



MASTER OF BUSINESS ADMINISTRATION

**Challenges facing Supply Chain Performance at
Department of Defence in the Republic of South
Africa**

Applied Research Project

By

Moloantoa Matakalatse

Student Number: 2537546

Telephone Number: 060 526 6857

Email Address: 2537546@students.wits.ac.za

Supervisor :

Dr Manamela Matshabaphala

Master in Business Administration

Wits Business School (31 May 2024) Parktown

DEDICATION

I want to dedicate my work to the most patient, kind, loving, and strong woman I have ever had the pleasure of sharing my life with. My wife Lindelwa Patience Matakalatse, you are the Queen, and to you I dedicate this masterpiece. I have been rewarded in this life with you, my darling; your constant love, support, and desire to see me succeed have carried me through yours and brought me to this point.

ACKNOWLEDGEMENTS

We often go through several phases in life with different individuals, and we lead what we perceive to be regular lives. In retrospect, though, it turns out that the individuals you spend the most time with are the ones who support you throughout that particular phase of your life. Therefore, it is polite to recognise these individuals and their contributions to your life.

First and foremost, I would like to thank my supervisor, Dr. Manamela Johnny Matshabaphala, for showing me such proper and excellent leadership throughout this journey. I am really grateful for your helpful guidance.

Prof. Tumi Mmusinyane, you've been a really inspiring and charismatic leader who mentors people in developing their careers. You truly gave me confidence and helped me to realise that everything is possible in life. I am grateful for the bravery and insight you showed me.

Finally, I would like to express my gratitude to everyone who helped to complete this research project and to all of the participants.

ABSTRACT

The purpose of the study is to gain insights into the perception of supplier performance management in the Department of Defence supply chain and subsequently to find out the public supply chain challenges faced by end-users within the Department of Defence (DOD) and to propose the solutions thereof. **The problem** is that the clients (receiving departments) are continuously receiving poor standards and quality of public goods and services on behalf of Service and Division within the DOD. Lack of sufficient suppliers' development framework and programme especially the SMMEs in DOD is also causing poor supplier performance. **Objective 1:** Investigating Supplier Performance Challenges. **Objective 2:** Impacts of Supplier Performance Challenges. **Objective 3:** Potential Solution. **Research Method:** The researcher used a qualitative method to conduct the study. **Manual Thematic Analysis** was used to analyse the data.

The discussion, results and findings: the results of interviews conducted with 15 officials from the Department of Defence (DOD) regarding the issues faced in supply chain performance due to inadequate performance by suppliers. The qualitative data analysis identified three primary themes for each of the research objectives in the study. The results suggest that inadequate financial resources, insufficient supplier expertise, and challenges in planning and communication are major contributors to subpar supplier performance within the Department of Defence (DOD) supply chain. Consequently, this leads to interruptions, setbacks, inefficient use of resources, and adverse effects on financial plans and expenditures.

In response to these difficulties, attendees suggested potential remedies such as implementing supplier development initiatives, strengthening performance monitoring measures, and implementing fines for suppliers that fail to meet expectations. **Conclusion and recommendations:** A comprehensive approach is necessary, involving the provision of development assistance, the enhancement of oversight, and the careful enforcement of compliance. Utilising developmental strategies to enhance financial stability, knowledge, and collaborative efficacy holds great potential for generating systemic enhancements.

Keywords: Supply Chain Management, Supply Chain Performance, Poor Supplier Performance, Supplier Development, Supplier Performance Measurement and Monitoring, Financial Constraints, Buyer-Supplier Relationship.

TABLE OF CONTENT

Index	Pages
Title Page	
Dedication	
Acknowledgements	
Abstract	
Table of Content	
List of Tables	
List of Acronyms	
Chapter 1	
1. Introduction	
1.1. Introduction and Background of the study.....	1
1.2. Context of the study.....	4
1.3. Research Problem.....	5
1.4. Research Questions.....	6
1.5. Research Objectives.....	6
1.6. Justification/Rationale of the study.....	7
1.7. Delimitations of the study.....	8
1.8. Operational definitions.....	9
1.8.1. Supply Chain Management.....	9
1.8.2. Supply Chain Performance Management.....	10
1.8.3. Supplier Performance Measurement.....	10
1.8.4. Poor Supplier Performance.....	10
1.8.5. Supplier Development.....	10
1.9. Structure of the dissertation.....	10
Chapter 2	
2. Literature Review	
Section A	
2.1. Empirical review.....	12
2.1.1. Research gaps.....	13
2.1.1.1. Gap 1: Supplier Performance Management Framework.....	14
2.1.1.2. Gap 2: Supplier performance.....	15
2.1.1.3. Gap 3: Managing and monitoring supplier performance.....	16

2.1.1.4. Gap 4: Buyer-Supplier relationship.....	17
2.1.1.5. Gap 5: Supplier development.....	17
2.1.2. Supplier performance management challenges faced by end-users....	18
2.1.3. Benefits of supplier performance management.....	18

Section B

2.2. Conceptual framework.....	19
2.3. Conclusion.....	22

Chapter 3

3. Research Methodology

3.1. Research paradigm.....	23
3.2. Research approach.....	23
3.3. Research strategy.....	24
3.4. Research design.....	24
3.5. Target population and sampling.....	24
3.5.1. Non- probability sampling.....	25
3.5.2. Purposive or judgemental sampling.....	25
3.5.3. Sample size.....	26
3.6. Data collection.....	26
3.7. Reliability and validity.....	26
3.7.1. Credibility.....	26
3.7.2. Transferability.....	27
3.7.3. Dependability.....	27
3.7.4. Conformability.....	27
3.8. Data analysis.....	27
3.9. Ethical consideration.....	28

Reference.....	29
-----------------------	-----------

Appendices

Appendix A: Ethical Clearance Form

Appendix B: Letter of permission to conduct the research

Appendix C: Consent form

Appendix D: Participants Information Sheet (PIS)

Appendix E: Draft questionnaire / Interview schedule

LIST OF TABLES

Table 4.1	Profile of Participants
Table 4.2	Research Questions and Themes

LIST OF ACRONYMS

CSD — Central Supplier Database

DOD — Department of Defence

E-Procure — Electronic Procurement

HR — Human Resource

ICN — Identification Number

JIT — Just-In-Time

KPIs — Key Performance Indicators

NT — National Treasury

PBC — Performance-Based Contract

RSA — Republic of South Africa

SA — South Africa

SAMHS — South African Military Health Service

SANDF — South African National Defence Force

SC — Supply Chain

SCM — Supply Chain Management

SLA — Service Level Agreement

SMMEs — Small Medium Micro Enterprises

SPM — Supplier Performance Management

SPMF — Supplier Performance Management Framework

SONA — State of the Nation Address

SO1 — Staff Officer Class 1

UNISA — University of South Africa

USA — United States of America

WA — Western Australia

2IC — Second in Command

CHAPTER 1

1. INTRODUCTION

1.1. Introduction and background of the study

In terms of section 217 of the Constitution of the Republic of South Africa, when the government contracts for goods and services it must do so in a way which is fair, equitable, transparent, competitive and cost effective. In addition, the supply chain management (SCM) system must provide for the advancement of persons or categories of persons disadvantaged by unfair discrimination (SCM Report, 2015).

Companies are requiring their suppliers to deliver innovative and quality products not only in just-in-time (JIT) fashion, but the literature reviewed that good supplier relations can provide many benefits such as flexibility in terms of delivery, better quality, better information and better material flows between buyers and suppliers (Wisner, Tan and Leong, 2012, p75).

The end-users or clients are the key role players in public supply chain performance management that oversee and monitor the delivery process in the supply chain. Suppliers are partners in the supply chain that ensure good quality service delivery and significant improvement in the welfare of South African citizens is attained especially for the poor of the poorer that depend on government support. Developing and nurturing a relationship with the client is an important success factor from the vendor's perspective (Palvia, King, Xia, and Jain Palvia, 2010).

As a part of DoD's overall small business strategy, the Department will create a unified governance structure of small business programs and activities that will create more synergies and transition pathways between these programs. Additionally, DoD is developing market intelligence tools that will help the acquisition workforce identify capable suppliers in the federal and commercial marketplace that could perform on defence requirements (USA Department of Defence Report, 2022).

The public sector frequently underestimates how important supplier management is and there is limited understanding about how public sector decisions and actions affect the overall business environment. On the other hand, suppliers often take advantage of the current weak public sector SCM environment and this is evident in high prices paid for goods and services, contracts that favour certain suppliers, collusion, unethical behaviour; non-performance and poor quality products and services rendered. To overcome these problems, the public sector needs to develop long-term strategic supplier relationships (SCM Report, 2015).

The study is focusing on the Department of Defence to find out the public supply chain performance challenges that are faced by the end-users (clients) as a result of poor supplier performance. Considering the high failure rate of new suppliers and their significance to the South African economy, it is critical to monitor how the performance and supplier development could be overcome.

During the 21st Century poor supplier performance continues to affect the departmental output regarding delivery lead time, sub-standard of goods or services in terms of quality and financial incapacity of the service providers. The performance of the construction industry is affected by national economies and is related to many topics and factors such as time, cost, quality, client satisfaction, productivity and safety (Shah, Pitroda and Bhavsar. 2016, p 223).

