



**EVALUATING THE IMPLEMENTATION OF SUPPLY CHAIN MANAGEMENT AND
PROCUREMENT PROCESSES IN THE DEPARTMENT OF TRANSPORT, PROVINCE
OF KWAZULU-NATAL**

by

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DEDICATIONS

This work is dedicated to my family, they have never stopped supporting me throughout this journey. Ngyabonga ntokazi kaNdandose ngezipho zempilo ongiphe zona okuyizo ezingibeke la namhlanje. Ngithi Qhubeka uvune izithelo sekuyiso isikhathi.

DECLARATION

I declare that this work has never been submitted anywhere for the reasons of obtaining a qualification. I declare that it is my own original work and I have full copy rights (unless to the extent explicitly otherwise stated).

Signature

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- To Mrs. Phoswa, may her soul rest in peace, for encouraging me to conduct this study.
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- To my kids, Minenhle and Khanya Khomo, thank you for understanding that I need to study during your time. May God protect and guide you to greater height.
- To my late grandparents, umkhulu Dingicebo benokhulu umaLuthuli, Dingicebo kaNganyingana, Nganyingana kaMkhontshwana, ngithi nje Khomo, Mnyaphane, Sodlabile syabonga kuwe nabantwana bakho bonke..!

ABSTRACT

Supply chain management has become a fundamental aspect of public-sector organisations, serving as a mechanism for policy implementation. Its goal is to minimise the complexities of public service delivery by providing a systematic process involving the coordination of activities in terms of inputs, processes and outputs by all the relevant parties. Over the years, observations have highlighted challenges within the supply chain management systems of government institutions. Amongst the many challenges to the implementation of supply chain management (SCM) processes in South Africa are mismanagement of resources, a weak governance system and the inability of the government to create fair, equitable, transparent, efficient and cost-effective SCM systems and processes. The Department of Transport in KwaZulu-Natal (KZN) serves as a case study illustrating ineffective supply chain management processes and the complex systems that hinder effective service delivery. This has been evident in many cases, including the consistent qualified audit reports the Department of Transport (DoT) received during the 2017–2018 financial year up to the 2021–2022 financial year. Moreover, it seems to indicate that the SCM space is a sensitive and vulnerable one.

This research study aims to investigate the challenges that inhibit the effective implementation of the SCM processes to enable the builders of the nation to find a space to advance the socio-economic development interests of the nation and improve the quality of service delivery. The study adopted a qualitative research approach to solicit detailed information on the challenges of ineffective supply chain processes. It further targets employees within the DoT, head office and regional offices as the study population. The researcher utilised the purposive sampling method to select a total of 12 supply chain employees within DoT. Subsequently, semi-structured interviews were conducted with the chosen sample, allowing for a comprehensive exploration of their perspectives and experiences related to the study's objectives. In this study, a brief theoretical perspective on SCM is provided. It is followed by an analysis of the auditor general's reports from the 2017/18 to 2021/22 fiscal years and the SCM policy and processes of the KwaZulu-Natal Department of Transport to identify the challenges and propose sustainable solutions. The study further interrogated the

legislative mandate while linking it with the auditor general's findings to determine the extent of the transgressions by the department. In order to support the research findings, the study will employ qualitative data collection.

The study findings indicate that the implementation of proper SCM practices face challenges within the KZN-DoT. These challenges have made it difficult for the department to function effectively in terms of SCM, hence the issues that have been presented in the study, such as compliance with the current legislation, lack of professionalism and delays in service delivery.

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LIST OF ABBREVIATION AND ACRONYMS

Abbreviation/ Acronyms	Description
AO	Accounting Officer
AA	Accounting Authority
AGSA	Auditor General of South Africa
CPBs	Central Purchasing Bodies
CSD	Central Suppliers Database
DPSA	Department of Public Service and Administration
DoT	Department of Transport
DUT	Durban University of Technology
GDP	Gross Domestic Product
InCiSE	International Civil Service Effectiveness
KZN	KwaZulu-Natal
KZN DoT	KwaZulu-Natal Department of Transport
NSG	National School of Governance
NZ	New Zealand
OECD	Organisation for Economic Co-Operation and Development
CAQDAS	Computer-Assisted Qualitative Data Analysis Software
RASCI	Responsible, Accountable, Support, Consulted, Informed
RFI	Request for information
RFQ	Request for quotation

RFT	Request for tender
EOI	Expression of interest
ROI	Registration of interest
RSA	Republic of South Africa
SCM	Supply Chain Management
ToR	Terms of Reference
UK	United Kingdom

CHAPTER ONE: AN OVERVIEW OF THE STUDY

1.1 INTRODUCTION

Compliance with the public sector supply chain management (SCM) norms and standards has been receiving a great deal of attention from the auditor general of South Africa (Zitha 2018:676). The absence of action by the management and leadership of the KwaZulu-Natal Department of Transport (KZN-DoT) to resolve the problems with the implementation of a proper SCM policy, processes and practices and the resultant poor service delivery hinder effective service delivery and thus are direct or indirect causes of community unrests. The KZN DoT has received qualified audit opinions from the 2017–2018 to 2021–2022 financial years for non-compliance, maladministration and non-implementation of the audit reports' recommendations to enable the effective implementation of SCM processes. The study aims to investigate the challenges that inhibit effective implementation of the SCM processes to enable the quality service delivery.

This study briefly provides a theoretical perspective on SCM. It is followed by an analysis of the auditor general's reports from the 2017/18 to the 2021/22 fiscal years and the SCM policy and processes of the KZN DoT to identify the challenges to proposing sustainable solutions. The study further interrogated the legislative mandate while linking it with the auditor general's findings to determine the extent of the transgressions by the department. The focus is on an analysis of the implementation of the SCM processes in the public sector, with the aim of comparing and investigating the root causes of the failures in the KZN DoT's SCM space. The view is that the analysis will assist the KZN DoT to determine shortcomings in its implementation of SCM processes by comparing them with the existing Treasury Regulations 16A, Guide for Accounting Officer or Authority and other relevant SCM policies. However, for a better understanding of the topic, it is important to first provide a background understanding of the origins of SCM, as this will provide different schools of thought between private and public sector SCM.

1.2 BACKGROUND OF THE STUDY

The SCM terminology and concept was first used by Oliver and Weber in 1982 while consulting big businesses on improving their business bottom line through improvements in logistics and warehouse management. They used the term to define the coordination of the raw material flow from organisation to organisation. This was part of their research that was motivated by the prevailing practice (Harb and Trad 2023: 283). The term then became popular as it was added to the management sciences' and public administration sciences' literature and government policies on SCM around the world. These authors also draw their definition from Oliver and Weber, who define SCM as the process of linking logistics with other business functions (Ginting and Tesselhof. 2023:1).

Drawing from the SCM definitions stated by different authors, the term and its concept are identified as the coordination of the movement of goods from raw material by the primary producers to original manufacturers, who are secondary customers, to the end-user, who is the last customer in the process as the final product. However, for a better understanding of the topic, it is important to first discuss how the South African government has conceptualised the SCM for adoption and implementation by all organs of state.

As time passed, the term SCM found its way to the public sector, where it was adopted by the government of the Republic of South Africa. In September 2003, the cabinet resolved to adopt the concept of SCM as the government method of acquiring and disposing of goods, services, or work. From that period on, a string of articles, research papers and regulatory documents were published, providing different opinions on the definition of SCM. In what may also be used as the definition of the public sector SCM, the South African Treasury Regulations 16A provide for the following: The accounting officer or accounting authority of an institution to which these regulations apply must develop and implement an effective and efficient SCM system in his or her institution for the following functions.

- (a) The acquisition of goods and services; and
- (b) The disposal and letting of state assets, including the disposal of goods no longer required".

Subsequent to the adoption of SCM by the cabinet, a guiding document titled SCM: a Guide for Accounting Officers and Authorities was developed to enhance uniformity. The belief was that the system was going to be an essential component of financial management and was going to assist in bringing conformance to global standards (Weerakkody, Haddadeh and Al-Busaidy. 2016:658).

The SCM system was introduced to the government to replace what was considered an outdated system called procurement and provisioning. Also, the government argued that the outdated system of procurement and provisioning was no longer serving the purpose as it was rule-driven, value for money always seemed to equate to the lowest price quoted, and the activities were not linked to the budgetary planning, to mention the few (Weerakkody *et al.* 2016:658). Despite all the refreshed systems and mechanisms that had been adopted by the 2003 Cabinet to enhance compliance and introduce a new way of doing things, the evidence as produced by the auditor general proves that the government and especially KZN DoT still seem to experience challenges in implementing the proper SCM processes.

1.3 RESEARCH PROBLEM

The South African public procurement system continues to face significant difficulties, despite the processes for reforming public procurement and the repositioning of SCM as a strategic tool. Thembekile Kimi Makwetu, the auditor general of South Africa (AGSA), encouraged officials in government to stop the trend of disappointing audit results, to reinstate public accountability, and to avert further mismanagement of public funds in November 2019 (Fourie and Malan 2020:8). During the 2017-2018 to 2021-2022 financial years, the auditor general reported non-compliance in the implementation of SCM processes. This led to delays in service delivery and contributed to community unrest in KwaZulu-Natal province. According to Du Plessis (2016), one of the main issues governments must deal with in order to carry out their duties successfully and efficiently is administrative incapacity. This is because service delivery protests are not only unique to KZN but the entire country. The study evaluated the implementation of SCM processes and used the department as a case study in a bid to unearth the root cause of non-compliance with SCM processes.

1.4 RESEARCH AIM

The aim of the study was to investigate the challenges in the implementation of SCM practices within the Department of Transport in KwaZulu-Natal. It seeks to achieve the following three objectives:

1.5 RESEARCH OBJECTIVES

- To investigate the challenges in the implementation of SCM practices in the Department of Transport.
- To explore the legislative framework that guides the implementation of SCM processes.
- To evaluate KZN Department of Transport SCM practices.

1.6 RESEARCH QUESTIONS

- What are the challenges in the implementation of SCM practices in the Department of Transport?
- What are the legislative framework requirements for the implementation of SCM?
- What are the current SCM practices in the KZN DoT?

1.7 OVERVIEW OF SUPPLY CHAIN MANAGEMENT AND PROCUREMENT MANAGEMENT

1.7.1 CONTEXTUALISING SCM

This section provides an overview of SCM, looking closely into its application in the private and public sectors.

1.7.1.1 Private Sector Concept

Oliver and Weber are regarded as the first group of consultants to formally use the terminology SCM back in 1982. They used the term to define the coordination of the material flow from organisation to organisation (Harb and Trad 2023: 283). The term then became popular as time went on, when different individuals and entities researched it and provided their own definition of SCM. Ginting and Tesselhof (2023: 1) have lately expanded upon the body of extant literature on SCM research. Additionally, they take their definition of SCM from Oliver and Weber, who characterise

it as the process of integrating logistics with other business operations. Drawing from the SCM definitions stated by different authors, it is identified that the term and its concept mean the coordination of the movement of goods from raw material by the primary producers to original manufacturers, who are secondary customers, to the end-user, who is the last customer in the process as the final product.

1.7.1.2 Public Sector Concept

As time progressed, the concept of SCM entered the public arena and was accepted by the government of South Africa's leadership. The cabinet resolved to use SCM as the government's way of procuring and letting go of products and services in September 2003. Since then, numerous publications, research papers and regulatory documents have been produced, offering various perspectives on SCM. The South African Treasury Regulations 16A state that the accounting officer or accounting authority of an institution to which these regulations apply must create and implement an effective and efficient SCM system in his or her institution for the following reasons: the purchase of products and services, as well as the leasing and selling of state property, including the sale of items no longer needed (South African National Treasury, 2005: 49). Mokoena (2018: 458), on the other hand, provides an interesting observation when defining public sector SCM. He argues that SCM in the public sector is a system concerned primarily with the coordination of the role-players who are part of the delivery of outcomes as a result of input and output combinations.

Subsequent to the adoption of SCM by the cabinet, a guiding document titled SCM: A Guide for Accounting Officers and Authorities was developed to enhance uniformity. The belief was that the system was going to be an essential component of financial management and was going to assist in bringing conformance to global standards. The SCM system was introduced to the government to replace what was considered an outdated system called procurement and provisioning. South African Treasury believed that the outdated system of procurement and provisioning was no longer serving the purpose as it was rule-driven and value for money always seemed to equate to the lowest price quoted; the activities were not linked to the budgetary planning, to mention the few (Weerakkody *et al.* 2016:658). Drawing from the earlier provided definitions, it is evident that public sector SCM is linked to procurement.

According to Blood-Rojas (2017), procurement is the acquisition of goods and services through commercial means for the organisation and the interested parties. Khan, Hussain and Ajmal (2018:2) concur with the idea of public procurement as a crucial tool for managing the use of public funds and state funds to purchase the goods and services necessary to complete public projects and programmes. The Treasury regulations refer to the acquisition of goods and services, which are generally procurement activities. And lastly, the establishment of the Office of the Chief Procurement Officer to oversee SCM operations in the South African public sector made it obvious that SCM cannot be divorced from procurement (Fuzile 2015). This emphasis is brought forward to prevent the study from being limited to using only the literature that deals with SCM but can also incorporate the literature that deals with procurement.

This study will also argue in its advanced stages that maybe the adoption of the term SCM instead of procurement management adds to the misunderstanding of processes. Scholars describe SCM elements as demand, acquisition, logistics, disposal, risk management and supply chain performance (Mokoena 2018: 458; Ambe and Badenhorst-Weiss, 2012: 30).

1.8 THEORETICAL FRAMEWORK FOR SCM

A theoretical framework for government that is used to define the flow of SCM processes is depicted as follows:

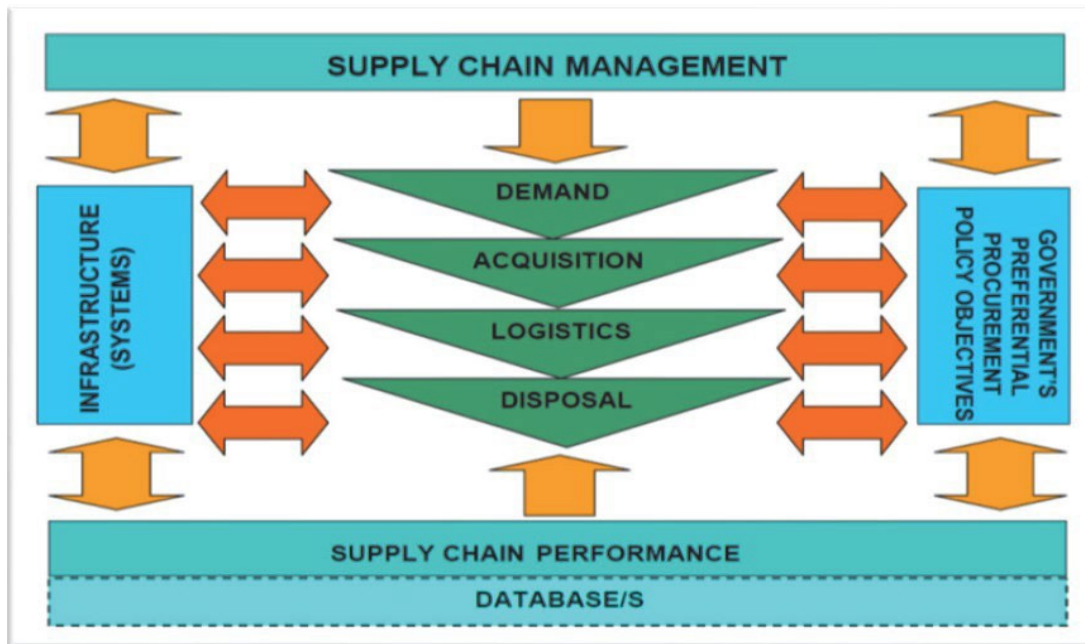


Figure 1. 1: SCM Framework

Source: (Ambe and Badenhorst-Weiss 2012: 30)

a. Demand management

The Kwa-Zulu Natal Department of Health (2021:11) defines demand management as the phase that is at the beginning of the SCM system. It further states that it is a stage where the Terms of Reference (ToR) for tenders are reviewed by delegated committees. The crucial role of the demand management phase is that it enables SCM practitioners to assess departmental strategic plans to ensure that SCM processes enable the achievement of strategic goals through effective and efficient service delivery to the people.

b. Acquisition management

Ngobese (2018:11) describes acquisition management as the phase where the decision is made on how to approach the market. The author further state that this is the phase where the establishment of the total cost of ownership is determined and where tenders are evaluated in accordance with the set criteria.

c. Logistics management

Logistics management is the term used to define the planning, execution and supervision processes associated with the smooth movement and storage of goods and services and the inventory information that comes with them from the primary producers' level to delivery to the last customer for utilisation. Some authors perceive logistics as physical, managerial and informational systems required to let goods and services overcome time and space (Tien Anh, and Thuc. 2019:5). However, this definition is best applied to a private-sector SCM concept. According to Christopher (2016: 29), in government, this is the third phase in the SCM system, which is responsible for placing purchase orders after the finalisation of the acquisition management processes so that the deliverables can be delivered by the service provider, received by the department, distributed to the end users and the payment process initiated.

d. Disposal management

Disposal management provides for any goods or assets in the inventory of the government that have served their complete lifespan to be discarded or written off. Disposal must be done carefully because some chemicals, including oil and clinical goods, are hazardous to people and the environment and must be disposed of appropriately (Kwa-Zulu Natal Department of Health 2021:68).

e. Supply chain performance

Supply chain performance is about monitoring the entire SCM, from internal actions to how the service providers have delivered the contracted service. Some of the responsibilities include monitoring compliance with the relevant prescripts, target achievements and broader policy scope for procurement. While enabling performance monitoring at every level, sustainable supply chain management also makes sure that urgently needed improvements are made to key supply chain components, according to Khan *et al.* (2016:46). With the above gaps mentioned, this research project aims at investigating deeper into the reasons that led to the KZN Department of Transport SCM finding qualified audit reports from the auditor general as a result of non-compliance in the implementation of the SCM processes as per the elements'

requirements for five years consecutively. It is also for these reasons that the study was conducted to suggest possible solutions to this question.

1.8.1 LEGISLATIVE FRAMEWORK FOR SCM IN SOUTH AFRICA

This section provides an overview of the legislative frameworks that guide SCM in the public sector in South Africa. These legislative frameworks are discussed as follows:

1.8.1.1 The Constitution of the Republic of South Africa Act 106 of 1996

According to Section 217 of the Constitution (1996: 133), a fair, equitable, transparent, competitive and cost-effective procedure must be followed by government procurement institutions. This implies that the implementation of procurement processes and supply chain management practices must be conducted in accordance with these principles. In addition, the procurement process is guided by fundamental values including fairness, equity, transparency, competition and cost-effectiveness. Hence, the allocation of government contracts may undergo examination and face potential objections if it is perceived that the process employed deviated from these principles.

1.8.1.2 The Public Finance Management Act 1 of 1999 (PFMA)

The Public Finance Management Act (1999: 45) is enacted to establish a solid framework for the regulation and administration of public funds. This act elaborates on the principles that institutions must adhere to and implement when handling public funds. The primary responsibility of the accounting officer is to ensure the establishment of a procurement and provisioning system within the department, constitutional institution, or public organisation that adheres to principles of fairness, equity, transparency, competitiveness and cost-effectiveness. This statement suggests that the job of the accounting officer is significant in facilitating efficient financial management within the context of procurement and supply chain operations.

1.8.1.3 The National Treasury Regulations 2005

These regulations' main goal was to provide the institutions with the means to establish an efficient and successful SCM system. (South African National Treasury, 2005: 199). The Treasury Regulations offer provisions for institutions to necessitate the

establishment and execution of an effective and efficient supply chain management system within the institution. This system should encompass two key aspects: (a) the procurement of goods and services; and (b) the proper disposal and leasing of state assets, including the elimination of products that are no longer deemed necessary.

1.9 SIGNIFICANCE OF THE STUDY

This study aimed to investigate the challenges related to SCM faced by the South African government, focusing on the KZN Department of Transport (DoT). It took into account the current situation of governance in South Africa and recognised the significant role that the supply chain plays in the overall functioning and efficiency of government operations. This study aspires to contribute to the advancement of knowledge within the context of SCM and intends to generate a high-quality research paper focusing on the challenges faced in the field of supply chain. The aim was to have the research findings published in a reputable and authorised academic publication in order to contribute to the existing scholarly discourse on supply chain challenges within the South African public sector.

1.10 LOCATION OF THE STUDY

The KwaZulu-Natal Department of Transport is situated in the Midlands region of the KwaZulu-Natal Province, specifically under the uMgungundlovu District Municipality in Pietermaritzburg. The central town uMgungundlovu District Municipality serves as the capital city of the province. It is located along the midlands region of the national road (N3) that connects Johannesburg and Durban. The DoT is further divided into regional and district offices located around the province. This research study will exclusively focus on participants located in the head office and regional offices within the district municipality.

1.11 RESEARCH METHODOLOGY

According to Creswell and Creswell (2018), research methodology refers to the procedures and techniques that the researcher adopts and applies in the process of carrying out the research study. The following methodological procedures were applied in this research study.

1.11.1 RESEARCH DESIGN

According to Polit and Beck (2021), the design of the research commences when the researcher has identified topic he or she is going to research. It represents a clearly defined structural concept of how the study will unfold to respond to the current question.

