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Compliance with the supply chain management policy in the Ngaka Modiri Molema District



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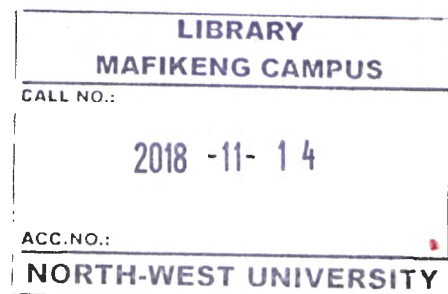
Dissertation submitted in partial fulfilment of the requirements for the degree *Master of Commerce in Business Management* at the North-West University

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Graduation May 2018

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DECLARATION

I declare that the work entitled – Compliance with the supply chain management policy in the Ngaka Modiri Molema District is my original work. I have not copied from any other students work or from any other sources except where due reference or acknowledgement is made explicitly in the text, nor has any part been written for me by another person.

Elsie Mbua Eposi

DEDICATION

To my parents the late Mr. Mbua Lingongo, Mrs. Enanga Mbua, my husband Doctor Andre and sister Nayongo Mbua. I thank you for all the financial, spiritual and emotional support throughout my studies.

ACKNOWLEDGEMENT

Special thanks to my supervisors, Prof M Potgieter and Mr F Pelser for their guidance and continued support throughout and their analytical but explicit meaningful comments and critique to the study.

I am deeply indebted to Doctor Andre Bechuke, my son Andin Romnie Bechuke and my daughter Elsiand Enanga Bechuke for their continuous support and encouragement throughout this study.

Special acknowledgement to all the authors and writers whose works provided a firm foundation for my ideas. My sincere thanks go to the faculty of Commerce and Administration North-West University (Mafikeng Campus) for their financial support. Special gratitude to all the participants in this study (Municipal staff).

I cannot forget the moral support of my family in Cameroon and others in South Africa; without them this work would never have been successful. A special gratitude to my friend Mrs. Lillian.

ABSTRACT

In South Africa, Supply Chain Management (SCM) is critical in the quest for service delivery excellence in the municipalities. The SCM drive in South African municipalities started in 2003 with reforms to introduce internationally accepted procurement best practices. The previous system failed the country due to deficiencies and malpractices resulting from the interpretation, implementation and governance of the preference procurement policy. Recently, SCM has become a talking point about which citizens are raising major concerns and it is perceived as being handled in a way that benefits only a few individuals. Laws and regulations governing municipal SCM are intentionally ignored by municipal officials resulting in corruption, or fruitless, wasteful and unauthorized expenditure. In an effort to address these challenges, the National Treasury continuously provides guidance in terms of policy revision, clarity in the provisions of the SCM policy, as well as training to SCM officials. Against this background, this study focuses on obtaining an understanding of the level of compliance with the SCM policy in the Ngaka Modiri Molema District Municipality of the North West. The substantive area of research was the five local municipalities.

The study used the mixed method research design with semi-structured face-to-face interviews to collect qualitative data and questionnaires for quantitative data. The instruments were administered over four weeks. The population of the study was the five local municipalities. Through purposeful sampling 30 participants were selected for interviews while another 400 were selected through the use of proportional stratified sampling fractioning for the quantitative data. Data collected were analysed through open-coding and Statistical Package for Social Sciences (SPSS) 24 accordingly and findings that emerged were presented according to themes and categories for the qualitative study supported by quantitative presentation of closed ended questions in tables and figures. The findings of the study revealed that, to a certain extent, the five local municipalities in the Ngaka Modiri Molema District of the North West, depicted the practice of some of the elements of SCM. SCM implementation policy is currently in its infancy and these municipalities do not fully comply with SCM policy. The municipalities are faced with problems of lack of knowledge, skills, lack of effective monitoring systems, communication flow, and lack of transparency, lack of proper infrastructure, lack of clarity, training and capacity. The study concludes with the development of propositions that need to be tested on SCM policy implementation and recommendations on how the five local municipalities can improve the SCM policy implementation process.

LIST OF ABBREVIATIONS AND ACRONYMS

AGSA	Auditor General South Africa
ALM	Asset Liability Management
AO	Accounting Officer
AT	Agency Theory
BBBEE	Broad Based Black Economic Empowerment
BEE	Black Economic Empowerment
CFO	Chief Financial Official
CIPD	Chartered Institute of Personnel and Development
COG TA	Co-operative Governance and Traditional Affairs
CPAR	Country Procurement Assessment Review
CPRA	Country Procurement Assessment
DHS	Department of Human Settlement
EC	Eastern Cape
FMS	Financial Management System
FS	Free State
HR	Human Resources
HRD	Human Resources Department
HRM	Human Resource Manages
IRS	Internal Revenue Service
KBV	Knowledge Based View
LGB	Local Government Bulletin
MKM	Marketing Managers
MM	Municipal Managers
MP	Mpumalanga
MSCMR	Municipal Supply Chain Management Regulations
NC	Northern Cape
NEV	Net Economic Value
NIM	Net Interest Margin
NMMDIDP	Ngaka Modiri Molema District Integrated Development Plan
NP	Network Perspective
NT	National Treasury
NW	North West
OAGSA	Office of the Auditor General South Africa
OM	Operational Managers
PFMA	Public Financial Management Act

POSDCORB	Planning, Organizing, Staffing, Directing, Coordinating, Reporting and Budgeting.
PPPFA	Preferential Procurement Policy Framework Act
RBV	Resource – Based View
RDP	Reconstruction and Development Programme
SA	South Africa
SALGA	South African Local Government Association
SAS	Statistical Analysis System
SCM	Supply Chain Management
SCMU	Supply Chain Management Unit
SEC	Securities and Exchange Commission
SMMEs	Small, Medium and Micro Enterprises
SPSS	Statistical Package for Social sciences
ST	Institutional Theory
UK	United Kingdom



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CHAPTER ONE

ORIENTATION AND PROBLEM STATEMENT

1.1 Background to the study

The global dialogue on good governance is underpinned by a call for government's vigilance in fighting the spread of corruption and fraud and in promoting integrity-driven administration. In this context, state institutions such as public services and municipalities are expected to serve as exemplars to promote and maintain a high standard of professional ethics; achieving this standard requires strong ethics and infrastructure supported by enabling policies (Duffield, 2014). Leading up to 1994, the South African government used a system of procurement which was not inclusive; it was based on discrimination by race and was mainly rule-driven, and the system focused only on uplifting the standard of living of a selected minority group. This tendering system and policies denied the mainly black community the opportunity to benefit and develop through government procurement policies, as explained by Solanke (2015).

After taking office in 1994, the newly-elected government initiated services of budgetary and financial reforms in its attempt to modernise the management of the public sector, to make it more user-friendly, and sensitive to meeting the needs of the communities it serves. To this end, government decided that the concept of Supply Chain Management (SCM) must be introduced within the public sector to address inefficiencies in procurement, contract management, inventory/asset control and obsolescence planning (Thomas, 2010).

During December 2003, the SCM System was introduced in national and provincial public entities by the government. The objective was to transform outdated procurement and provisioning practices into an integrated SCM function, to introduce a systematic approach for the appointment of consultants to create a common understanding and interpretation of the preferential procurement policy, and to promote the consistent application of best practices throughout government's supply chain. Although a number of reforms have been introduced within the procurement system in South Africa, the procurement system is still facing a number of serious challenges, such as fraud and corruption (Ambe, 2016a).

Against this backdrop, the key research objective of this study is to assess the effective compliance with SCM policies and its elements, namely: demand management; acquisition management; logistic management; disposal management; risk management and performance management, in the Ngaka Modiri Molema District. The SCM policies will be discussed in detail in Chapter 3 of this study.

The value of this research lies primarily in the fact that SCM has already been implemented by Government institutions including municipalities. This research is based on the implementation of the

existing SCM policy process in order to derive recommendations for improving SCM practices to be comparable to those of international best practices. This will ultimately not only benefit government but all communities served by government.

1.2 Motivation of the study

The Ngaka Modiri Molema District Municipality of the North West is head of the five local municipalities in the North West province. The head office of the district municipality is situated in Mahikeng. Mahikeng also houses the provincial government of the North West. Mojaki (2013) indicates that by 2013, Mahikeng was the seat of government for nearly 3.6 million people. According to Global Insight estimates, the population for the North West province is projected to increase to 3.8 million by 2017. Ngaka Modiri Molema District is made up of five local municipalities, namely:

- Ditsobotla Local Municipality (Lichtenburg)
- Mahikeng Local Municipality (Mahikeng)
- Ramotshere Moiloa Local Municipality (Zeerust)
- Ratlou Local Municipality (Setlagole)
- Tswaing Local Municipality (Delareyville)

Figure 1.1 reflects the different local municipalities with reference to the location of the different areas and their demographics.