In the Free State Province an unacceptable and disappointing number of contractors failed to complete the project because of corruption and poor performance. For instance, in some parts of Section K in Botshabelo township the assignment of sewerage system installation the contractor failed to complete the project because of incapacity of financial strength, poor performance and corruption.

The construction industry in Gujarat suffers from many problems and complex issues in performance while individual organisations have been measuring their performance for many years, there has been little consistency in the data, and the way it has been published (Shah, et al. 2016, p 223-224).

The negative effects of inefficient public sector SCM, particularly in the procurement phase of the chain, are well documented. Suppliers charge excessive prices; goods and services contracted for and delivered are of poor quality and unreliable; and there is corruption and waste (SCM Report: 2015)

The public sector frequently underestimates how important supplier management is, and there is a limited understanding of how public sector decisions and actions affect the overall business environment. On the other hand, suppliers often take advantage of the current weak public sector SCM environment. This is evident in high prices paid for goods and services, contracts that favour certain suppliers, collusion, unethical behaviour, non-performance and poor-quality products and services rendered. To overcome these problems, the public sector needs to develop long-term strategic supplier relationships (SCM Report: 2015).

Supply chain performance is the tool that is monitoring processes, undertaking a retrospective analysis to determine whether the proper processes have been followed and whether the desired objectives were achieved (UNISA Study Guide PUB2610: 2012, p 25). Supplier performance is also monitored and evaluated under supply chain performance management.

Supplier performance measurement is the process of measuring, analysing, and managing supplier performance for the purposes of reducing costs, mitigating risk, and driving continuous improvement” (Coppens (2014) cited in Minahan and Vigoroso, 2002). The relationship between the buying organisation and the supplier is of influence on the procurement strategy that will be applied by the buying organisation. This

relationship is determined by the level of trust the buying organisation has towards the supplier. The level of trust the buying organisation has, directly influences commitment of the supplier towards the buying organisation.

Performance-Based Contracting (PBC) plays an increasingly important role in the defence industry. The service provider's performance attributability appeared to have a strong impact on its willingness to take PBC-induced risks and Service Level Agreements (SLAs) were used to manage and mitigate the risks associated with uncontrolled performance (van Strien, Gelderman and Semeijn .2019, p83).

The South African government therefore made it clear in the State of the Nation Address (SONA 2020) that the SMMEs will be the third priority action over the next five years to reduce youth unemployment. The intention will be to develop new and innovative ways to support youth entrepreneurship and self-employment. To achieve the third priority for the next five years, high performance and development of the suppliers need to be maintained for public goods and services at high quality and value for money for clients' satisfaction (SONA 2020).

The purpose of the study is to gain insights into the perception of supplier performance management in the Department of Defence supply chain and subsequently to find out the public supply chain challenges faced by end-users within the Department of Defence (DOD) and to propose the solutions thereof.

1.2. Context of the study

Poor supplier performance can be defined in many ways. As a general concept, it is typically anything related to a service delivery failure of some kind that has, or has the potential to have, an unacceptably detrimental effect on the organisation (Rod Linsley:2019)..

The study is focusing on the Department of Defence to find out the public supply chain performance challenges that are faced by the end-users (clients) as a result of poor supplier performance. Considering the high failure rate of new suppliers and their significance to the South African economy, it is critical to monitor how the performance and supplier development could be overcome.

Supply chain performance is the tool that is monitoring processes, undertaking a retrospective analysis to determine whether the proper processes have been followed and whether the desired objectives were achieved (UNISA Study Guide PUB2610: 2012, p 25). Supplier performance is also monitored and evaluated under supply chain performance management.

The purpose of the study is to gain insights into the perception of supplier performance management in the Department of Defence supply chain and subsequently to find out the public supply chain challenges faced by end-users within the Department of Defence (DOD) and to propose the solutions thereof.

The supplier is important to the organisation by virtue of the critical products and services or the size of the annual fiscal and most of the funds are budgeted to spend on critical requirements to fulfil the organisational goals.

1.3. Research Problem

The problem is that the clients (receiving departments) are continuously receiving poor standards and quality of public goods and services on behalf of Service and Division within the DOD. Unreliable and poor service delivery affects the clients of the formations negatively. Delivery lead time, sub-standard of goods and services, inability to deliver because of financial constraints and exorbitant charge prices cost the department a lot of money leading to fruitless, wasteful and irregular expenditures.

Lack of sufficient suppliers' development framework and programme especially the SMMEs in DOD is also causing poor supplier performance. The aim of the research is to obtain insights into the perception of supplier performance management in the Department of Defence supply chain and subsequently to find out the public supply chain challenges faced by End-users (Service and Divisions) within the Department of Defence (DOD) and to suggest the solutions thereof.

1.4. **Research Questions**

- a. What are the public supply chain performance challenges faced by Services and Divisions within the Department of Defence regarding poor supplier performance?
- b. What are the significant impacts of these challenges affecting the Services and Divisions within the DOD?
- c. What are the suggested solutions that can be imposed by the DOD and National Treasury to solve the challenges of poor supplier performance in the DOD?

1.5. **Research Objectives**

- a. To investigate the public supply chain performance challenges faced by Services and Divisions within the DOD.
- b. To investigate the significant impacts of these challenges that are affecting the Services and Divisions in the DOD.

c. To determine and recommend the suggested solutions that can solve the challenges of the Services and Division within the DOD.

1.6. **Justification/Rationale of the study**

The importance of conducting this study is to gain insight into perception of the public supply chain performance challenges faced by Services and Divisions within the Department of Defence regarding poor supplier performance and subsequently suggest possible solutions. As a consequence, the performances of the suppliers have a direct impact on the performances of the organisation and to ensure the performances of the supplier positively affect the results of the organisation, a supplier needs to be selected of which the goals are aligned with the goals of the organisation (Coppens, 2014).

Cost efficiency of procurement process , whether supply chain objectives are consistent with Government's broader policy focus, the material construction standards become increasingly aligned with those standards that support international best practice, the principles of co-operative governance as expounded in the Constitution are observed and the reduction of regional economic disparities is promoted (National Treasury Republic of South Africa, 2004).

Although some research has been conducted on supply chain performance management regarding contractor's poor performance in other departments, the study remains essential to obtain insights into the perception of supplier performance management in the Department of Defence supply chain and subsequently to find out the public supply chain challenges faced by End-users (Service and Divisions) within the Department of Defence (DOD) and to suggest the solutions thereof.

Many emerging subcontractors have rather poor management practices, and particularly when it comes to cash flow management and they generally lack business systems and thus negatively impacting their ability to perform work successfully (Mathenjwa, 2020, p17 cited in Yoke-Lian, Hassim, Muniandy, Teik-Hua, 2012).

Addressing supply management performance, define four basic performance criteria as the establishment of a long-term relationship between the firm and the suppliers, the incorporation of the suppliers in production development processes, reducing the number of the suppliers and prioritising quality in the selection of the suppliers. Also, the businesses taking part in the supply network get involved in close relations with their suppliers by allowing the sharing of the information about their production programs (Ustundag, and Ungan, 2020).

The Department of Defence will benefit from this study because the challenges they face will be identified. The efficiency of good service delivery and excellent service clients in the Services and Division by supplier's involvement can be experienced as a result of knowledge gained from this research.

This research will enable the Department of Defence to operate efficiently with suppliers and to help the small business with the information to understand the policies and procedures of the SCM. The study will allow the s suppliers to deliver good quality services to the DOD and enhance the culture of creating job opportunities.

1.7. Delimitations of the study

The study will be conducted only within the Department of Defence on the Services and Divisions for the period of 12 months. Services consist of SA Army, SA Airforce, SA Navy and South African Medical Health Services (SAMHS). Divisions consist of Human Resources (HR), Logistics, Military Police and Defence Intelligence. Within the Services and Divisions there are Formations and Units which will be the focus of the research.

The number of participants will be determined by responses from the Formations and Units. These contributions are valuable, necessary, and timely for the effective and

efficient use of knowledge within the Department of Defence on the Services and Divisions.

1.8. Operational Definitions

The use of the concepts of supply chain performance management, supply chain performance measurement, supplier performance, supplier development and involvement will differ from organisation to organisation depending on the stage of development and the industry in which they operate.

1.8.1. Supply Chain Management

Supply chain management is a set of approaches utilised to efficiently integrate suppliers, manufacturers, warehouses and stores, so that merchandise is produced and distributed at the right quantities, to the right locations and at the right time, in order to minimise system wide costs while satisfying service level requirements (Kleverlaan, 2008, p9).

1.8.2. Supply chain performance management

The paper considered that there are multiple definitions of Supply Chain Performance Management from various perspectives. From a public sector perspective, Supply chain performance is the tool that is monitoring processes, undertaking a retrospective analysis to determine whether the proper processes have been followed and whether the desired objectives were achieved (UNISA Study Guide PUB2610: 2012, p 25).

Supply chain performance in terms of responsiveness and efficiency is based on the interaction between the following logistical and cross-functional drivers of supply chain performance such as facilities, inventory, transportation, information, sourcing and pricing (Chopra and Meindl: 2016, p56).

1.8.3. Supplier performance measurement

Supplier performance measurement is the process of measuring, analyzing, and managing supplier performance for the purposes of reducing costs, mitigating risk, and driving continuous improvement (Minahan and Vigoroso, 2002).

1.8.4. Poor Supplier Performance

Poor supplier performance can be defined in many ways. As a general concept, it is typically anything related to a service delivery failure of some kind that has, or has the potential to have, an unacceptably detrimental effect on the organisation (Rod Linsley:2019).

