensuring business growth, problem identification, motivating employees, guaranteeing profitability, providing accountable business performances, and improving communication.

These findings suggest that small enterprises in Ntuzuma perceive all the listed CMAP

tools statements as useful for their business. This is a significant and impactful finding. The results of this study align with previous research, emphasising the importance of these CMAPs for businesses in avoiding failure rates. Other studies, such as Drury (2018) and Cele (2019), have also recognized the awareness among SEs regarding the advantages and significance of CMAPs, as reflected in the high agreement scores for the listed statements.

In conclusion, the findings highlighted that respondents were well-informed about the importance of CMAPs, indicating collective awareness of their value in business management. However, there was a negative aspect as SEs struggled to actively incorporate CMAPs into daily operations. Challenges hindering their full utilisation need to be explored. The implications of the results extend to potential enhancements in decision-making processes, financial planning, and overall business performance among SEs in Ntuzuma. Strategies to overcome barriers and actively integrate CMAPs into daily operations should be explored.

Hypothesis: Examining the correlation between the biographic data and CMAP tools results.

5.3.4 Correlation of biographical Information in Costing and budgeting practice

The aim of this objective was to investigate the correlation between biographical information and costing as well as budgeting practices. Specifically, the study examined the correlations between various biographical factors, including gender, race, age, and educational level, with costing tools and budgeting tools. The analysis of these correlations yielded important insights into the influence of biographical information on costing and budgeting decisions.

The findings regarding the correlation between biographical information and costing tools revealed that the correlations were generally weak, with correlation coefficients ranging from -0.056 to 0.214. These weak correlations suggest a limited impact of biographical factors on costing practices. Furthermore, the majority of these correlations were not statistically significant, as indicated by p-values above 0.05. This implies that biographical information, such as gender, race, age, and educational level, has minimal influence on costing decisions within organisations.

Similarly, the investigation of the correlation between biographical information and budgeting tools also indicated weak correlations. The correlation coefficients ranged from -0.173 to 0.306, suggesting a modest association between biographical factors and budgeting practices. However, only a few correlations, such as age and education level, were found to be statistically significant, indicating a limited overall impact of biographical information on budgeting decisions. These statistically significant correlations imply that certain biographical factors may have a modest influence on specific aspects of budgeting practices, but the overall correlation remains relatively weak.

The results of this study emphasize the need for organizations to consider factors beyond biographical information when making costing and budgeting decisions. While biographical factors may play a role in certain contexts, the weak correlations and lack of statistical significance indicate that other factors, such as organizational structure, industry dynamics, or financial considerations, may have a more substantial impact on these financial practices. Therefore, organizations should adopt a more holistic approach, considering a wide range of variables, to ensure effective decision- making and resource allocation in costing and budgeting processes.

In conclusion, correlation between biographical data and CMAPs utilisation. The examination of the relationship between biographical data and CMAPs utilisation revealed generally weak correlations. Biographical factors like gender, race, age, and educational level had minimal influence on costing and budgeting practices. The modest impact of individual demographics suggests that other organisational and environmental factors may play a more significant role in shaping CMAP adoption among SEs in the township. Further exploration of these factors is recommended to understand the dynamics influencing CMAP utilisation in Ntuzuma.

5.4 CONTRIBUTIONS MADE BY THE THEORETICAL FRAMEWORK OF THE STUDY.

The use of contingency theory for the study has revealed that the SEs use different MAPs that are tailor-made for their specific needs and requirements. Likewise, the theory was developed with the assumption that various tools of MAP can be used with different expectations are requirements. The results are aligned with this since all MAPs tools were chosen based on the level fit for the SEs owners. The objective one sections,

from part A-F were being answered as what is suitable for their business including objectives two and three.

5.5 RECOMMENDATIONS FOR THE STUDY

Based on the study findings and contributions, the following recommendations are made based on the utilisation and knowledge of CMAP tools among small enterprises in Ntuzuma Township are as follows:

Staff awareness and training

To further enrich the understanding and knowledge of small enterprises regarding CMAP tools, it is crucial to implement targeted initiatives such as training programs, workshops, and educational resources exclusively focused on management skills. Develop and implement targeted training programs aimed at enhancing the practical understanding and application of CMAPs among SE owners in Ntuzuma Township. These initiatives should focus on translating theoretical knowledge into actionable practices to bridge the gap identified in the study. These initiatives will empower SE to fully harness the benefits and functionalities of these tools in their day-to-day operations. Thango (2020: 24) and Msomi (2020: 17) state that change occurs if respondents are well educated with management skills.

Academics and community support network

Establish community support networks that facilitate knowledge exchange and collaboration among SE owners. Creating a platform for sharing experiences, challenges, and best practices could foster a supportive community that encourages the effective implementation of CMAPs. This can support SE by translating the findings from their studies into educational materials or books tailored to different education levels, helping entrepreneurs better understand and apply relevant business insights. Explore and disseminate industry-specific best practices in CMAP adoption, particularly tailored to the retail and wholesale sector, which dominates the small enterprise landscape in Ntuzuma Township. Understanding sector-specific financial management needs can inform more targeted and relevant CMAP strategies.