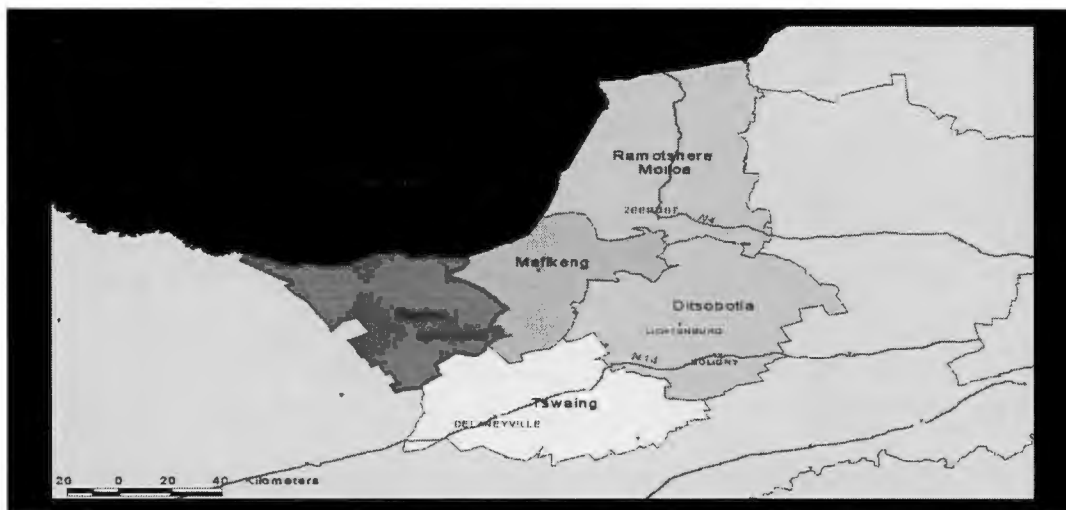


Figure 1:1 Ngaka Modiri Molema municipalities

Source: Ngaka Modiri Molema District Integrated Development Plan (NMMDIDP) (2013/14)

The overall government spending and service is equal to more than 20% of the gross domestic product in the country. Sporrang and Kadefors (2014) mention that government has a big influence on the

economy of this country and this is the reason why so much emphasis has been put on the municipalities' SCM. Furthermore, beyond any doubt, SCM plays a crucial role in both the private and public sector environments. Although the private sector's objective is to make a profit, the public sector's goal is to provide quality service to communities; the common denominating factor of SCM is sourcing quality services and goods at a cost effective price, which ultimately has a direct impact on an organisation's bottom line. SCM in the South African public sector is a fairly new concept, but internationally it has been a long-standing policy. SCM has played a crucial role in international governments' abilities to execute their respective service delivery projects (Ambe & Badenhorst-Weiss, 2011) and the same applies to South Africa.

Ambe and Badenhorst-Weiss (2011) have brought an exciting variation into the study of SCM by exploring supply chains in the public sector while making reference to the private sector as the point of departure. Ambe and Badenhorst-Weiss (2011) are of opinion that public sector SCM is of strategic importance in ensuring that improved efficiency and value for money are achieved when a particular public organisation seeks to perform procurement functions. The real added advantage of SCM is derived from the competitive process, which contributes to the lowering of costs for the organisation in delivering a service, leading to savings that can be diverted to other basic services. Integrating SCM in the public sector plays the critical role of optimal logistical support and improved management of secondary inventory with the ultimate goal of achieving efficient financial management (Essig & Dorobek cited by Ambe & Badenhorst-Weiss, 2011).

The audit report of the Auditor General of South Africa (AGSA) indicated that unauthorised expenditure, irregular expenditure and fruitless and wasteful expenditure is a result of bad SCM practice. Since 2015, two audit options are reported by the Auditor General, namely, an opinion on regularity and an opinion on performance. Performance Audit, as mentioned by McKinney (2015) refers to an examination of a program, function, operation or the management systems and procedures of a governmental or non-profit entity to assess whether the entity is achieving economy, efficiency and effectiveness in the employment of available resources. Regularity Audit in context entails expressing an opinion as to whether or not the financial statements are prepared, in all material respects, in accordance with an identified/applicable financial reporting framework and/or statutory requirements (Teka, 2015). Disclaimers of opinions have been reported by the AGSA on both regularity and performance since the 2009-10 financial year, as the auditees provided insufficient evidence in the form of documentation on which to base an audit opinion. The lack of sufficient evidence is not confined to specific amounts, or it represents a substantial portion of the information contained in the financial statements. Thus unauthorised expenditure, irregular expenditure and fruitless and wasteful expenditure was incurred. In most cases, such expenditure is incurred as a result of non-compliance with legislation (National Treasury, 2015).

According to National Treasury (2014b), unauthorised expenditure is defined as any expenditure incurred by a municipality otherwise than in accordance with the approved budget, and includes overspending of the total amount appropriated in the municipality's approved budget. Fruitless and wasteful expenditure is defined as expenditure that was made in vain and would have been avoided had reasonable care been exercised. Irregular expenditure is defined as expenditure incurred by a municipality in contravention of the SCM policy approved by council.

Table 1.1 reflects the five-year trend in unauthorised, irregular as well as fruitless and wasteful expenditure for local government South Africa.

Table 1.1 Unauthorised, irregular and fruitless and wasteful expenditure

Descriptions	Years	Amount
Unauthorised Expenditure	2010-11	R5,081 million
	2011-12	R10,241 million
	2012-13	R8,506 million
	2013-14	R11,765 million
	2014-15	R15,328 million
Irregular Expenditure	2010-11	R7,323 million
	2011-12	R8,882 million
	2012-13	R13,083 million
	2013-14	R11,761 million
	2014-15	R14,750 million
Fruitless and wasteful expenditure	2010-11	R284 million
	2011-12	R578 million
	2012-13	R851 million
	2013-14	R685 million
	2014-15	R1,343 million

Source: General Report on the audit outcomes of South Africa's local government for 2010-15

In 2010-11, the Office of the Auditor General South Africa reported that unauthorised expenditure in South Africa's local government amounted to R5.081 million; in the 2011-12 financial year it amounted to R10.241 million; in 2012-13 it amounted to R8.506 million; in 2013-14 it increased to R11.765 million in the financial year, and 2014-15 it amounted to R15.328 million. From the above statistics it can be seen that there is generally an increase in unauthorised expenditure every financial year. Unauthorised expenditure is that which was made in vain and which could have been avoided had reasonable care been taken by SCM practitioners (Auditor General South Africa, 2010-2015).

In 2010-11, R7.323 million of irregular expenditure was identified during the audit report while in 2011-12, R8.882 million was identified as irregular expenditure. In 2012-13 it increased to R13.083 million, in 2013-2014 it was R11.761 million, while in 2014-15 it amounted to R14.750 million, as shown by

the audit report. Municipalities in the North West (NW), Mpumalanga (MP), Eastern Cape (EC) and Limpopo (L) were the main contributors to the significant increase in irregular expenditure over the past five years (Auditor General South Africa, 2014-2015). Irregular SCM practices make SCM activities ineffective. Time and money are invested in the training and development of staff in order to ensure that they are able to execute their work according to expected standards, but they are still unable to meet the supply chain management policies (National Treasury, 2010-2015).

Fruitless and wasteful expenditure incurred during 2010-11 amounted to R284 million, in 2011- 2012 it amounted to R578 million and in the year 2012-2013 it increased to R851 million, and in 2013-2014 there was a slight decrease and amounted to R685 million. Finally in 2014-15, there was a substantial increase which amounted to R1.343 million. Almost all the fruitless and wasteful expenditure incurred (99%) was the result of non-adherence to SCM prescripts. In total, 71% of the expenditure was the result of acts of non-compliance in the year under review, while the rest was expenditure resulting from transgressions in previous years (National Treasury, 2010-2015).

In 2010-2015, AGSA reported that the following municipalities were the main contributors (32%) to unauthorised expenditure in 2010-15:

- Madibeng (NW): R1 258 million.
- Mangaung Metro (FS): R1 006 million.
- City of Johannesburg Metro (GP): R959 million.
- Maluti-A-Phofung (FS): R958 million.
- City of Tshwane Metro (GP): R786 million.

Furthermore, the following municipalities were the main contributors (43%) to irregular expenditure in 2010-15:

- Rustenburg (NW): R3 062 million.
- Nelson Mandela Bay Metro (EC): R1 348 million.
- City of Tshwane Metro (GP): R1 100 million.
- Buffalo City Metro (EC): R479 million.
- UThukela District (KZN): R324 million.