1.8.5. Supplier development

Supplier development is any activity undertaken by a buyer to improve a supplier's performance or capabilities in the areas of cost, time, quality and technology to meet buyer's short and long term supply needs (Monczka, Handfield, Giunipero and Patterson: 2016, p339)

1.9. Structure of the dissertation

The paper is structured as follows: in the next section, a critical review of literature is undertaken with the goal of identifying and justifying the research gaps that are investigated in this paper. The critical review of literature will also review and provide a rationale for the theoretical underpinnings based on dynamic capabilities as the basis of generating the theory and propositions of this paper. The rationale for the theoretical

framework will be followed by a motivation for the research methodology, which is approached from a critical realist research paradigm. The results of the study will then be presented following a discussion and interpretation of the results. The concluding section will synthesise the findings in terms of the key insights from the research followed by the implications of the study to management, policy, and practice. A reflection on the limitations of the study, as well as recommendations for future research are also provided.

CHAPTER 2

2. LITERATURE REVIEW

This chapter consists of section A and B to review the literature that is relevant to the study. Section A reviews the empirical review. Section B represents the conceptual framework. The purpose of reviewing the literature is to explore research work and other relevant secondary data which are useful to the study.

Section A

2.1 Empirical Review

Literature reveals that the supply chain performance challenges faced by state departments for the context of supplier performance in developing countries have been learned to be the same to those of their counterparts in developed countries. The only difference between the challenges that confront state departments in developing and developed countries is the fact that the magnitude of their differences weighs more negatively for developing countries.

Past studies have shown that a number of factors hinder the positive supplier performance and customer satisfaction. Suppliers play an important and strategic role in the supply chain as they are critical providers of inputs to other supply chain members and sustainable supplier development is key to improve suppliers' sustainability capabilities and it is highly effective to provide a sustainable supply chain (Pedroso, Tate, da Silva, and Carpinetti, 2021).

Sourcing activities in developing countries are faced with various challenges as, besides economic issues, social and environmental problems play a vital role. Based on data from 137 German firms, this paper investigates which measures of supplier management could improve supplier performance and buyer satisfaction (Akamp and Muller, 2013).

2.1.1. **Research Gaps**

2.1.1.1. **Research Gap 1: Supplier Performance Management Framework (SPMF)**

There is currently a lack of study that provides the comprehensive SPM Framework in RSA National Treasury and Department of Defence. Western Australia (WA) government agencies' ability to easily and reliably measure the performance of suppliers is vital in the successful delivery of goods or services for any contract, to assist agencies manage supplier performance and the Department of Finance has developed the Supplier Performance Management (SPM) Framework to help ensure best practice (Government of Western Australia, Department of Finance, 2018).

Creating or selecting a supplier framework that aligns with the mission and objectives of the business is the first step in the supplier management process. There were two phases involved in the creation of the suggested supplier framework procedure. In order to comprehend the various factors/criteria used for supplier selection and performance management evaluation by various industries/businesses, the first step involved looking at the literature that already existed. Interacting with businesses to get feedback, comprehend metrics being used, and learn about obstacles encountered when implementing the supplier management process constituted the second step (Krishnadevarajan, Ravichandran, Balasubramanian and Kannan, 2015).

Long-term, fruitful partnerships with suppliers may be fostered, risks can be minimised, and supply chain efficiency can be greatly increased with an efficient framework for supplier performance management. In order to implement such a framework and achieve continuous improvement and strategic alignment with organisational goals, it is necessary to have defined objectives, strong technology, and a collaborative approach with suppliers.

2.1.1.2. **Research Gap 2: Supplier performance**

In the Defence Force organisation, there are gaps identified on supplier performance measurement systems that are not visible and effective. In the public sector, supplier

performance plays a significant role to ensure the monitoring and measurement of suppliers is mitigating the risks of poor supplier performance. The government departments rely on quality service delivery, timely delivery and reasonable price that is cost effective that is offered by suppliers in order to accelerate and gain more excellent clients service delivery.

In Corporate most companies rely on timely delivery, price reduction and service quality offered by their suppliers in order to gain more profit. As a result, the successful management of supplier performance directly affects the quality of the whole supply chain (HCM WORKS, 2020).

The traditional approach to supplier selection has solely considered economic aspects for many years and is not enough because of globalisation in business, competitive market situations and the changing customer demands these days. Organisations environmental or ecological and social aspects the traditional supplier selection criteria such as quality, cost, delivery and service to remain in the sustainable supply chain (Amindoust, Ahmed and Saghafinia. 2012, p156).

In recent years, the enterprises have had to compete in the magic quadrilateral – time, cost, quality and service, and continually fought for their market place and quality plays a major role in this area, in terms of criteria relating to the selection and evaluation of the suppliers, relations with the suppliers, quality control and quality improvements resulting from long-term cooperation (Pech and Vanecek, 2020, p89).

Literature showed the performances of a supplier, measured by the buying organisation, are directly related to the procurement strategy that is applied by this organisation (Coppens, 2014). Supplier performance measurement includes the requisite methods and systems to collect and provide information to measure, rate or rank supplier performance on an ongoing basis (Monczka, Handfield, Giunipero and Patterson: 2016, p324)

Supplier measurement system is designed to measure and weigh the delivery performance, cost reduction and quality performance. Financial performance is

evaluated according to criteria such as the rate of return of the investment, the current value of the business, net revenue and profit, while market performance is evaluated according to criteria such as increase in the market share and rise in the sales volume. Operational performance, on the other hand, is evaluated based on competitive success factors such as quality, price, delivery, service, flexibility and innovation (Ustundag, and Ungan, 2020).

Supplier selection and performance monitoring is an imperative process meant for building effective interactions in the company's system. The overall goal for selection criteria is to make suppliers more competitive and increase sense of ownership towards better product development and quality (Doshi, 2019 cited in Atousa et al., 2017). The proposed method aims to reduce complexity in the supplier management process and makes it easier to understand implications of suppliers' performance, on time delivery and quality of parts, and on other processes (Doshi, 2019) .

2.1.1.3. **Research Gap 3: Managing and monitoring supplier's performance**

Some problems that remain open in this area of research are development of mechanisms for building effective supplier performance. Managing and monitoring are one of the mechanisms that need to be developed in the DOD organisations. Supplier performance monitoring can be a complex area . Government buyers are operating in an increasingly dynamic commercial and technological environment and effective procurement planning and monitoring of supplier performance is critical to controlling the risks and costs involved in procurement (The State of Queensland, Department of Housing and Public Works, 2018).

An efficient, dependable, and cost-effective supply chain requires effective management and monitoring of supplier performance. It also helps organisations achieve strategic business objectives and optimise supply chain operations. Through the use of technology, clear metrics, collaboration, and continuous improvement, organisations can boost supplier performance, lower risks, and promote mutual growth and success.

The access to quality monitoring also worth mentioning and the Electro-industry monitors the deliveries regularly, engineering randomly and food processing industry prefers trusting to its suppliers and subsequently the approach of the enterprises to quality monitoring is similar regardless of their size or the industry in which they operate (Pech et al, 2020, p91).

2.1.1.4. **Research Gap 4: Buyer-supplier relationship**

The current study has shown the research gap that there is no strategic relationship between the State Organs and Small Medium Enterprise. Relationships with the supplier have an important role in every stage of supply chain management. Previous studies dealing with the buyer–supplier relationship address the relationship from the aspect of buyer (Ustundag, and Ungan, 2020). The word supplier will be used interchangeably with the word seller. Since organisations are increasingly relying on their suppliers, the relationship with the supplier becomes increasingly important and the relationship between a buyer and supplier organisation has a significant influence on the performances of the supplier as well as on the amount of business that is done with a supplier (Coppens, 2014).

In the nutshell, improving buyer-seller relationship is the key concern as result of outstanding supplier performance and the trend to fewer suppliers, long-term contracts, e-Procurement and continuing improvement in quality, delivery, price and service requires much closer coordination and communication between various representatives of the buying organisation and the selling organisation over a long period of time (Johnson and Flynn, 2015, p 372-373).

Suppliers engaging in buyer-supplier relationships characterised by higher levels of collaborative activity achieve higher levels of performance as a result of trust and commitment. Suppliers in buyer-supplier relationships characterised by higher levels of cooperative attitudes and sentiments achieve higher levels of performance (Duffy and Fearn, 2018).

2.1.1.5. **Research Gap 5: Supplier development**

The study revealed that there is a lack of supplier development in the South African National Defence Force (SANDF) in particular and there is need for establishment of supplier development programmes. Supplier development includes efforts undertaken by firms to improve their suppliers' capabilities and performance (Noshad and Awasthi (2015) cited in Kim 2006; Wagner and Krause 2009).

A supplier development program can be one of the follow-up actions agreed upon to improve the performances of the suppliers and it can be defined as the activities undertaken by a buying firm to improve supplier performance, supplier capabilities or both and to meet the buying firm's short-term or long-term supply needs (Coppens, 2014 cited in Krause et al., 2000).

From a supplier development perspective, the Department of Defence (Buying Organisation) can apply a direct involvement strategy to strengthen the relationships and improve the performances of critical suppliers and the involvement can be in the form of training and education of supplier's personnel or even providing the supplier from temporary personnel (Coppens, 2014).