Encourage diversification of tool usage

While budgeting emerged as the most utilised CMAP tool, it is imperative to encourage

small enterprises to diversify their utilisation of CMAP tools. This diversification is essential to provide a comprehensive and well-rounded approach to financial management, enabling businesses to gain insights into cost structures, make informed strategic decisions, and measure performance effectiveness, ultimately contributing to their long-term sustainability. Awareness programs should be conducted to emphasize the advantages and practical applications of other tools, including costing, strategic analysis, decision-making, and performance measuring. Small enterprises should be motivated to explore and adopt these tools to enhance their overall MAPs.

Promote collaboration and knowledge sharing.

Given the limited statistically significant correlations between biographical information and both costing and budgeting tools, collaboration and knowledge sharing among businesses is essential. Establishing networking events, industry-specific events, and online platforms will facilitate the exchange of experiences, best practices, and insights related to the utilisation of CMAP tools. This collaborative environment will enable small enterprises to learn from one another and collectively enhance their MAPs.

Support programs for specific Industries

Recognize the challenges faced by newer businesses operating for 1-5 years and provide long-term support mechanisms. Tailor initiatives to address the unique needs of startups, helping them overcome initial hurdles in adopting CMAPs. Explore and disseminate industry-specific best practices in CMAP adoption, particularly tailored to the retail and wholesale sector, which dominates the SEs landscape in Ntuzuma Township. Understanding sector-specific financial management needs can inform more targeted and relevant CMAP strategies. Industry-specific workshops, mentoring programs, and case studies should be developed to address the unique challenges and opportunities faced by businesses in this industry. This targeted approach will provide practical and relevant guidance to small enterprises in optimizing their use of CMAP tools.

Further research and evaluation

The study identified weak and non-significant correlations between biographical information and CMAP tools. To gain a deeper understanding of the factors influencing the adoption and utilisation of CMAP tools, it is advised to conduct further research and

evaluation. This may involve exploring additional variables, conducting longitudinal studies, and comparing results across different biographical regions. Such research endeavours will contribute to an enhanced comprehension of the dynamics between biographical information and CMAPs.

5.6 RECOMMENDATIONS FOR FUTURE RESEARCH

The recommendations for the study mentioned above provide potential avenues for future research, which are summarised as follows:

- Future research could adopt a qualitative or mixed approach as this could provide more depth to the analysis. The mixed-quantitative and qualitative data allows more informed recommendations to be made. It could also help to limit the study to SEs in any industry to get more details on each SE category.
- This study has opened an opportunity for other studies to analyse any CMAP tools
- they may specialise, as this study included most of the contemporary MAP tools. As the research focused on the role of MAPs, it could be wise to select one or more MAPs in future research to enable an in-depth understanding of each technique.
- Future studies could also make use of different townships rather than rural areas comparing the finding with this study. As this study includes majority sectors and industries within small enterprises, any research can collaborate with this study investigating in medium enterprises.
- This study concentrated solely on small enterprises within the Durban, Ntuzuma township. Future research could extend its scope to encompass specific sectors, and different biographical locations, and even consider medium, and micro- enterprises that were excluded in this study.
- Future research should consider using a bigger size to ensure more generalisable results or conduct in-depth case studies to thoroughly examine the utilisation of CMAPs within one or a few SEs. An additional comparative study could be conducted to compare the usage of MATs by SEs in South Africa with SMEs in other countries.
- Future research should delve into these factors to formulate effective strategies for enhancing the integration of CMAPs and fostering the financial resilience of SEs in Ntuzuma Township.

5.7 SIGNIFICANCE OF THE FINDINGS

The significance of the findings from the study investigating the usefulness and knowledge of CMAP tools among SEs in Ntuzuma Township lies in key aspects:

The study contributes to the existing discussion on knowledge by providing insights into the perceived usefulness and knowledge of CMAP tools within the context of SEs in Ntuzuma Township. It sheds light on the specific tools that are predominantly used, the level of knowledge among small enterprise owners, and the correlations between biographical information and the adoption of CMAP tools. These findings fill a gap in the literature and enhance our understanding of MAPs in this particular setting.

The findings of this study hold great significance for the Department of Small Enterprise, which is responsible for supporting and promoting SEs through financial and non-financial services. The insights gained from this study assist department. efforts in creating an enabling environment for SEs to thrive. The findings provide valuable information with types of CMAPs utilised by SEs and those overlooked. Additionally, the study sheds light on the purposes for which MAPs are employed and their perceived effectiveness, while identifying factors that hinder their usage. These insights can guide the development of new interventions aimed at improving the survival rate of SEs, as existing interventions have not effectively addressed their ongoing challenges.

The findings have practical implications for SEs in Ntuzuma Township. With identifying the most utilised CMAP tools and highlighting the need for diversification in tool usage, the study offers guidance for small enterprise owners to optimize their MAPs. The recommendations derived from the findings provide actionable steps that can be taken to enhance awareness, foster collaboration, and tailor support programs to the specific needs of small enterprises in this area.

The study findings have significant value inform the development of policies and support programs aimed at promoting the effective utilisation of CMAP tools among SEs. The recommendations for enhancing awareness, promoting collaboration, and tailoring support programs to specific industries can guide policymakers, industry associations, and business development enterprises in designing initiatives that address the unique challenges and requirements of small enterprises in Ntuzuma Township. This can

contribute to the overall growth and sustainability of these businesses.

The study findings also open avenues for further research and evaluation. The weak and non-significant correlations between biographical information and the adoption of CMAP tools suggest the need for deeper investigation into the factors influencing tool adoption in this context. Future research can explore additional variables, conduct comparative studies across different regions, and delve into the long-term impact of CMAP tool utilisation on small enterprise performance. These research advancements can contribute to the refinement and development of MA theories and practices.