The AGSA report also confirmed that although some other municipalities contributed to fruitless and wasteful expenditure, municipalities in the provinces of Mpumalanga (MP), Eastern Cape (EC), North West (NW), Free State (FS) and Northern Cape (NC) were the main contributors to the significant increase in fruitless and wasteful expenditure over the five years. The following municipalities were the main contributors (59%) to fruitless and wasteful expenditure in 2010-15:

- Nelson Mandela Bay Metro (EC): R423 million.
- Matjhabeng (FS): R152 million.
- Emalahleni (MP): R95 million.
- Maluti-A-Phofung (FS): R78 million.
- Thaba Chweu (MP): R36 million.

These municipalities are among those that had incurred this expenditure for the past five years, except for Thaba Chweu, which incurred expenditure in the past four years, while Emalahleni did so over the past three years (Auditor General South Africa, 2015).

It is worrying that even despite the fact that supply chain managers and staff attend training and workshops to improve their skills in the areas of document management, irregular SCM practices are still evident and this makes supply chain management activities ineffective. Time and money are invested in the training and development of staff in order to ensure that they are able to execute their work according to expected standards, but non-compliance with SCM policies still has negative consequences, both financially and on performance. Despite this drive, irregular practices in the SCM arena are continuing (Seekoei, 2015).

The South African Press Association (2014) stressed the importance of realising that the problem of non-compliance with SCM policies is not only at local government level. It is also occurring in Provincial and National departments in the South African Government, since the Department of Public Works uncovered billions of Rands worth of wasteful expenditure, all within the Public Financial Management Act (PFMA) framework. The Auditor General of South Africa mentioned that this consequence is a result of a shortage of key, specialized and critical skills, such as using the preference points system, overlooking preferred suppliers without proper motivation, irregular extension of validity periods, insufficient motivation for deviations from SCM, and a lack of leadership in enforcing disciplinary action against officials involved with non-compliance in accordance with principles (National Treasury, 2015).

The Department of Human Settlement (DHS) had spent R2 billion over a period of three years to repair poorly built houses; the reason for the repairs being that contractors used inferior quality material (National Treasury, 2015). Also, the continuous service delivery protests by residents as experienced from time to time in municipalities signifies that there is a gap in the service delivery functions of the supply chain management department. This is also experienced by many municipalities throughout South Africa where government loses millions of Rends as a result of protests by angry residents (Sangonet, 2010).

According to the South African Minister of Co-operative Governance and Traditional Affairs (COGTA), out of 278 municipalities, only nine had a clean audit report, with three of these being in the Western Cape. The Minister also reported irregular expenditure to the value of billions of Rands and fruitless and wasteful expenditure reaching millions of Rands which is more than double that of the previous year. These audit outcomes are an indication that local government financial management is regressing and they paint a gloomy picture of possible achievement of the goals of the government's "Operation Clean Audit 2014" launched by the previous Minister in 2009. Operation Clean Audit 2014 primarily seeks to ensure that none of the municipalities of the Republic of South Africa has either a qualified or an adverse audit opinion. Ultimately, the operation seeks to ensure that all municipalities have clean audit reports by 2014, with the view that there will be no qualified audit reports received across the board (National Treasury, 2014).

According to the Office of the Auditor General South Africa, there are certain factors which play a critical role in non-compliance with the relevant legislation by municipalities: especially corruption and fraud within the supply chain management arena (Department of Cooperative Governance and Traditional Affairs, 2015). The factors identified are:

- Poor demand management planning.
- Officials involved in the implementation of the supply chain management policy are not adequately trained to perform their duties, such as noticing document management deviations.
- Internal audits do not evaluate SCM controls, processes and compliance annually.
- No consequence management.

The above-mentioned factors contribute towards the problems associated with the effective compliance with SCM policies within municipalities and thus result in unfavourable audit outcomes (Auditor General South Africa, 2014).

Concerns are related to the effectiveness of SCM policies and various related legislation developed for the entire government since 2000. The South African Broadcasting Corporation (2015), the National Treasury (2015) and the Auditor General South Africa (2014) all indicate that there is a gross continuation of SCM policy contraventions to date. Hence the government has set the objective of establishing a South African public sector SCM department to create uniform procurement practices that enhance economic transformation through the principles of fairness, ethics, transparency, cost-effectiveness and equity (Ambe, 2011). It had been noted through the examination of various publications that the public sector supply chain irregularities could be interpreted as confirmation of weaknesses in the current supply chain management framework.

Against this backdrop, this particular study is driven by the apparent ineffectiveness of most municipalities to manage the SCM policy and regulation. This has led to wastage of money and resources, which government cannot afford, given its very limited resources as measured against the substantial and growing demand for services (Isaacs, 2016). This study is undertaken to obtain an understanding of the effective compliance with SCM policy and its elements within the Ngaka Modiri Molema District of the North West.

1.3 Research problem

Auditor General South Africa (AGSA) (2012) reported that there are material misstatements in the financial statements submitted for auditing. It was indicated that there are unfair or uncompetitive procurement processes in some instances, and also that there are inadequate or no performance management systems. However, unauthorised, irregular, as well as fruitless and wasteful expenditure was not prevented and there was no evidence of any investigation in this regard. Competencies of financial officials, supply chain management officials, chief financial officers, and heads of the supply chain management units were not assessed and/or reports on compliance with prescribed competency levels were not submitted to treasuries. Irregular expenditure incurred during 2013-14 is extremely high and showed an increase from 2012-13 as indicated in Table 1.1. Almost all the irregular expenditure incurred (99%) was the result of non-adherence to SCM prescripts. Irregular supply chain management practices render supply chain management policy activities ineffective. Time and money are invested in the training and development of staff in order to ensure that they are able to execute their work according to expected standards, but they are still unsuccessful to meet the supply chain management policy. It is therefore deemed necessary to conduct a study to obtain an understanding of the situation of the level of compliance with the SCM policy in local government municipalities.

1.4 Aim of the study

The objectives of this study can be operationalised as follows:

1.4.1 Primary aim

The primary aim of this study is to obtain an understanding of the level of compliance with the SCM policy in the Ngaka Modiri Molema District Municipality of the North West Province.

1.4.2 Secondary aim

To achieve the primary aim of this study, the following secondary aims are to be realised:

- To establish to what extent SCM officials and senior managers of departments are familiar with the SCM policy.
- To investigate whether the SCM procedure/regulation and measurement is communicated effectively in all the functional areas of the municipality district.
- To determine what impact the policy has on the successful compliance with the SCM policy.
- To identify the challenges arising from the inadequate compliance with SCM policy and to make recommendations.

1.5 Research paradigm

A paradigm is a fundamental set of beliefs that guides actions to a study which could arise on the basis of current discipline or past research experience (Creswell, 2014). The paradigm selected for this study is the pragmatic paradigm. The pragmatic paradigm is problem centred and enables a researcher to use diverse approaches to find answers to the research questions, and this is explained in detail in Chapter Four.

1.6 Research methods

Punch and Oancea (2014) refer to methodology in research as a theory about method. It entails what lies behind the approaches and methods of inquiry that might be used in research. Methodology is a plan of action which informs and links the methods used to collect and analyse data to answer postulated research questions. For the purpose of this study, a case study will be used and the focus of the study will be on the Municipal managers, SCM managers, Chief financial managers, SCM officials, Financial officers, Human resource managers and officials, Marketing managers and officials, operational managers and officials, and the internal audit managers and officials within the five local municipalities of the Ngaka Modiri Molema District of the North West. A case study research tries to understand the uniqueness and idiosyncrasy of a particular case in all its complexity (September, 2010).

1.6.1 Research design

Research design is a systematic way of collecting data, processing data and analysing data in an empirical research (Bhattacharjee, 2012). The data collection technique in this research followed the mixed methods approach. This method enabled the collection of data through quantitative and qualitative methods to enhance clarity, development and initiation by comparing the qualitative and quantitative results. Qualitative data was collected first and this was followed by the quantitative component. In the mixed method approach, the researcher collects both qualitative and quantitative data, analyses and discusses them to find answers to the research questions (Creswell, 2014). This procedure ensured systematic presentation and triangulation by presenting the qualitative and quantitative results sequentially and discussing them subsequently.

1.7 Information needs

Data are regarded as facts and figures which are collected for statistical investigation and are found from and within a study's environment, and they can be characterized into verifiability, elusiveness and closeness to the phenomenon being studied (Burns & Bush, 2010). Feinberg, Kinnear and Taylor (2013) and Neelankavil (2015) explain that there are two types of information that provide research information to solve problems, namely primary information and secondary information.