This conceptual structural design comprises the research methodology, the methods and the techniques, to mention a few dominants. The researcher utilised a case study research approach in order to acquire in-depth knowledge of the issues faced in SCM within the public sector. The KZN DoT was selected as the specific case study for this investigation.

1.11.2 RESEARCH APPROACH

Research approaches refer to the procedures that the researcher follows when conducting a research study. Although this study followed a qualitative method, it is important to offer an overview of approaches in research, and they are discussed as follows:

1.11.2.1 Qualitative Research approach

Research methodologies encompass three main approaches: quantitative, qualitative and mixed-method. Scholars employ distinct procedural strategies in their research endeavours. In this study, the researcher utilised a qualitative methodology, which falls under the realm of social science research. This approach involves the collection and utilisation of non-numerical data (Crossman, 2017:1).

According to Dlungwane (2017:46), the reason the qualitative research approach is typically employed to examine policies is because it can provide insights and clarity on topics that are considered sensitive, helping the researcher gain a complete understanding of the perspectives of the subjects. The qualitative research approach method was specifically employed in this research study to gather data.

1.11.3 POPULATION

According to Polit and Beck (2021), a population is the totality of humans or objects that share a particular trait. For the purpose of this study, the population is the selected

group of officials from the KZN DoT. The study focused on the directors and managers who are employed in the SCM unit at both the KwaZulu-Natal Department of Transport (KZN DoT) head office and its regional offices. These individuals include both males and females and are regarded as possessing extensive knowledge and experience in the field of SCM systems and procedures, having been working in the department for a minimum duration of three (3) years.

1.11.4 SAMPLING METHOD

The research employed purposive sampling as it is a qualitative study. According to Polit and Beck (2021), purposive sampling is a non-probability technique employed to select a subset of the population that can effectively represent the entire population. The selection pattern is influenced by the department's expertise and comprehension of the procedures related to supply chain management. The selection of directors and managers in the SCM was based on their knowledge and experience in the department. Consequently, the information they produced has provided the necessary data for the study to draw its conclusions.

1.11.5 INCLUSION AND EXCLUSION CRITERIA

The research incorporates both inclusions and exclusions. The study will involve the participation of senior, middle and junior management staff within the SCM unit, as determined by the researcher. The reason for this is that the data acquired from management may be more effectively structured and strategically utilised since it is deemed valuable due to their role in overseeing and supervising the comprehensive execution of supply chain management practices and operations within the department. The inclusion criteria encompass participants who have been employed for a minimum duration of three years, as they are deemed to possess comprehensive and detailed knowledge about the unit's environment and operations. Both male and female managers and directors were included in the study.

In terms of exclusion criteria, supervisors and junior staff members were not included in the study. The study exclusively concentrated on directors and managers due to the specific criteria established. The research is focused on the examination of the strategy and policy of SCM, which directors and managers have vast knowledge about as policy and strategy formulation is one of their responsibilities. In addition, within the

realm of governance, it is customary for the management to assume responsibility for the handling of audit outcomes that arise as a consequence of policy implementation.

The structural character of the sample is illustrated in the tables below.

a. Sample Size

The study will be targeting the SCM director, one of the seven demand officials, one of the twelve acquisitions officials and one of the six contract officials. This will total to four out of twenty-three officials from the head office. The director of SCM was selected and managers from demand, acquisition and contracts management were also included.

At the regional offices, one finance manager was selected per region in four regions. Also, the study targeted one supervisor per region in four regions. This led to a total number of eight out of eight target sample.

1.11.6 DATA COLLECTION METHOD

The researcher conducted semi-structured interviews with the sampled participants. The adaptable nature of this type of interview approach enables the researcher to actively elicit additional information or express interest in the interviewee's responses. This approach grants the researcher the autonomy to prompt the interviewee for further elaboration or to pursue a different line of questioning based on the interviewee's responses. Semi-structured interviews allowed participants the opportunity to freely articulate their in-depth perspectives on the subject of the study (Creswell and Creswell 2018).

1.11.7 DATA PROCESSING AND ANALYSIS

According to Sekaran and Bougie (2019), after data collection, the researcher has processed the data and identified the pattern in the response. The researcher processed and analysed the data using thematic analysis with two computer software, NVivo version 14 and CAQDAS software, to code the collected data accordingly. This is important to ensure that we have adequate information to draw accurate conclusions from the study.

1.11.8 ETHICAL CONSIDERATIONS

Ichendu (2020) asserts that research ethics impose obligations on operational tasks, preserving the respect due to participants and the publicly available data in the study. It is imperative to take into account all ethical considerations in order to prevent any deception or obstacles with the research. A research project involving human participants is subject to an ethics review by the relevant institution prior to the commencement of any fieldwork, especially if the case study is their current organisation.

In the case of this study, the Durban University of Technology (DUT) has performed the necessary review due diligence. The university used its **Research Proposal and Ethics Checklist (PG 2a form)** completed by the researcher in order to meet the necessary ethics requirements. This process covers the critical elements, which are:

- Ensuring that permission to conduct the study was obtained from the Director of the Department of Transport
- Informed consent was obtained from participants to create an enabling environment for both the study and the participants when interacting.
- Confidentiality of information provided by participants was ensured and it will be stored in the department where the study is conducted and disposed of after five (5) years as per university policy.
- Anonymity was ensured by protecting the identities of the participants (names and surnames).
- The interview questions were vetted and verified to limit any possible research overreach and observing research limitations.

1.12 OUTLINE OF THE DISSERTATION

Chapter 1: An overview of the study

This is the first phase, which is the introductory chapter to the entirety of the research project. This section outlines the introduction of the study to give the reader an overview of what the study is about. It covered the background of the study, the research project, the aims and objectives, the study location, the research methodology and ethical considerations.

Chapter 2: Overview Of Supply Chain Management and Procurement Management

This chapter marks the second phase of the research project, where various scholarly minds have been brought together to argue, corroborate and also establish the relevance of the study. This area also provided the necessary historical background linked to the research topic.

Chapter 3: Research methodology

The third phase responsible for outlining the research design. This chapter discusses the research methodology and design, population and sampling strategy, data collection and data analysis methods. It provides the justification for the selected data collection methods.

Chapter 4: Data interpretation and analysis

The fourth phase discusses the research findings. The qualitative data is discussed by means of themes associated with it, which then lead to recommendations being made based on the research findings.

Chapter 5: Conclusion and recommendations

The final chapter concludes the research, consolidating the preceding chapters and reflecting on the research objectives. The research's findings, recommendations and conclusions are discussed and solutions are proposed.

1.13 CONCLUSION

This first chapter concludes the research by providing an overview of the study. Its primary aim is to reflect on the research objectives and possible solutions based on the research recommendations. Literature review, research methodology, data interpretation and analysis are discussed in summary. In this chapter, the researcher lays down the key steps that were followed to address the research questions and aim. These steps included the research approach and design, the method of data collection and data analysis. The aim of this study was to evaluate the challenges that inhibit the effective implementation of the SCM processes to enable the builders of the

nation to find a space to advance the socio-economic development interests of the nation and improve the quality of service delivery. The next chapter will focus on reviewing the literature in relation to public sector SCM and procurement.

CHAPTER TWO: OVERVIEW OF SUPPLY CHAIN MANAGEMENT AND PROCUREMENT MANAGEMENT

2.1 INTRODUCTION

This chapter intends to review the existing literature pertaining to government SCM, both locally and internationally. It intends to investigate the challenges with regards to the implementation of SCM practices in the Department of Transport. Government procurement processes in developed countries like New Zealand, Denmark and the United Kingdom (UK) will be briefly reviewed in order to assess if there are any international best practices that can be adopted. The use of these countries as benchmarks is motivated by the 2019 International Civil Service Effectiveness (InCiSE) index. According to the InCiSE Index Result Report (2019.23), New Zealand became number one in public sector procurement, followed by Denmark and the UK. Although the Republic of South Africa (RSA) is not a member of the Organisation for Economic Co-Operation and Development (OECD), it interacts with OECD countries to enhance engagements through partnering hence, it is advisable to compare and benchmark the South African SCM concept with the top performing countries in the 2019 report. This chapter will also delve into the Judicial Commission of Inquiry into the State Capture Report on Public Sector SCM and Procurement in RSA as it highlights relevant points of this study, including the professionalisation of the field of SCM and public procurement. Lastly, this chapter will also discuss the legislative framework that guides government procurement and SCM in the RSA.

2.2 THE ORIGINS OF SCM

An overview of the origination of the SCM concept, drawing from international countries. is discussed below:

2.2.1 BACKGROUND OF SCM AND PUBLIC PROCUREMENT IN THE SELECTED, LEADING INTERNATIONAL COUNTRIES

Procurement has a historical lineage dating back to ancient times, reaching as far back as 1800 BCE, when the material management aided in the building of the pyramids in Egypt. (Nolan 2023). Babbage (2009: 260) is considered as one of the earliest individuals to acknowledge procurement from an organisational perspective. He observed that in the mining sector the services of a materials manager, who selects,

purchases and track the goods and services is essential. In the 1950s, the government of New Zealand (NZ) decided to enact legislation called the Public Bodies Contracts Act. The Act aimed at introducing the modes of contracting by public bodies. During this period procurement was formally adopted in New Zealand as the method of acquiring goods and services (New Zealand 1959: 2).

On the other hand, when the countries in Europe formed a union called the European Union (EU), one of the key agreements was to develop a single European Treaty. The Treaty envisaged the opening up of national contracts and the free participation of the member states (European Union 1957: 4). A Council exists in the EU that is tasked with issuing directives on matters concerning the Union. Then, in relation to procurement matters, MORO (1971: para. 1 line1) of the Council of the European Communities, issued Directive 71/305/EEC, outlining the procedure for awarding public works contracts. This is arguably the first European directive to adopt procurement and lay down the procedures that ought to be followed.

2.2.2 BACKGROUND OF SCM AS A PRIVATE SECTOR CONCEPT

As the researcher alluded to in Chapter One, Oliver and Weber are regarded as the first group of consultants to formally use the term SCM back in 1982. The motive behind the use of the term was to define the coordination of the material flow from organisation to organisation (Harb and Trad 2023: 283). As different individuals and entities researched the term, it became more popular as time went on and gained various definitions in the process. Ginting and Tesselhof (2023: 1) have recently added to the existing research literature on SCM. The author also draws his definition from Oliver and Weber, where they define SCM as the process of linking logistics with other business functions. Drawing from the SCM definitions stated by different authors, it is acknowledged that the term and its concept mean the coordination of the movement of goods from raw materials by the primary producers to original manufacturers, who are secondary customers, to the end-user, who is the last customer in the process as the final product.

2.2.3 BACKGROUND OF SCM AS A PUBLIC SECTOR CONCEPT

Over time, the name SCM made its way into the public sphere, where the Republic of South Africa's government embraced it. The cabinet decided in September 2003 to make the idea of supply chain management (SCM) the official way that the government acquires and disposes of commodities, services, or labor. The government replaced the outdated procurement and provisioning system with the SCM system since it was rule-driven, did not take value for money or budget planning into account, and was no longer functional (Republic of South Africa Treasury 2004: 2). From that period on, a string of articles, research papers and regulatory documents were published, providing different opinions on the definition of SCM. Mokoena (2018: 458), on the other hand, defines public sector SCM as a system concerned primarily with the coordination of the role-players who are part of the delivery of outcomes as a result of input and output combinations. Since public sector SCM and procurement are global practices, it is necessary to consult the diversity of cultures that exist in various countries for international best practices. In that case, the researcher is going to provide a brief overview of public sector SCM and procurement in selected international developed countries.

2.3 PUBLIC SECTOR PROCUREMENT AND SUPPLY CHAIN: GLOBAL PERSPECTIVE

This section provides an overview of public sector procurement in countries, such as New Zealand and Denmark.

2.3.1 PUBLIC SECTOR PROCUREMENT AND SCM IN NEW ZEALAND

The New Zealand government defines procurement as the system of acquiring and delivering goods or services (Blood-Rojas 2017). A system concerns itself significantly with the whole life cycle of a contract, starting from needs identification to the end of a service contract, or the end of the lifespan of an asset and subsequent disposal. The system is phased into three parts: planning, sourcing and managing. Within these three phases, an additional eight stages are designed to enhance each phase. These are structured as follows:

- **Planning**

Initiate project

Identify needs and analyse the market.

Specify requirements.

Plan approach to market and evaluation.

- **Sourcing**

Approach the market and select a supplier.

Negotiate and award a contract.

- **Manage**

Manage contracts and relationships.

Review

A theoretical framework for government that is used to define the flow of SCM and the procurement processes is depicted as follows:

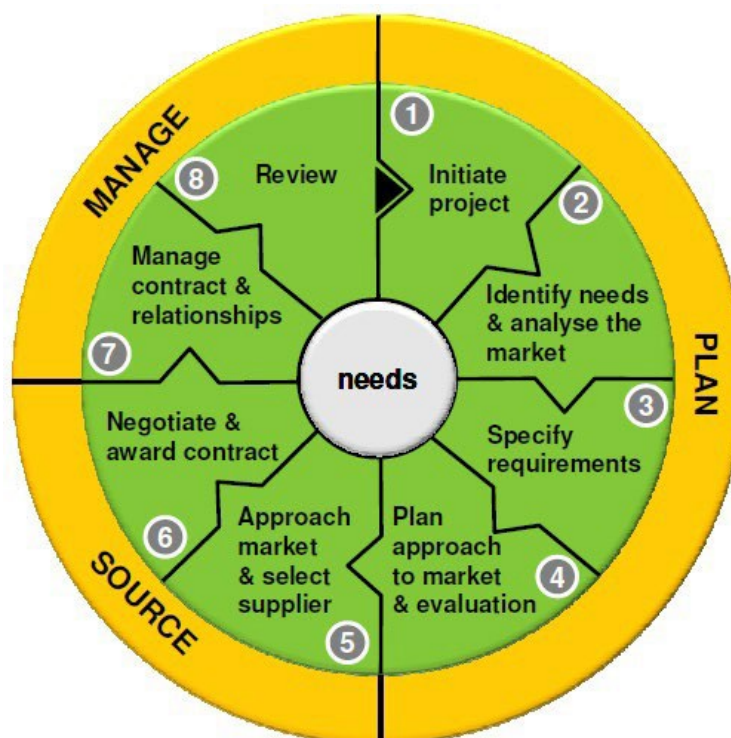


Figure 2. 1: Procurement Lifecycle Framework

Source: New Zealand Government Procurement (2011: 6)

2.3.2 NEW ZEALAND PROCUREMENT LIFECYCLE FRAMEWORK

2.3.2.1 Planning

Walubengo (2023: 161) wrote that planning is a process of future thinking together with decision-making in order to integrate decisions from various areas and procurement decisions ought to be supported by thorough preparation. The AGSA report for the 2018–19 fiscal year reported that the KZN DoT did not include some of the major projects in the approved departmental procurement planning. Below is a brief discussion about the planning phase of New Zealand procurement. The KZN DoT can learn lessons from New Zealand procurement processes.

- **Stage 1: Initiate Project**

This stage is more concerned with all the activities that need to be finalised before the process of acquisition starts. The trans-section being initiated must be on the public entity's procurement plan and be budgeted for. All relevant stakeholders are identified and brought together for participation. The hierarchy of approvals from other public entities is identified. Project scoping, including document-associated risks, must be finalised at this stage (Herm *et al.* 2022:21). In the project initiation, there is a significant focus on key stakeholder involvement. This is because key stakeholders have vested interest and influence in the project. The government then uses RASCI charts to decide on the management strategy for the various stakeholders and the analysis of the project to consider the tasks or deliverables involved (Oregon State University n.d.). RASCI stands for the following:

R = Responsible: This lead role-player is responsible for successfully delivering the project and/or task.

A = Accountable: This is a delegated authority who has ultimate accountability and oversight roles. He or she is the person to whom 'R' or the project leader is accountable.

S = Support: This role player's responsibility is to "get dirty" because they do the actual work.

C = Consulted: In every project or task, there are masterminds who provide background support in the form of intellect or specialists; they have to be consulted timeously for their ‘buy-in’.

I = Informed: The project sponsor is entitled to be continuously informed about progress status. The individual or group at this level does not participate in the project but is responsible for backing it (Oregon State University n.d).

The above chart is employed in order to determine the involvement of each stakeholder and help clear up any possible confusion. Table 2.1 below is an example of the RASCI Chart in an Informatics Business Related Project.

<p>R = Responsible</p> <p>A = Accountable</p> <p>S = Support</p> <p>C = Consulted</p> <p>I = Informed</p>	Project sponsor	Senior user	Business actor (user)	Domain expert	Project manager	Business analyst	Database administrator
Business case	A	C	I	C	R	C	
Project initiation document	A				R	S	
Interview notes	I	C	C	C	A	R	
Notes from workshops	I	C	C	C	A	R	
Requirements catalogue	I	C	C	C	A	R	
Use case diagram	I	C	C	C	A	R	
Use case descriptions	I	C	C	C	A	R	
Class diagram	I	C	C	C	A	R	S

Table 2. 1: RASCI Chart

Source: (Oregon State University n.d)

The **outcomes** of this process are the correct people doing the correct things at the correct time to achieve optimal outcomes. The contributing **outputs** are to initiate

engagement with key stakeholders, establish the project team, project integrity or probity, governance and management frameworks (Oregon State University n.d).

Stage 2: Identify needs and analyse the market

The expectation at this stage is to achieve smart procurement by utilising available knowledge to make informed decisions. These are achieved through thorough document analysis as outputs, where costs, risks and benefits are investigated (Cousins and Menguc 2014). However, at the beginning of this stage, key activities that are regarded as inputs must be practised to create an enabling environment. They are as follows:

(a) Identify the needs: Zahari et al. (2019: 45) report that “the process of procurement begins when user’s needs are established and registered as the requirement”. It appears that the New Zealand government applies exactly the same model. In this stage, the guide for mastering procurement for government agencies clearly states that it is important to conduct superior levels of research and analysis to identify public policy needs, as it will have an impact on the quality of the solutions and results you realise. Firstly, you need to consult with your key stakeholders to determine the purpose and impact of procurement, which will assist in developing a high-level statement of needs.

(b) Review previous procurements: in this activity, the government agencies explore the historical experience of deliveries of similar nature, either within the procuring agency or other government agencies in New Zealand, to exploit the available knowledge through lessons learned (New Zealand Government Procurement 2011: 25).

(c) Supply positioning: this is critical to ensuring the balancing of supply and demand principles. Although companies should best utilise supplier relationships to suit organisational needs, they are not always in a position to interact with suppliers in an effective manner. The procuring agency is required to scan the market to assess the sustainability of the required supplies. This greatly assists if the procurement is for a particular period (Ginting and Tesselhof 2023: 5).

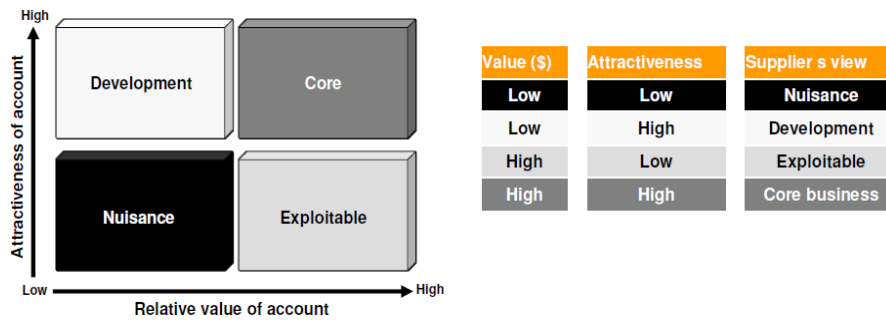
(d) Analyse the market: various mechanisms may be employed in conducting market research before procuring goods and services. The diagram below depicts common actions:



Figure 2. 2: Market Research Options

Source: New Zealand Government Procurement (2011: 26)

(e) Analyse market behaviours: business practitioners are quite considerate of what they invest their time and resources in; hence, it is always advisable for procurement practitioners to put themselves in the suppliers' shoes. A business opportunity with little or no profit does not attract a supplier. However, a business with great exposure or high profit does attract suppliers (Ginting and Tesselhof 2023: 4). Below is the matrix for assessing the suppliers' interest in your business offer:



Quadrant	Description	Action
Nuisance	<ul style="list-style-type: none"> • Low value • Little profit 	withdraw
Development	<ul style="list-style-type: none"> • Low-value • But still attractive 	Get further business
Exploitable	<ul style="list-style-type: none"> • High-value • But not attractive 	Maximise profits
Core	<ul style="list-style-type: none"> • High value • Highly attractive • Supplier's core business 	Retain & expand

Figure 2. 3: Analyse market behaviours

Source: New Zealand Government Procurement (2011: 34)

(f) Solution identification and option appraisal: this activity is purely meant to reconcile the activities performed above, allowing you to determine the potential working solution for your procurement need (Zealand Government Procurement 2011: 36).

(g) Approach to market options: then inviting bidders. Due to the highly regulated nature of the government procurement space, it is critical to ensure that any possible option chosen for approaching the market is compliant with the guiding legislation, policies and codes of conduct of government (Ginting and Tesselhof 2023: 4).