5.8 LIMITATIONS OF THE RESEARCH

This section outlines the limitations as follows:

- Only small enterprises in the Ntuzuma were targeted in the township of Durban, therefore, this study may not apply to the utilisation of MAPs in other regions of South Africa. The survey was only extended to owners and managers of small enterprises operating. Since the SEs Ntuzuma majority are in partnerships It is important to note that these individuals might not represent the sole decision- making within the enterprise.
- Although conducting inferential statistics analysis could have provided more valuable insights, the researcher chose to perform only descriptive statistics analysis due to the simplicity and the need to summarize the extensive data collected in this study. A future study could test the variables used in the study more robustly using more sophisticated statistics.
- The study employed a self-administered questionnaire survey, a method that is known to have limitations such as low response rates, unintended respondents completing the questionnaire, non-response bias, and respondents skipping questions. However, several precautions discussed in Chapter Three were taken to minimise the impact of these limitations.
- Despite the limitations, the results of this study significantly contribute to the understanding of the utilisation of CMATs by SEs. Therefore, these limitations should not undermine the valuable insights provided by the study, particularly in an area of research that has received limited attention thus far.

5.9 CHAPTER SUMMARY

The chapter concluded the entire dissertation and provided recommendations for future research. The research aim was to investigate the use of contemporary MAPs tools. Both research objectives and questions were developed with led to the literature. The results of this study were driven by the structure of the research questions designed to achieve the objectives.

This research followed a quantitative approach and focused on small enterprises in Ntuzuma township, Durban as the target population. The sample consisted of owners and managers of SEs selected through simple random sampling across various industries and sectors. This sampling method was chosen to ensure the acquisition of the most accurate results. In this chapter, a concise summary of the research findings was presented. The recommendations were derived from the findings of this study. Additionally, suggestions for future research were made, considering the limitations of resources and feasibility that prevented certain aspects of this study.

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APPENDIX

Appendix 1: The Spearman rank correlation

Table 4. 21: The Spearman rank correlation coefficients between statements in budgeting practices tools and duration of budgeting.

Correlation between budgeting systems and duration of budgeting					
			Monthly budget	Annual budget	Continuous budgeting
Spearman rho	Sales budgets	Correlation Coefficient	.316**	.177*	-0.026
		Sig. (2-tailed)	0.000	0.018	0.727
		N	180	180	180
	Master budgeting	Correlation Coefficient	.223**	.166*	.153*
		Sig. (2-tailed)	0.003	0.026	0.040
		N	180	180	180
	Purchases budgets	Correlation Coefficient	.285**	.285**	.167*
		Sig. (2-tailed)	0.000	0.000	0.025
		N	180	180	180
	Capital expenditure budgets	Correlation Coefficient	.205**	.250**	.215**
		Sig. (2-tailed)	0.006	0.001	0.004
		N	180	180	180
	Capital budgeting	Correlation Coefficient	0.132	.216**	.326**
		Sig. (2-tailed)	0.077	0.004	0.000
		N	180	180	180
	Inventory budgets	Correlation Coefficient	.215**	.257**	0.095
		Sig. (2-tailed)	0.004	0.000	0.203
		N	180	180	180
	Marketing budgets	Correlation Coefficient	.351**	.335**	0.083
		Sig. (2-tailed)	0.000	0.000	0.269
		N	180	180	180
	Cash flow or cash budgets	Correlation Coefficient	.487**	.363**	0.044
		Sig. (2-tailed)	0.000	0.000	0.558
		N	180	180	180
	Flexible budgeting	Correlation Coefficient	0.047	0.099	.274**
		Sig. (2-tailed)	0.533	0.187	0.000
		N	180	180	180
	Fixed budgeting	Correlation Coefficient	0.075	.266**	.386**
		Sig. (2-tailed)	0.315	0.000	0.000
		N	180	180	180
	Incremental budgeting	Correlation Coefficient	0.025	.246**	.362**
		Sig. (2-tailed)	0.741	0.001	0.000
		N	180	180	180
	Zero based budgeting	Correlation Coefficient	0.003	0.112	.224**
		Sig. (2-tailed)	0.973	0.133	0.002
		N	180	180	180
		N	180	180	180
**. Correlation is significant at the 0.01 level (2-tailed).					
*. Correlation is significant at the 0.05 level (2-tailed).					

Table 4. 22: The Spearman rank correlation coefficients between statements in biographic information and budgeting practices tools