1.7.1 Primary information

Primary information is gathered for the first time from information sources; this information has not undergone analysis before and is carried out to meet specific objectives (Eastman, Teicholz, & Sacks 2011). Primary information for the purpose of this study was collected directly from the research population through fieldwork and this was obtained quantitatively and qualitatively (Mertens, 2014).

1.7.2 Secondary information

Secondary information is information that has already been collected by other researchers and agencies and has already been processed, such as the information obtainable from government and non-governmental agencies (Goodwin, 2012). Secondary sources contain not only published reports but also unpublished reports. The sources of secondary data utilised for obtaining the information required for this study are:

- Government sources
- Census reports
- Media sources
- Commercial sources
- Electronic databases
- Books and journals

There are concerns with secondary data that need to be considered, such as the validity of the information. Often secondary information is aggregated into regional or even national level which makes it of little use for local comparisons. Sometimes, definitions of variables are ambiguous and there are often problems with cohesion over time in that the definition of a variable may have changed several times in the history of a variable (Burns & Bush, 2010). There is a paucity of secondary information relevant to the specific research question and objectives of this study, and primary information had to be obtained.

1.8 Population of the study

The population of a study consists of the entire group, persons or cases to which the researcher is interested in generalising the study result (Bhattacharjee, 2012). The population of this study was selected from the five local municipalities of the district consisting of Mafikeng, Ditsobotla, Ramotshere, Ratlou, and Tswaing. The total target population of this study consisted of:

- Present supply chain management officials in the five municipalities.
- Supply chain managers.
- Chief financial managers and officers.
- Operational managers and officials.
- Internal audit managers and officials.
- Municipal Managers.
- Human resource managers and officials.
- Marketing managers and officials.

1.8.1 Understanding the general population of the study

Mafikeng municipality has a total of 827 employees (www.mafikeng.gov.za), Ditsobotla municipality is second with a total of 646 employees (www.ditsobotla.co.za), and Ramotshere Moiloa municipality is the third largest with 379 employees (www.ramotshere.gov.za). This is followed by Tswaing municipality with 353 employees (www.tswaing.gov.za), and Ratlou municipality has only 176 employees (www.ratlou.gov.za). Statistics on the total population for each municipality for the year 2014/2015 are presented in Table 1.2. The size of a municipality is used as a directive for sampling purposes and the anticipated sample for this study is 430 sample members.

1.8.2 Sampling of municipality workers

The municipality workers of the five selected local municipalities were selected using a convenience sampling method. This enabled selecting respondents based on their availability and proximity, also their knowledge on SCM policy matters in the local municipalities. The sample size of the municipality workers was determined by using Research Advisor's (2006) sample size calculator by following 95% confidence interval and a 0.05 degree of accuracy/margin of error. According to the research advisor's guide, the sample size for the municipality workers is 430.

Moreover, a proportional stratified sampling method was used to determine the total number of samples that will be drawn from each municipality. Table 1.2 presents the sample size for the total population in the five local municipalities.

Table 1.2: Sample size for employees in the five local municipalities

Local Municipalities	Population size
Mahikeng	827
Ditsobotla	646
Ramotshere Moiloa	379
Tswaing	353
Ratlou	176
Total no. of employees	2381

Source: Ngaka Modiri Molema District Local Municipalities (NMMDLM) (2015/16).

Sampling fraction= $\frac{n}{N} = \frac{430}{2381} = 0.180596388$

Mahikeng = $0.180596388 * 827 = 149$

Ditsobotla = $0.180596388 * 646 = 117$

Ramotshere Moiloa = $0.180596388 * 379 = 68$

Tswaing = $0.180596388 * 353 = 64$

Ratlou = $0.180596388 * 176 = 32$

Table 1.3 presents the sample fraction of the municipality workers in the five local municipalities using proportional stratified sampling fractioning.

Table 1.3: Sample fraction of municipality workers in the five local municipalities

Local Municipalities	Population size	Sample fraction
Mahikeng	827	149
Ditsobotla	646	117
Ramotshere Moiloa	379	68
Tswaing	353	64
Ratlou	176	32
Total no of employees	2381	430

Note: the study sampled 430 members from five local municipalities; 30 members made up the qualitative sample, and 400 members formed the quantitative sample. The subsequent section describes sample selection.

1.9 Sample selection

Sampling is the process of selecting a subset out of a research population (Gray, 2014). Convenience sampling, purposive sampling and proportional stratified sampling were used to select participants for

this study. Convenience sampling involves the selection of respondents based on convenience and accessibility (Maree, 2010). This method of sampling enhances readiness or access to respondents which ensures that data can be collected in the quickest possible time. Convenience sampling selection furthermore saves time and reduces cost. The convenience sampling method entails the selection of respondents, based on their accessibility and availability. Purposive sampling method enables the selection of respondents in order to determine their vast experience and understanding of the SCM policy in the five local municipalities mentioned above. Furthermore, a proportional stratified sampling method was adopted to determine the total sample that will be drawn in each municipality. According to Williams (2015), proportional stratified sampling method ensures that the size of each stratum is proportionate to its size in the population. The senior managers and department officials in each municipality were uniformly selected through proportional stratified sampling method.

1.9.1 Sample selection of senior managers of the departments

The purposive sampling method was used for recruiting sample members for the qualitative component of this study and there are in total 30 senior managers of departments. This method of sample member selection encourages the selection of respondents to determine their vast experience and understanding of their level of compliance with the SCM policy within the five local municipalities.

1.9.2 Sample selection for municipality officials in the departmental

The convenience sampling method was used for the quantitative component of this study and 400 SCM officials and department officials were targeted as respondent based on their accessibility and availability, to determine their level of understanding of compliance with the SCM policy within the five local municipalities.

1.10 Research instrument

Any research instrument chosen must be valid and reliable and this depends on the appropriateness of the research instrument used. Both Saunders and Lewis (2012) and Denscombe (2014) mention that the survey collection method enables a highly flexible research and it is ideal for the collection of large amounts of appropriate data with a high response rate.

Two schools of thought exist for the capturing of research information, namely qualitative and quantitative approaches. The research instruments used to collect data for the qualitative component were document analysis and personal interviews with the aid of an interview guide. Thirty participants were targeted for the qualitative interviews. Interviews were conducted with senior managers of departments at the five local municipalities. These interviews were recorded and subsequently transcribed. The transcribed data was analysed using coding of key words and themes, as recommended

by Creswell (2012). Document analysis was used to collect various records in respect of the SCM policy within the five local municipalities. The research instrument used to collect the quantitative data needed was self-administered questionnaires with a range of questions, distributed to department officials. Questionnaires were distributed to the targeted research population according to the sample indicated in Table 1.2.

1.11 Data collection procedure

Following is an indication of the procedure followed for collecting the data needed for the purpose of this study.

1.11.1 Individual interviews

Semi-structured interviews were used to collect qualitative data from the Municipal managers and senior managers of departments. The personal interviews were semi-structured and aimed to obtain detailed facts from the municipal managers and the senior managers by having direct contact and in-depth conversations of high quality with them. Conversations with municipal managers and senior managers of departments ensured reliable data collection because of their vast understanding and experience in compliance with the SCM policy. The interview guide used contained open-ended questions and, where necessary, follow-up questions were used.

1.11.2 Document analysis

A document analysis for the purpose of this study was undertaken involving both primary and secondary sources of data (Maree, 2010). Document analysis was used to collect various records in respect of the SCM policy within the five local municipalities of the Ngaka Modiri Molema District of the North West.

1.11.3 Quantitative questionnaire

Questionnaires were distributed to SCM officials and departmental officials at the five municipalities. A self-administered questionnaire was used because it saves cost, is easy to administer, and easy to answer, code and to analyse. The questionnaire was divided into two sections; Section A addressed the biographical and demographical facts of respondents and Section B addressed the research questions of this study. A four (4) point Likert response scale format was used with formulated statements. Mixed continuous statements (strongly disagree, disagree, agree, strongly agree) were used to ensure that respondents read the statements and give their true opinion.

1.12 Data analysis and statistical analysis

As mentioned by Creswell (2011), after data has been collected then responses have to be analysed in relation to the objectives of a study. The Statistical Package for Social Sciences (SPSS) 24 was used to analyse the numerical data obtained from the questionnaires while descriptive analysis, correlation analysis, Chi-square test of independence and analysis of variance were used for analysing the data. Furthermore, data collected from the semi-structured interviews were measured by transcribing the interviews from audio tapes. They were further sorted and arranged while central ideas were identified, coded into themes and categories, and analysed with regards to the research questions.