- **Stage 3: Specify requirements**

Stage three is exactly how it is described, with a specification of what is required. In this stage detailed terms of reference for services or specifications for goods are crafted. What was considered a high-level statement of need in stage two, is detailed

here. This is done considering economies of scale and necessary cost containment. At this stage, it is important to comply with all the necessary quality standards and implement good practices. The end product in this process is having the right quantities delivered at the right time and place or a service rendered in accordance with your needs (Ginting and Tesselhof 2023: 5).

- **Stage 4: Plan approach to market and evaluation**

At this stage, the decision about how to approach the market is made. It is also a stage when the evaluation methodology, process plan and realistic timetable are determined. Various types of procurement methods can be selected depending on the nature of the procurement. According to the Guide for Mastering Procurement, the New Zealand government uses the six procurement methods listed below:

- a) Pre-tender supplier engagement.
- b) Open or closed tender.
- c) Single-stage or multi-stage tender.
- d) RFQ, ROI/EOI/PQQ and RFP/RFT documents are required.
- e) Advertising the opportunity (GETS, industry publications/websites).
- f) Consider alternative proposals if deemed necessary (New Zealand Government Procurement, 2011: 50).

2.3.2.2 Source

- **Stage 5: Approach market and select supplier**

During this stage, under sourcing, the publication of a tender invitation and its evaluation are initiated, and all the questions about the tender are responded to, either by briefing sessions or direct questions and answers. Supplier selection is part of this process and must be conducted in a manner that is fair, impartial and equitable. The documentation prepared in previous stages is issued to the bidders and evaluated. After the evaluation of proposals, all due diligence is taken care of, and an evaluation report is produced. A prospective bidder is notified, and negotiations are entered into. All unsuccessful bidders are notified of their status (Munyimi and Chari 2018).

- **Stage 6: Negotiate and award contract**

This is where the agency tries to get the best deal on the market. The relevant officials are tasked with preparing all the necessary documentation and logistics required for negotiation. After the finalisation of the negotiations, the preferred bidder is informed, and awarded the contract. The purpose of all these activities is to get the best value for money while maintaining the reputation of the procuring agency as a fair and ethical buyer (Harb and Trad 2023: 291).

2.3.2.3 Manage

- **Stage 7: Manage contract and relationships**

The execution of the contract management plan, monitoring performance and sticking to the awarded financial implications are the key contributors at this stage. These activities are aimed at ensuring that what was initially planned is achieved without problems. In the end, all the necessary reports must be made available to assist in the process of contract closure. The World Bank (2018:19) affirms that while contract awarding is the final stage of the procurement process, contract management is still necessary to guarantee that services are provided as needed and that suppliers receive payment for their work on schedule.

- **Stage 8: Review**

Stage eight is an important stage as it is a significant source of information that feeds into the planning phase. Nothing much is expected here besides verifying all the deliverables and recording lessons learned (World Bank 2018:19).

2.3.3 PUBLIC SECTOR SCM AND PROCUREMENT IN DENMARK

According to the InCiSE Index Result Report (2019.23), Denmark came second in rankings simply because of its role as the central purchasing body. What makes the Danish government the second-best in the rankings is the role it plays in the central purchasing body. This practice is regulated by one piece of legislation that establishes the practices and creates an enabling environment for prudent financial spending (Sanchez-Graells 2023: 4). It is easier to manage the integrity of the procurement process if there is the use of central purchasing bodies (CPBs) (Hamer and Comba 2021: 01). Nirmla and Fagbadebo (2021: 77) view procurement centralisation as the action of locating purchasing power in one authority to procure for other authorities. It

appears that the CPBs are key players in European countries such as Denmark, Portugal, Italy, Finland and Sweden. The belief is that they are maximising bargaining power in order to exploit possible discounts available from the market (Hamer and Comba 2021: 01). Some of the key benefits that are gained through the centralisation of procurement are:

- There is significant efficiency in improving the skills and knowledge of the specialising practitioners, as they are situated at one central point. Bulk procurement assists in the prevention of stock depletion and plays a significant role in influencing price reductions in the market.
- It enhances the coordination of the system of procurement.
- There is high standardisation of specifications and interpretation of working documents and managers have direct access to activities associated with procurement to ease their control (Nirmala and Fagbadebo, 2021: 79).

The root causes of the lack of effective prevention and detection are due to the decentralisation of SCM processes, inadequate contract management and poor consequence management, according to the auditor general's report in 2019. The department, or even South Africa as a whole, can draw good practices from the concept of CPBs.

2.3.4 PUBLIC SECTOR SCM AND PROCUREMENT IN THE UNITED KINGDOM

This section will briefly discuss public procurement in the United Kingdom. The researcher is not aiming to place more focus on UK public procurement, as it is not the number one performer but part of the top three. The intention is to present the activities associated with pre-procurement. Public sector procurement in the United Kingdom might be seen as being practised at the national industry and central and local government levels. The British Parliament, which is responsible for monitoring the principal policies, practices and fiscal control, is also responsible for government procurement (Jozepa 2023).

It is expected that the organ of state will have a clear understanding of the type of procurement that it is conducting, the value and risk associated with the procurement and the importance of procurement to achieving its strategic goals. The UK has adopted quite an interesting approach to addressing pre-procurement activities. Pre-

procurement activities determine the direction the tender process will take. In a case where their procurement processes must be triggered, the following procurement route decision-making tree must be taken into account:

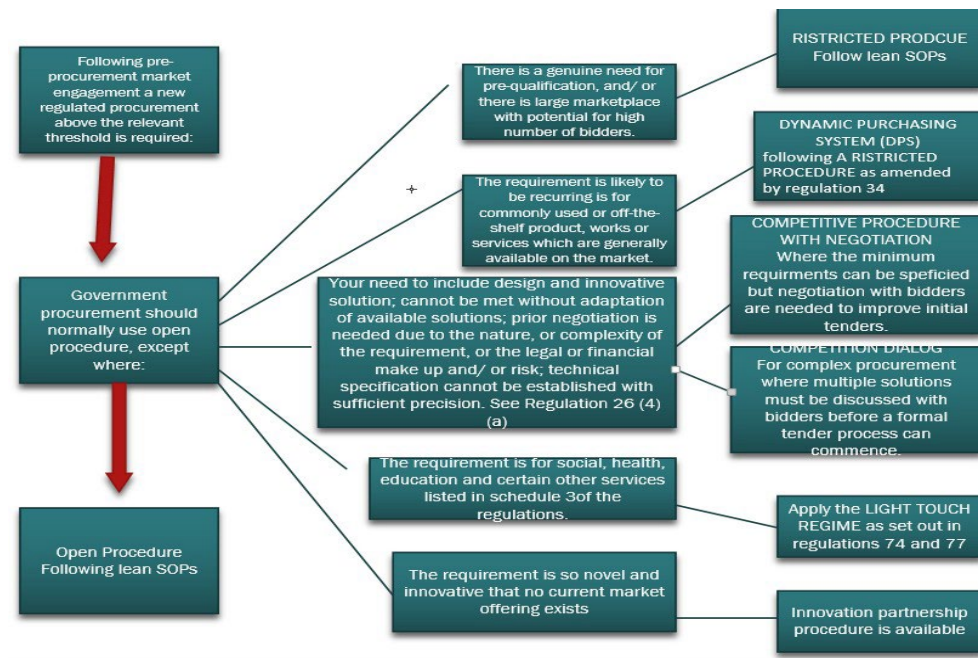


Figure 2. 4: Procurement Route Decision-Making Tree

Source: Crown Commercial Services (2015: 3)

2.3.5 PUBLIC SECTOR SCM AND PROCUREMENT IN SOUTH AFRICA WITH REFERENCE TO KZN DOT

As earlier defined by South African Treasury Regulations 16A, SCM is a system for acquiring goods and services together with the disposal and letting of state assets, including the disposal of goods no longer required. Scholars describe SCM elements as demand; acquisition; logistics; disposal; risk management; and supply chain performance (Mokoena 2018:458; Ambe and Badenhorst-Weiss 2012:30). A theoretical framework for government that defines the flow of SCM processes is briefly described below.

2.4. SUPPLY CHAIN MANAGEMENT SYSTEM

2.4.1 DEMAND MANAGEMENT

The Kwa-Zulu Natal Department of Health (2021: 11) defines demand management as the phase that is at the beginning of the SCM system. It further states that it is a stage where the Terms of Reference (ToR) for tenders are reviewed by delegated committees. The crucial role of the demand management phase is that it enables SCM practitioners to assess departmental strategic plans to ensure that SCM processes enable the achievement of strategic goals through effective and efficient service delivery to the people. The following figure illustrates the demand management process:

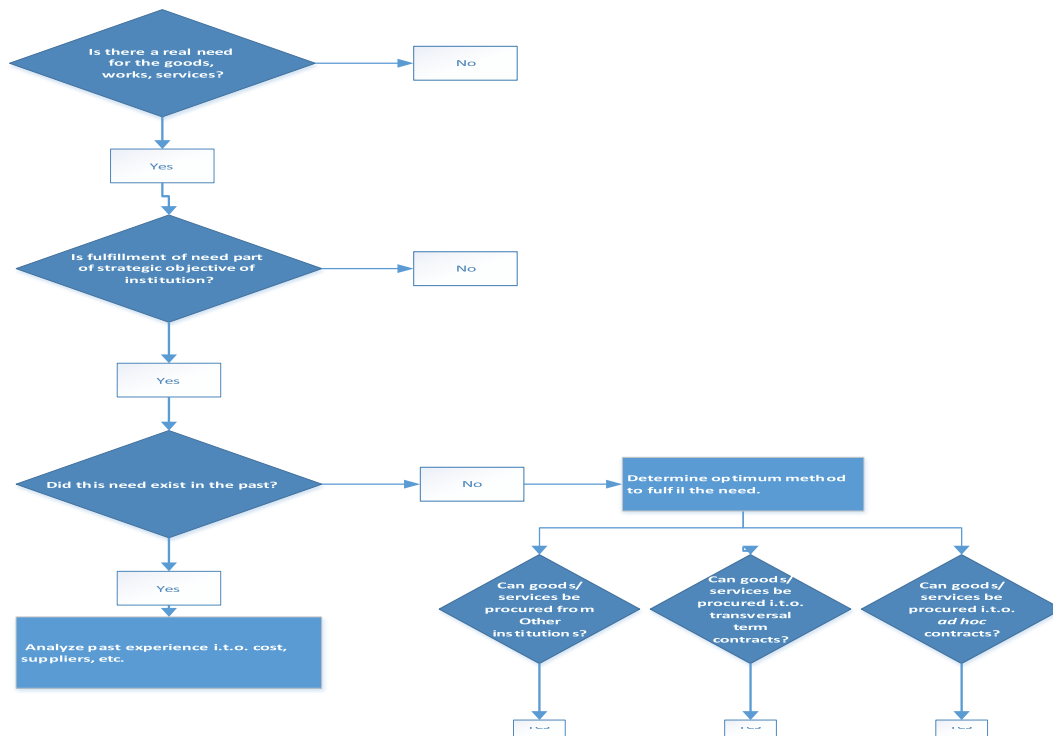


Figure 2. 5: Demand Management process

Source: National Treasury, (2004:26)

2.4.2 ACQUISITION MANAGEMENT

Ngobese (2018:11) describes acquisition management as the phase where the decision is made on how to approach the market. They further state that this is the phase where the establishment of the total cost of ownership is determined and where tenders are evaluated in accordance with the set criteria. Similar to the UK, South Africa has its own decision-making tree. This tree informs the decision on how to approach the market in the acquisition process. The following figure depicts the acquisition process:

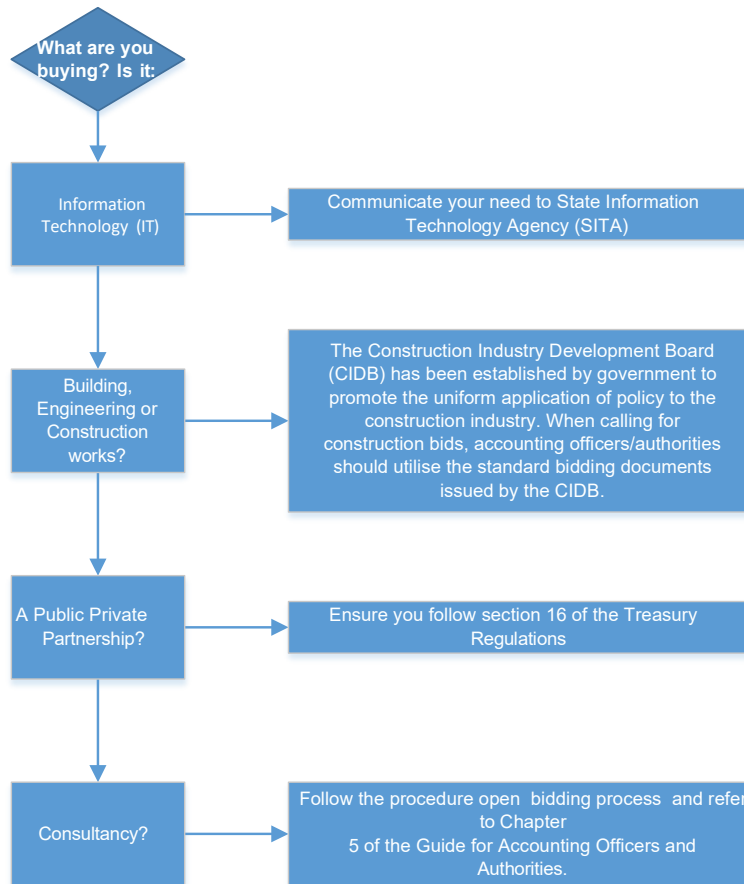


Figure 2. 6: Second acquisitions management process

Source: National Treasury, (2004:30)

In a case where the above decision-making tree does not suit your needs, the Guide for Accounting Officers and Authorities advises of the following:

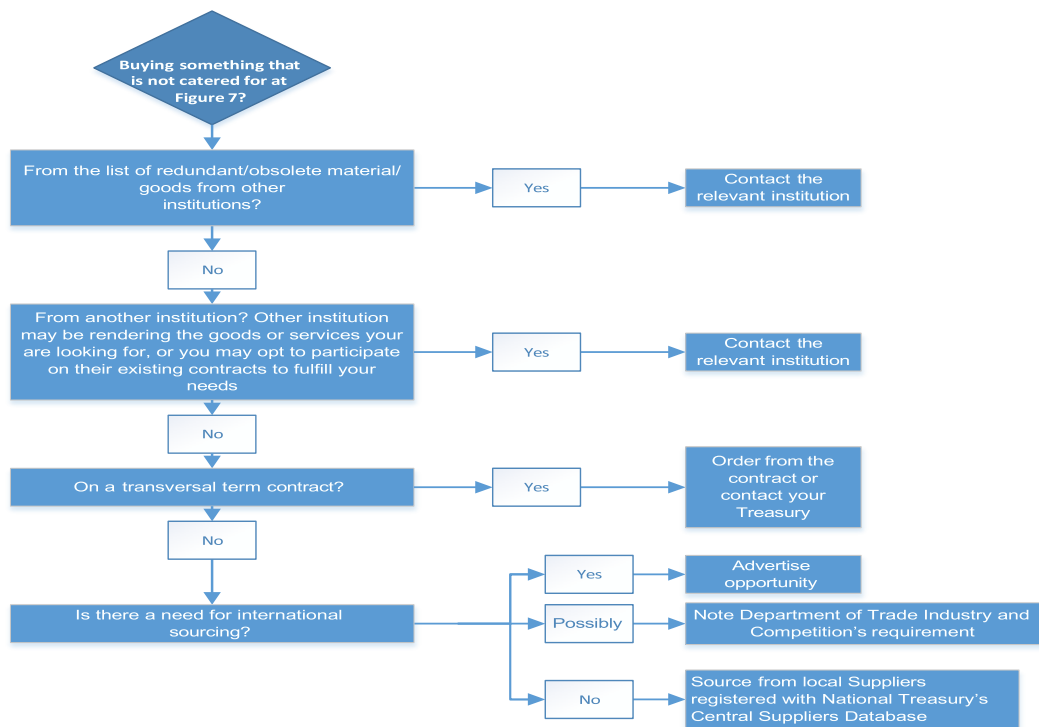


Figure 2. 7: Second Acquisitions Management process

Source: National Treasury, (2004:31)

In a case where there is no need for international suppliers and the needs will be sourced from the local suppliers registered with the National Treasury's Central Suppliers Database (CSD), the following procurement thresholds must be adhered to.

Table 2. 2: Summary of 2021 Threshold Values

Source: Threshold Values for the Procurement of Goods, Works and Services (2021)

Summary of 2021 Threshold Values		
Petty Cash	Up to R2000	Accounting officers/authorities may procure goods and services by means of petty cash up to the value of R2000 (inclusive of all applicable taxes) without inviting price quotations or following a bidding process.
Quotations	R2000> to 1 000 000	Accounting officers/authorities must invite written price quotations for requirements up to an estimated value of R1 000 000 (inclusive of all applicable taxes) from prospective suppliers who are registered on the Central Supplier Database.
Tenders	R1 000 000>	Accounting officers/authorities must invite open competitive bids for all procurement above R 1 000 000 (inclusive of all applicable taxes).

2.4.3 LOGISTICS MANAGEMENT

Logistics management is the term used to define the planning, execution and supervision processes associated with the smooth movement and storage of goods and services and the inventory information that comes with them, from the primary producers' level to delivery to the last customer for utilisation. Some authors perceive logistics as physical, managerial and informational systems required to let goods and services overcome time and space (Tien *et al.* 2019:5). However, this definition is best applied in the private sector. In government, this is the third phase in the SCM system, which is responsible for placing purchase orders after the finalisation of the acquisition management processes so that the deliverables can be delivered by the service

provider, received by the department, distributed to the end users and the payment process initiated (Mkhize 2023: 111).

2.4.5 DISPOSAL MANAGEMENT

Disposal management provides for any goods or assets in the inventory of the government that have served their complete lifespan to be discarded or written off (Kwa-Zulu Natal Department of Health 2021: 68).

2.4.6 SUPPLY CHAIN PERFORMANCE

Supply chain performance is about monitoring the entire SCM, from internal actions to how the service providers have delivered the contracted service. Some of the responsibilities include monitoring compliance with the relevant prescripts, target achievements and broader policy scope for procurement (World Bank 2018:14).

2.5 LEGISLATIVE FRAMEWORK THAT GUIDES SUPPLY CHAIN MANAGEMENT IN THE PUBLIC SECTOR

The public sector is governed by laws and legislation for effective operation and management. The same applies to the South African public sector supply chain. State institutions are the primary procurers of items and services for effective functioning and operation. In order to achieve the objectives of the government, it is imperative to clearly articulate legal frameworks pertaining to supply chain management that will ensure value for money, efficiency and effectiveness in service delivery. The South African government entity is legally required to comply with the established and implemented standardised policies of SCM as mandated by legislation. The lack of adherence to relevant legislation hinders the effective implementation of supply chain management (SCM) and adversely affects the provision of services to the population of South Africa.

The following are key legislations that guide SCM in the public sector:

2.5.1 THE CONSTITUTION OF THE REPUBLIC OF SOUTH AFRICA (RSA) ACT 108 OF 1996

In government institutions, procurement and supply chain management must be performed in accordance with a system that is fair, equitable, transparent, competitive

and cost-effective. The constitution further requires that a national treasury be established through national legislation to exercise oversight by prescribing measures to achieve transparency and expenditure control. According to the constitutional provisions that regulate governmental transactions and processes, it is explicitly stated that when any organ of state within the national, provincial, or local sphere of government, or any other institution specified in national legislation, enters into contracts for goods or services, it is required to adhere to a system that aligns with the constitutional principles (The Constitution, 1996).

Based on the aforementioned perspective, it is the responsibility of government institutions to adhere to the provisions outlined in the constitution while implementing SCM procedures. This contributes to the promotion of a fair and equitable execution of the supply chain process, encompassing demand management, purchase, logistics and disposal. Furthermore, the tender methods are conducted in compliance with the established regulations.

2.5.2 THE PUBLIC FINANCE MANAGEMENT ACT 1 OF 1999

The Public Finance Management Act (1999) in South Africa holds significant importance as it stands as a crucial legislative enactment established by the inaugural democratic administration in the country. The legislation advances the goal of sound fiscal administration to optimise the provision of services by employing limited resources effectively and efficiently. The Public Finance Management Act (PFMA) outlines the responsibilities of the Accounting Officer, which include the obligation to establish a procurement and provisioning system that adheres to principles of fairness, equity, transparency, competitiveness and cost-effectiveness within their respective department, constitutional institution, or public corporation.

The purpose of this measure is to implement the requirements outlined in Section 217 of the Constitution, which mandates adherence to constitutional principles in the realm of supply chain management (SCM) practices. This implies that the accounting officer is responsible for ensuring the efficient management of resources and the effective execution of supply chain management duties, while maintaining accountability for the department.

2.5.3 THE NATIONAL TREASURY REGULATIONS 2005

The primary intention of these regulations was to make provisions enabling the accounting officers and accounting authorities to implement an effective and efficient SCM system. These regulations provide a very clear direction on what the SCM system should look like, as supported by the National Treasury guide for accounting officers and accounting authorities (South African National Treasury 2005: 199). In this sense, the South African SCM must follow this concept as established by these regulations. The National Treasury Regulations provide support for the provisions outlined in the PFMA. These regulations aim to complete the transfer of supply chain management responsibility to the accounting officers and establish a formalised integration of various functions within a specific SCM function. The legislative basis for supply chain management in South Africa is outlined by the South African National Treasury (2005).