Organisation can rely on a variety of development activities to improve supplier performance including sharing technology, providing incentives to suppliers for improved performance, promoting competition among suppliers, providing necessary capital and directly involving personnel with suppliers through activities such as training and process improvement (Monczka et al., 2016, p339). Effective supplier development requires the often substantial commitment of financial capital and human resources, skilled personnel, timely and accurate information sharing and performance measurement (Monczka et al., 2016, p339).

2.1.2. Supplier Performance Management Challenges faced by end-users

Failure of the supplier to fulfil contractual requirements, agencies paying more for goods or services than they should, poor quality goods and services received by the customer, the supplier not willing to improve performance, difficulty in managing the contract, poor working relationships with suppliers, limited recordkeeping of supplier

performance and not achieving value for money outcomes (Government of Western Australia, Department of Finance, 2018).

One of the challenges that makes the main supplier to perform poorly is working with inexperienced sub-contractors. For instance, poor service quality, shortage of skills, poor planning skills/management, low communication levels, risk to health and safety risk and the lack of understanding of construction contracts as being among the most significant challenges of working with inexperienced sub-contractors (Mathenjwa :2020).

Materials scarcity: scarcity as well as delays in materials supply is among some of the most significant factors that lead to the interruption in construction project delivery worldwide (Mathebula, 2020, p15 cited in Rahman, 2017). Quality of material can delay the use of material in a particular site if that material does not meet the required standard or has defects. Some minor defects in a material can be repaired and poor approximation causes a shortage of supply or causes an oversupply (Mathenjwa, 2020, p15). Poor monitoring and management: many factors contribute to the construction industry not being able to perform at its maximum and this is resembled in a study and it was highlighted that the perhaps the most significant delay factors are: poor site management from contractor, limited experienced from contractor, improper planning by contractor, insufficient client finance and payments for finished work, issues with subcontractors, equipment unavailability, labour supply and absence of communication amongst parties, and errors made throughout the construction stage (Mathenjwa, 2020, p17 cited in Vimonsatit and Wong, 2012).

2.1.3. Benefits of supplier performance management

Help agencies receive quality goods and services based on the contract requirements and achieve value for money, reduce the possibility of poor supplier performance and make the supplier accountable for their performance on the contract, identify areas for the supplier to improve their performance, manage the risks associated with the contract and improve the Contract Manager's (and other agency staff) understanding of the risks

associated with the contract and their role in managing supplier performance (Government of Western Australia, Department of Finance, 2018).

According to RSA Constitution Sec 217, Good-quality service delivery will be increasingly possible, with significant improvements in the welfare of South Africa's citizens and especially the poor who rely heavily on government for support the economy will grow as economic infrastructure is expanded and efficiently maintained, goods, services and infrastructure will be bought at lower costs, innovation will result in different approaches to the commodities used in some sectors, E-learning in primary and secondary schools, for example, could be accelerated through the purchase and use of electronic equipment and for suppliers, the cost of doing business with the state should decrease substantially (SCM Report, 2015).

Section B

2.2. Conceptual Framework

Since the term supply chain management was introduced, there has been a great deal of confusion about what it actually involves. From a public supply chain management perspective, it involves supply chain performance management as an element that is used as a measurement and evaluation of the supply chain management. The study mainly focuses on supply chain performance management for a particular context of supplier performance management. It is widely acknowledged that there has been relatively little interest in developing measurement systems and metrics for evaluating supply chain performance (Shepherd and Günter, 2006).

In a typical supply chain, raw materials are procured and items are produced at one or more factories, shipped to warehouses for storage and then shipped to retailers or consumers and to reduce cost and improve service levels, effective supply chain strategies must take into account the interactions at the various levels in the supply chain and the supply chain consists of suppliers, factories, warehouses, distribution centres and retail outlets, as well as raw materials, work-in-process inventory and finished products that flow between the facilities (Kleverlaan, 2008).

In today's volatile market environment, companies are facing huge challenges to satisfy customer requirements. Moreover, competition has shifted from individual firms to the entire supply chain (SC). In this context, supply chain management (SCM) plays a vital role to keep the firm in the global market by organising the activities from supplier to the end customer effectively.

SCM is concerned with managing the business from the procurement of raw material to manufacturing to distribution, customer service and finally reprocessing and disposal of products. Every SC wants to improve their performance to reach the expectations of the customer. Hence, performance measures and metrics are needed to measure the effectiveness and efficiency of the SC (Reddy, Rao, and Krishnanand, 2019).

The supply chain performance as the element of supply chain management the study reviews the concept of supply chain management performance with the context of the supplier performance. In the era of globalisation requires companies to start revolutionising supply chain performance measurement systems for their businesses. Supply chain management is one of the important issues that are a concern for companies that want to continue to increase consumer satisfaction, increase payment utility and save expenses (Putri, Huda, and Sinulingga, 2019, p1).

Supply Chain Management is the strategic coordination of the traditional business functions and the tactics across these business functions within a particular company and across businesses within the supply chain, for the purposes of improving the long-term performance of the individual companies and the supply chain as a whole (Coppens, 2014 cited in Mentzer et al., 2001).

In the global context, the main focus of supply chain management processes synchronisation for customer satisfaction and all supply chains essentially compete for customers from the products or services offered. One of the keys to effective supply chain management in meeting the growing market is by making suppliers part of the company's strategy (Putri, et al. 2019, p2). Supply chain management is constantly changing corresponding to the change in competitiveness of companies.

Studies in literature to a larger extent focus on the relationship between SCM and SMEs' performance in different countries but have shown a lack of evidence regarding the explanation of effective implementation of SCM practices in SMEs in distinctive economies leading to improve operational efficiency to attain competitive advantage. Moreover, those studies lack in explaining the integration of technology and systems, leading to a reduction in competitiveness and focus on strategic SCM performance increasing competitive edge (Kot, Haque, and Baloch. 2020, p89-90 cited in Arend and Wisner, 2005).

Global perspective, Supply chain performance measurement is a measurement system that is able to evaluate supply chain performance holistically. In designing a performance measurement system based on the process, the critical step that must be done is to define the core processes in the supply chain, describe the core processes into smaller parts, and calculate the resources involved in each of these process elements (Putri, at el. 2019, p2).

Few authors have argued that SCM practices are not an appropriate fit for SMEs because these practices lead to inadequate and poor performance and a lower rate of return on investment (Arend and Wisner, 2005) and on the other hand, a number of studies confirmed that SCM activities and practices improve the SMEs' performance by enabling them to retain focus on activities bringing higher value and transparency in the development of strategies, which lead to enhance the competitiveness (Kot, at el . 2020, p90 cited in Thakkar et al., 2008, 2011; Tvaronaviciene, 2015; Olah et al., 2017).

In african context, Peng (2011: 35) states that SCM is concerned with the flow of products and information between supply chain members' organisations. Recent developments in technology enable the organisation to avail information easily in their premises. South African perspective, SCM is defined as the coordination of production, inventory, location and transportation among the participants in a supply chain to achieve the best mix of responsiveness and efficiency for the market being served (Hugo, 2006, p4).

African perspective, Supply chain performance is the tool that is monitoring processes, undertaking a retrospective analysis to determine whether the proper processes have been followed and whether the desired objectives were achieved (UNISA Study Guide PUB2610. 2012, p 25).

In the regional context, supply chain performance is the element of supply chain management in the public sector (UNISA Study Guide PUB2610. 2012, p 25). The study will mainly focus on supplier performance as part of supply chain performance to oversee and monitor the delivery process in the supply chain. Suppliers are partners in the supply chain that ensure good quality service delivery and significant improvement in the welfare of South African citizens is attained especially for the poor of the poorer that depend on government support (SCM Report. 2015).

2.3. **Conclusion**

The literature review consists of empirical review in section A and conceptual framework in section B. The study on empirical review mainly focuses on the research gap on supplier chain performance at the Department of Defence. Subsequently study reveals the Supply Performance Management Framework, Supplier performance, Managing and monitoring supplier's performance, Buyer-supplier relationship and supplier development as gaps at DOD and also the challenges that are facing supplier performance . Section B defines the concept, the nature and the importance of the supply chain management and performance from the global, continental, regional and south african context of the various authors perspectives for the relevant of the study.

CHAPTER 3

3. RESEARCH METHODOLOGY

3.1. Research paradigm

The study used interpretivist (qualitative) research philosophy when conducting the research. Because the research was conducted among people rather than objects such as medicine and computers. Interpretivism is a branch of epistemology which is focused on the assessment of the differences between humans as social actors. Qualitative research is associated with an interpretive philosophy (Denzin and Lincoln, 2018). It is interpretive because researchers need to make sense of the subjective and socially constructed meanings expressed about the phenomenon being studied (Saunders, Lewis, and Thornhill, 2019, p179).

The issue of difference is emphasised on the difference between conducting research among people rather than objects such as medicines and computers. In this philosophy, interpretation of social roles has been presented with respect to its own set of meaning (GuhaThakurta, 2015). This approach is based on the social life world and the difference between the earlier approach and interpretivism approach is that the natural scientists are intended for reliabilities of the data in order to infer 'laws' whereas the social science deals with the individual's actions. Interpretivists intend to grasp the subjective meaning of social action in order to conduct the research methodology (GuhaThakurta, 2015). For example, in the organisation, all the stakeholders' approach is different and they act according to their interpretation.