1.13 Ethical considerations

Ethics, as mentioned by Cooper and Schindler (2011), are regarded as norms and standards of behaviours that guide moral choices about behaviours and relationships with others. Leedy and Ormrod (2010) comment that ethical issues in research fall into four categories namely:

- Protection from harm
- Informed consent
- Right of privacy
- Honesty with professional colleagues

Ethics in its basic meaning refers to rules of behaviour dictating what is acceptable within a profession. Ethics in conducting research, however, varies across different professional codes or disciplines and/or institutions but there are generally acceptable guidelines (O'Leary, 2010). An application for ethical clearance was submitted to the Ethics Committee of the Faculty of Economics and Management Sciences and ethical clearance was obtained to commence this study. Respondents and participants in this study were given the right to partake voluntarily in this research and to withdraw at any time. It was guaranteed that the participants at all levels were protected against harm whilst the confidentiality of the respondents and participants' responses was assured. Furthermore, the true findings of this study are presented in this report and no findings as obtained in the process of this research are purposefully concealed or misrepresented.

1.14 Trustworthiness, validity and reliability

Relmer and Ryzin (2011) posit the concepts of validity and reliability as originating from the quantitative method of research which have recently been adopted in qualitative research while Susanne (2012) affirms that methods used to establish trustworthiness in scientific research include internal validity, external validity, reliability and objectivity.

Validity refers to the degree of an instrument's ability to measure what it is supposed to measure (Maree, 2010, Kumar, 2011 and Yilmaz, 2013). Furthermore, the instrument that is meant for data collection is supposed to be of a good standard and dependable to be able to measure opinion competently. In this study, content validity was ensured by formulating a questionnaire and an interview guide from the literature review and expertise gathered from employees of the five local municipalities. The questionnaire was designed in English and questions were easy to understand, to code and to analyse. Validity was also maintained by ensuring that the questionnaires were distributed only to SCM officials and all departmental officials as per the sample and only the Municipal Managers and senior managers of departments were interviewed for clarity purposes.

Reliability refers to the degree of consistency of an instrument (Maree, 2010). Furthermore, reliability measures the dependability, stability, honesty and accuracy of a measuring instrument (Maree, 2010; Kumar, 2011; Gratton & Jones, 2011; Hansen & Machin, 2013). Reliability ensures that the processes of data collection are done in an accurate way and ensures that relevant data is duly attributed to the research questions. Reliability is important in quantitative studies because it is a basis for validity and clarity and measures whether or not a study obtains the same results each time (Susanne, 2012). Objectivity is achieved through the methodology of measurement, data collection, and data analysis through which reliability and validity are established (Susanne, 2012). Objectivity was attained in this study by creating an appropriate distance between the researcher and respondents in order to reduce bias, so that neither the respondents nor the study are influenced in any way whatsoever.

1.15 Exposition of the study

Determining the level of compliance with supply chain management policy is a vast topic and this study comprises six chapters. Each of the chapters will now be briefly described.

Chapter 1: Orientation and problem statement

This chapter provides a general overview of the study, including the introduction and rationale, the problem statement, aims and objectives of the study, an overview of research design and methodology followed.

Chapter 2: The domain of management

This chapter summarises the literature review conducted for the purpose of this study. Other scholars' opinions and other related topics were reviewed to ensure that the problem under study is extensively explored and answers to the research questions obtained.

Chapter 3: Supply chain management within a municipality

This chapter deals with literature relevant to supply chain management and the focus is on supply chain management within a municipal setting.

Chapter 4: Research design and methods

Research methodology and research design is dealt with in this chapter, as well as the research population of this study, the sampling method used and the data collection techniques, data analysis, and the ethical considerations applicable to this study.

Chapter 5: Research results

This chapter provides the research results obtained after the data were analysed and the presentation of the findings is in the form of discussions, figures and also tables.

Chapter 6: Conclusions and recommendations

Finally, Chapter 6 deals with conclusions and recommendations of this research study. Also presented are possible future research directions and the limitations of this study. The study then terminates with a final conclusion.

CHAPTER TWO

AN OVERVIEW OF MANAGEMENT

2.1 Introduction

Chapter one of this study provided a general overview of the study, including the introduction, rationale, the problem statement, aims and objectives of the study, an overview of the research design and methodology followed. The purpose of this chapter is to give a basic understanding of management. It is a compilation of resources that explain what management is, understanding the concept of management, defining management, and the role of management in society, essential managerial tasks, and the functional areas of management. It also includes financial management, understanding financial management, financial management as a process, and the scope of financial management, objectives of financial management, and elements of financial management, and finally looks at areas of financial management practices.

This chapter also gives a basic understanding of management and how management is interrelated to financial management. Management is a vital aspect of the economic life in any society, which is an organised group activity. It is considered as an indispensable institution in the modern social organisation marked by scientific thought and technological innovation. Management is essential wherever human effort is to be undertaken collectively to satisfy wants through some productive activity, occupation or profession. It is management that regulates productive activities through the coordinated use of material resources. Without the leadership provided by management, the resources of production remain resources and never become production (Armstrong & Taylor, 2014).

2.2 Understanding the concept of management

Management as a discipline is more than 80 years old and there is no common agreement among experts and practitioners about its precise definition. In fact, this is so in most social sciences such as psychology, sociology, anthropology, economics, and political science. As a result of unprecedented technological developments, business organisations have grown in size and complexity, causing consequential changes in the practice of management (Bernard & Bernard, 2012). Changes in management styles and practices have led to changes in management thought. Moreover, management, being interdisciplinary in nature, has undergone changes because of developments, for example in behavioural sciences, quantitative techniques, engineering and technology. This can involve dealing with the production and distribution of goods and services, the dynamism of environments such as social, cultural and religious values, consumers' tastes and preferences, education and information explosion and the democratisation of governments (Anderson, 2016). All have led to changes in the theory and practice of management. Yet a definition of management is necessary for its teaching and

research, and also for improvement in its practice (Myers, 2013). The word 'management' is used sometimes interchangeably with 'leadership,' as suggested by Gold, Thorpe, and Mumford, (2010), who argue that it is very difficult to be precise about the use of the term 'leader' or 'manager' as they are being used interchangeably by organisations and/or departments. The authors conclude that all professionals who are covering the activities of planning, organising and decision-making could be considered as managers and leaders at the same time.

On the other hand, the Chartered Institute of Personnel and Development (CIPD) (2012) suggested that management and leadership are different, as management aims at planning and executing to achieve work outcomes, while leadership tends toward emotional aspects, and claimed that leadership is important to management. Sadler-Smith (2011) also distinguishes between leadership and management but claims that the role of the manager and leader overlap to an extent. Thus, leadership and management may share some features and intersect at many points; therefore, the development process of each might be different. Consequently, the subsequent discussion deals with the management development process and elaborates on some aspects of leadership development as required.

Management, according to Armstrong (2011), is an organisational process consisting of strategic planning, setting objectives, managing resources, deploying human and financial assets needed to achieve objectives, and measuring results. Management also includes recording and storing facts and information for later use or for others within an organisation. However, management functions are not limited to managers and supervisors; every member of an organisation has some "management and reporting function as part of their job" (Smit, Cronje, Brevis & Vrba, 2011).

Agarwal, Green, Brown, Tan, and Randhawa (2013) also refer to management as being an integrating force in all organised activity. Whenever two or more people work together to attain a common objective, they need to coordinate their activities. Business organisations also have to organise and utilise their resources in such a way as to optimise results. It does not apply only to business enterprises where costs and revenues can be ascertained accurately and objectively but also in service organisations such as government, hospitals, schools and clubs. Scarce resources including people, machines, materials and money have to be integrated into a productive relationship, and utilised efficiently towards the achievement of goals. Thus, management is not unique to business organisations but common to all kinds of social organisations (Ihuah, 2014). Experts in the field of administration consider management as a system of authority. According to Koppell (2014), "management is a rule-making and rule-enforcing body, and within itself it is bound together by a web of relationships between superiors and subordinates". Teece (2016) mentions that there is a hierarchy of authority among people operating in an organisation. Managers at different levels possess varying degrees of authority. In general, the higher-level managers have the authority to lay down the goals and policies of the enterprise while those

at the lower level are authorised to execute the plans and policies to achieve the desired goals, as explained by Brigham (2014). Thus management is the most vital force in the successful performance of all kinds of organised social activities (Agarwal *et al.* 2013).

Many management experts have attempted to define management, but no definition of management has yet been universally accepted. Some of the leading definitions of management are presented below in Table 2.1.

Table 2.1: Definitions of management

Year	Authors	Description
2010	Naeemullah <i>et al</i>	Management is a distinct process consisting of planning, organising, actuating and controlling; utilising in each both science and art, and followed in order to accomplish pre-determined objectives.
2011	Wrener & DeSimone	Management is an art of knowing what you want to do and then seeing that it is done in the best and the cheapest way.
2013	Hatch & Cunliffe	Management is the process of reaching organisational goals by working with and through people and other organisational resources.
2016	Mehta & Tailor	Management is the art of getting things done through people, getting things done with formally organised groups. And also seeing that the job gets done. Its tasks all center on planning and guiding the operations from an enterprise.