2.5.4 OTHER SUPPORTING LEGISLATION

2.5.4.1 The Preferential Procurement Policy Framework Act (PPPFA); Act 5 of 2000

Zindi and Sibanda (2022) argue that to meet some of the Green Paper's socioeconomic goals, such as assisting small, medium and micro enterprises and formerly disenfranchised persons, the government adopted the Preferential Procurement Policy Framework Act 5 of 2000. This legislation is meant to give effect to Section 217(3) of the Constitution by establishing a framework for implementing the procurement policy proposed in Section 217(2) of the Constitution and to provide for matters related thereto.

The PPPFA concept is applied to the public sector procurement system across all branches of government at the national, provincial and local levels. Any governmental body responsible for implementing preferential policies is only authorised to implement such policies within the legal framework established by the relevant legislation. The implementation of the preference points system should be extended to encompass all procurement activities. The PPPFA and its corresponding rules aim to support historically disadvantaged individuals and a wide range of development objectives by implementing a system of distributing preference points for these diverse policy goals.

2.5.4.2 The Green Paper on Public Sector Procurement Reform in South Africa

According to Zindi and Sibanda (2022), prior to the passage of public procurement legislation, the South African government issued the Green Paper on Public Sector Procurement Reform in 1997. The Green Paper outlined a plan for government procurement regarding both socioeconomic and governance goals.

2.5.4.3 The Public Procurement Bill of South Africa

According to the South African National Treasury (2023), this bill is introduced to regulate public procurement, to prescribe a framework within which preferential procurement must be implemented, and to provide for matters connected therewith. The goals of the draft Public Procurement Bill (2023), as stated by the South African National Treasury (2023), are to establish regulations for public procurement and to provide a framework for procurement policy in accordance with Section 217(3) of the Constitution. The legislation incorporates a range of ideas and mechanisms designed to utilise public procurement as a means of assisting historically marginalised groups, such as women, youth and individuals with disabilities. Additionally, it seeks to foster the growth of the nation's productive sectors. The National Treasury of South Africa governs the stipulations for public procurement regulations applicable to the general population.

2.6 JUDICIAL COMMISSION OF INQUIRY INTO STATE CAPTURE REPORT ON PUBLIC SECTOR SCM AND PROCUREMENT IN SOUTH AFRICA.

The issues faced by the KZN DoT do not exhibit any distinctiveness as compared to those encountered in other regions of the country. This assertion is made in the context of the Commission of Inquiry into State Capture. On corruption and fraud, it was stated that, *“international experience suggests that of all government activities, public procurement is one of the most vulnerable to fraud and corruption”* (Zondo 2022: 721). It is widely acknowledged that a public procurement system will only be fit for purpose if it is founded on good governance and good management and enforced through effective monitoring and oversight measures that ensure accountability. *“Anything less renders the system open to abuse”* (Zondo 2022: 721).

This study aims to incorporate the pertinent insights from the SA Commission of Inquiry into State Capture, Corruption and Fraud Report with the specific aim of aligning the findings with the government procurement aspect. The report addresses a broad range of issues related to maladministration, including instances stemming from a lack of understanding as well as fraudulent practices. This observation indicates that the KZN DoT is not the sole entity facing the current issue. Consequently, the researcher posits that the suggested remedies outlined in the report may have applicability to the present study as well. The evaluation of this report will primarily emphasise the recommendations to maintain manageable parameters.

The government of South Africa spends almost a trillion rand procuring goods, services and public works infrastructure. This expenditure is equated to 19% of the country's gross domestic product (GDP) and is essential for creating financial flow in both the private and public sectors (Zondo 2022). This is supported by the Organisation for Economic Co-operation and Development (OECD) report (2009: 9) on its Principles for Integrity in Public Procurement Report that was published in 2009, when it stated that government procurement represents a significant chunk of the GDP worldwide. Again, this points to an earlier argument that South Africa can learn a lot from OECD member countries like New Zealand, as they seem to have a lot of things figured out.

In its bid to introduce much needed principles in the public procurement space, the Commission of Inquiry into State Capture, Corruption and Fraud (Zondo 2022: 725), seeks refuge again in the OECD report on Principles for Integrity in Public Procurement. The Commission of Inquiry into State Capture, Corruption and Fraud unpacked the following principles:

a) Transparency

Principle 1: This principle aims to give effect to pillar number 3 of the RSA Constitution, Section 217-1. It aims to ensure fair and transparent treatment of prospective bidders (South African Parliament 1996: 133).

Principle 2: Some organs of state would, after conducting public tender openings, go so far as to adjudicate tenders in public in order to maximise transparency in bidding processes (Organisation for Economic Co-operation and Development 2009:18).

b) Good Management

Principle 3: With public procurement vulnerable to abuse, it is important to safeguard public funds against misuse. This is because bidders may tender exorbitant prices intentionally to get as much as they can from a poorly managed government procurement system. This is why we have to request justification of prices and negotiate with prospective bidders before awarding contracts (OECD, 2009: 18).

Principle 4: The South African Department of Public Service and Administration (DPSA), working together with the South African National School of Governance (NSG), has published a draft implementation framework to professionalise the public service. All this is aimed at enhancing good management in the implementation of government processes (National School of Governance 2020: 42).

(c) Prevention of Misconduct, Compliance and Monitoring

Principle 5: What mechanisms can be deployed to mitigate risks in the procurement system? The need for an e-tendering system in government is inevitable, which is why the South African National Treasury is enhancing its e-tender portal and including the “Online Bid Submission” platform. This module is aimed at assisting the government in reducing the risks associated with tender processes and maintaining the integrity of the process (Botsime 2022: 9).

Principle 6: A professional relationship must be developed and maintained between government and the business community. The relationship must be for credible contract management between the two parties and not be toxic, which may lead to undue benefit (Zondo 2022: 747).

Principle 7: Ibrahim *et al.* (2017:1), the system that the government must put in place should be a system that will be able to clearly point out where the decay started. A system that will track the decision-making process of all stakeholders involved for prudent decision-making and for future reference.

(d) Accountability and control

Principle 8: An effective system of delegations of authority must be put in place.

Principle 9: The government must also put in place a system to handle complaints from aggrieved bidders that will promote the fairness and integrity of the procurement process.

Principle 10: Create an enabling environment for civil society organisations, media and the wider public to question the public procurement systems (OECD, 2009: 19).

Other recommendations from the State Capture report deal largely with the professionalisation of public procurement in SA. This will be unpacked in the next section of the professionalisation of public sector SCM and procurement in South Africa.

2.7 PROFESSIONALISATION OF PUBLIC SECTOR SCM AND PROCUREMENT IN SA

According to the South African Parliament (1996: 117), part of the democratic values and principles that must govern the public administration are high standards and professional ethics. This phenomenon is faced by the global community when it comes to the civil service (National School of Government, 2020: 38). However, for the purpose of this study, let us first define what professionalisation is. Balthazard (2014: 1) defines professionalisation as the procedure by which a group of professionals' endeavour to attain the recognition and status that is afforded to other well-established professions. They do that by matching or implementing the defining characteristics of existing professions. Balthazard (2014) illustrates the transformation of an occupation into a profession as the actual professionalisation. Mokoena (2018:461) adopted an interesting definition which stated that professionalisation may be perceived as an effort to take on the characteristics of a profession by an occupational group to raise its collective standing. Borrowing from these definitions, one would define SCM and procurement professionalisation in SA as the process of enacting legislation that will establish a professional body, which will serve as the official registry for all SCM and procurement practitioners in the country.

2.7.1 BENEFITS OF PROFESSIONALISING SCM AND PROCUREMENT

According to the Commission of Inquiry into State Capture, Corruption and Fraud (Zondo 2022: 852), through the enactment of national legislation and the subsequent establishment of the professional body, the public SCM and procurement space in SA can enjoy the streamlined qualifications necessary to train and skill members of the profession to exploit the benefits of having personnel with a commitment to behaving ethically and displaying the highest standards of probity and integrity (Mokoena 2018: 461). Professionalisation will also help in making it possible for the government to prescribe that the procurement processes of the Organs of State must be managed by a member of the professional body in good standing (Zondo 2022).

Public servants who belong to professions have a twofold benefit: they navigate their way at work through detailed codes of conduct that are managed externally. This gives supervisors and managers less time to manage the individual and more time to manage the actual work deliverables (National School of Government, 2020: 42). The Commission of Inquiry into State Capture, Corruption and Fraud (Zondo 2022: 853) proposes that the body that will be established in order to be responsible for the SCM and procurement professionals will have a duty to establish a subcommittee that will handle all the disciplinary processes of members of the profession. This is a step in the right direction. To enhance the effectiveness of organs of state governance, disciplinary committees must be recognised by professional bodies as major role-players in good corporate governance and a vital tool in improving the quality of SCM and procurement (Koutoupis *et al.* 2021: 449).

2.8 CONCLUSION

This chapter examined the body of knowledge that already exists in relation to the topic of this research project. It drew attention to significant discussions about SCM among academics and the necessity of searching overseas for best practices. International perspectives on SCM best practices from leading OECD countries were also discussed to substantiate some of the State Capture report findings. The Commission's report provided a significant way forward on matters relating to government procurement. The department is encouraged to draw some inspiration from it.

CHAPTER THREE: RESEARCH METHODOLOGY

3.1 INTRODUCTION

This chapter focuses on the research methodology, where the data collection and the sources of the collected information are discussed. Creswell and Creswell (2018) define the term "methodology" as a reference to a group of practices or methods used to direct the application of design. However, it might be good to point out that the word "research" may not have a unique or unanimously accepted definition (Mukherjee 2020:1). This element of the study also addressed the research design in order to systematically analyse the evaluation of the implementation of SCM procedures in the department of transport. The objective of conducting research utilising data gathering tools is to examine the SCM procedures within the Department of Transport. This investigation aims to identify and analyse the many problems associated with SCM practices. The subsequent part provides a more detailed description of the sample population, consisting of directors and managers, serving as the study's target population. A total of twelve individuals were included in the sample, specifically chosen for their extensive understanding and expertise in SCM practices. Furthermore, ethical concerns were delineated in this particular section.

3.2 RESEARCH METHODOLOGY

According to Saunders and Lewis (2018), research methodology is a philosophy, which is a set of presumptions and ideas about the origins and nature of knowledge. Igwenagu (2016:4) describes research methodology as a methodical, theoretical examination of the techniques used in the study's field. According to Saunders and Lewis (2018), research methodology is a philosophy that refers to a set of presumptions and ideas about the origins and nature of knowledge. It is a process-format exercise that involves the research design, selection of the research methods and their associated techniques. The research methodology is regarded as the whole structure of the research project, including how the researchers aim to start and finish their research project or problem. Makhanya (2018) states that the research design, together with the projected dates, is expected to clearly explain the framework of the investigation, while research methods refer to the many ways employed to carry out the research. Research methods are regarded as a tool for choosing the best research

methodologies. This subtopic extends to the data collection methods to be used. In so far as this study is concerned, the qualitative method has been considered appropriate for data collection. This choice aligns qualitative nature of the study, with a significant portion involving interviews and one-on-one sessions. Then the research methods give birth to the research technique. In essence, research techniques can be regarded as the baby of the research method. Interviews can be regarded as the research technique in so far as this study is concerned.

3.3 RESEARCH DESIGN

At this stage, the researcher becomes the architect of the study. The research design commences once the researcher has clarified the specific research topic he or she intends to investigate. A research study's design is a thorough strategy or layout for how it will be carried out, including applying variables so they can be measured, choosing the study sample of interest, gathering data to serve as a basis for testing the hypothesis and analysing the findings (Sekaran and Bougie 2019). Frantz (2018:6) concurs with this view, as he argues that the goal of the research design is to provide guidance to the researcher in conducting and analysing data, facilitating the accomplishment of the study's objectives. Having decided on your research problem, the planning then begins.

The present study employed a case study research design to conduct a comprehensive and descriptive examination of SCM practices and challenges faced by the public sector, with specific reference to the KZN Department of Transport (DoT). According to Verleye (2019: 553), the case study design predominantly employs a qualitative technique to investigate a specific topic that has been identified through research. Additionally, the case study employs a descriptive analytic methodology, enabling the researcher to examine the phenomenon through the lens of participants' experiences presented in a narrative format.

3.4 RESEARCH APPROACHES

Three basic research approaches are commonly used by researchers in various studies. These approaches are used to examine and explain the study based on the

methodologies used by the researcher and the findings. Below is a comprehensive discussion of each approach and its application to research studies.

- **Quantitative approach**

Gravetter (2016: 21) asserts that the quantitative method is the best strategy for analysing particular data from a large number of participants. A quantitative study measures the information and extrapolates the sample's findings to the target population (Stumpfegger 2017: 2). This approach utilises both empirical assertions, which are descriptive statements regarding the significance of the cases in real-world terms rather than prescriptive comments about what should be done in the cases, as well as methods. Additionally, empirical evaluations are utilised to ascertain the extent to which a norm or standard is met within a specific policy or programme. Ultimately, the gathered quantitative data is subjected to analysis through the utilisation of mathematical techniques (Leavy 2017).

- **Qualitative approach**

This approach employs diverse empirical resources, including case studies, personal experiences and narratives, to illustrate the daily practices and challenges faced by individuals. They delve into the profound significance and motivations underlying these events, which cannot be quantitatively measured. To better accommodate and connect with complexity and plurality, qualitative research is always expanding its collection of research tools and embracing new paradigms and subsequent approaches (Mohajan 2018). Tjebana and Rachidi (2018) believe that all qualitative techniques entail two things: first, they require recording and investigating the complexity of events; second, they centre on phenomena that occur in natural contexts, or the actual world. The objective of qualitative research is to gather original, first-hand textual data and subsequently analyse it through the application of certain interpretive methodologies. Exploratory in nature, this strategy proves to be valuable for examining a phenomenon that is characterised by limited accessible information. The qualitative technique has the capacity to uncover novel insights and ideas and produce original theories (Aloudah 2022: 01).

- **Mixed-method approach**

Tjebana and Rachidi (2018) offer that mixed-method research utilises the combination of qualitative and quantitative methodologies, selected based on the study's objectives and the characteristics of the research issue, with the intention of enhancing comprehension of the topic at hand. However, equal emphasis can be placed on both ways, or one method might be prioritised based on the chosen integration procedure. The utilisation of integrating both methodologies can assist researchers in effectively addressing complex research situations across several domains of study, including social and health research. These methodologies encompass the benefits of both qualitative and quantitative methods, making them valuable when one approach alone is insufficient for a study.

In this study, the researcher employed the qualitative research approach. The chosen approach was deemed most appropriate for the study due to its descriptive nature, which facilitated the acquisition of comprehensive and detailed information regarding the research subject. This approach provided valuable insights into the challenges encountered in the implementation of SCM practices within the department, as well as an evaluation of the legislative frameworks that guide SCM and a review of policies related to SCM.

3.5 TARGET POPULATION

The complete set of individuals, events, or objects that display the behaviours and/or possess the characteristics of interest to the researcher may easily be referred to as the population in research (Berndt 2020:224). The target population may vary across regions, reflecting cultural, demographic and economic differences. This stems from a purposive sampling, taking into account healthcare priorities and biological difference when defining it (Tang *et al.* 2017:13). In the context of qualitative research, it is frequently unfeasible to encompass a whole community within the scope of a study. Consequently, researchers opt to sample a particular proportion of the target population of interest for inclusion in their research. The objective of this study is to generalise the findings to the entire population under investigation. Distinctive attributes are cultivated and employed to categorise the populace, encompassing factors such as occupational status, age cohort, ethnic background, or educational

attainment. These attributes aid in the identification of prospective participants to be included in the study (Berndt 2020: 226).

The participants recruited for the research, include the SCM director, managers from various units within the supply chain at the head office and managers of SCM in KZN DoT's regional offices who had been employed for a minimum of three years. The rationale for choosing managers, specifically, is rooted in their specialised expertise and extensive experience in SCM procedures and the associated issues. The participant's significant contribution to the research topic facilitated the researcher's acquisition of a thorough and profound understanding necessary to successfully achieve the study's goals.

3.6 INCLUSION AND EXCLUSION CRITERIA

The sampling population comprises both individuals who are included and those who are excluded. The study encompassed individuals holding managerial positions within the department, specifically those at the level of director and managers within the supply chain managerial (SCM) unit. The motivation behind this action stems from their strategic knowledge and skill in the implementation of SCM practices. They serve as the primary catalysts for the operational functioning of the SCM unit, particularly in terms of executing these practices and applying policies. Additionally, the research investigated the inclusion of participants who had been employed by the Department of Transportation (DoT) for a minimum of three years. In terms of gender, both male and female managers were included in the study.

The study excluded junior-level staff members from the department. The rationale for this investigation lies in the need to assess the execution of SCM techniques at a strategic and policy-oriented level. In the area of governance, it is commonly observed that the responsibility for addressing audit findings arising from policy execution mostly lies with the management. Furthermore, the study implemented an exclusion criterion whereby participants with less than two years of employment were eliminated. This decision was based on the assumption that individuals with little experience within the KZN DoT would not possess the necessary knowledge and insights required to contribute valuable information to the study.

3.7 SAMPLING METHOD AND SAMPLE SIZE

When a researcher aims to forecast or ascertain specific information about a particular group, they employ a sampling technique to pick a subset of that group. This subset is then used to estimate or predict the behavioural patterns of the entire population. The aforementioned procedure is commonly recognised as sampling (Kumar, 2019). The study utilised purposive sampling as a method to selectively recruit participants in order to gather information pertaining to SCM practices and difficulties within the KwaZulu-Natal Department of Transport (KZN DoT).

According to Polit and Beck (2021), purposive sampling refers to the systematic selection of a subset of the population in order to accurately reflect the entire population. The rationale behind the selection process is driven by a comprehensive understanding of the hierarchical framework of departmental SCM, commencing from the head office and extending to the regional offices. The manner in which the selection process is conducted yields the necessary data for the study to draw its conclusions. The participants were strategically positioned and effectively guided the investigation towards a robust result. The researcher opted for a representative sample due to the inability to study the entire population in terms of sample size. The concept of sample size, as defined by Berndt (2020: 226), pertains to the overall number of individuals to be encompassed in a research investigation. In this study, the researcher engaged a group of twelve (12) participants, all of whom actively participated in contributing to the study's findings. The table below shows a breakdown of the participant's population and the selected sample that the researcher appointed in the different units of the SCM unit, in both the head office and the regional office.

3.7.1 SAMPLING TABLE

Table 3. 1: Head Office

Head Office SCM			
Office Name	Total No. of population	No. of Sample	
Director SCM	1	1	
Demand	7	1	
Acquisition	12	1	
Contract Management	6	1	
Total Population	23	Total No. of samples	4

The Director of SCM and the managers from Demand, Acquisition and Contracts Management were interviewed.

Table 3. 2: Regional Office

Regional Office SCM			
Office Name	Total No. of population	No. of Samples	
Finance Managers	4	4	
SCM Managers	4	4	
Total Population	24	Total No. of samples	8

At the regional offices the interviews were conducted with finance managers and SCM managers as mentioned in the tables above.

3.8 DATA COLLECTION

Data collection is the act of acquiring and measuring information on variables of interest in an organised, systematic manner to answer specified research questions, test propositions and assess results (Kumar 2019). As part of the sampling technique, the researcher purposefully selected certain SCM practitioners and their respective office locations for the purpose of data collection for this study.

The study is a qualitative study and is more inclined towards primary data. The researcher conducted one-on-one, semi-structured interviews to collect the necessary data. These interviews were conducted over a period of two months, from 1 July 2022 to 30 August 2022. This type of data collection was useful as it provided the researcher with an opportunity to control the line of questioning so that participants could provide relevant information about the research subject. Interviews were conducted in English to ensure that all participants understood the questions. This was done with the understanding that all selected participants are professionals and therefore understand English as an official medium of communication. The interviews were based on prepared questions, where the researcher prepared an interview schedule with open-ended questions to allow participants the opportunity to express themselves while providing an in-depth perspective on the topic under investigation. To capture all the information divulged by participants during interviews, the researcher recorded the participant's responses and jotted down important notes to assist in reaching the conclusions of the study. The participants wrote down their answers on the prescribed question-and-answer template. A vast amount of secondary data was collected from various sources, which included books, journals, government policy documents, government prescripts and audit general reports on SCM. This helped to provide theoretical insights and perspectives on SCM practices and challenges relating to the implementation of these practices.

3.9 DATA PROCESSING AND ANALYSIS

Sekaran and Bougie (2019) define data analysis as the process of turning unusable data into knowledge that will be most valuable to the organisation. Also, according to Rubin and Babbie (2016:22), the process of examining, purifying, converting and modelling data in order to find relevant information, make recommendations and aid

in decision-making is known as data analysis. Data processing and analysis were done in accordance with thematic analysis. This is important to ensure that we have enough information to reach the correct conclusion. After all the interviews that were conducted, the data was organised and coded using the NVivo software version 14 and CAQDAS. The examination of ambiguous statements and dual-response answers was carried out to verify the accuracy of the communicated information.