Correlations between biographical information and budgeting duration					
			Monthly budget	Annual budget	Continuous budgeting
Spearman rho	Gender	Correlation Coefficient	-0.072	-0.014	0.112
		Sig. (2-tailed)	0.336	0.851	0.135
		N	180	180	180
	Race	Correlation Coefficient	.235**	.257**	0.042
		Sig. (2-tailed)	0.002	0.000	0.580
		N	180	180	180
	Age	Correlation Coefficient	.228**	0.128	-0.098
		Sig. (2-tailed)	0.002	0.086	0.192
		N	180	180	180
	Education Level	Correlation Coefficient	0.089	.163*	.253**
		Sig. (2-tailed)	0.232	0.029	0.001
		N	180	180	180
	Nature of Small Business Industry	Correlation Coefficient	-0.056	-0.020	0.064
		Sig. (2-tailed)	0.459	0.792	0.394
		N	180	180	180
	Nature of Small Business Form	Correlation Coefficient	.180*	0.085	-0.100
		Sig. (2-tailed)	0.016	0.254	0.181
		N	180	180	180
	Business Premise	Correlation Coefficient	.245**	.279**	0.022
		Sig. (2-tailed)	0.001	0.000	0.768
		N	180	180	180
	Year Your Business Has Been Operating	Correlation Coefficient	.332**	.300**	0.041
		Sig. (2-tailed)	0.000	0.000	0.587
		N	180	180	180
	Total Number of Employees in the enterprise	Correlation Coefficient	.271**	.216**	0.000
		Sig. (2-tailed)	0.000	0.004	0.999
		N	180	180	180
**. Correlation is significant at the 0.01 level (2-tailed).					
*. Correlation is significant at the 0.05 level (2-tailed).					

Table 4. 23: The Spearman rank correlation coefficients between statements in biographic information and performance measurement.

ormation and Performance measurment.												
	Sales growth	Cash flow	Operating income	Return on investment	Variance analysis	Net profit margin	Customers' complaints and satisfaction	Employee turnover rate	Number of returned products	Hours of employees' training	Employees' absenteeism rate	Job satis survey
ation	0.002	-	0.068	0.133	0.079	0.108	-0.024	0.096	0.005	-0.027	0.134	-0.027

cient		0.063										
(2-	0.983	0.402	0.365	0.076	0.291	0.147	0.747	0.200	0.951	0.719	0.074	0.719
	180	180	180	180	180	180	180	180	180	180	180	180
ation cient	.152*	0.100	0.072	-0.011	-0.074	-0.061	0.142	-0.082	0.088	0.051	-0.065	-0.019
(2-	0.042	0.183	0.337	0.884	0.324	0.414	0.057	0.272	0.238	0.495	0.388	0.798
	180	180	180	180	180	180	180	180	180	180	180	180
ation cient	0.117	.180*	.226**	0.036	-0.026	0.083	0.125	0.060	.178*	.151*	0.024	.176*
(2-	0.119	0.016	0.002	0.627	0.724	0.265	0.095	0.425	0.017	0.044	0.752	0.018
	180	180	180	180	180	180	180	180	180	180	180	180
ation cient	0.137	0.032	0.032	0.009	0.104	.178*	-0.102	0.115	0.003	0.048	.160*	0.095
(2-	0.068	0.669	0.674	0.910	0.163	0.017	0.175	0.124	0.967	0.520	0.032	0.206
	180	180	180	180	180	180	180	180	180	180	180	180
ation cient	-0.088	-0.126	-0.056	0.044	0.046	-0.014	0.023	0.011	0.003	-0.040	-0.029	-0.075
(2-	0.242	0.091	0.455	0.555	0.536	0.853	0.759	0.884	0.965	0.593	0.695	0.316
	180	180	180	180	180	180	180	180	180	180	180	180
ation cient	.157*	0.122	.196**	-.161*	-.164*	-0.039	.204**	-0.006	.167*	0.042	0.010	0.118
(2-	0.035	0.102	0.008	0.031	0.028	0.602	0.006	0.932	0.025	0.578	0.889	0.114
	180	180	180	180	180	180	180	180	180	180	180	180
ation cient	0.029	0.052	0.116	0.080	-0.004	-0.030	0.011	.223**	-0.037	.187*	0.059	.192**
(2-	0.697	0.486	0.120	0.283	0.954	0.692	0.878	0.003	0.625	0.012	0.428	0.010
	180	180	180	180	180	180	180	180	180	180	180	180
ation cient	.232**	.245**	.304**	0.076	0.025	0.046	.246**	0.140	.160*	.278**	0.080	.301**
(2-	0.002	0.001	0.000	0.308	0.736	0.544	0.001	0.060	0.032	0.000	0.284	0.000
	180	180	180	180	180	180	180	180	180	180	180	180
ation cient	.249**	.176*	.217**	.188*	0.076	-0.013	0.127	.159*	.179*	.233**	0.072	.325**
(2-	0.001	0.018	0.003	0.012	0.313	0.862	0.089	0.033	0.016	0.002	0.337	0.000
	180	180	180	180	180	180	180	180	180	180	180	180

level (2-tailed).

Table 4. 24: The Spearman rank correlation coefficients between statements in biographic information and decision-making.