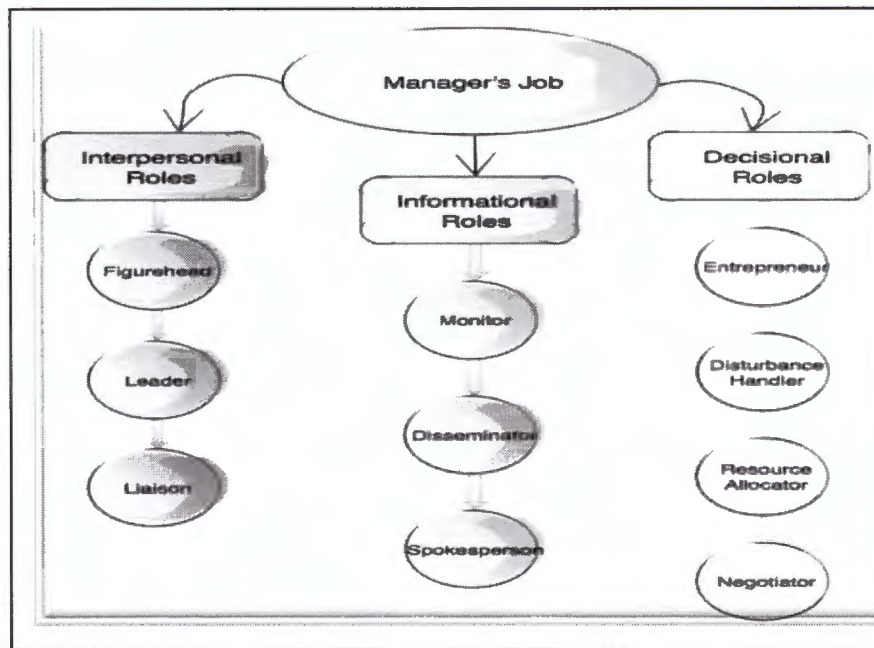


Management for the purpose of this study is regarded as: the management issues that are fundamental to any organisation. This is mostly focused on how the organisation gets things done, how it is organised to be efficient and effective, leads and motivates employees, and puts in place controls to make sure the organisational plans are followed and goals are met (Kerzner, 2013). A good management is basic to starting a business, growing a business, and maintaining a business once it has achieved some measure of success. After having a clear understanding of the term management, the subsequent section of discussion is on the roles of management in society.

2.3 Roles of management in society

Ten separate roles in managerial work have been identified by Aithal (2016) and each role is defined as an organised collection of behaviours belonging to an identifiable function or position. These roles are divided into three subcategories: interpersonal contact roles (role 1, 2, and 3), information processing roles (role 4, 5, and 6) and decision making roles (role 7-10). These ten roles are as illustrated in Figure 2.1.

Figure 2.1: Ten roles of management



Source: Compiled from Skarlicki & Rupp (2010)

There three subcategories of managerial roles will now be discussed in more detail.

- **Interpersonal roles**

As part of their interpersonal roles, managers serve as **Figureheads**. In this role, every manager has to perform some duties of a ceremonial nature, such as greeting dignitaries, attending the wedding of an employee, taking an important customer to lunch and so on (Mitchell, 2015). Furthermore, managers also serve as **Leaders**, as mentioned by Rahim (2010), as part of their management position. Every manager must motivate and encourage employees, and try to reconcile their individual needs with the goals of the organisation. Finally, as part of their interpersonal roles managers also need to serve as a **Liaison**. Every manager must cultivate contacts outside of the vertical chain of command to collect information useful for the organisation (Golden & Taneja 2010).

- **Informational roles**

As part of the informational roles, managers serve as **Monitors**. McCarthy and Baron (2010) affirm that a manager has to perpetually scan the environment for information, interrogate liaison contacts and subordinates, and receive unsolicited information, much of it as a result of the network of personal contacts developed. Managers also serve as **Disseminators**. In the role of a disseminator, the manager passes some privileged information directly to subordinates who would otherwise have no access to

such information (Singh, 2010). And lastly, a manager serves as a **Spokesperson**. In this role, the manager informs and satisfies various groups and people who influence the organisation. Thus, the manager advises shareholders about financial performance, assures consumer groups that the organisation is fulfilling its social responsibilities, and satisfies government that the organisation is abiding by the law (Citroen, 2011).

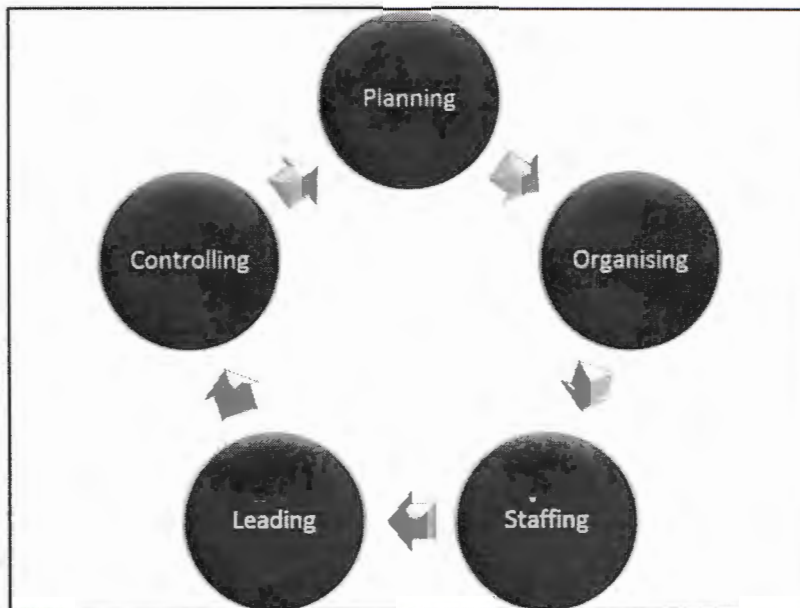
- **Decisional roles**

The final subcategory of managerial roles, which is decisional, as per Figure 2.1, is where managers finally serve as **Entrepreneurs**. In this role, the manager constantly looks out for new ideas and seeks to improve the business unit by adapting it to changing conditions in the environment according to Simons (2013). Managers are also seen as **Disturbance Handlers**. In this role, the manager has to work like a fire-fighter, seeking solutions to various unanticipated problems – a strike may loom, a major customer may go bankrupt, a supplier may renege on a contract, and so on (Desmond, 2012). Managers also serve as **Resource Allocators**. In this role, the manager divides work and delegates authority among subordinates and the manager must decide who will get what (Simons, 2012). Finally, managers also serve as **Negotiators**. The manager has to spend considerable time in negotiations. Thus, the chairman of a company may negotiate with union leaders; the foreman may negotiate with the workers about a grievance problem, and so on. In addition, managers in any organisation work with each other to establish the organisation's long-range goals and to plan how to achieve them. Added to this, managers also have to work together to provide one another with the accurate information needed to perform tasks. Thus, managers act as the channels of communication of an organisation (Citroen, 2011).

2.4 Essential managerial tasks

A manager's job uniquely describes the functions of management, which are most commonly cited as planning, organizing, leading, controlling and commanding, although some manager's jobs might include additional functions as mentioned by Van Vliet (2011), who defined the process of management by the functions of management. These functions are distinct from accounting, finance, marketing, and other business functions. These functions provide a useful way of classifying information about management, and most basic management texts since the 1950s have been organised around a functional framework (Chandra, 2011). The five functions of management proposed by Van Vliet (2011) are illustrated in Figure 2.2.

Figure 2.2: Five functions of management



Source: Compiled from Van Vliet (2011)

Van Vliet (2011) describes the five functions of management as: planning, organising, commanding, coordinating and controlling. Anderson (2016) states seven such functions under the slogan POSDCORB, which stands for: Planning, Organizing, Staffing, Directing, Coordinating, Reporting and Budgeting. Kerzner (2013) classifies management functions into decision-making, organising, staffing, planning, controlling, communicating and directing. Bose (2012) categorises management functions into planning, organising, staffing, directing and controlling. Bateman and Snell (2013) include planning, organising and controlling. Benjamin, Sharma, Tawiah, Chandok and John (2014) include planning, organising, motivating, coordinating and controlling. The management functions selected for the purpose of this study are: planning, organising, commanding, coordinating and controlling, and these will now be further discussed.