3.10 VALIDITY AND RELIABILITY OF DATA MEASURING INSTRUMENTS

In order to adhere to research principles, the researcher needed to verify the validity and reliability of the results. This involved using data collection tools with accurate and unbiased questions and ensuring that the desired results were obtained. Additionally, this verification process was necessary to enable the drawing of implications and conclusions from the findings. In order to effectively articulate the research methodology chapter in a succinct yet accurate manner, it is imperative to incorporate considerations of reliability and validity. The evaluation of any measurement instrument for research purposes necessitates the consideration of two paramount and indispensable qualities. According to Mohajan (2018:59), validity refers to the degree of appropriateness and correctness with which a research procedure is conducted (Kothari and Garg, 2019). The validity and suitability of the study's questions were assessed by performing a pilot study prior to conducting interviews with the chosen participants. A preliminary investigation was undertaken involving two individuals from the target population, who were subsequently omitted from the main study.

This study served as an initial investigation aimed at assessing the pertinence and efficacy of the interview schedule in enhancing question clarity and mitigating any disparities. In order to assure the reliability of the data gathering tool, thorough conversations and deliberations were conducted with the participants selected for the pilot study. When considering reliability, it is imperative that research instruments exhibit both consistency and accuracy (Kothari and Garg, 2019). According to Mohajan (2018: 59), dependability can be defined as the consistency or stability of research findings. The transcripts were reviewed by the researcher subsequent to the interviews in order to identify and rectify any grammatical errors as well as instances of question repetition.

3.11 ETHICAL CONSIDERATIONS

According to Ichendu (2020), prior to conducting any fieldwork, it is necessary for a research project involving human participants, particularly if the case study pertains to their current organisation, to undergo an ethics review by the appropriate institution. In this investigation, the researcher acquired a letter of ethical approval from the Durban University of Technology (DUT). This correspondence authorises the researcher to undertake the study and guarantees its adherence to the ethical guidelines established by the university. The researcher sought permission from the KZN Department of Transport (DoT) to conduct the study. This permission was granted through a gatekeeper letter. Additionally, agreement was requested from the target population to participate in the study and participants provided their informed consent by signing a consent form agreeing to participate in the study.

Furthermore, the participants were provided with information regarding the purpose and design of the study and were explicitly informed that their participation was voluntary. It was emphasised that they had the right to withdraw from the study at any point if they experienced discomfort or unease. The individuals were additionally assured that their anonymity would be maintained in order to conceal their identities and any information provided would be treated with the utmost privacy and confidentiality. The audio recording containing the recorded material was secured using a password-based protection mechanism. Additionally, the written information will be securely held in a designated safe located at the institution where the study is being done, namely DUT. This storage arrangement aligns with the university's ethical code, which mandates a retention duration of five years for such information. Following the conclusion of this time frame, all gathered data will be appropriately discarded and permanently erased.

3.12 CONCLUSION

The research technique and design were covered in this chapter. To provide accurate and pertinent information about the study, the target population and sample technique were explained. This chapter also highlighted the qualitative approach, study area, validity and reliability of the data acquired for this study, as well as the articulation of

anonymity, confidentiality and ethical concern. The next chapter will highlight the data presentation, analysis and findings of the study.

CHAPTER FOUR: DATA PRESENTATION, ANALYSIS AND FINDINGS

4.1 INTRODUCTION

The chapter highlights the data presentation, analysis and findings of the study. Sekaran and Bougie (2019) define data analysis as the process of turning unusable data into knowledge that will be most valuable to the organisation. According to Chapter Three's discussion, the findings are based on the qualitative data obtained through the interviews. The data analysis adopted to explain the research questions yielded six themes. These are inclusive of **the importance of training provision for departmental SCM officials, professionalism within public sector SCM, views on proposed strategies to ensure compliance, SCM challenges, views on the current SCM organogram structure to achieve compliance and views on the departmental SCM policy alignment to the departmental functions.** A demographic profile of participants is presented and a breakdown of each participant's contribution is tabulated. Secondly, the data analysis process is described and the process used to clean the data is explained. This includes the Computer-Assisted Qualitative Data Analysis Software (CAQDAS) and NVivo software used to code and analyse the data. The coding process and how the themes were generated are described in detail.

4.2 DEMOGRAPHICS OF PARTICIPANTS

Prior to discussing the various emerging themes, it is imperative to describe the participants involved in this study. Twelve participants were interviewed for this qualitative study with the aim of contributing to the understanding of SCM in the public sector. Table 4.1 below illustrates the demographic profile of the participants.

Table 4. 1: Participants Demographic Profile

Participant no.	Gender	Years of experience in SCM	Highest Qualification	Position
Participant 1	Male	Above 16 Years	B Degree/B Tech/ Honours Degree	Director- SCM
Participant 2	Female	Between 11-15 years	B Degree/B Tech/ Honours Degree	Assistant Director
Participant 3	Female	Between 6-10 years	B Degree/B Tech/ Honours Degree	Assistant Director
Participant 4	Female	Above 16 years	B Degree/B Tech/ Honours Degree	Assistant Director
Participant 5	Female	Between 6-10 years	National Diploma	Deputy Director
Participant 6	Male	5 years and less	B Degree/B Tech/ Honours Degree	Assistant Director
Participant 7	Female	Between 11-15 years	National Diploma	Assistant Director
Participant 8	Male	Above 16 years	B Degree/B Tech/ Honours Degree	Assistant Director
Participant 9	Female	5 years and less	B Degree/B Tech/ Honours Degree	Assistant Director
Participant 10	Male	5 years and less	B Degree/B Tech/ Honours Degree	Deputy Director
Participant 11	Female	5 years and less	B Degree/B Tech/ Honours Degree	Deputy Director
Participant 12	Female	5 years and less	National Diploma	Deputy Director

4.4 DATA ANALYSIS PROCESS

A thematic analysis methodology of data analysis was used to analyse the information provided by the twelve semi-structured interviews. According to Warren (2020), thematic analysis is regarded as a rigorous and inductively predictable process designed to identify and examine themes from word-based data in a way that is translucent and dependable. Following the thematic analysis technique, after transcribing the discussions on Word, the data was organised, coded and grouped, and themes were constructed, refined and finalised. Thematic analysis was used to make sense of the data provided by the participants and provide suitable themes that speak to the proposed theoretical framework, the research questions and the objectives of the study. The transcribed data was then uploaded into NVIVO Version 14, a qualitative data analysis software. The analysis process followed the work of Creswell (2013: 205), where typographical errors and missing words were discarded and meaningful codes were developed to assist and ease the analysis process.

4.4.1 COMPUTER-ASSISTED QUALITATIVE DATA ANALYSIS SOFTWARE (CAQDAS)

Computer-Assisted Qualitative Data Analysis Software (CAQDAS) and NVivo software were used to code and analyse all the information provided by the participants in the study. NVivo was perceived as the most useful software for the study because it saves time and organises work clearly and logically in comparison to manual coding. Furthermore, the software assists in building networks and relationships, resulting in the creation of a graphical representation of the data (Ngalande and Mkwinda 2014). Although the software allows organising transcript data in preparation for analysis, it does not analyse the data, as the analytic part remains the responsibility of the researcher.

4.4.2 CODING PROCESS

Coding is described as using tags to mark data with a tallying theme, keyword, or phrase (Myers 2013). After coding data, they are grouped into categories related to the codes. Grouping coded data allows diversity in the data to begin to take form. The coding process is described in the chart below.

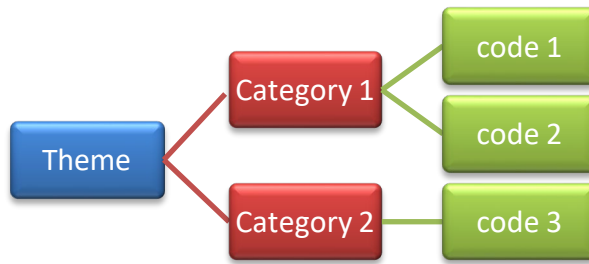


Figure 4. 1: Coding process

Table 4.3 below demonstrates an example of the coding process; how themes and codes are created. The code ‘**crucial to ensuring adherence**’ was used to give meaning to the information provided by the participants. Therefore, the theme ‘**perceptions of the importance of training provision**’ was generated through the code grouping.

Table 4. 2: Example of the coding process

Theme	Code	Information from transcript
Perceptions of the importance of training provision	Crucial to ensuring adherence	Yes, because lack of knowledge cannot be an excuse once irregularities occur and accountability needs to take place. SCM is governed by legislation and every decision that is made must be within the provisions of legislation, common sense does not work. (Participant 3)

4.5 GENERATED MAIN THEMES

The main themes that emerged from the data analysis process are presented in Figure 4.2, below. Figure 4.2 shows the theme **challenges** that were most discussed by participants, this theme generated 57 references. The theme **views on the current**

SCM-compliant structure were least discussed by participants, with 11 references extracted from nine participants.

Table 4. 3: Main themes

Theme No.	Main Themes	Sources	References
1	SCM Challenges	12	57
2	Views On the Current SCM Organogram Structure to Achieve Compliance	9	11
3	Views On the Departmental SCM Policy Alignment to The Departmental Functions	12	13
4	Importance Of Training Provision for Departmental SCM Officials	12	14
5	Professionalism Within Public Sector SCM	12	21
6	Views on proposed strategies to ensure compliance	11	18

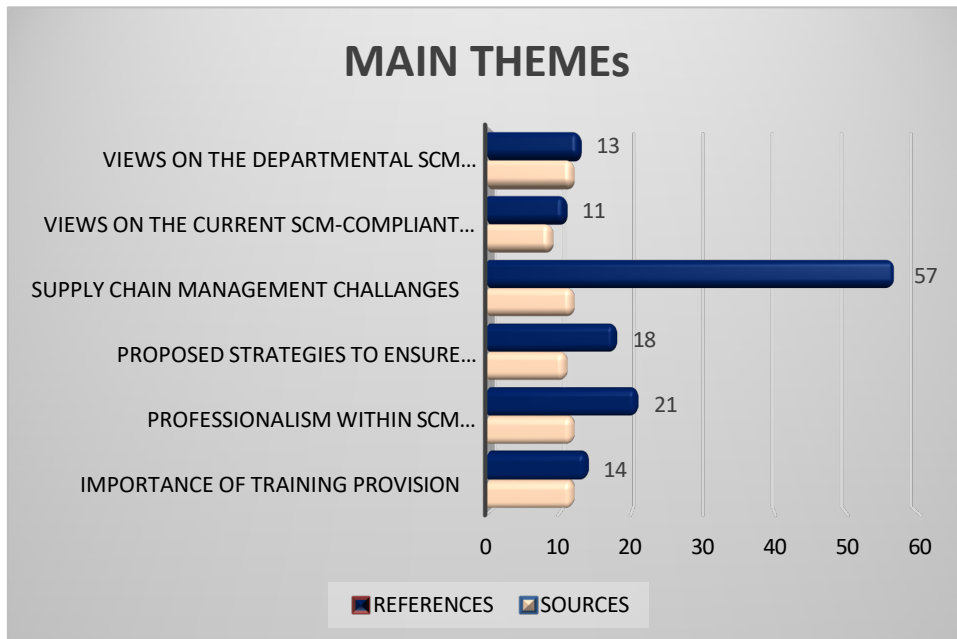


Figure 4. 2: Main themes

4.5.1 Theme One: SCM challenges

It is understood that the mandate or core functions of the supply chain are effectively planning, procuring, storing and delivering goods and services. However, within the Department of Transport, some dissatisfaction with the SCM processes was noted. Hence, this section seeks to unearth the SCM challenges faced by personnel within the Department of Transport. The interviewed participants highlighted a number of challenges that are discussed below.

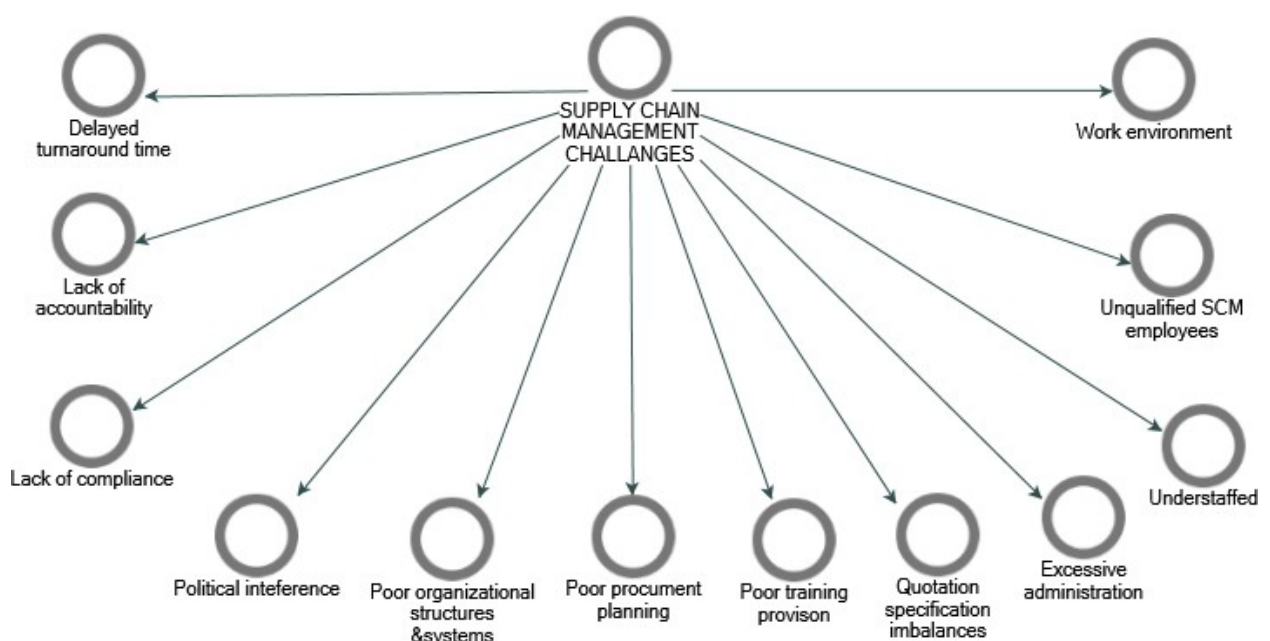


Figure 4. 3: SCM Challenges

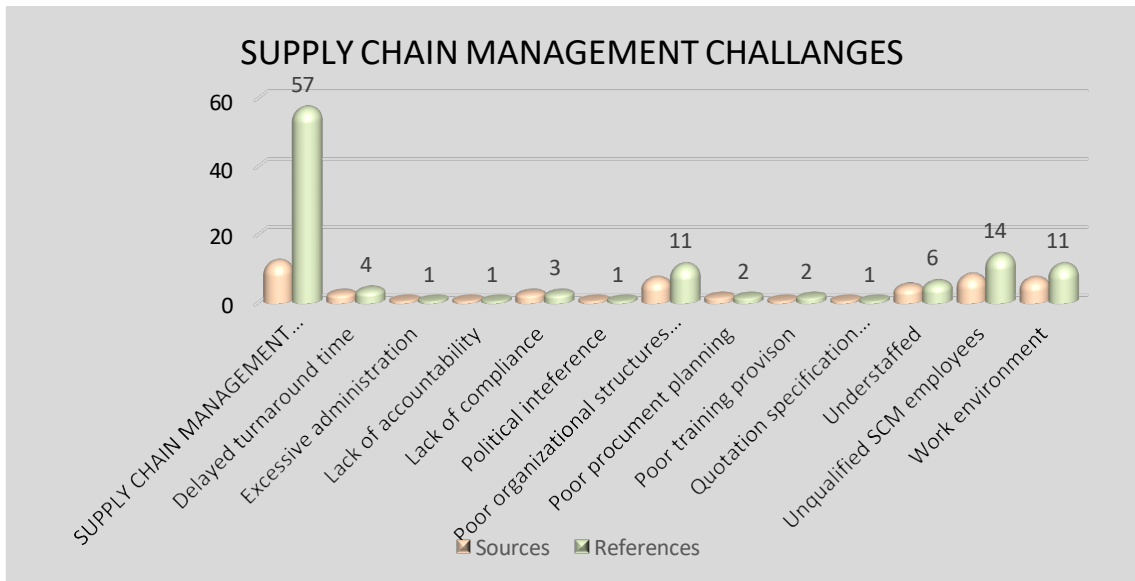


Figure 4. 4: SCM challenges

4.5.2 Delayed turnaround time

The interview participants acknowledged that they were dissatisfied with numerous aspects of SCM. For instance, Participant 2, the Deputy Director, stated that although SCM processes were described fully, execution was difficult and turnaround times were lengthy. The participant explained that:

“The procedure manual does not have lead times. Processes are outlined, but no turn-around times are attached to them. This then causes SCM Practitioners to work ‘unsupervised’ in the sense that requests are kept longer within the section than they should.” (Participant 2)

In addition to the statement shared above, Participant 7 alluded to the fact that the technological systems employed contribute to the delays as well, and the reviewing process causes delays as it goes through different channels.

“SCM e-tool [is] delaying processes. KW treasury reviewal of practice notes should be at least twice a year because it causes delays big time.” (Participant 7)

Participant 9 articulated that one of the functions of SCM is to ensure delivery from reliable suppliers; however, she noted that the current suppliers fail to deliver.

“Managing suppliers and good relationships with suppliers are key to maintaining [the] supply chain effectively. Now the biggest challenge is knowing and ensuring that you find suppliers with consistent and reliable services and at a price that doesn’t hurt your bottom line. There’s a supplier who always fails to deliver.” (Participant 9)

4.5.3 Lack of accountability

The most difficult challenge is not admitting to anything. When things go wrong, no one wants to take responsibility for anything, which creates a toxic environment in the workplace since people are blamed for things they did not do. One participant was captured stating that: “There is no accountability, thus we start blaming each other for non-delivery of tasks or when something goes wrong.” (Participant 3)

4.5.4 LACK OF COMPLIANCE

Lack of compliance was also outlined as another challenge encountered within the SCM processes. The assistant director maintained that processes were not adhered to. For instance, Participant 3 explains below:

“There is always a rush to implement or finish a project or issue orders and ignoring what the legislation has prescribed.” (Participant 3)

Participant 12, the assistant director, shared a similar view with Participant 3 and contended that quite a lot that happens and the problems begin with the end user and are followed by inconsistency with the requisition documentation used as well as the clauses that are bypassed.

“Currently, challenges that we are currently facing is dealing with end-users, the submission of approval signed by HOD. Changing document. Clauses that are in the biased document.” (Participant 12)

4.5.5 POLITICAL INTERFERENCE

Participant 8 claimed that political leaders' engagement has a negative effect because they make public comments guaranteeing service delivery while permanent employees are lacking and work is done by interns who are only

capable of so much.

“Statements by political leadership are not helping as unreasonable promise are portrayed to the public; this puts pressure on current resources and interns who are trying to find their feet and must deliver at the same time.” (Participant 8)

4.4.6 POOR ORGANISATIONAL STRUCTURES AND SYSTEMS

The interviewed participants maintained that another factor contributing to the apparent challenges is the adoption of poor organisational structures and systems. Due to a shortage of personnel and other misalignments within the organisation, there has been an organisational disconnect.

“The biggest challenge faced by the SCM unit relates to understaffing and disconnected organisational structure.” (Participant 1)

Participants 2 and 3 added that there is an issue of mixed infrastructure. The participant detailed that there should be a separation or division between general procurement and massive infrastructure projects to lessen the SCM staff workload.

“Moreover, the Department has massive infrastructure projects and general procurement, which, in my view, should be separated by having a general procurement unit and infrastructure procurement unit, thus doubling the SCM staff complement.” (Participant 2)

Participant 3 added that:

“There should be a structure that will separate between general and infrastructure procurement to allow for skilled and equipped employees.” (Participant 3)

Moreover, participants 10 and 11 maintained that the systems are troublesome as they cannot continue with daily activities that result in delays impacting the planning process.

“So far, I'm yet to point out any challenges with our SCM department except for external issues that include network disturbance, which lowers our planning and demand.” (Participant 10)

Participant 11 added that:

“Poor network system when leading SCM department underperforms; for example, finance department received invoices for suppliers all to find out that the order is not made or captured on e-tool and that makes it difficult for finance to compile the payment, which meant they have to wait for [the] order. (Participant 11)

4.4.7 POOR PROCUREMENT PLANNING

Poor procurement planning was highlighted as another concern within the SCM and it is generally understood that problems with the procurement process have a negative impact on the organisation because things do not get completed within a reasonable time. Participant 1 stated that:

“Moreover, End-Users fail to plan their procurement and submit urgent requests at the last minute, giving SCM insufficient time to process them and then the pressure results in mistakes for SCM.” (Participant 1)

Participant 5 stated that the necessity of acquiring approval before making a purchase, but requisitions are often late. Everything is affected by the procedure of obtaining a signature.

“Obtaining approvals prior to procurement/purchase. Receiving of requisitions late no being given on time to do SCM process.” (Participant 5)

4.4.8 POOR TRAINING PROVISION

Participants shared that the non-provision of training to officials does have an impact and further alluded that it is crucial to have training as far as technological advancement is concerned. There are continuous changes that officials need to equip themselves with.

“What is more problematic is that neither the National Treasury nor the National School of Governance is providing prescript-specific training to officials. In KZN, departments and municipalities have to rely on the provincial treasury’s non-approved SCM training.” (Participant 1)

The participant further expressed:

“As discussed in Question 6 above, neither the public or private institutions of higher learning nor the national government has specific training on public

sector SCM to equip practitioners and officials with the technical skills and qualifications to implement SCM.” (Participant 1)

4.4.9 QUOTATION SPECIFICATION IMBALANCES

The data shows that the interviewed participants maintained that, besides the delay in turnaround time, there is also an issue of imbalances in the quote specification.