Correlations between biographic information and decision-making								
			Total quality management	Back flush analysis	Activity base management	Relevant cost	Price decision making	Margin of safety
Spearman rho	Gender	Correlation Coefficient	0.083	.196**	0.081	-0.053	0.015	0.086
		Sig. (2-tailed)	0.271	0.008	0.283	0.479	0.839	0.251
		N	180	180	180	180	180	180
	Race	Correlation Coefficient	0.002	-0.029	-0.017	-0.047	0.036	0.118
		Sig. (2-tailed)	0.980	0.698	0.826	0.535	0.630	0.116
		N	180	180	180	180	180	180
	Age	Correlation Coefficient	-0.073	-0.122	0.007	0.121	-0.005	-0.021
		Sig. (2-tailed)	0.329	0.102	0.922	0.105	0.950	0.781
		N	180	180	180	180	180	180
	Education Level	Correlation Coefficient	.215**	.219**	.161*	.175*	0.068	.149*
		Sig. (2-tailed)	0.004	0.003	0.030	0.019	0.363	0.045
		N	180	180	180	180	180	180
	Nature of Small Business Industry	Correlation Coefficient	0.099	0.040	0.011	-0.090	0.100	0.047
		Sig. (2-tailed)	0.185	0.597	0.889	0.228	0.180	0.534
		N	180	180	180	180	180	180
	Nature of Small Business Form	Correlation Coefficient	-0.046	-0.076	0.012	.154*	-0.023	-0.070
		Sig. (2-tailed)	0.539	0.308	0.878	0.040	0.757	0.347
		N	180	180	180	180	180	180
	Business Premise	Correlation Coefficient	-0.083	-0.036	-0.022	0.019	-0.036	.203**
		Sig. (2-tailed)	0.266	0.632	0.773	0.803	0.634	0.006
		N	180	180	180	180	180	180
	Year Your Business Has Been Operating	Correlation Coefficient	0.049	0.035	0.146	0.123	0.102	.191*
		Sig. (2-tailed)	0.513	0.644	0.050	0.100	0.173	0.010
		N	180	180	180	180	180	180

	Total Number of Employees in the enterprise	Correlation Coefficient	0.108	0.062	.201**	0.139	0.049	.171*
		Sig. (2-tailed)	0.151	0.406	0.007	0.062	0.512	0.021
**. Correlation is significant at the 0.01 level (2-tailed).								
*. Correlation is significant at the 0.05 level (2-tailed).								

Table 4. 25: The Spearman rank correlation coefficients between statements in biographic information and strategic.

Correlations in biographic information and strategic.								
			Balance score card	Value analysis	Function analysis	Risk and uncertainty	Profitability analysis	Capital investment analysis
Spearman rho	Gender	Correlation Coefficient	0.068	0.094	0.040	0.033	0.093	.219**
		Sig. (2-tailed)	0.366	0.211	0.595	0.662	0.212	0.003
		N	179	180	180	180	180	180
	Race	Correlation Coefficient	-0.078	-0.076	0.002	-0.069	0.020	-0.081
		Sig. (2-tailed)	0.300	0.311	0.980	0.359	0.787	0.281
		N	179	180	180	180	180	180
	Age	Correlation Coefficient	-0.025	-0.012	0.043	.166*	0.066	-0.059
		Sig. (2-tailed)	0.738	0.877	0.566	0.026	0.377	0.433
		N	179	180	180	180	180	180
	Education Level	Correlation Coefficient	0.082	0.125	.166*	0.055	0.132	0.079
		Sig. (2-tailed)	0.274	0.094	0.026	0.462	0.078	0.294
		N	179	180	180	180	180	180
	Nature of Small Business Industry	Correlation Coefficient	.156*	-0.021	0.001	0.113	.206**	.146*
		Sig. (2-tailed)	0.037	0.775	0.992	0.132	0.006	0.050
		N	179	180	180	180	180	180
	Nature of Small Business Form	Correlation Coefficient	-0.138	-0.088	0.022	0.092	-0.052	-.179*
		Sig. (2-tailed)	0.065	0.242	0.770	0.218	0.487	0.016
		N	179	180	180	180	180	180
	Business Premise	Correlation Coefficient	0.052	0.048	0.081	0.057	0.051	-0.030
		Sig. (2-tailed)	0.486	0.524	0.277	0.444	0.494	0.689
		N	179	180	180	180	180	180

	Year Your	Correlation Coefficient	0.101	0.097	.195**	.178*	.189*	0.046
	Business Has Been Operating	Sig. (2-tailed)	0.178	0.195	0.009	0.017	0.011	0.543
		N	179	180	180	180	180	180
	Total Number of Employees in the enterprise	Correlation Coefficient	0.045	0.000	0.100	0.073	0.023	-0.039
		Sig. (2-tailed)	0.549	0.998	0.180	0.327	0.758	0.607
		N	179	180	180	180	180	180
**. Correlation is significant at the 0.01 level (2-tailed).								
*. Correlation is significant at the 0.05 level (2-tailed).								

Table 4. 26: The Spearman rank correlation coefficients between statements in biographic information and usefulness of CMAP tools

	Help with planning	Assists in choosing the best investment opportunities	Guarantees sustainability	Yield an advantage over competitors	Guarantees business growth	Assists with providing accountable business performances	Motivating employees	Assist to improve communication	Guarantees profitability	Help owne and managers run th business successfully
	-0.103	-.208**	-.190*	-0.146	-0.131	-0.107	-0.125	-0.134	-0.142	-0.094
	0.170	0.005	0.011	0.050	0.080	0.153	0.095	0.072	0.057	0.210
	180	180	180	180	180	180	180	180	180	180
8	-.168*	-0.089	0.049	-0.014	-0.026	0.003	0.065	0.053	0.114	-0.031
	0.024	0.236	0.514	0.852	0.729	0.969	0.388	0.478	0.127	0.679
	180	180	180	180	180	180	180	180	180	180
	0.011	-0.009	0.036	-0.017	0.022	0.025	0.050	0.028	-0.012	-0.029
	0.884	0.901	0.634	0.821	0.770	0.741	0.509	0.706	0.874	0.698
	180	180	180	180	180	180	180	180	180	180
	0.022	0.031	-0.017	0.088	-0.032	0.045	-0.017	0.058	-0.004	.153*
	0.769	0.684	0.817	0.242	0.669	0.551	0.816	0.440	0.953	0.040
	180	180	180	180	180	180	180	180	180	180
	0.063	0.039	-0.042	-0.092	-0.068	-0.002	0.016	0.041	0.043	-0.058
	0.402	0.600	0.577	0.219	0.361	0.982	0.829	0.586	0.565	0.440
	180	180	180	180	180	180	180	180	180	180
	0.046	0.086	.183*	-0.052	0.057	0.034	0.131	0.086	-0.020	0.002