(1) Planning

Planning, according to Koontz (2010), is deciding in advance what to do, when to do it and how to do it. Planning bridges the gap from where we are to where we want to be. Thus a plan is a future course of action. It is an exercise in problem-solving and decision-making. Planning is the determination of courses of action to achieve desired goals. Thus, planning is the systematic thinking about ways and means for the accomplishment of pre-determined goals. Planning is necessary to ensure the proper utilisation of human and non-human resources. It is all-pervasive, it is an intellectual activity and it also helps in avoiding confusion, uncertainties, risks and wastages. Attah (2016) refers to planning as the

activity dealing with chalking out a future course of action and deciding in advance the most appropriate course of action for achieving a set of determined goals.

(2) Organising

To organise a business is to make available everything useful to its functioning according to Cummings and Worley (2014) with regard to personnel, raw materials, tools and capital. All this can be grouped into two segments, the human organisation and the material organisation. Once managers have established objectives and developed plans to accomplish them, they then must design and develop a human organisation that will be capable of performing those plans effectively. According to Allen *et al.* (2014), this human organisation refers to "the structure which results from identifying and grouping work, defining and delegating responsibility and authority, and establishing relationships". Scott and Davis (2015) refer to organisation as the process of identifying and grouping work to be performed, defining and delegating responsibility and authority, and establishing relationships for the purpose of encouraging people to work efficiently. Attah (2016) also substantiates that an organisation can only function well if it is well-organised. This means that there must be sufficient capital, staff and raw materials so that the organisation can run smoothly and build a good working structure. Thus, the organisational structure with a good division of functions and tasks is of crucial importance. When the number of functions increases, the organisation will need to expand both horizontally and vertically and this requires a different type of leadership. Organising is an important function of the five functions of management.

(3) Staffing

Every enterprise is very much concerned with the quality of its people, especially its managers. The staffing function is concerned with this aspect of management. According to Steiner (2010), "the managerial function of staffing involves manning the organisational structure through proper and effective selection, appraisal and development of personnel to fill the roles designed into the structure." Thus, the staffing functions involve:

- (a) Proper selection of candidates for positions;
- (b) Proper remuneration;
- (c) Proper training and development so as to enable them to discharge their organisational functions effectively and proper evaluation of personnel.

Staffing function is performed by every manager of the enterprise as managers are actively associated with the recruitment, selection, training and appraisal of subordinates. Kumar (2010), for example,

states the Board of Directors of the enterprise undertakes the staffing function by selecting and appraising the Chief Executive who, in turn, performs these functions in relation to subordinates like divisional heads or departmental heads of the enterprise. Similarly, departmental heads or their subordinates also perform the staffing function. Naude (2015) confirms that staffing function is a difficult managerial function because it is concerned with the selection of persons who are properly qualified and mentally well-adjusted to the situations.

(4) Directing/Leading

The fourth function is known as directing, sometimes also referred to as the influencing or the leading function of management. Directing is about the actuation of the methods to work efficiently to achieve the set organisational objectives (Bose, 2012). The function goes beyond organising the employees to their specific roles and involves ensuring they are able to perform the tasks through a variety of means. Directing, in essence, is looking after productivity and ensuring that productivity is going up instead of decreasing (Murugesan, 2014).

The function delves deeper inside human interaction, making the managers motivate, communicate and inspire their personnel (Buxton, 2010). At this stage, managers are meeting and connecting with their employees to find out how the tasks are going (Kotler and Armstrong, 2010). As managers, they talk to employees about new marketing programmes, get their feedback on the projects and spend time inspiring them with new ideas. The directing function is all about the day-to-day interaction between the management and the staff (Garrett, 2010).

The function directing, according to Louis, Leithwood, Wahlstrom, Anderson, Michlin and Mascall, (2010), has strong links to things such as leadership. A good manager will be able to inspire the workforce to work towards the goals not because they have to do it, but because they are driven to achieve these objectives (Kerzner, 2013). The manager's role is not just about ensuring the workplace has the right resources and employees know what they are doing; it is also important to create an environment of friendship. The manager wants to be someone who can encourage and motivate the personnel and not frighten them into submission. With proper directing, the manager is able to set in motion the processes already prepared with the above three functions (Boxall & Purcell, 2011).

(5) Controlling

The controlling function of management often leads to the identification of situations and problems that need to be addressed by creating new performance standards. The level of performance affects the success of all aspects of an organisation. According to Koontz and Weihrish (2010), "Controlling is the measurement and correction of performance activities of subordinates in order to make sure that the

enterprise objectives and plans desired to obtain them is being accomplished”. Controlling can be regarded as a stepwise process and the steps are:

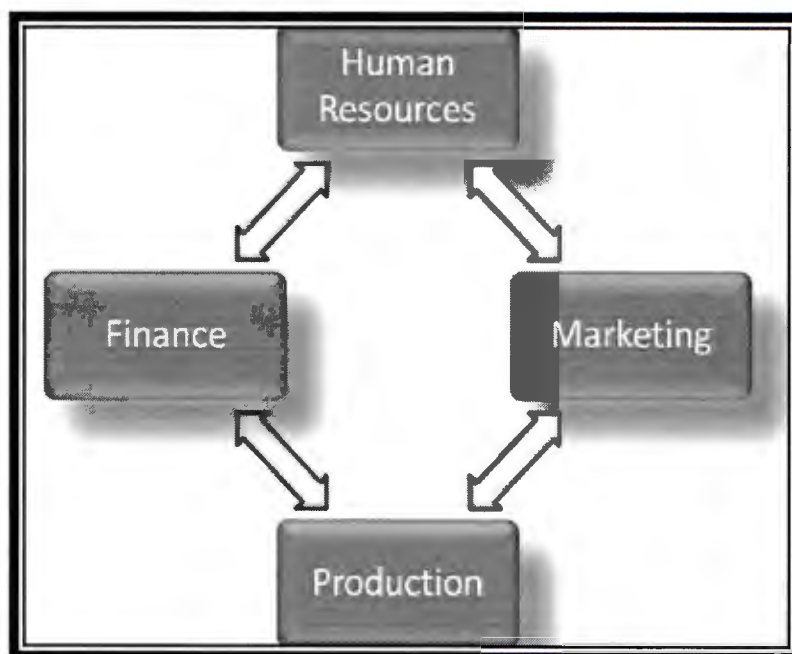
- Establishment of performance standards.
- Measurement of actual performance.
- Comparison of actual performance with the standards and identifying deviations if any and deciding on corrective action.

Scott and Davis (2015) are also of the view that the controlling function of management is useful for ensuring all other functions of the organisation are in place and are operating successfully. Controlling involves establishing performance standards and monitoring output to ensure each employee’s performance meets predetermined and agreed-upon standards.

2.5 The functional areas of management

Beside the roles of management as discussed above, management is also regarded as consisting of functional areas. These areas, according to Golden and Taneja (2010), are presented in Figure 2.3.

Figure 2.3: Functional areas of management



Source: Adapted from Robbins and Coulter (2012)

The above figure illustrates the various functional areas of an organisation in which business takes place. Organisations typically begin their yearly plan with the marketing function by estimating the expected year's sales. This input forms the basis for production planning in the operational areas of business. Depending on the production plans, procurement planning is done and this leads to a certain estimate of fund requirement. This forms an important input for the finance function. At the time this plan is executed the interactions between functions are even greater. The human resource function influences the productivity capacity of labour available in real time. Following is an operation of the different management functional areas.

2.5.1 Human resources department

Human resources, as Huczynski and Buchanan (2010) explain, is a strategic approach to managing employment relations which emphasises that leveraging people's capabilities is critical to achieving sustainable competitive advantage. Here the concern is for integration and the behaviour of people in the workplace based on ability, motivation, role perception and situational contingencies. Thompson (2014) uses a different angle, claiming that human resources means adopting a longer-term perspective to the management of people in order to obtain added value from them and thus achieve competitive advantage.

After analysing the different meanings of HR, one of the best and most comprehensive definitions is: "Human resource management relates to the total set of knowledge, skills and attitudes that firms need to compete. It involves concern for and action in the management of people, including: selection, training and development, employee relations and compensation. Such actions may be bound together by the action of an HRD philosophy" (Armstrong & Taylor, 2014). Ceptureanu (2015) also mentions the importance of the people at work and their contribution to an organisation's overall performance. The human resource department is an important part of the organisation which performs the following functions as mentioned by Werner and DeSimone (2011): (1) recruitment, (2) employee relations, (3) safety, (4) training and development, (5) compensation and benefits. These functions will now be explained.