“Loopholes in specifications for quotations.” (Participant 3)

4.4.10 EXCESSIVE ADMINISTRATION

SCM personnel complained that the procedure requires too much labour and that the documentation is time-consuming.

“Too much unnecessary paperwork and documentation is time-consuming.” (Participant 4)

4.4.11 UNDERSTAFFED

The coding process revealed that within the SCM, there is a shortage of staff, which as a result, affects service delivery.

“The department/Section is understaffed as a result functions are not easy to do or are not easily performed.” (Participant 5)

Participant 6 echoed similar sentiments and highlighted that due to the shortage of staff, the employed interns have the burden of making sure that everything goes accordingly and things are going smoothly.

“The organisation uses interns to perform SCM duties. So, it would be advisable to employ these interns to permanent positions.” (Participant 6)

Participant 8 also mentioned that within the Department of Transport, human capital is a challenge, especially for skilled and qualified individuals and the department solely relies on the interns, who are still in the learning phase and are not yet fully equipped with the SCM processes.

“Limited human resources who are experienced and knowledgeable. The system relies more on interns, thus SCM compliance is compromised as they are still learning.” (Participant 8)

4.4.12 UNQUALIFIED SCM EMPLOYEES

When questioned about their belief regarding the adequacy of technical skills and appropriately qualified officials to implement SCM processes, the majority of the interviewees maintained that most SCM officials do not have the required qualifications and skills. They attributed this deficiency to the education offered by South African institutions. Participant 1 expounded and noting that their qualification is specifically related to public administration:

“No. The majority of the junior officials in the SCM unit do not possess the technical skills required to implement processes. That institutions of higher learning do not have junior (NQF 6-7) academic qualifications that focus on public sector SCM is a problem. The majority of personnel possess administration-related qualifications, legal-related qualifications and commerce-related qualifications. This is even reflected in the posts advertised for SCM. While commerce and law offer some degree of relatedness with SCM, public administration fails to meet the work requirements within SCM. A skills revolution is necessary in public sector SCM.” (Participant 1)

Participant 2 maintained that they are not qualified but have technical skills and suggested that they need to be trained to ensure that SCM processes are carried out effectively. They further expressed that they believe that the current staff were appointed to those positions during the decentralisation process.

“No. The current SCM staff complement is not appropriately qualified to implement SCM processes. The majority of them do possess the technical skills, as they have been trained on the job over the years. However, some do not hold the relevant SCM qualifications. It is understood that some SCM employees were moved or were transferred from other sections within the Department back when SCM was decentralised. This evidently gave SCM employees who are qualified in other fields and not SCM.” (Participant 2)

4.4.13 WORK ENVIRONMENT

4.4.13.1 No departmental integration

Participants were asked whether the working environment was conducive enough for the officials to effectively carry out their duties. The participant responded and alluded to the fact that departments work in silos. Participant 2 contended below:

“In the short period I have been in the Department I have observed that the entire SCM works in silos.” (Participant 2)

Participant 8 expressed that within the organisation there is no teamwork each division; operates on its own; there is no homogeneity.

“One of the organisational cultures is teamwork, [which] is currently lacking more especially in SCM, which is characterised by a division between sub-sections and working in silos with no unity; therefore, SCM implementation.” (Participant 8)

4.4.13.2 Non-conducive work environment

Other participants stated that the organisational culture is not conducive; there is no unity or teamwork, and as a result, it is difficult to implement any SCM processes.

“The organisational culture is unfortunately not conducive to implementing SCM processes.” (Participant 1)

“Firstly, the seating arrangements are not conducive for the environment.” (Participant 2)

Furthermore, Participant 9 eloquently expressed the importance of a conducive environment with regard to decision-making.

“Organisational culture plays an integral part in the decision-making process of operations and SCM strategic decisions are not always based on economic considerations.” (Participant 9)

4.4.14 PHYSICAL STRUCTURE DIVISION

One participant expressed dissatisfaction about how the physical structural division significantly impacts the pleasant environment of the workplace, explaining how this contributes more to the departmental unit's disintegration.

“The office plan is poor, such that sub-sections are separated not by floors but by buildings. This alone separates the section and causes internal divisions.”

(Participant 10)

4.4.14.1 Poor effective communication

When participants explained how there is not a conducive working environment, they added that it is due to poor communication among officials. The participant explained that the physical divisions of structures make it difficult to communicate effectively.

“It is difficult to communicate mainly because of the physical divisions, which end up manifesting in other forms. It is easy to incur irregular expenditures due to the failures, which are a result of communication barriers.” (Participant 2)

Buttressing more on the above statement is Participant 4, who postulated that information is not cascaded down to the bottom line. Also, nothing is explained to the officials’ staff, who are left to teach themselves about the new policies adopted.

“Vital information is not cascaded down the line. Policy procedures are implemented. Employees are left to their own devices to understand, interpret and implement SCM processes.” (Participant 11)

Moreover, Participant 12 corroborated the statements shared above and stated that the information is shared with different officials and others are left to figure things out themselves.

“The environment is poor; [there is a] lack of communication between employees and the employer. Communication goes in one way from the top to the bottom; no [are] paying details in the challenges faced by the SCM as a whole.”

4.5 THEME TWO: VIEWS ON THE CURRENT SCM ORGANOGRAM STRUCTURE TO ACHIEVE COMPLIANCE

This theme explores participants’ perspectives on the current SCM structure of the department and how it helps them in meeting compliance requirements. The divergent views were shared and are discussed below.

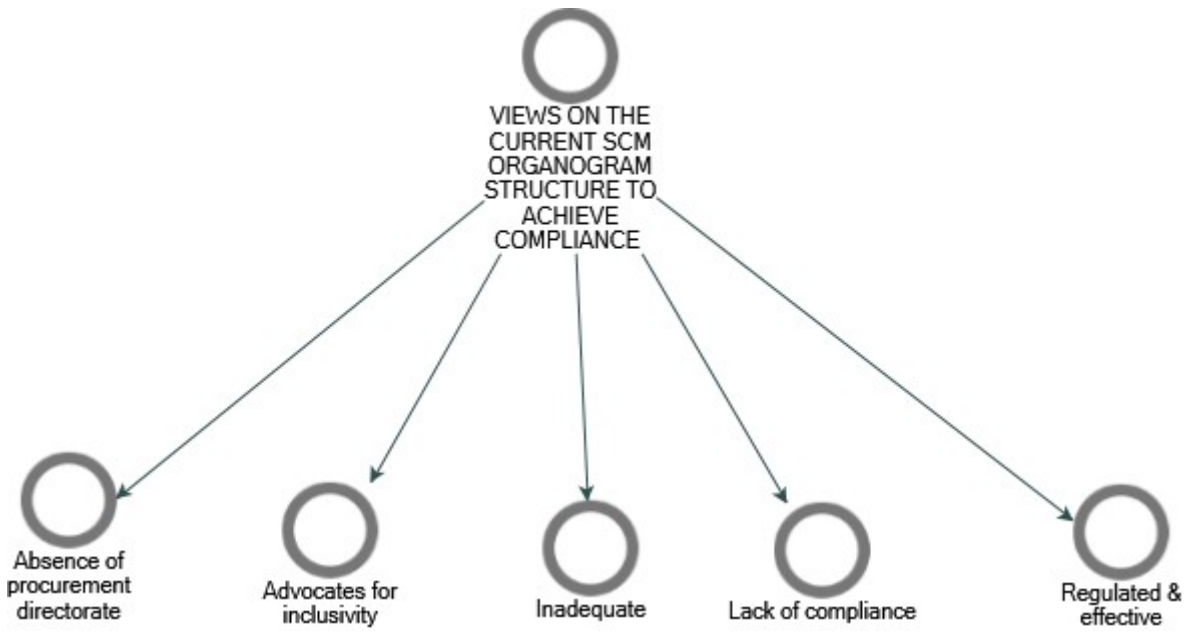


Figure 4. 5: Views on the current SCM organogram

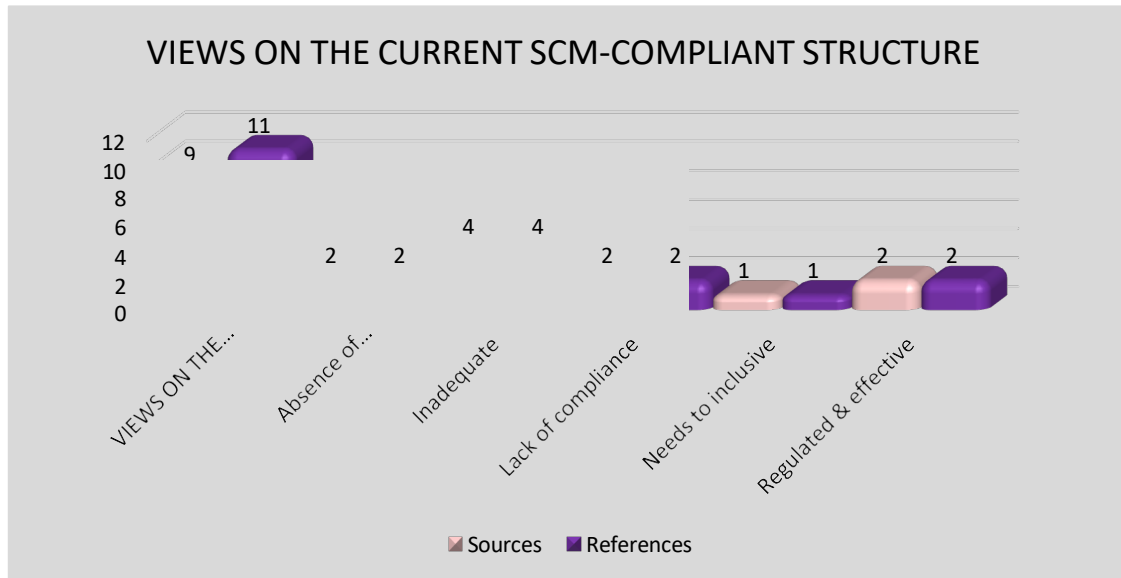


Figure 4. 6: Views on the current SCM organogram

4.5.1 INADEQUATE SCM STRUCTURE

Most participants shared that there is no structure to begin with to ensure compliance. The extract below confirms this statement.

“Inadequate in every aspect. Non-existent support structure.” (Participant 4)

Participant 7 concurs, due to the shortage of staff, some things cannot be done and the issue of ensuring compliance cannot be dealt with due to apparent departmental challenges.

“Department/sections are understaffed, as a result, functions are not easy to do or are not easily performed.” (Participant 7)

Participant 8 indicated that the current structure is outdated and, as a result, some organisational changes cannot be implemented.

“The current structure is outdated and focuses more on procurement, as a result, SCM is neglected. This has resulted in heavy negligence on [the part of] interns who are bound to make mistakes and thus compromise compliance requirements.” (Participant 8)

4.5.2 LACK OF COMPLIANCE

Participant 1 eloquently shared that there is non-adherence to the SCM processes; money is spent without any consideration of policies or budget restrictions. The extract below politely details:

“The SCM unit processes in excess of 5000 transactions per annum. The unit manages a procurement budget of more than R8b annually.” (Participant 1)

Participant 12 shared similar views and alluded to the fact that the organization does not follow any processes:

“The current structure is not practical; something is not done by the books it’s something implemented by a particular [individual].” (Participant 12)

4.5.3 ADVOCATES FOR INCLUSIVITY

Participant 6 contended that the management should learn to include their up-liners in decision-making and be considerate of the different challenges they encounter economically and personally with regard to positive work-life balance.

“On that one, I wouldn’t know people’s qualifications, but I do feel a person can be employed without meeting the requirements of [the] post. But I do feel top management could be approachable and think for lower staff members in every decision they make.” (Participant 6)

4.5.4 REGULATED AND EFFECTIVE SCM STRUCTURE

Two participants argued that the current structure is regulated and effective from the top management to the bottom line; everyone abides by the set regulations and policies, and compliance births fruitful results.

“We have a well-structured staff, starting from the [topmost] position and having such good structure allows us to maximise the production in the department.” (Participant 10)

Adding to the statement by Participant 2 is Participant 11, who said the current structure assists her in understanding the weight of complying with the SCM processes.

“SCM structure helped me so much to have a better understanding of the process that happens before the supplier being invited.” (Participant 11)

4.5.5 ABSENCE OF PROCUREMENT DIRECTORATE

The director and assistant director complained that there is no senior official to handle infrastructure procurement. The following quotations eloquently explain:

“The current structure has a total of 26 funded posts, mostly junior officials. In a department responsible for the biggest infrastructure in the province as well as other functions, there should ideally be an infrastructure procurement directorate and one that deals with general procurement.” (Participant 1)

“We have senior clerks in our section whom I believe should be elevated to practitioners because of how much knowledge and expertise they possess. I don’t get why there are senior clerks but no practitioners in some sections.” (Participant 6)

4.6 THEME THREE: VIEWS ON THE DEPARTMENTAL SCM POLICY ALIGNMENT TO THE DEPARTMENTAL FUNCTIONS

The theme responded to the question about whether there is an alignment with the current departmental SCM policy and procedure manual. The interviewed participants shared their positive views, which are discussed in the following categories of identified codes. Figure 4.7 projects the view of the participant regarding the alignment of SCM policy. While Figure 4.8 is weighing the responses in terms of positive and negative views.

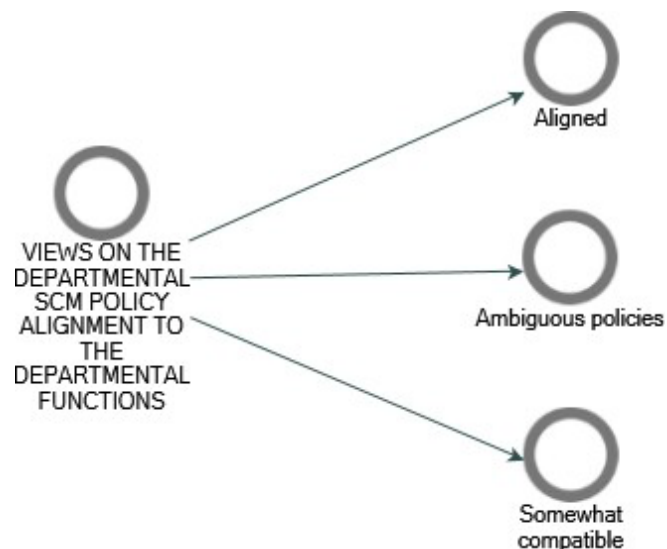


Figure 4. 7: Views on departmental SCM policy

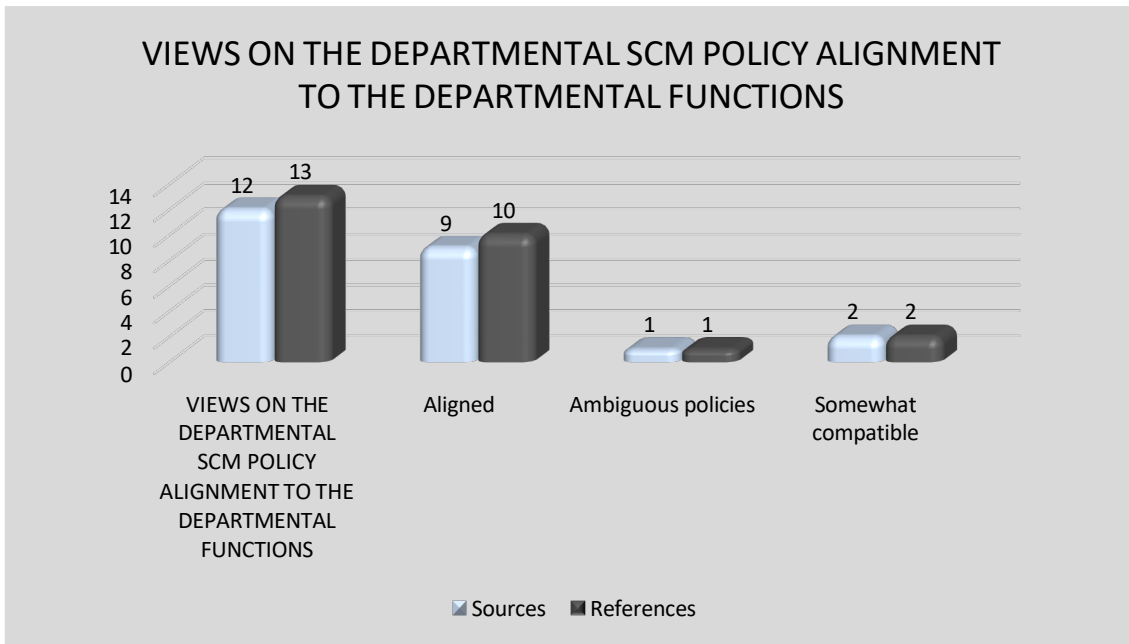


Figure 4. 8: Views on departmental SCM policy

4.6.1 SCM POLICY ALIGNMENT

Most participants agreed that, in the same vein, the SCM manual procedure is comparable to the departmental core functions. As stipulated, there is room for improvement in certain aspects to ensure that everything runs smoothly and efficiently.

“Yes. While I do think that the policy and procedure manual could use improvement for enhanced delivery, all legislative prescripts are provided for in the documents. A simple infrastructure procurement procedure manual, aligned with FIDPM and the SFU, is necessary to complete the compatibility of documents.” (Participant 1)

Participant 2 reverberated the sentiments of Participant 1 and maintained that there is alignment, as Participant 1 stipulated that there is room for improvement with regard to effective communication.

“Yes, both the departmental SCM policy and procedure manual are compatible to the core functions of the department. However, they are not very detailed. They do not have timelines or turnaround times, as mentioned above. This opens up SCM processes to the risk of incurring irregular expenditure. Nothing has been put in place on both to prevent late or last-minute submissions to SCM

and SCM is not at liberty to refuse to accept the submissions for processing.”
(Participant 2)

Participant 10 maintained that there is alignment and elucidated:

“Yes, after going through the policy, one can realise the process started taking place at the workplace. We are a policy-pertaining department. Most of our processes are done by complying with the policy.” (Participant 10)

4.6.2 AMBIGUOUS POLICIES

Although the majority of participants maintained that the manual and departmental processes are compatible, Participant 4 argued otherwise and stated that:

“The departmental SCM policy is too vague and the individual needs to apply her discretion; everyone has their own opinion, hence no standardisation.”
(Participant 4)

4.6.3 SOMEWHAT COMPATIBLE SCM POLICIES

Two participants shared that it is not yet there and that there are certain aspects that need to be strengthened. Participants 3 and 8 maintained:

“Yes, the SCM policy and procedure manuals have been clearly crafted. They are user-friendly and we are always able to refer to them when clarity is sought. The manner in which things are done tends to contradict these two documents.”
(Participant 3)

“Partially compatible. [The} policy and procedure manual focuses more on procurement of general goods and services and does not cover much on construction tenders/procurement.” (Participant 8)

4.7 THEME FOUR: IMPORTANCE OF TRAINING PROVISION FOR DEPARTMENTAL SCM OFFICIALS

The subsequent section explores the twelve participants’ perceptions of the importance of training provision for public sector procurement practitioners on SCM processes. The data analysis process revealed that training was **crucial to ensuring adherence** to SCM procedures and legislation, as well as to **effectively equip employees** with the skills and knowledge required to effectively conduct their duties.

Figure 4.9 below is a schematic representation of the codes established under this theme.

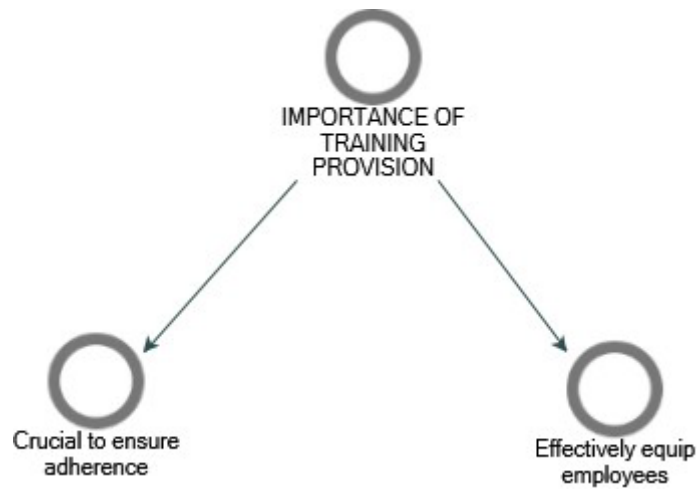


Figure 4. 9: Importance of training provision

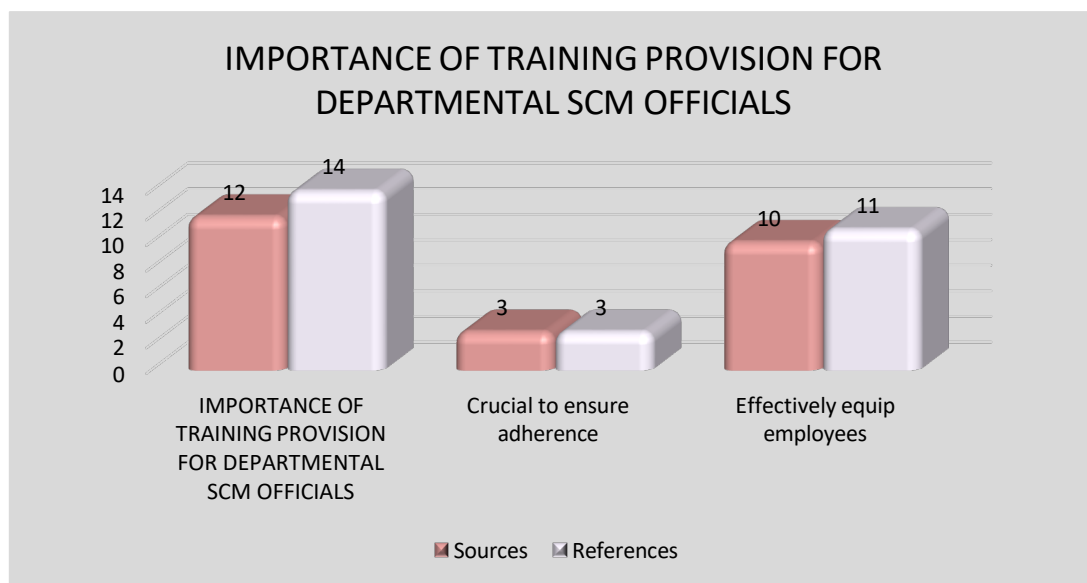


Figure 4. 10: Importance of training provision

4.7.1 CRUCIAL TO ENSURING ADHERENCE.

An acquisition supervisor who participated in this study emphasised that it is crucial to train public-sector procurement practitioners intensively on SCM processes, as it will ensure adherence to legislation and limit irregularities that may occur.