	0.539	0.251	0.014	0.486	0.448	0.649	0.080	0.253	0.794	0.981
	180	180	180	180	180	180	180	180	180	180
	0.089	0.085	0.119	0.097	0.117	0.093	.205**	.172*	0.142	0.117
	0.233	0.259	0.110	0.195	0.118	0.212	0.006	0.021	0.057	0.118
	180	180	180	180	180	180	180	180	180	180
	0.072	0.105	-0.029	0.056	0.065	0.040	-0.025	0.036	-0.012	0.062
	0.334	0.160	0.697	0.458	0.386	0.597	0.739	0.634	0.872	0.407
	180	180	180	180	180	180	180	180	180	180
	0.041	0.056	-0.009	-0.012	0.031	-0.034	0.018	0.028	-0.013	0.030
	0.584	0.455	0.902	0.870	0.675	0.647	0.813	0.708	0.861	0.686
	180	180	180	180	180	180	180	180	180	180

Appendix 2: Questionnaire

Title: Investigating the Contemporary MA Practices (MAPs) used by small business Enterprises in Durban, Ntuzuma township

SECTION A: DEMOGRAPHIC INFORMATION
Please mark 'X' in the box provided for answers applicable to you. (Only one answer should be given for each question).

1. Gender

Male	
Female	

2. Racial Background?

African	
Indian	
Coloured	
White	
Other	

3. **Age**

25 years or below	
26 to 35 years	
36 to 45 years	
46 years and over	

5. Educational background

Primary level	
Secondary level	
High school level	
Tertiary level	
Other (Specify):	

6. Nature of small business Industry

Legal and financial services	
Education and training	
Food and manufacturing	
Medical and health services	
Safety and security	
Marketing and information technology	

Logistic and transport	
Retail and wholesale store	
Other (Specify):	

7. Nature of small Business form

Sole trader	
Partnership	
Close corporation	
Co-operative	
Joint venture or Joint associates	
Franchise	
Private company (Pty Ltd)	
Other (Specify):	

8. Your business premise

Home space	
Leased space	
Other	

9. Years your business has been operating

1 year	
1 – 5 years	
6 – 10 years	
Over 10 years	

10. Total number of employees in the business

1 – 4	
5 – 10	
11 – 20	

SECTION B: CONTEMPORARY MA PRACTICES

Never = 1, Rarely = 2, Occasionally = 3, Frequently = 4 and Always = 5

Part A

Please indicate with an X how often does your business prepare any of the following BUDGETS?

STATEMENT	Never	Rarely	Occasionally	Frequently	Always
	1	2	3	4	5
1. Sales budgets					
2. Master budgeting					

3. Purchases budgets					
4. Capital expenditure budgets					
5. Capital budgeting					
6. Inventory budgets					
7. Marketing budgets					
8. Cash flow or Cash budgets					
9. Flexible budgeting					
10. Fixed budgeting					
11. Incremental budgeting					
12. Zero based budgeting					

Part B

Please indicate with an X how often does your business prepare any of the following BUDGETS?

STATEMENT	Never	Rarely	Occasionally	Frequently	Always
	1	2	3	4	5
13. Monthly budget					
14. Annual budget					
15. Continuous/rolling budgeting					

Part C

Please indicate with an X how often does your business prepare any of the following COSTING SYSTEMS?

STATEMENT	Never	Rarely	Occasionally	Frequently	Always
	1	2	3	4	5
16. Traditional costing					
17. Process costing					
18. Joint and by product costing					
19. Target costing					
20. Job costing					
21. Activity based costing (ABC)					
22. Variable costing					

23. Absorption costing					
24. Just-in-time costing					
25. Other: (please specify and rate)					

Part D

Please indicate with an X how often does your business prepare any of the following PERFORMANCE MEASURES?

STATEMENT	Never	Rarely	Occasionally	Frequently	Always
	1	2	3	4	5
Financial Measures					
26. Sales growth					
27. Cash flows					
28. Operating income					
29. Return on investment					
30. Variance analysis					
31. Net profit margin					
Non- financial measures					
32. Customers' complaints and satisfaction					
33. Employee turnover rate					
34. Number of returned products					
35. Hours of employees' training					
36. Employees' absenteeism rate					
37. Job satisfaction survey					
38. Response time to customers					
39. Staff competency rate					

Part E

Please indicate with an X how often does your business prepare any of the following DECISION MARKING?

STATEMENT	Never	Rarely	Occasionally	Frequently	Always

	1	2	3	4	5
40. Total quality management					
41. Back flush analysis					
42. Activity base management					
43. `Relevant cost					
44. Price decision making					
45. Margin of safety					

Part F Please indicate with an X how often does your business prepare any of the following STRATEGIC ANALYSIS?