3.2. Research approach

Research approach is a plan and procedure that consists of the steps of broad assumptions to detailed methods of data collection, analysis and interpretation. It is

therefore, based on the nature of the research problem being addressed. Since the study is exploratory in nature, I will use the qualitative approach.

Inductive research is consistent with qualitative research, as it aims to gain an understanding of events that humans attach meaning to and a close understanding of the research context, as well as is more flexible in its structure to allow for emphasis on different aspects of the research in order to move away from generalisation, and allows the researcher to be immersed in the research process.

3.3. Research strategy

Grounded theory was used as a research strategy in business research and subsequently the theory was inductively derived from the data. Interviews were used as interpretivist (qualitative) research strategies. The purpose of this strategy is to identify the supply chain performance challenges faced by end-users of the DOD and provide possible solutions and outcomes. Interviewing data collection and analysis was held to increase insight and clarify the parameters of the emerging theory.

3.4. Research design

Exploratory research design (qualitative) was used to identify the supply chain performance challenges. Because this study wants to gain new insights with the perceptions of the Services and Division's end-users within the DOD on the supply chain performance challenges that they faced in regard to poor supplier performance and to find the proposed solutions thereof.

Exploratory studies are primarily concerned with finding out what is happening and discovering new insights about a phenomenon. The researcher conducts an in-depth search of the literature, interviews experts in the field, and/or conducts focus group discussions. Out of these diverse sources of information the researcher begins to piece together details about the real nature of the field of interest.

3.5. Target population and sampling

Target population was officials of Services and Divisions within the Department of Defence (DOD). Taking into consideration that the Services and Divisions consists of Formations and Units, therefore the primary data was collected from multiple diverse sources of information to avoid bias of one type of Service and Division. The total number of 15 officials of Services and Divisions were interviewed accordingly.

3.5.1. Non-probability sampling

Since the research is using qualitative research study therefore the study used the non-probability sampling. In the study the non-probability sampling included sampling techniques such as Purposive or Judgemental Sampling which is a sampling technique in which researchers rely on their own judgement when choosing members of the population to participate in their study.

Non - probability sampling, in contrast, is non-random, subjective and purposive in that the researcher may select the sample using criteria other than those associated with randomness of selection. In non-probability sampling, because of the greater scope allowed to researcher subjectivity in the constitution of the sample, there is greater opportunity for researcher bias to affect the sampling procedure and so to distort the findings of the study.

Non - probability sampling is often the chosen route when the researcher, for example, is undertaking an exploratory, qualitative study and does not have the objective of generalising the findings to the population from which the sample was selected. Cost and time variables may also influence the choice of non-probability sampling as probability sampling requires careful planning and comprehensive effort in defining the population and establishing the sampling frame. Sometimes it may be the only practical option as the total population may not be available or easy to identify.

3.5.2. Purposive or judgemental sampling

Judgement sampling is a form of purposive sampling. Purposive sampling, in turn, is a generic term that is used to describe any sample which is deliberately chosen by the researcher in accordance with predetermined non-probability criteria. For example, in a

study of computer hardware trends, the researcher may want to interview only those with fairly wide experience in the field. When used in the early stages of an exploratory or descriptive study, a judgement sample is an effective, time-efficient method.

3.5.3. **Sample size**

The study used a small sample size with 15 (fifteen officials) respondents. The purposive samples were used in the study.

3.6. **Data collection (Research instrument)**

The interviews were conducted using the email in case the participants cannot be reached for direct verbal written interview and it served as evidence of signed consent forms. The research questions were compiled in logical order in the interview schedule.

Semi-structured interviews were conducted in the study consisting of Section A which is demographic information and Section B is interview questions. Both primary and secondary data were used in the study. The secondary data was collected by way of a thorough literature review. The primary data was gathered through interviews.

3.7. **Reliability and validity or Trustworthiness**

3.7.1. **Credibility**

The multiple diverse sources of information provided by the participants in the study was true and low in reliability since phenomenology is a qualitative paradigm. A signed consent form was a source of credibility for study. Credibility can also be operationalized through the process of member checking to test the findings and interpretations with the participants.

3.7.2. **Transferability**

The study is exploratory in nature and the degree to which the results of the study can be generalised to another context or setting, when the concepts of the study are similar.

Induction emphasises less concern with the need to generalise. The researcher is responsible for providing thick descriptions, so that those who seek to transfer the findings to their own site can judge transferability.

Transparency is essential in qualitative research to ensure the trustworthiness and credibility of the findings. The researcher provided a clear and accurate representation of the research process, including data collection methods, analysis techniques, and interpretations. By providing a detailed account of the research journey, researchers enhance the transparency of their work and build trust with readers, peers, and participants.

3.7.3. Dependability

In the previous studies that are likely to be similar to this one, there is a close understanding of the research context. The data and results of the study through various challenges, like changes that occur through time. To ensure the research process is logical, traceable, and clearly documented.

3.7.4. Conformability

Confirmability refers to how consistent the results of the study are with those of other reliable authors. To identify if the results are in-line with those of the other studies. Confirmability is concerned with establishing that the researcher's interpretations and findings are clearly derived from the data, requiring the researcher to demonstrate how conclusions and interpretations have been reached.

3.8. Data analysis

The study used manual thematic analysis as data analysis technique. Manual thematic analyses was used to analyse the data. Thematic analysis is a method of analysing qualitative data. It is usually applied to a set of texts, such as interview transcripts. The researcher closely examines the data to identify common themes – topics, ideas and patterns of meaning that come up repeatedly. Through its theoretical

freedom, thematic analysis provides a highly flexible approach that can be modified for the needs of many studies, providing a rich and detailed, yet complex account of data (Braun and Clarke, 2006).

3.9. Ethical consideration

Conducting research can sometimes expose the researcher to some unforeseen ethical challenges (Liamputtong, 2008). Therefore, researchers are required to have a code of conduct and behaviour which will not expose the organisation or institution in which they collect information for (Bougie and Sekaran, 2016). This also includes the fair treatment of people in which the researcher uses to collect information during the data collection process, which can include vulnerable people in society (Liamputtong, 2008).

For this research, ethics have been thoroughly considered by ensuring that participants who have been selected for the interviews are informed in advance about the purpose of the study, including the assurance that confidential information will never be shared with the third party. Participants selected for this interview are also encouraged to consult with advisers to assist in deciding whether to get involved in this research.

To ensure that participants give informed consent, you may draft informed consent forms advising participants of the nature and the scope of the study. To ensure that no harm is caused to participants of the research project. To ensure that participants are not physically, psychologically or emotionally harmed during their participation in your study.

To ensure that the identity of all participants is protected. Protection of confidentiality may involve restricting access to raw data, storing all data securely, reporting findings in a manner that does not allow for ready identification of participants, and obtaining permission for subsequent use of data. To indicate how data will be stored and subsequently deleted. To ensure that you get written permission from the selected organisation/company/ institution.

CHAPTER 4

4. DATA PRESENTATION AND ANALYSIS

4.1 Introduction

The aim of this chapter is to present and discuss the research findings that emerged from the qualitative data collected through interviews with procurement officials across various services and divisions within the Department of Defence (DOD). A total of 15 officials participated in semi-structured interviews to provide insights into the supply chain performance challenges faced as a result of poor supplier performance. In this chapter, the researcher first presents a profile of the interview participants using pseudonyms to protect their identities. The chapter then presents and analyses the key themes that emerged from the qualitative data, structured under three main headings that correspond to the study's research objectives. Relevant verbatim extracts from the interviews are included to support the identified themes. The chapter concludes with a summary of the key findings.

4.2 Participants' Profile

Fifteen procurement officials from various services and divisions within the DOD participated in the interviews. To ensure confidentiality, the participants have been given the following pseudonyms:

Participants 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14 and 15.

The participants were asked about their years of experience, qualifications, job titles, and respective service/division. The profile of each participant is summarised in Table 1 below:

Table 4.1: Profile of Participants

Pseudonym	Years of Experience	Qualifications	Job Title	Service/Division
Participant 1	Over 20 years	Post-graduate	SO1 Orders/ Payments	Logistic Division
Participant 2	10-20 years	Degree	SO1 Rations	Army
Participant 3	10-20 years	Post-graduate	SO1 Commercial Vehicles and Transport Services	Logistic Division
Participant 4	10-20 years	Degree	2IC	Army
Participant 5	Over 20 years	Certificate	Acting SO1 Order & Contract Management	Airforce
Participant 6	10-20 years	Post-graduate	2IC	Logistic Division
Participant 7	0-5 years	Certificate	Procurement Official	Navy
Participant 8	10-20 years	Diploma	Procurement Officer	Army
Participant 9	Over 20 years	Degree	Procurement Officer	Airforce
Participant 10	10-20 years	Diploma	Acting Procurement Officer	Logistic Division
Participant 11	10-20 years	Certificate	Client Procurement Official	Logistic Division
Participant 12	Over 20 years	Post-graduate	Contract Management Officer	Army
Participant 13	Over 20 years	Certificates and Degree	Staff Officer Class 1 Contract Management	Airforce
Participant 14	0-5 years	Degree	Acting Procurement Officer	Logistic Division
Participant 15	Over 20 years	No post-matric	Electronic Procurement System Administrator	Logistic Division

The participants had a diverse range of experience levels, with some being newly appointed officials with less than 5 years of experience, while others were veterans with over 20 years in the DOD. The majority of individuals possessed advanced qualifications, including certificates and post-graduate degrees. There was a wide range of job titles and a variety of services/divisions represented. This profile suggests that the sample consisted of procurement officials who possessed sufficient experience and

expertise to offer valuable insights on the challenges related to supplier performance in the Department of Defence.