“Yes, because lack of knowledge cannot be an excuse once irregularities occur and accountability needs to take place. SCM is governed by legislation and every decision that is made must be within the provisions of legislation, common sense does not work.” (Participant 3)

Participant 11 noted that procurement practitioners are embroiled in corruption scandals and colluding with suppliers; however, training would ensure adherence to procedures and eliminate these corrupt tendencies.

“Big yes. two years of training maybe will be good because what I can see is worse: SCM practitioners have an interest in suppliers; they told suppliers how to quote or even do the documentation for suppliers’ corruption.” (Participant 11)

Moreover, training will refresh the knowledge of practitioners in the field and ensure their alignment with their duties.

“Training from other departments that will clarify SCM people, really don’t know SCM [and] its functions, policies and purpose. The balance between official and management leadership using skills, strategies and power.” (Participant 11)

4.7.2 EFFECTIVELY EQUIP EMPLOYEES

A director who participated in this study notes that SCM is a specialised field of expertise and requires adequate training and an isolated focus to effectively equip employees for their responsibility in the field.

“Because it’s such a specialised field, it requires being removed from the office of the CFO and a chief procurement officer is required to develop and manage specific training requirements more generally in the public sector but more specifically in individual departments and other organs of state.” (Participant 1)

Participants 4, 5, 7, 8 and 9 stated that training practitioners will effectively equip employees to enable them to understand the evolving field.

“Yes, training is absolutely necessary in enabling SCM to interpret and understand the constant changes in policy procedures.” (Participant 4)

Similar sentiments were echoed by Participant 5, who stated the need for practitioners to keep up to date with the changes in the field.

“Yes, training is always a requirement in SCM. Changes are always happening in SCM and we need to be kept up to date.” (Participant 5)

Participants 9 and 10 explain that the technology ecosystem is always changing and new systems for SCM are introduced; thus, employees need to be trained in order to be adequately equipped to effectively utilise new technologies.

“Yes. For reasons specified above as well as the fact that SCM is a dynamic environment, I think they do, because looking at how things improve everyday technology-wise, we all need some good training on how to keep up with the current system.” (Participant 9)

Participant 6 states that the training will give practitioners a competitive edge in their sector.

“I think they do; training is important because things change. In order to compete with the best one, [they] need to always equip themselves with the necessary skills and knowledge to compete with the best in this business.” (Participant 6)

4.8 THEME FIVE: PROFESSIONALISM WITHIN THE PUBLIC SECTOR SCM

This research study included a discussion on the level of academic professionalism in public sector SCM and the data highlighted the **absence of professionalism** in some departments and its **existence** in other departments. Additionally, the diagram presented below outlines the prevalence of **adherence to SCM processes** and the presence of **skilled SCM practitioners** in the public sector.

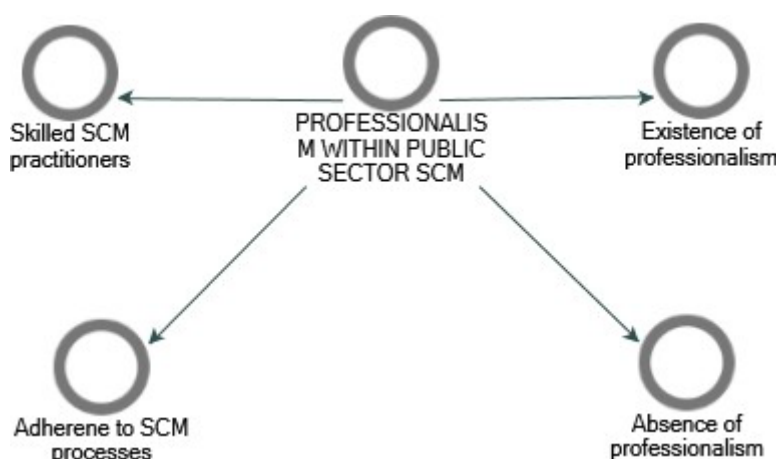


Figure 4. 11: Professionalism within public sector SCM

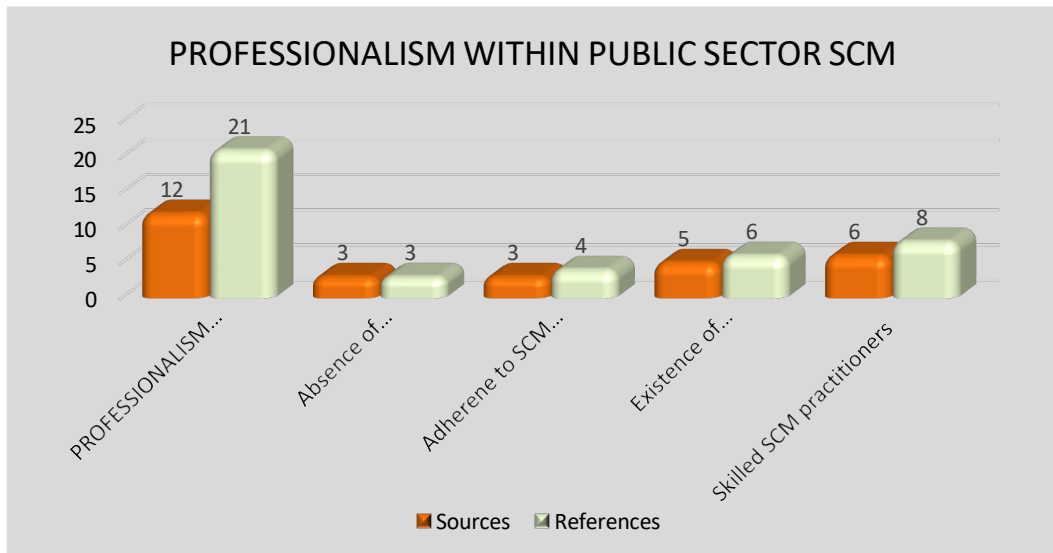


Figure 4. 12: Professionalism within public sector SCM

4.8.1 ABSENCE OF PROFESSIONALISM

In dealing with the concept of academic professionalism in the public sector SCM, some participants in this study observed the absence of professionalism from practitioners. One director highlighted that the absence of professionalism in the public sector is embedded in all the departments.

“Professionalism could improve generally in the public sector. The problems relating to professionalism in our SCM unit are not homogenous to SCM but are endemic in the public sector in general.” (Participant 1)

At a point of convergence, Participant 2 enlightens the study by pointing out that employees in SCM do not always have the qualifications required for their positions.

“The level of academic professionalism in the department is not entirely perfect. In my view, it is average. Though employees may have qualifications, they do not necessarily hold qualifications specific to SCM.” (Participant 2)

Participant 4 claims that the absence of professionalism is particularly evident in employees who are permanent and have become very comfortable in their roles.

“Permanent staff are too comfortable; professionalism is somewhat lost.” (Participant 4)

4.8.2 EXISTENCE OF PROFESSIONALISM

Some participants in this study simply commented on the existence of professionalism within their organisations. Participant 4 expresses that their experience in SCM as well as the training they have received have ensured their professionalism.

“I possess not only the qualifications, but being exposed to the forums, workshops and the actual job, and also facing daily challenges has enhanced my level of professionalism in SCM.” (Participant 4)

Participant 9 states that their colleagues conduct themselves in a manner that is transparent and with integrity.

“Yes. All SCM officials conduct themselves properly without compromising their integrity. They make sure that their procurement process is transparent and fully understandable.” (Participant 9)

Participant 12 remarks that even though professionalism exists in their organisation, it is low. They account for this trend based on the high demand in the lives of practitioners.

“Low, some are looking for money [rather] than knowledge, so they don’t really focus on enhancing their academic professionalism. Of course, interest rates are high; standard of living keeps on being expensive every day.” (Participant 12)

4.8.3 ADHERENCE TO SCM PROCESSES

Participant 10 states that there is adherence to SCM processes in their organisation, expressing that their office is well organised with adequate communication, which enables an environment of productivity and adherence.

“The office is well organised and communication is in good place, which allows us to practice all implemented SCM processes and follow all regulations.” (Participant 10)

Participant 11 explains that adherence to SCM processes has cultivated a transparent working environment free of corruption.

“The organisational culture is very good. The reason is that the process of recruiting or inviting bidders check the quote [does] not involve one person to check or it not a decision that is taken by one person, the SCM department

makes a sitting and takes a decision without having an interest in suppliers.”
(Participant 11)

Moreover, the participant notes that the organisation has found professional channels to solicit additional information from suppliers required for decision-making in the supply chain process.

“It is professional; firstly, they know how to talk to bidders if they need more information when it comes to the process of inviting, and they follow all procedures. They don’t have interest in bidders.” (Participant 3)

4.8.4 SKILLED SCM PRACTITIONERS

Participant 5 exclaims that SCM practitioners are skilled; however, there is a requirement for them to continually develop their skills.

“Yes, most officials do have qualifications that are relevant to SCM, but I feel they need to be refreshed once in a while.” (Participant 5)

Similarly, Participant 6 remarks that practitioners are skilled and their only focus now should be their job and responsibilities within the unit.

“I do think so because the present staff members have the necessary qualifications to implement the SCM process. I just feel staff members can know their job descriptions and be divided among the members.” (Participant 6)

Participant 8 remarks that the SCM officials at their organisation have the qualifications required, and those who don’t have will be phased out through retirement.

“My opinion on the departmental SCM office, in particular, [is that] the academic level is high. Most staff have qualifications and continue to upgrade. The few that have limited qualifications are mostly older staff who will eventually phase out through retirement and some have already retired.” (Participant 8)

Converging with this view, Participant 10 details that staff members have the qualifications and experience and are able to train and mentor interns coming into the field.

“Yes, with experience comes perfection. Most of our staff members are well-experienced and we have SCM interns who are well-guarded by their seniors. We also need to implement skills development through conducting courses and testing that all department members are correct.” (Participant 10)

4.9 THEME SIX: VIEWS ON PROPOSED STRATEGIES TO ENSURE COMPLIANCE

The participants in this study explored the various measures they would suggest to the department for adoption in order to enhance its compliance with SCM prescripts and the proposed strategies are represented below and outlined in this final section.

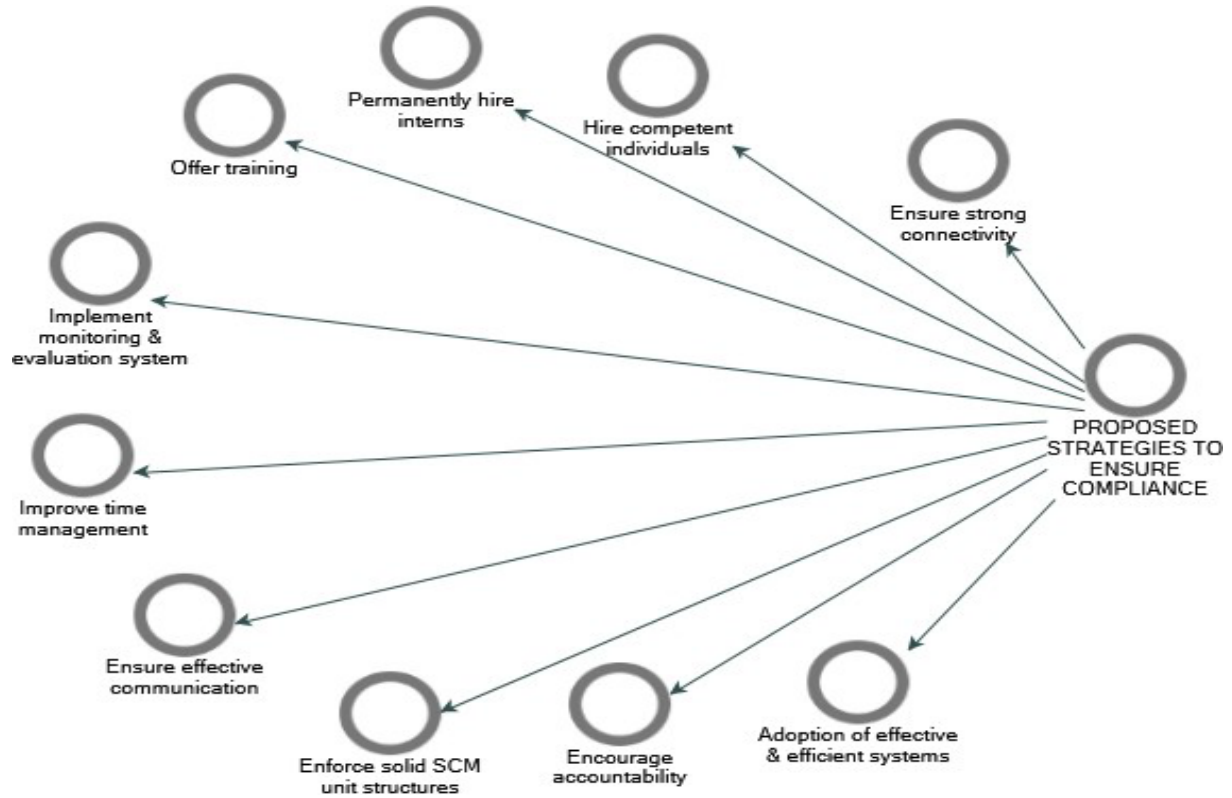


Figure 4. 13: Proposed Strategies to Ensure Compliance

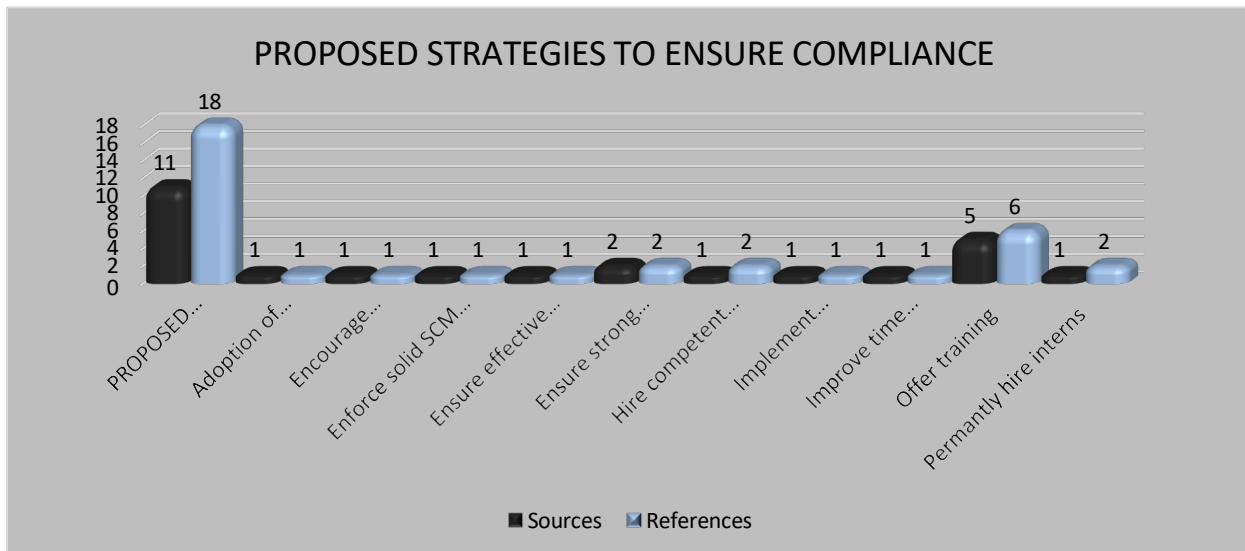


Figure 4. 14: Proposed Strategies to Ensure Compliance

4.9.1 ADOPTION OF EFFECTIVE AND EFFICIENT SYSTEMS

Participant 1 provides insight into the need for departments to adopt effective and efficient systems that are electronically moving with the latest developmental trends in SCM. This would include automating processes and frameworks.

“Second and most critically, the department needs to invest in an electronic management information system to automate the SCM processes and to provide for gates in the SCM approval/delegations framework.” (Participant 1)

4.9.2 ENCOURAGE ACCOUNTABILITY

Participant 8 suggests that there is a need to encourage accountability and consequence management within the organisations and SCM units.

“Accountability for one’s action and consequence management.” (Participant 8)

4.9.3 ENFORCE SOLID SCM UNIT STRUCTURES

The director noted that there is a need to enforce solid SCM unit structures in organisations; these structures should be aligned and fit for purpose.

“The first measure is to deal with the SCM unit structure and make it fit for purpose both at the head office and in regional (district) alignment of the SCM function with the SCM directorate.” (Participant 1)

4.9.4 ENSURE EFFECTIVE COMMUNICATION

Participant 2 highlights the need to ensure effective communication from management, particularly information from the provincial and national treasury.

*“Management needs to also share instruction and practice notes and any communication that is issued by both National and Provincial Treasury.”
(Participant 2)*

4.9.5 ENSURE STRONG CONNECTIVITY

Participants 10 and 11 recommend that departments ensure strong connectivity, as this is a crucial infrastructure that will enable employees' productivity.

“Installation of wi-fi because the main problem is having slow network, which enables us to do our great jobs on time.” (Participants 10 and 11)

4.9.6 HIRE COMPETENT INDIVIDUALS

Moreover, Participant 10 proposes that departments hire competent individuals to fill the positions that have been made available with the changes in the system. There is a need to open vacancies for young graduates to gain experience as well.

*“With the changes in our system, we need to start employing individuals who qualify for certain positions. As much as experience is vital, we also need to consider qualifications. We need to open posts for young graduates.”
(Participant 10)*

4.9.7 PERMANENTLY HIRE INTERNS

Participant 6 suggests that departments permanently hire interns so that there are more personnel doing the work that is required to make the unit successful.

“I would say that the department needs to employ interns on a permanent basis because the need to always change interns every two years hurts the department because they have to teach new people every day.” (Participant 6)

4.9.8 OFFER TRAINING

Furthermore, Participant 2 recommends offering further training to SCM practitioners as well as end-users on the processes of SCM.

“The department needs to conduct regular training within the department and educate end-users on SCM prescripts and SCM timelines.” (Participant 2)

Participant 7 stresses the need for early intervention in training staff members on new developments in SCM processes from the treasury in an effort to avoid misinterpretation of frameworks and legislation.

“For any changes or new developments, head offices or treasury [should] somebody conduct a workshop to everyone before implementation to avoid misinterpretation.” (Participant 7)

Moreover, departments need to offer training on technological improvements being introduced into the organisation.

“I would suggest the department engage more in implementing relevant training for its officials so that they keep up with the current technology improvement.” (Participant 4)

4.9.9 IMPLEMENT MONITORING AND EVALUATION SYSTEM

Participant 4 stresses the need to implement monitoring and evaluation systems that will essentially protect suppliers from the practices of SCM officials.

“CSD commodity selection needs to be controlled. Employees are now able to manipulate CSD reports.” (Participant 4)

4.9.10 IMPROVE TIME MANAGEMENT

Participant 2 highlights the need to improve time management and notes it in their procedure manuals.

“The department needs to update the SCM policy and procedure manual to include timelines or turnaround times, amongst other things.” (Participant 2)

4.10 CONCLUSION

The information from the semi-structured interviews was presented and analysed in accordance with the goals outlined in Chapter One. Additionally, the chapter included participants' demographic information. Emergent themes were used to discuss the outcomes of the interviews and the participants' responses to the in-person interviews. The reader was additionally given an in-depth understanding of the themes and their subthemes through an explanation of each theme. The following themes were dealt

with the importance of training provision for departmental SCM officials; professionalism within public sector SCM; views on proposed strategies to ensure compliance; SCM challenges; views on the current SCM organogram structure to achieve compliance; and views on the departmental SCM policy alignment to the departmental functions. The following chapter summarises the investigation, offers suggestions and draws a conclusion.