STATEMENT	Never	Rarely	Occasionally	Frequently	Always
	1	2	3	4	5
46. Balance score card					
47. Value analysis					
48. Function analysis					
49. Risk and uncertainty					
50. Profitability analysis					
51. Capital investment analysis					

SECTION C: SOURCES OF MA PRACTICES UNDERSTANDING

Part A

Please indicate with an X the sources of your MA practices understanding

STATEMENT	
52. School background of MA	
53. Attending training programs (workshops) for management	
54. Company conducts management programs	
55. Came with previous working experience	
56. Online courses attended	
57. Not applicable	

Part B **Please indicate with an X your understanding of contemporary MA practices**	
STATEMENT	
58. Contemporary MAP is a system that addresses the 21st century costing problems.	
59. Contemporary MAP records, summarizes, and analyses costs and spending behaviour, drivers and fluctuations.	
60. MAP includes costing, budgeting, performance, decision-making, and strategic analysis.	
61. MAP helps to produce a report that allows management to develop decisions and give information for decision-making, monitoring and performance analysis.	
62. MAP concentrates on the business internal procedures to aid management tasks.	
63. Not applicable	

SECTION D: USEFULNESS OF CONTEMPORARY MA PRACTICES			
Disagree = 1, Don't know = 2, Agree = 3			
Please indicate with an X your view on the usefulness of contemporary MA practices			
STATEMENT	**Disagree**	**Don't know**	**Agree**
	1	**2**	**3**
64. Help with decision-making			
65. Assist with control costs			
66. Help with planning			
67. Assists in choosing the best investment opportunities			
68. Guaranties sustainability			
69. Yield an advantage over competitors			
70. Guaranties business growth			
71. Assists with providing accountable business performances			
72. Motivating employees			
73. Assist to improving communication			

74. Guaranties profitability			
75. Help owners and managers to run the business successfully			
76. For problem identification			
77. Helps in financial reporting			
78. For business process improvement			
79. Assist in developing business strategies			
80. Other: (please specify and rate)			

Thank you for your time and participation

Appendix 3: Letter of information

Appendix B

LETTER OF INFORMATION

Title of the Research Study: Investigating the Contemporary MA Practises (MAPs) used by Small Business Enterprises in Durban, Ntuzuma Township.

Principal Investigator/s/researcher: Miss Londiwe Thandazi Zulu

Co-Investigator/s/supervisor/s: Dr. Zwelihle Wiseman Nzuza

Brief Introduction and Purpose of the Study: Small businesses contribute towards the country's economy. Researches reveal that small business do not keep proper accounting records for the operation of their businesses. Even though there are studies conducted on various MA tools from private and public organizations, but to the knowledge of the researcher, there has been no study conducted that specifically concentrates on identifying the Contemporary MA Practices (CMAPs) applied by small businesses Ntuzuma Township and examining the knowledge of small businesses on the Contemporary CMAPs in the Ntuzuma Township. Therefore, this study seeks to bridge this gap.

Outline of the Procedures: The self-administered questionnaire will be conducted by the researcher. A covering letter and a gatekeeper's letter will be attached to the questionnaire. The questionnaire will be conducted in English Language for all managers who are most likely to know the English language. The questionnaire will consist of ordinal, nominal, and ratio questions. Appointments and door drop will be used. The estimated time to complete the questionnaire is 10 to 15 minutes. Distributed questionnaires will be accompanied by the consent letter and letter of information, which explains and give a clear introduction of the study. The appointment will be made before visiting the participant. The dropped-out questionnaires will be collected same time, but a 2 to 3 days period will be allowed should the respondent not be available. The researcher since will be personal dropping the questionnaire will be available for any clarity and face to face to explain all the questions to non-English speaking. The researcher will leave a cellphone number and email address to be contacted or called back.

Risks or Discomforts to the Participant: There is no risk for participants or discomforts to you.

Benefits: The findings of this study will be used in order to improve the understanding of small businesses on the benefits of contemporary MAPs. This research will be published in DHET accredited journals upon completion of the dissertation available to participants upon request.

Reason/s why the Participant May Be Withdrawn from the Study: There will be no adverse consequences for the participants who should choose to withdraw from the study at any time. This study is harmless the is no reason for participants to withdrawn.

Remuneration: There will be no remuneration or whatsoever for participating in this study.

Costs of the Study: You will not be expected to cover any costs towards the study.

Confidentiality: All your information would remain confidential in the secure storage and deletion. The information will not be used for any other purposes other than this research study I the researcher secure that.

Research-related Injury: There will not be any compensation for any research-related injury but DUT insurance will.

Persons to Contact in the Event of Any Problems or Queries:

Please contact me (Miss Londiwe Zulu) on 060 464 8618 and my supervisor Dr ZW Nzuza on 031 373 5351 or the Institutional Research Ethics Administrator on 031 373 2375. Complaints can be reported to the Director: of Research and Postgraduate support, Dr Linda Z. Linganiso at 031 373 2577

General: Potential participants must be assured that participation is voluntary and the approximate number of participants to be included should be disclosed. A copy of the information letter should be issued to participants. The information letter and consent form must be translated and provided in the primary spoken language of the research population e.g., isiZulu.

Once again, your participation in this study is voluntary. You can opt not to participate or withdraw from the study at any time without adverse consequences. Confidentiality and anonymity of records identifying you as a participant will be maintained by the researcher and the university.

Thank you for participating.

Your assistance is greatly appreciated.