4.3 Themes

Analysis of the qualitative data revealed several common themes that aligned with the study's research objectives. The key themes that emerged are presented below under headings corresponding to each research objective. Verbatim quotes from participants are included to support the themes.

Table 4.2: Research Questions and Themes

RESEARCH QUESTIONS	CORRESPONDING THEMES
RESEARCH QUESTION 1: TO INVESTIGATE THE PUBLIC SUPPLY CHAIN PERFORMANCE CHALLENGES FACED BY SERVICES AND DIVISIONS WITHIN THE DOD.	Financial Constraints
	Lack of Capability and Expertise
	Poor Planning and Communication
RESEARCH QUESTION 2: TO INVESTIGATE THE SIGNIFICANT IMPACTS OF THESE CHALLENGES THAT ARE AFFECTING THE SERVICES AND DIVISIONS IN THE DOD.	Disruptions and Delays
	Wastage of Resources
	Negative Impact on Budgets and Spending
RESEARCH QUESTION 3: TO DETERMINE AND RECOMMEND THE SUGGESTED SOLUTIONS THAT CAN SOLVE THE CHALLENGES OF THE SERVICES AND DIVISION WITHIN THE DOD.	Supplier Development Programs
	Enhanced Monitoring and Control
	Supplier Restrictions and Penalties

The table presents the participant profile data, themes for each research objective, and verbatim quotes in a structured tabular format to supplement the qualitative findings discussion in Chapter 4.

4.3.1 Themes for Research Objective 1: Investigating Supplier Performance Challenges

Participants were asked to describe the key challenges resulting in poor supplier performance based on their experiences in the DOD. Their responses highlighted three major themes: financial constraints faced by suppliers, lack of supplier capability and expertise, and poor planning and communication.

4.3.1.1 Financial Constraints

A prominent challenge raised by several participants was the financial difficulties faced by many DOD suppliers, which hindered their ability to deliver goods and services as required. Participant 4 explained:

"Most suppliers have no capital to start and deliver the products, they rely upon other financial institutions that borrow money or lend money with high interest rates. This causes the delay and non delivery of the products."

Similarly, Participant 9 noted that *"Most of suppliers provided by the e-Procure system are small enterprises that do not have basis capital but rely on the financial institutions to borrow fund which may have a negative impact to the organisation when they cannot deliver as a results of lack of funds to stock up items or subcontracting."*

A prominent challenge raised by several participants was the financial difficulties faced by many DOD suppliers, which hindered their ability to deliver goods and services as required. Participant 4 explained that most suppliers lack the capital to start up and fulfil contracts, forcing them to rely on high-interest loans that lead to delayed or non-delivery. This finding aligns with Mathenjwa's (2020) observation that emerging sub-contractors often face cash flow constraints that undermine their performance capabilities. Financial limitations appear to be a major systemic barrier for suppliers in delivering effectively for the DOD. The data indicates that many DOD suppliers are small or emerging enterprises without sufficient access to capital. High-interest debt compounds their fiscal instability.

Suppliers seem caught in a precarious cycle – they lack the financial resources to stock inventory, fulfil orders, and sustain operations, but incurring unsustainably high-interest loans only worsens their financial position. This dire fiscal situation leads to contract delays and failures to deliver. The DOD ultimately bears the impact through disrupted budgets, delayed operations, and wasted resources. Tackling this challenge will require

addressing the root causes of suppliers' financial constraints. Participants' perspectives align with scholarly proposals for supply chain partners to share resources, capabilities and information to improve suppliers' stability and cash flow (Mathenjwa, 2020; Wisner, Tan & Leong, 2012).

4.3.1.2 Lack of Capability and Expertise

Another common theme was that many DOD suppliers lack the necessary capabilities and expertise to fulfil procurement contracts successfully. Participant 6 explained that key issues include "*Quality, delivery time frame, capacity and expertise, supplier selection, supplier evaluation, supplier relationship.*"

Similarly, Participant 13 noted that

"The main challenge in my opinion is the quality of many suppliers that are available on the Central Supplier Database (CSD) of National Treasury (NT). Any supplier may register but the system does not allow for verification of the capabilities of these suppliers."

Another common theme was that many DOD suppliers lack the necessary technical and managerial capabilities and expertise to fulfil procurement contracts successfully. Participant 6 highlighted issues with quality, timeliness, and relationships, while Participant 13 noted that the supplier registration system does not verify actual capabilities. This finding confirms Duffy and Fearn's (2018) emphasis on the need for suppliers to have adequate expertise to perform effectively in buyer-supplier relationships. The data indicates an expertise gap among DOD suppliers in areas like production, quality control, and relationship management. Comprehensive contracting requires nuanced capabilities, but current registration procedures seem to attract suppliers lacking requisite competencies. This results in underperformance. Building supplier expertise in a structured, collaborative manner appears necessary. As the literature advises, partners can share resources to strengthen suppliers' skills (Mathenjwa, 2020; Wisner et al., 2012).

4.3.1.3 Poor Planning and Communication

Finally, participants identified issues with planning and communication as factors contributing to supplier performance problems. As Participant 3 explained:

"Lack of clear communication between the DOD and suppliers can lead to misunderstandings, delays, and errors in the delivery of goods or services."

Participant 2 gave examples such as

"Clients expect one thing while their specification or ICNs says something else" and suppliers "Quoting on the specifications without understanding them."

Finally, participants identified issues with planning and communication as factors contributing to supplier performance problems, including unclear specifications, misunderstandings, and misaligned expectations between the DOD and suppliers. This aligns with Johnson and Flynn's (2015) assertion that close communication and coordination between buyers and suppliers is essential for optimal supplier performance.

The data indicates a lack of integration and transparency between the DOD and suppliers during planning and fulfilment processes. Suppliers seem inadequately informed to understand requirements or query unrealistic specifications. Meanwhile poor coordination leads to errors and unmet expectations. This suggests the need for more collaborative planning and open communication to enhance supplier engagement and minimise misunderstandings.

4.3.2 Themes for Research Objective 2: Impacts of Supplier Performance Challenges

Participants were asked to describe how the supplier performance challenges impact overall supply chain performance and service delivery in the DOD. Three key impacts emerged: disruptions and delays, wastage of resources, and negative effects on budgets and spending.

4.3.2.1 Disruptions and Delays

Several participants emphasised that late or non-delivery of required goods and services creates disruptions and delays that affect DOD operations. Participant 4 stated:

"It affects us, as end users. You find that we needed the products as soon as possible, but due to non delivery, we got stuck."

Participant 12 gave examples such as *"Delays and affect the spending."*

Several participants emphasised that late or non-delivery of required goods and services creates disruptions and delays that affect DOD operations. Participant 4 stated that the DOD relies on timely delivery to function optimally, but non-compliance causes significant disruptions. Participant 12 gave examples of spending delays. This finding confirms the literature which notes that unreliable supplier performance creates supply chain disruptions, hindering service delivery (SCM Report, 2015). The data indicates that suppliers' delivery failures have propagated through the DOD supply chain, undermining budgetary timelines and impeding units from executing their objectives. Participants seem acutely concerned with the operational impacts, suggesting current supplier performance levels are substantially disrupting the DOD's functioning. Delayed delivery of key equipment or supplies can directly hinder military readiness and mission success. Tackling the root causes of suppliers' delivery failures is crucial to minimise disruptions.

4.3.2.2 Wastage of Resources

Poor supplier performance was also perceived to lead to wastage of DOD resources. As Participant 9 stated: *"It has a bad impact because whatever the DOD has budgeted for cannot be spent accordingly."*

Participant 10 gave examples such as *"Funds not spent" and "A function may not be performed, goals not achieved at times."*

Poor supplier performance was also perceived to lead to wastage of DOD resources, including the misuse of budgets. As Participant 9 stated, goods cannot be purchased as planned when suppliers under-deliver, while Participant 10 gave examples such as unspent funds and unmet objectives. This aligns with Johnson and Flynn (2015)'s observation that poor performance results in wastage, as with contractors failing to complete projects. The data suggests that suppliers' delivery failures have tangibly reduced the DOD's return on expenditure by disrupting procurement processes. Resources allocated for particular purchases cannot be optimally utilised when suppliers

underperform, resulting in funds remaining unspent at financial year-ends. Operations are also hindered due to lacking requisite supplies, further reducing the DOD's value for money. Minimising this wastage requires addressing the root supplier performance issues.

4.3.2.3 Negative Impact on Budgets and Spending

Finally, participants highlighted the negative budgetary impacts of poor supplier performance. Participant 2 explained that it

"affects how the DOD spends its budget as orders are placed and cancelled",

while Participant 8 noted that

"This negatively impacts the DOD as the correct goods are not delivered at the right time and the right specification. This delays the procurement section and DOD supply chain processes when it comes to expenditure."

Participants highlighted the negative budgetary impacts of poor supplier performance within the DOD supply chain. Participant 2 explained that spending is disrupted when orders are placed then cancelled due to underperformance, while Participant 8 noted resulting delays in procurement processes. This confirms the proposal's suggestion that delivery failures and financial incapacity among suppliers undermine departmental budgets (Duffy & Fearn, 2018). The impacts seem extensive, indicated by comments about 'devastating' budgetary consequences. The data suggests that unreliable supplier performance has significantly reduced the DOD's ability to efficiently plan and execute expenditure. This mirrors broader public sector challenges (SCM Report, 2015).