CHAPTER FIVE: RECOMMENDATIONS AND CONCLUSION

5.1 INTRODUCTION

The findings are presented and discussed in this chapter. Additionally, the compilation of interviews and the results of the study are deliberated. These results are also reviewed in light of prior research findings and the body of literature that is currently in circulation in order to highlight any differences and parallels between this study and earlier research. Some of the biographical details included here will not be utilised as a basis for recommendations; rather, they are included to highlight the research participants' personalities. In this concluding chapter, the researcher revisits the opening problem statement, which outlined the need to evaluate the implementation of SCM processes in the department of transport.

It is a well-documented reality that, despite efforts to improve public procurement and the repositioning of SCM as a strategic tool, the South African public procurement system still faces considerable challenges. Former Auditor General, Mr Kimi Makwetu, urged government officials to "stop the trend of disappointing audit results, to reinstate public accountability and to avert further mismanagement of public funds" (Fourie and Malan 2020:8). The auditor general reported non-compliance in the execution of SCM processes from the 2017–2018 through the 2021–2022 financial years. This led to delays in the delivery of services and increased community unrest in the province of KwaZulu-Natal.

5.2 RESEARCH OBJECTIVES AND KEY QUESTIONS

The main objective of the research was to identify the challenges related to effective SCM implementation within KwaZulu-Natal's Department of Transport. It aims to accomplish the following three goals:

- a. To investigate the challenges in the implementation of SCM practices in the Department of Transport.
- b. To explore the legislative framework that guides the implementation of SCM processes.
- c. To review KZN Department of Transport SCM practices.

The key questions the study aimed to answer are as follows:

- a. What are the challenges in the implementation of SCM practices in the Department of Transport?
- b. What are the legislative framework requirements for the implementation of SCM?
- c. What are the current SCM practices in the KZN DoT?

5.3 FINDINGS DISCUSSION

A pattern was discovered in the participants' responses during the data collection. Six themes were obtained from the data analysis adopted to explain the research questions. These patterns known as themes, are as follows:

a. SCM challenges: The collected data is evidence that the departmental SCM is facing challenges. Participants painted a picture of a department requiring intervention. From policy to capacity and to the working environment, the department needs to invest focused attention in order to create an enabling environment for the staff to excel at their jobs . Some of the challenges discovered by the study include:

- (1) Contracts or tenders were being awarded to close family members of employees serving the State and departmental staff, which is a conflict of interest. An additional conflict of interest in the contract award process occurred when officials and bidders falsely declared information in the tender documents to unlawfully secure contracts. This practice violates Public Service Act 1994 of Section 30(1). This clause requires that any state employee conducting business with the government obtain approval from the relevant accounting officer or accounting authority.
- (2) Competitive bidding for tenders of large amounts is characterised by an inadequate contract management system. It contrasts strongly with Section 217 of the RSA constitution, which requires national, provincial and local government authorities and any other entity specified in the national legislation to contract goods and services according to the framework, which is fair, transparent, equitable, competitive and cost-effective. All this was

discovered through the AGSA reports from the 2017–2018 to 2021–2022 financial years.

(3) Ngcamu (2019:1) claims that service delivery protests have a direct impact and can also be seen as a self-defeating tactic when infrastructure ends up being destroyed during the protests.

b. Views on the current SCM organogram structure to achieve compliance:

Amongst the findings from participants, there is a general consensus that the current organisational structure does not serve the purpose of the department. The department is responsible for R10billion in infrastructure service delivery; however, the SCM structure is very small and does not cater for infrastructure procurement. The organisational structure is by far not considerate of infrastructure and general procurement. According to National Treasury (2019: iii), infrastructure departments are required to position themselves strategically and structurally in line with the Framework for Infrastructure Delivery and Procurement Management (FIDPM) in order to create an enabling environment for the Infrastructure Delivery Management System (IDMS). The organisational structure of the department does not cover this requirement.

c. Views on the departmental SCM policy alignment to departmental functions:

The backbone of procurement is infrastructure and although the departmental SCM policy and procedure manual provide necessary guidance, the procedure manual for infrastructure procurement has not been developed. This makes it difficult for the department to comply with legislative provisions when it comes to infrastructure procurement. The department could be in a better place should it invest in this guiding document. The deficiency also stemmed from policy perspective. Over time, the department has been required to establish and communicate the supply chain management policy and procedures to SCM officials. The department has developed the policy; however, it falls short in terms of infrastructure procurement. This is a deficiency since infrastructure procurement is the backbone of the department. Schooner and Whiteman (2002, cited in Marius 2017:84) are of the same view that, in order to guarantee efficient service delivery in the public sector, procurement policy plays a crucial role.

- d. Importance of training provision for departmental SCM officials:** Participants, in this case, are expressing a unified perspective. The findings point to a desire for training. The training required may be short- or a long-term as long as the officials are trained to better understand what is expected of them. There is a general view that suggests training is also necessary to assist in the interpretation of statutes associated with the field. In this study, it has been outlined that government SCM is governed by multiple pieces of legislation, including the country's constitution. Thai (2016:3) underlined the need for training public procurement personnel since they operate in a continuously evolving environment that is marked by a proliferation of product options and quickly evolving technologies. In addition, he suggests that a global standard for procurement be established in order to help public procurement become a recognised profession.
- e. Professionalism within the public sector SCM:** The findings also point to a need to professionalise government procurement in general. A professionalised government procurement system will create an enabling environment for continuous awareness and training for the practitioners in the space. The comparison between the field of chartered accountants and SCM practitioners proves that having a streamlined qualification in a professionalised environment can go a long way. In government procurement and SCM, officials are recruited based on relevant qualifications, and not specifically for SCM or procurement. This results in a significant inconsistency within the same government. Professionalisation will also facilitate the government's ability to mandate that an active member of the professional body oversee the Organs of State's procurement procedures (Zondo 2022).

5.4 RECOMMENDATIONS

- Management needs to enhance awareness campaigns on how to avoid conflicts of interest, a key aspect, which characterise the SCM challenges, to empower staff to prioritise the interests of citizens. Additionally, efforts should be made to capacitate SCM officials so that they understand the legislative frameworks.
- Continuous internal and external training for practitioners is vital. The department needs to prioritise training their workforce in order to have skilled personnel.

- The department should assess if the centralisation of the procurement processes will not yield any positive outcomes. This then requires the department to strengthen its SCM structural organogram to mirror the national legislation and their guidelines.
- Also, this practice translates to the policies of the department; policies must always be in place and updated to fit the current legislation and trends.
- It has been proven that the challenges of the department are not unique to them and these challenges have a national footprint. As a consequence, the department is responsible for urging the national government to expedite the professionalisation of SCM and procurement as a recognised profession. In taking this approach, they will acknowledge their weaknesses as key areas to address in the pursuit of professionalisation. The department can even request to be the strategic partner in the drive to professionalise SCM so that they will influence the process to move faster and subsequently cater for their needs.
- The department needs to align its SCM policy with the current guidelines and legislation. This will assist in ensuring that the processes being implemented are in line with the current legislation.
- There is still hope for the KwaZulu-Natal Department of Transport to lift itself out of the continuous qualified audit opinions. The department needs to borrow from the highlighted best practices of the New Zealand, Denmark and UK governments' SCM and procurement practices and experiences.
- The implementation of SCM processes cannot be practised in a vacuum. It requires intense research and benchmarking with national and international best practices. Denmark is proving, in its procurement practices, that a streamlined approach is the way to go.

5.5 CONCLUSION

The primary objective of this study was to evaluate the implementation of SCM processes in the department of transport in the province of KwaZulu-Natal. The researcher has successfully gathered the data and proposed actionable measures for the department in order to enhance its current situation. It is in the interest of this study that the findings are utilised to assist the department and the general public in dealing with matters relating to public SCM and procurement. It is also in the interest of this study to help change the trajectory of future audit findings towards a favourable clean audit opinion.

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APPENDICES

APPENDIX A: LETTER OF INFORMATION

Appendix B



LETTER OF INFORMATION

Title of the **Research Study**: Evaluating the Implementation of Supply Chain Management and procurement processes in the Department of Transport, Province of KwaZulu-Natal

Principal Investigator/Researcher: Sanele Khomo, B-Tech Public Management

Co-Investigator/Supervisor: Prof Mzibiyise Binn

Brief Introduction and Purpose of the Study: This research focuses on the implementation of supply chain management processes. It seeks to delve much on the public sector supply chain management and circumstances surrounding the implementation. During 2014-2015 to 2016-2017 financial years, Auditor General reported non-compliance in SCM processes implementation. As a result, the challenges are witnessed through the rise in protests directed to the lack of service delivery particularly the road infrastructure. The lack of service delivery has the direct link to the supply chain management processes and how they are implemented. These are some of the reasons that prompted the study to be conducted in order to investigate the underlying factors leading to non-compliance in the KwaZulu-Natal Department of Transport SCH. The study will examine the Auditor General's report, in relation to supply chain management with the aim of finding possible solutions on the issues of concern.

Greeting: Greetings Sir/ Madam

Introduce yourself to the participant. I am a Post Graduate at DUT, doing research for my Master's degree in Public Administration specialization in Supply Chain Management in the Department of Public Management, Law and Economics within the Faculty of Management Sciences.

Invitation to the potential participant: I would like to invite you to participate in the research which will cover aspects as per the title of the study.

What is Research (1004: 11). Commonly, research refers to the search of knowledge or may also be described as the scientific and systematic quest of data that pertains to a particular problem. In the case of this study, the quest of data pertains to the SCM processes at the department of transport where you will be asked questions to understand better how you practice SCM. Research comprises of research design that plays a great role to the one in answering the research questions. You are more than welcome to return the questions home for reading and we will page afterwards. This research interview question is not binding and should you wish to withdraw from answering questions, it will have no impact on you.

Outline of the Procedures:

- II. The study will be conducted in the Department of Transport KwaZulu Natal. Offices that will be involved are:
 - a. **Head Office** where the Director SCM will be interviewed. Supervisors from Demand, Acquisition and Contracts Management will be part of the sampling that will be required to answer questions together with the head of their subordinate. This means one supervisor and his or her subordinate will be sampled for each SCM region.

- b. **Four Regional Offices:** At the Regional offices the interviews will be conducted with the Finance Managers who are the custodian of the regional SCM processes. Regional SCM Supervisors and two of their SCM Clerks will participate in the questioner data collection method.
 - c. **Twelve Cost Centers:** SCM Assistant Directors will be interviewed in order to collect data. Cost center SCM Supervisors and two of their SCM Clerks will participate in the questioner data collection method.
2. The selection pattern is motivated by the understanding of the structure of the departmental SCM starting from the Head office down to the cost centers. The manner in which the selection is made will produce the required information for the study to conclude its findings. I will visit each office mentioned above to conduct qualitative research.
 3. Your involvement in the research will be kept confidential and their status will not be revealed unless the participants give the permission.
 4. The information from the you will be kept confidential and not disclosed to unauthorized parties unless the permission is granted by the you. The information will be used for **master's degree** research project which the researcher is currently doing at the Durban University of Technology. It will also be used to find possible solutions to the current challenges of the department. At no point will the information be used to the detriment of the department.

Risks or Discomforts to the Participant: there are no foreseeable risks to you.

Explain to the participant the reasons he/she may be withdraw from the Study: Participation to this study is voluntary. Should you wish to withdraw from the study, you may do so at any stage without having to provide the reason.

Benefits: the main aim and the intention of this study is to meet the requirements and obtain the masters qualification. Possible solutions will be applied after approval/authorization by the university to the current problems faced by the Department of Transport in KwaZulu Natal. It will benefit both the yourself and the department in so far as the problem solving.

Remuneration: you will not receive any form of remuneration to participate on the study.

Costs of the Study: you and the department are not liable for any costs associated with the study, therefore there will be no costs.

Confidentiality: I guarantee you the following:

- High level confidentiality;
- Protection of your identity;
- Protection of questionnaire responses;
- Make available the findings of the study on request by the you.

Results: as the main priority for this study is to graduate for master's degree, the final approved theses will be

available at the DUT library, a copy for the department at the request and electronically available in google scholar for citations. Department may then circulate the copy to you if you are interested.

Research-related Injury: the nature of the research is administrative and there are no injuries associated with it.

Storage of all electronic and hard copies including tape recordings the data will be stored in accordance with the DUT approved timeframes and be shredded when it is due to be destroyed. Electronic data will be stored on cloud storage that is accessed by password only by a designated person.

Persons to contact in the Event of Any Problems or Queries: Please contact the researcher 060 997 4451/ 033 897 0500, my supervisor 047 502 2660/4 or the Institutional Research Ethics Administrator on 031 373 2375. Complaints can be reported to the Director: Research and Postgraduate Support researchdirector@dut.ac.za.

General:

You are assured that participation is voluntary and the rest of your 109 colleagues are also part of the population sampled to participate. 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.

APPENDIX B: GATE KEEPERS' LETTER: KWAZULU-NATAL DEPARTMENT OF TRANSPORT



transport

Department:
Transport
Province of KwaZulu-Natal

INKOSI MHLABUNZIMA MAPHUMULO HOUSE

Street Address: 172 Burger Street

Pietermaritzburg, 3200

Postal Address: Private Bag X9043

Pietermaritzburg, 3200

Tel: (27)(33) 355 8808

Fax: (27)(33) 355 8021

E-mail: smanga.ngubo@kzntransport.gov.za

OFFICE OF THE HEAD: TRANSPORT

To	Mr Sanele Khomo
From	Acting Head of Department Ms Smanga Ngubo
Cc	SCM Director Mr NN Sangweni
Subject	Permission To Conduct Research
Date	06 July 2020

Dear Mr Khomo

Purpose

The purpose of this correspondence is to advise that your letter dated 6 July 2020 is acknowledged.

Background Brief Purpose of the Study

Based on the content of your letter and further discussions, your intending to conduct a research using the department as the case study. This research focusses on the implementation of Supply Chain Management processes. It seeks to delve much on the public sector Supply Chain Management and circumstances surrounding the system. During 2014-2015 to 2018-2019 financial years, Auditor General reported none compliance in SCM processes implementation. As a result, the challenges are witnessed though the rise in protests directed to the lack of service delivery particularly the road infrastructure. The lack of service delivery has the direct link to the supply chain management processes and how they are implemented. These are some of the reasons that prompted the study to be conducted in order to investigate the underlying factors leading to none compliance in the KwaZulu Natal Department of Transport SCM. The study will examine the Auditor General's reports in relation to Supply chain management with the aim of finding possible solutions on the issues of concern.

Outline of the Procedures:

1. The study will be conducted in the Department of Transport KwaZulu Natal. Offices that will be involved are:
 - a. **Head Office**, where the Director SCM will be interviewed. Supervisors from Demand, Acquisition and Contracts Management will be part of the sampling that will be required to answer questioners together with each of their subordinates. This means one supervisor and his or her subordinate will be sampled for each SCM segment.

PROSPERITY THROUGH MOBILITY

b. Interview Regional Offices: At the Regional offices the interview will be conducted with the finance Managers who are the most important of the regional SOM processes. Regional M Supervisors and two of their SCM experts will participate in the questionnaire data collection method.

c. Interview Central Office: SOM Assistant Directors will be interviewed in order to collect data. Cost center SCM Supervisors and two of their SCM experts will participate in the questionnaire data collection method.

- The selection pattern is motivated by the undemanding of the structure of the departmental SCM starting from the Head office down to the most centers. The manner in which the selection is made will produce the required information for the study to conclude findings. The researcher will visit each office mentioned above to conduct qualitative data collection.
- The participant's involvement in the research will be kept confidential and their status will not be revealed unless the participants give the permission.
- The information from the participants will be kept confidential and not disclosed to unauthorized parties. The permission is granted by the participant. The information will be used for master's degree research project which the researcher is currently doing at the Durban University of Technology. It will also be used to find possible solutions to the current challenges of the department. At no point will the information be used to the detriment of the department.

Risks or Discomforts to the Participant: there are no foreseeable risks to the participant.

Benefits: The main aim and the intention of this study is to meet the requirements and obtain the master's qualification. Possible solutions will be applied after approval/authorization by the university to the current problems faced by the Department of Transport in KwaZulu-Natal. It will benefit both the participants and the department in so far as the problem solving.

Reasons why the Participant may Withdraw from the Study: Participation to this study is voluntary. Should the participant wish to withdraw from the study, they may do so at any stage without having to provide the reason.

Remuneration: Participants will not receive any form of remuneration to participate on the study.

Costs of the Study: The department and the participants are not liable for any costs associated with the study, therefore there will be no costs.

Confidentiality: the researcher guarantees the participants the following:

- High level confidentiality;
- Protection of participant identity;
- Protection of questionnaire responses;
- ▶ Make available findings of the study on request by the participants.

Risks related to injury: the nature of the research is administrative and there are no injuries associated with it.

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

Please contact the researcher: Sanele Khomo, email SANELEKHOMO@yahoo.com, cell 060 997 4451

My supervisor: Prof Mzikayise Shakespeare Binza, email mbinza@wsu.ac.za, cell 083 717 9352

The Institutional Research Ethics administrator on 031 373 2900.

Recommendation

Based on the above detailed background, your request for permission to conduct research in the department is accepted and approved.

Approved / Not Approved

Acting: HOD: Transport
Simanga Naubo

Date: 03/01/2023

APPENDIX C: TRREE CERTIFICATE



TRREE

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Ce document atteste que - this document certifies that

Sanele Khomo

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[REV : 20170310]

APPENDIX D: ETHICAL CLEARANCE



19 January 2023

Mr S Khomo
P.O. Box 1097
Umkomaas
4170

Dear Mr Khomo

Evaluating the Implementation of Supply Chain Management and procurement processes in the Department of Transport, Province of KwaZulu-Natal
Ethical Clearance number IREC 192/22

The DUT-Institutional Research Ethics Committee acknowledges receipt of your gatekeeper permission letter.

Please note that FULL APPROVAL is granted to your research proposal. You may proceed with data collection.

Any adverse events [serious or minor] which occur in connection with this study and/or which may alter its ethical consideration must be reported to the DUT-IREC according to the DUT-IREC Standard Operating Procedures (SOP's).

Please note that any deviations from the approved proposal require the approval of the DUT-IREC as outlined in the DUT-IREC SOP's.

Yours Sincerely

Prof J K Adam
Chairperson: DUT-IREC

APPENDIX E: COVER PAGE OF THE INTERVIEW QUESTIONS

QUESTIONNAIRE TO BE COMPLETED BY RESEARCH PARTICIPANTS

KWAZULU-NATAL DEPARTMENT OF TRANSPORT

Dear Sir/Madam

The aim of this study is to evaluation of the implementation of supply chain management processes in the Department of Transport, Province of KwaZulu-Natal.

Please answer the questions to the best of your ability. Your accurate and objective response in answering questions is of vital importance as it will be used to determine efficiency and effectiveness of the implementation of SCM processes in the department as a whole.

NB: THE INFORMATION YOU GIVE WILL BE TREATED WITH HIGH CONFIDENTIALITY. IT IS THEREFORE NOT NECESSARY TO GIVE YOUR PARTICULARS IF YOU WISH TO REMAIN ANONYMOUS.

Thank you

— 
Student

Cell No.: 060 997 4451

Date: 01 April 2022

Section A: Bibliographic Questions

1. How many years have you been employed in SCM?

Less than 5 years	6-10 years	11-15 years	Above 16 Years

2. How many years have you been employed in KZNDOT SCM?

Less than 5 years	6-10 years	11-15 years	Above 16 Years

3. Indicate your racial group (Only for the purpose of this research).

African	Coloured	Indian	White	Other

4. Indicate your gender (Only for the purpose of this research).

Female	Male	Other

5. Indicate your level of qualification.

Less than Grade 12	Grade 12	Certificate(s)	National Diploma	B Degree/ B Tech/ Honours Degree	Master's Degree	Doctoral degree

6. Indicate the name of your qualification and the institution obtained from.

Name of qualification	
Name of Institution	

7. Indicate your position.

Senior Admin Clerk	Senior Admin Officer (Supervisor)	Assistant Director	Including Deputy Director	Director

8. Indicate your age.

Less than 20 Years old	21-30 Years old	31-40 Years old	41-50 Years old	Above 51 Years old

Section B: Core Questions

1. What are SCM compliance challenges that currently exist in the department?
2. How would you comment on the organisational culture in creating an enabling environment to implement SCM processes?
3. How would you comment on the current SCM structure of the department in helping you to meet your compliance requirements?
4. In your opinion, do you think the current departmental SCM policy and procedure manual is compatible to the core functions of the department?

- a. Please explain your answer.
-
5. Based on your experience, what measures would you suggest to the department for adoption in order to enhance its compliance to SCM prescripts?
 6. Do you believe that in the department there is enough technical skills and appropriately qualified officials to implement SCM processes?
 - a. Please explain your answer.
 7. In your opinion, how would you describe the level of academic professionalism in public SCM?
 8. In your opinion, do you think SCM practitioners are having adequate qualifications needed in the public procurement?
 9. Do you think public sector procurement practitioners need to be trained intensively on SCM processes? Why?

APPENDIX F: TURN-IT-IN REPORT

EVALUATING THE IMPLEMENTATION OF SUPPLY CHAIN MANAGEMENT AND PROCUREMENT PROCESS IN THE DEPARTMENT OF TRANSPORT, PROVINCE OF KWAZULU-NATAL

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Signature:

Name : ~~Prof. Warren O. S. G. Supervisor~~

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