Miss LT Zulu

Student No. 21607575

Contact no. 060 464 8618

Appendix 4: Consent Letter

CONSENT

Full Title of the Study:

Names of Researcher/s:

Statement of Agreement to Participate in the Research Study:

- I hereby confirm that I have been informed by the researcher, Londiwe T. Zulu researcher), about the nature, conduct, benefits and risks of this study - Research Ethics Clearance Number: _____,
- I have also received, read and understood the above written information (Participant Letter of Information) regarding the study.
- I am aware that the results of the study, including personal details regarding my sex, age, date of birth, initials and diagnosis will be anonymously processed into a study report.
- In view of the requirements of research, I agree that the data collected during this study can be processed in a computerised system by the researcher.
- I may, at any stage, without prejudice, withdraw my consent and participation in the study.
- I have had sufficient opportunity to ask questions and (of my own free will) declare myself prepared to participate in the study.
- I understand that significant new findings developed during the course of this research which may relate to my participation will be made available to me.

_____ _____ _____ _____

Full Name of Participant **Date** **Time** **Signature / Right Thumbprint**

I, Londiwe T. Zulu herewith confirm that the above participant has been fully informed about the nature, conduct and risks of the above study.

_____ _____ _____

Full Name of Researcher **Date** **Signature**

_____ _____ _____

Full Name of Witness (If applicable) **Date** **Signature**

_____ _____ _____

Full Name of Legal Guardian (If applicable) **Date** **Signature**

Appendix 5: Ethical Clearance

DUT
DURBAN UNIVERSITY OF TECHNOLOGY
INYUVESI YASETHEKWINI YEZOBUCHWEPHESHE

FACULTY OF ACCOUNTING & INFORMATICS

Faculty Research Office

Durban University of Technology
06 May 2022

Student: LT Zulu

Student Number: 21607575

Degree: Master's Degree of Accounting
Email: 21607575@dut4life.ac.za
Supervisor: Dr ZW Nzuza
Supervisor email: zwelihlen@dut.ac.za

Dear LT Zulu

I am pleased to inform you that the Faculty Research Ethics Committee (FREC) following feedback from two reviewers, has granted preliminary permission for you to conduct your research "Investigating the Contemporary MA Practices (MAPs) used by small business Enterprises in Durban, Ntuzuma township".

When ethics approval is granted:

You are required to present the letter at your research site(s) for permission to gather data. Please also note that your research instruments must be accompanied by the letter of information and the letter of consent for each participant, as per your research proposal.

This ethics clearance is valid from the date of provisional approval on this letter for one year. A student must apply for recertification 3 months before the date of this expiry.

is required every year until after corrections are made, after examination, and the thesis is e Faculty Registrar.

A summary of your key research findings must be submitted to the FRC on completion of your studies.

Kindest regards.

Yours sincerely

Dr Olga Sizakele Ndlovu

Faculty Research Ethics Committee Chairperson
Faculty of Accounting and Informatics
Durban University of Technology
Ritson Campus
P O Box 1334, Durban, 4000, South Africa

Tel: +27 31 373 6767

Email: olgaN@dut.ac.za

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Appendix 6: Government MILE Gatekeepers letter

For attention:
Chair of Research Ethics Committee
Faculty of Accounting and Informatics
Department of Costing and Management Accounting
Durban University of Technology
Durban
4001

4 March 2022

RE: LETTER OF SUPPORT TO L.T ZULU, STUDENT NUMBER 21607575 - GRANTING PERMISSION TO USE ETHEKWINI MUNICIPALITY AS A STUDY SITE

The Business Support, Markets and Durban Tourism Unit (BSMTU) and Municipal Institute of Learning (MILE) in eThekwini Municipality, have considered a request from **Londiwe Thandazi Zulu (Ms)** to use eThekwini Municipality as a research study site for the purposes of undertaking a research study entitled: " **Investigating the Contemporary Management Accounting Practises (MAPs) used by small business enterprises in Durban, Ntuzuma township** in fulfilment of Master of Accounting degree.

We wish to inform you of the acceptance of this request and hereby assure the student of our utmost cooperation towards achieving his/her academic goals; the outcome which we believe may help the eThekwini Municipality improve its services. **The student is reminded of the ethical considerations and the Disaster Management Act, Act 2020 Regulations when conducting this research.** The student must take all necessary measures to ensure her personal safety during the research period as eThekwini Municipality indemnifies itself from any incidental claims that may arise. **In return, we stipulate as mandatory that the student contacts Dr Collin Pillay to present the preliminary results and recommendations of this study to the related unit/s.**

Wishing the student all the best in her studies.

Mr. Oswald Nzama
Head: BSMT Unit
eThekwini Municipality

[redacted]
Program Manager: MILE
eThekwini Municipality

I .....
as per the c[redacted].....hereby accept as conditional that I will comply fully

Signed ..... Date: .....

Appendix 7: Editor's letter

EDITOR'S LETTER

Researchers Beyond-Borders (Pty) Ltd
Umhlanga, Durban
South Africa

1 September 2023

To whom it may concern

Editing of Masters Dissertation: Londiwe Thandazi Zulu (Student number -21607575)

Title of dissertation: Investigating the Contemporary Management Accounting Practices used by Small Enterprises in Durban, Ntuzuma township.

This letter serves as confirmation that the aforementioned dissertation has been language edited. Any queries may be directed to the author of this letter.

Regards

Maleni Pillay