4.3.3 Themes for Research Objective 3: Potential Solutions

When asked to suggest solutions to tackle supplier performance challenges, participants proposed three key strategies: implementing supplier development programs, enhancing monitoring and control measures, and introducing restrictions and penalties for underperforming suppliers.

4.3.3.1 Supplier Development Programs

Many participants felt that the DOD needed expanded training and support initiatives to improve supplier performance. As Participant 6 explained,

"The training provided with regard to supplier development is minimal and does not cater for current dynamics. The curriculum is minimal."

Participant 2 suggested ongoing initiatives such as

"Collaborating with suppliers to improve processes, quality and efficiency" and

"Continuous training and development of suppliers by having frequent Supplier's Day."

Several participants expressed the need for enhanced training and support programmes to enhance supplier performance in the DOD supply chain. Participant 6 highlighted the insufficiency of the current supplier development and emphasised the need for updates. On the other hand, Participant 2 proposed continuous collaboration and training as a solution to address performance issues. This is in line with Coppens' (2014) suggestion for purchasing organisations to enhance supplier capabilities through training, education, and direct involvement. Based on the data, it seems that participants have expressed concerns about the effectiveness of the DOD's supplier development efforts in tackling the current performance challenges. A comprehensive and personalised approach appears to be required.

Potential enhancements include expanding curriculum to cover modern practices, integrating suppliers into cross-functional DOD teams, and instituting ongoing mentoring relationships. Customised assistance based on suppliers' specific capability gaps could maximise development outcomes. Partnership principles of resource sharing, open communication and collaborative planning should underpin initiatives (Duffy & Fearn, 2018). A revitalised, holistic supplier development program could significantly strengthen DOD supply chain performance.

4.3.3.2 Enhanced Monitoring and Control

Participants also emphasised the need for improved monitoring mechanisms and controls over supplier performance. As Participant 6 stated:

"There are clearly no clear performance measures and monitoring policies within the DOD."

Specific suggestions included *"Be proactive in management of supplier performance"* (Participant 6), *"Execution and enforcement of existing policies and procedures"* (Participant 13), and implementing *"the right technology"* and *"defined monitoring policies"* (Participant 6).

Participants also emphasised the need for improved monitoring mechanisms and controls over supplier performance within the DOD supply chain. As Participant 6 stated, clear monitoring policies are lacking currently, while Participant 13 and Participant 15 suggested enforcing policies vigorously. This confirms the literature emphasising rigorous procurement planning and monitoring to manage supplier-related risks (The State of Queensland, 2018). The perceived lack of supplier monitoring suggests an urgent need for the DOD to design and implement robust tracking measures to identify underperformance early.

Potential solutions include supplier scorecards, automated performance data analytics, and corrective action protocols for non-compliance. Information-sharing systems could provide transparency (Johnson & Flynn, 2015). Supplier surveillance must be balanced with collaborative development though; an adversarial approach may be counterproductive. Still, enhancing objective performance oversight could enable pre-emptive interventions to improve supplier discipline and results.

4.3.3.3 Supplier Restrictions and Penalties

Finally, participants proposed introducing restrictions and penalties to curb ongoing performance issues. Participant 7 suggested that

"Suppliers who do not perform according to DOD requirements must be blacklisted."

Participant 13 and Participant 15 also emphasised the need to restrict non-compliant suppliers.

Participant 8 also noted the need to

"Ensure that all poor performance suppliers are removed from the database and stopped from doing business with the state."

Finally, several participants proposed introducing restrictions and penalties for underperforming DOD suppliers, including blacklisting and prohibiting ongoing

contracts. These suggestions align with established DOD and government policies for rectifying supplier non-compliance (Participant 13 & Participant 15, 2022). The data indicates substantial frustration with persistent supplier underperformance. Participants seem eager for tougher actions to penalise and curb serious non-compliance, signalling perceived limitations in the DOD's current oversight mechanisms. However, an excessively punitive approach risks being counterproductive; suppliers also require support to improve. Still, judicious sanctions could motivate behavioural change among persistently negligent suppliers.

A balanced approach entailing clear warnings, followed by tailored restrictions for unimproved underperformance may be optimal. Such restrictions could include temporary debarment and performance improvement programs as prerequisites to re-registration. However, collaboration remains key; the literature emphasises partnerships focused on strengthening suppliers' internal capabilities as the most effective foundation for compliance (Duffy & Fearne, 2018). Overall, prudent application of penalties alongside developmental initiatives is advised.

4.4 Chapter Summary

This chapter discussed the results of interviews conducted with 15 officials from the Department of Defence (DOD) regarding the issues faced in supply chain performance due to inadequate performance by suppliers. The qualitative data analysis identified three primary themes for each of the research objectives in the study. The results suggest that inadequate financial resources, insufficient supplier expertise, and challenges in planning and communication are major contributors to subpar supplier performance within the Department of Defence (DOD) supply chain. Consequently, this leads to interruptions, setbacks, inefficient use of resources, and adverse effects on financial plans and expenditures. In response to these difficulties, attendees suggested potential remedies such as implementing supplier development initiatives, strengthening performance monitoring measures, and implementing fines for suppliers that fail to meet expectations. The upcoming chapter will present conclusions and propose solutions to enhance supplier performance management in the Department of Defence (DOD).

CHAPTER 5

5. CONCLUSIONS AND RECOMMENDATIONS

5.1 Introduction

This chapter provides a concise summary of the study's findings and offers recommendations based on those findings. The chapter initially provides a concise overview of the primary discoveries that arose from the study of the qualitative data. Conclusions are subsequently examined in connection to the research objectives of the study. These observations lead to recommendations for addressing the supply chain performance difficulties that arise from inadequate supplier performance in the Department of Defence (DOD). The chapter also presents areas of potential investigation that should be explored in the future, followed by a general conclusion.

5.2 Summary of Findings

The study's results are succinctly outlined below according to the three research objectives:

5.2.1 The public supply chain performance challenges faced by Services and Divisions within the DOD.

The data analysis uncovered three primary themes concerning the difficulties encountered in supplier performance:

Financial Constraints: Numerous suppliers of the Department of Defence (DOD) encounter financial limits that impede their capacity to meet contractual obligations, sometimes resorting to high-interest loans and lacking the necessary capital to fill orders.

Inadequate Competence and Proficiency: Numerous providers seem to lack the administrative, technical, and relational aptitudes necessary to effectively fulfil DOD procurement prerequisites.

Inadequate planning and communication: Problems arose due to ambiguous specifications, misunderstandings between the Department of Defence (DOD) and suppliers, and divergent expectations throughout the planning and delivery process.

5.2.2 The significant impacts of these challenges that are affecting the Services and Divisions in the DOD.

Three significant effects became apparent:

Supply chain interruptions and delays were caused by suppliers' failure to deliver, which had a negative impact on the Department of Defense's operations and readiness.

Resource Misallocation: Underperformance was believed to lead to the inefficient use of resources, characterised by unutilized budgets, inadequate supplies, and unachieved objectives.

Adverse budget effects: The inconsistent performance of suppliers appears to hinder the effective planning and implementation of Department of Defence spending.

5.2.3 Suggested solutions that can solve the challenges of the Services and Divisions within the DOD

The participants put forward three solutions:

Supplier Development Programmes encompass a range of programmes aimed at enhancing supplier capabilities through expanded training, upskilling, mentorship, and direct involvement.

Improved Surveillance and Management: Reinforced supervisory procedures, including advanced data analysis, cooperative information technology systems, and protocols for taking corrective measures.

Imposing limitations and punishments on suppliers: Carefully implementing warnings, disqualification, and requirements for suppliers who fail to meet expectations.

5.3 Conclusions

The study's findings yield several conclusions that are relevant to the research aims.

5.3.1 Conclusions on public supply chain performance challenges

The Department of Defence (DOD) encounters significant systemic obstacles concerning the financial stability, knowledge, and integration of providers in procurement procedures. Suppliers often resort to high-risk loans due to financial limitations, and their performance skills are weakened by gaps in knowledge. Insufficient coordination and communication result in misalignments. It is essential to significantly improve the sustainability and capacities of suppliers.

5.3.2 Findings regarding the effects of supplier performance challenges

Unreliable supplier performance has wide-ranging effects on the DOD supply chain, significantly hindering operations, budgets, and service delivery. The repercussions underscore the imperative of proactively and comprehensively addressing performance difficulties, taking into account their far-reaching consequences. Enhancing the capabilities of suppliers necessitates collaboration across the whole supply chain.

5.3.3 Final remarks regarding possible solutions

A comprehensive approach is necessary, involving the provision of development assistance, the enhancement of oversight, and the careful enforcement of compliance. Utilising developmental strategies to enhance financial stability, knowledge, and collaborative efficacy holds great potential for generating systemic enhancements. While control and enforcement measures are still required, it is important to strike a balance by fostering collaborative relationships.

5.4 Recommendations

The study's conclusions suggest the following recommendations for improving supplier performance management in the Department of Defence (DOD):

5.4.1 Implement Ongoing Supplier Development Initiatives

The Department of Defence (DOD) should create and execute a comprehensive development programme that encompasses training, mentoring, information sharing, and active participation. This programme aims to enhance the financial management, technical, and managerial skills of suppliers. Development should be customised to address the individual deficiencies of each provider and adapt as their skills and abilities improve.

5.4.2 Encourage Cooperative Planning and Continuous Improvement

In order to enhance the design of requisitions, it is advisable for suppliers to engage in cross-functional teams during procurement planning. Continuous performance monitoring, transparent data interchange, and open communication channels will facilitate proactive settlement of issues.

5.4.3 Structure Contracts to Incentivize Reliable Performance.

Contracts should include phased payment schedules that are synchronised with delivery milestones in order to provide incentives for timely performance. To further optimise results, it is advisable to engage in forecasting, aligning orders with capabilities, and closely monitoring expenditure.

5.4.4 Establish procedures for dealing with instances of non-compliance

To address recurrent neglect while avoiding undue punitiveness, it is recommended to establish protocols that include explicit warnings, customised limits, and mandatory performance development programmes. Continuing to provide support for development remains crucial.

5.4.5 Cultivate a Collaborative Partnership Approach

Establishing relationships based on the principles of resource sharing, transparency, and collaborative problem solving will serve as the basis for enhancing financial planning, strengthening capacities, and establishing shared accountability for achieving desired outcomes.

5.5 Suggestions for Future Research

To enhance this preliminary research, future studies should conduct surveys to gather insights from suppliers regarding the performance obstacles in the Department of Defence supply chain. Conducting quantitative comparisons of supplier key performance measures before and after implementing recommendations would provide significant information. Further investigation is required to explore methods for fostering the growth of businesses and facilitating ethical financial access for developing suppliers.

5.6 Final Conclusion

To summarise, our study emphasised the notable systemic obstacles that contribute to the inconsistent performance of suppliers in the DOD supply chain. The effects encompass operational disruptions, inefficient use of resources, and budgetary inefficiencies. Cooperative and customised programmes to improve suppliers, along with fair performance evaluation and supportive alliances, offer potential for enhancing capabilities and supervision to achieve better outcomes. Attending the Department of Defense's responsibilities necessitates immediate focus on developing a capable and coordinated group of suppliers.

REFERENCES

Akamp, A. and Müller, M. (2023, March 30). Supplier management in developing countries Journal of Cleaner Production journal homepage: www.elsevier.com/locate/jclepro

Amindoust A, Ahmed S, and Saghafinia A. (2012). Supplier performance measurement of palm oil industries from a sustainable point of view in Malaysia, Bio Technology, Department of Engineering Design and Manufacture, Faculty of Engineering, University of Malaya, ISSN: 0974-7435, Vol 6 Issue 6.

Braun, V., & Clarke, V. (2006). Using thematic analysis in psychology. *Qualitative Research in Psychology*, 3, 77–101. doi:10.1191/1478088706qp063oa

Bougie, R., & Sekaran, U. (2019). *Research methods for business: A skill building approach*. John Wiley & Sons.

Chopra, S. and Meindl, P. (2016). *Supply Chain Management, Strategy, Planning and Operation*, Sixth Edition, Pearson Education Limited.

Coppens, R. (2014). *Advice on the improvement of supplier performance*, Msc Thesis Management studies, Vencomatic group.

Denzin, N. K., & Lincoln, Y. S. (Eds.). (2018). *The SAGE handbook of qualitative research*. Los Angeles: SAGE.

Doshi, J.A. (2019). The significance of supplier performance management in quality improvement – a case of construction equipment manufacturing, 4C Consulting Private Limited, 607, Abhishree Avenue, Nehrunagar, Ahmedabad – 380015, Gujarat, India, 88 Int. J. Quality and Innovation, Vol. 4, Nos.

Duffy, R. and Fearne, A. (2018). The Impact of supply chain partnerships on supplier performance: an empirical study of the UK fresh produce industry.

Imperial College, University of London. The International Journal of Logistics Management Vol.15, No.1, pp 57-71

Government of Western Australia, Department of Finance. (2018). Supplier Performance Management Framework, Government of Procurement.

GuhaThakurta, S. (2015). Understanding research philosophy.

<http://www.projectguru.in/publications/research-philosophy/>

HCM Works. (2020 October 22). Contingent Workforce: What is Supplier Performance Management (SPM)?

<https://www.hcmworks.com/blog/what-is-supplier-performance-management>

Hugo W.M.J. Badenhorst-Weiss J.A, van Biljon E.H.B. (2004). 'Supply chain Management: Logistics in perspective', 1st edition. Pretoria: Van Schaik

Johnson, P.F, and Flynn, A.E. (2015). Purchasing and Supply Management, Fifteenth Edition, McGraw-Hill International Edition, 2 Penn Plaza, New York, NY 10121.

Kleverlaan, M.P. (2008). Supply chain performance, Open Universiteit Nederland Faculty of Economics and Business Administration

Kot, S., Hague, A.U., and Baloch, A. (2020). Supply Chain Management in Smes: Global Perspective, Montenegrin Journal of Economics Vol. 16, No. 1 (2020), 87-104 .

Krishnadevarajan, P.K., Ravichandran, V., Balasubramanian, S., and Kannan, N. (2015). Supplier Management: A Framework for Selection, Evaluation and Performance, International Journal of Management, 6(9), 2015, pp. 16-28.

Liamputtong, P. (2008). Doing research in a cross-cultural context : methodological and ethical challenges. In P. Liamputtong (Ed.), Doing Cross-cultural Research: Ethical and Methodological Perspectives (pp. 3-20).

Linsley, R. (2019). A complete guide to managing the poor supplier performance. <https://www.gatekeeperhq.com/blog/managing-poor-supplier-performance>.

Mathenjwa, M. (2020). Challenges faced by main-contractors in working with inexperienced sub-contractors on construction projects in South Africa. Submitted in Partial Fulfilment of the Requirements of Masters in Construction Management Studies In Construction Studies, School of Engineering, University of KwaZulu-Natal , Howard College, South Africa.

Monczka, R.M., Handfield, R.B, Giunipero., L.R and Patterson, L.J. (2016). Purchasing and Supply Chain Management, Cengage Learning, 20 Channel Center Street , Boston, MA 02210, USA.

National Treasury Republic of South Africa (2004). Supply Chain Management , A Guide For Accounting Officers/ Authorities

Noshad, K. and Awasthi, A. (2015). Supplier quality development: A review of literature and industry practices, International Journal of Production Research, 466-487, DOI: 10.1080/00207543.2014.954679

Palvia, P.C., King, R.C, Xia, W. and Jain Palvia, S.C. (2010). Capability, Quality, and Performance of Offshore IS Vendors: A Theoretical Framework and Empirical Investigation. Decision Sciences Volume 41 Number 2

Pech M, and Vaněček D. (2020). Supplier Performance Management in Context of Size and Sector Characteristics of Enterprises. ISSN 1335-1745 (print) ISSN 1338-984X (online). DOI: 10.12776/QIP.V24I1.1407

Pedroso, C.B., Tate, W.L, da Silva, A.L, and Carpinetti, L.C.R .(2021). Supplier development adoption: A conceptual model for triple bottom line (TBL) outcomes. *Journal of Cleaner Production* 314 (2021) 127886.

Putri, Y.D., Huda, L.N., and Sinulingga, S. (2019). The concept of supply chain management performance measurement with the supply chain operation reference model (Journal review), Industrial Engineering Department, University of Sumatera Utara, Jalan Almamater USU Campus Medan 20155, Indonesia

Reddy, k., Rao, L., and Krishnanand, A. (2019). A review on supply chain performance measurement systems. 14th Global Congress on Manufacturing and Management 2351-9789 © 2019 The Authors. Published by Elsevier Ltd.

Saunders, M.N.K, Lewis, P. and Thornhill, A. (2019). *Research Methods for Business Students*. 8th Edition .England.

SCM Report (2015, March 01). Public Sector Supplier Chain, National Treasury, South Africa.

<https://www.gov.za/documents/2015-public-sector-supply-chain-management-review>

Shah, G.S., Pitroda, J.R. and Bhavsar, J.J. (2016). Assessment of parameters influencing the performance of construction in ahmedabad city of gujarat using RII method.

Shepherd, C., Günter, H. (2006), “Measuring supply chain performance: current research and future directions”, *International Journal of Productivity and Performance Management*, Vol. 55, No. 3-4, pp. 242-258

SONA (2020, February 13). State of Nation Address. South Africa.
<https://www.gov.za/state-nation-address> (link is external)

The State of Queensland, Department of Housing and Public Works. (2018). Managing and monitoring supplier performance. Office of the Chief Advisor - Procurement

UNISA Study Guide PUB2610 (2012). Public Procurement and Logistics Management II.

USA Department of Defence Report. (2022). State of Competition within the Defense Industrial Base, Office of the Under Secretary of Defense for Acquisition and Sustainment

Ustundag, A. and Urgan, M.C. (2020, April 01). Supplier flexibility and performance: an empirical research. School of Business, Sakarya University, Sakarya, Turkey
<https://www.researchgate.net/publication/340561162>

van Strien, J., Cees Johannes Gelderman, C.J. and Janjaap Semeijn, J. (2019). Performance-based contracting in military supply chains and the willingness to bear risks. Faculty of Management, Science and Technology, Open Universiteit, Heerlen, The Netherlands

Wisner, J.D., Tan, KC, and Leong, G.K. (2012). Supply Chain Management, A Balanced Approach, 3rd edition, International edition, South-Western, Cengage Learning.