(1) Recruitment

The success of recruiters and employment specialists generally is measured by the number of positions they fill and the time it takes to fill those positions, as mentioned by Holtbrügge, Friedmann and Puck (2010). Recruiters who work in-house (as opposed to companies that provide recruiting and staffing services) play a key role in developing the employer's workforce. The HRD advertises job postings, sources candidates, screens applicants, conducts preliminary interviews and coordinates hiring efforts with managers responsible for making the final selection of candidates. Van Hoyer (2013) mentions that

recruitment should be one of the largest items in the whole budget, especially if inexpensive resources, such as employee referrals, are not sufficient. Organisations incur considerable costs in recruiting and training new employees. Thus, an organisation must bear the following in mind; because of the cost of recruiting and training workers, employers must decide on an overall hiring strategy (Shamnot, 2014).

(2) Employee relations

In a unionised work environment, the employee and labour relations functions of the HRD may be combined and handled by one specialist or may be entirely separate functions managed by HR specialists with specific expertise in each area (Sawchuk, 2011). Employee relations is the HR discipline concerned with strengthening the employer-employee relationship through measuring job satisfaction, employee engagement and resolving workplace conflict. Bach and Kessler (2011) indicate that the scope of employee relations covers institutional relations, employee safety, health, employment security, working conditions and assistance with non-work problems. Government laws are responsible for regulating employee safety. Apart from fulfilling the obligations spelled out under law, employers organise safety awareness programme to promulgate the organisation's commitment to safety. The components of such programme are hazard identification, communication and education to those at risk, and reinforcement of safe practices. Employee health is taken care of by employee assistance programmes and employee wellness programmes. Disciplinary procedures, compressed workweek, flexi-time, job-sharing and part-time work fall under the ambit of employment security and working conditions. To help the employees to manage their work and private life, organisations have started family-friendly policies, which include childcare, elder care and family leave policy. The purpose of all these programmes is to ensure the workforce's economic and psychological well-being. These programmes help in enhancing productivity, reducing turnover and making the organisation more competitive (Sawchuk, 2011). Employee relations are meant to cultivate a sense of belonging to and oneness with the organisation. Employee relations are associated with all the welfare measures of the organisation which take in the interests of employees and maintenance of their good health at the work place and also involve giving constructive feed-back to the employees (Dávila & García, 2012).

(3) Safety

Safety, as indicated by Krutz and Vines (2010), refers to the need for security and protection. When physiological needs i.e. food and water are met, the safety needs dominate behaviour. Those needs have to do with natural desire needs in today's world which can manifest themselves as job security, savings accounts, insurance policies, financial security, and health and well-being. Workplace safety is an important factor; under the Occupational Safety and Health Act; 1983 (Act No. 6 of 1983) employers have an obligation to provide a safe working environment for employees. One of the main functions of the HRD is to support workplace safety training and maintain government mandated logs for workplace

injury and fatality reporting. In addition, HRD safety and risk specialists often work closely with HR benefits specialists to manage the company's workers compensation issues (Brauer, 2016).

(4) Training and development

With regard to training and development, employers must provide employees with the tools necessary for success in the work place. In many cases, this means giving new employees extensive orientation training to enable their transition into a new organisational culture, according to Jehanzeb & Bashir (2013). Many HR departments also provide leadership training and professional development. Leadership training may be required of newly hired and promoted supervisors and managers on topics such as performance management and how to handle employee relations matters at the departmental level. Professional development opportunities are for employees looking for promotional opportunities or employees who want to achieve personal goals such as finishing a university degree. Programmes such as tuition assistance and tuition reimbursement often are within the purview of the HRD training and development area, and also the quality of employees to be hired and how to strengthen their capacities and competencies through training and motivating. When this happens, the HRD will need to implement a reduction in the work load of employees to achieve the goals of the organisation, through which the employees' personal goals are achieved (Shammot, 2014).

(5) Compensation and benefits

The compensation and benefits functions of the HRD often can be handled by one HR specialist with dual expertise. On the compensation side, the HRD functions include setting compensation structures and evaluating competitive pay practices (Brice, 2011). A compensation and benefits specialist also may negotiate group health coverage rates with insurers and coordinate activities with the retirement savings fund administrator. Payroll can be a component of the compensation and benefits section of HR; however, in many cases, employers outsource administrative functions such as payroll (Seth & Sethi, 2011). With regard to compensation and benefit, Tooksoon (2011) mentions that wages, bonuses, and other types of pay have an important influence on an employee's standard of living. This carries at least two important implications. First, remuneration can be a powerful motivator. An effective compensation strategy can substantially promote an organisation's success; conversely, a poorly-conceived pay strategy can have detrimental effects. Secondly, the importance of pay means that employees care a great deal about the fairness of the compensation process. Shilling (2015) states that the remuneration programme must be explained and administered in such a way that employees understand the underlying rationale and believe it to be fair.

In conclusion, the HRD for the purpose of the study explains that an organisation without a proper setup for HR is bound to suffer from serious problems while managing its regular activities. For this reason,

organisations must put a lot of effort and energy into setting up a strong and effective HRD within their business environment.

The subsequent section of discussion is marketing.

2.5.2 Marketing

Marketing, as explained by Baker (2014), is referred to as a means of creating superior value and delivering high levels of customer satisfaction. Pandian, Varathani and Keerthivasan (2012) state that marketers should endeavour to understand customers' needs and wants, carefully study competition, make products available at places convenient to customers, communicate effectively and efficiently, and finally, offer superior value at a reasonable price. Schindler (2012), however, states this does not mean organisations ignore making high revenue, since more revenue will make available additional beneficial services. Phadtare (2014) holds that the focus of marketing is customer needs and wants. Through these, an organisation is also obliged to offer solutions to clients, not just tangible goods and services.

Furthermore, Schindler (2012) states that the marketing concept points out that those responsible for price control should also consider customers' value as a very important element when setting prices because consumers' feeling about the final price charged is also vital. On a profit-making basis, marketing can be defined as a process and a set of tools used to get things done, either to achieve a goal, to solve a problem or take advantage of an opportunity (Blumstein & Taylor, 2013). For a marketer to take advantage of an opportunity, a good or service is to be offered to the consumer who has to pay for the good or service. Klasovitá (2014) explains that what the customer pays for includes everything the customer must give up, such as money, time, effort and all non-selected alternatives. Value is a key component in setting price; the relationship between pricing and value is intricately tied to every element in the marketing programme.

2.5.2.1 Main functions of a marketing department

(1) Research

Research helps to advise entrepreneurs that "primary marketing research should be the number one tool in all business activities" Hunt (2015) explains that primary market research provides a "competitive and propriety offering, one that arises from a unique and differentiated approach to the market." Babin and Zikmund (2015) are of the view that research is a leader of all marketing activities. Without demographic research, product developers will not know what features to design into products that will appeal to customers. Research is used to measure buying habits, product use and the opinions of

organisations as well as that of competitors. The better the research understands these phenomenon, the less money will be wasted.

(2) Products

Product, as defined by Riaz and Tanveer (2012), refers to an important attribute, the place the product occupies in the consumers' minds. The marketing department implements customer relationship management functions to track and predict what customers want in their products. It connects the customer to the product with hard data as well as emotional and qualitative information that can help product designers differentiate products from those of a competitor (Kumar & Reinartz, 2012). This information also helps marketing promotions by highlighting these differences in marketing materials. A marketing department sets prices for products that recoup development and promotional costs while generating revenue for the company (Kwon & Vogt, 2013).

(3) Promotions

Kotler and Armstrong (2010) mention that marketing departments formulate promotional strategies for products and services, and some may also incorporate promotional activities, such as public relations, for the organisation as a whole. The promotions staff assists the sales force with sales promotions; offer public relations support for product launches, trade shows and other events; purchase advertising that illustrates product benefits and features; and pitch the product to media outlets. Promotion activities range from creating awareness of a product to persuading customers to try and then buy the product. Magrath and McCormick (2013) define promotion as the "marketing function concerned with persuasively communicating to target audiences the components of the marketing program in order to facilitate exchange." Adongo (2016) suggests that objectives for promotions must be set, therefore it is clearly established what is required of the promotion in monetary terms, numbers of customers, and customers' reactions to the proposition.

(4) Business development

Business development, according to Ernst, Hoyer and Rübsaamen (2010,) refers to marketing working closely with sales in generating new business. Employees entice prospects to engage with the organisation in some way, even if it is just visiting the website, and then use incentives to get customers to continue thinking about the product so that the sales team can convince them to buy the product. This is called generating leads. Not every lead turns into a paying customer, so business development is ongoing. It can also include identifying new markets for existing products or discovering a need that current customers have for a modified version of an existing product. Tebbe (2011) states a successful business development begins with discovering customer's real need, in other words, the company

should have the ability to deliver value to customers. Kotler & Armstrong (2010) prefer that an organisation should shift its focus from how to produce a better product to how to meet needs of customers.

Marketing for the purpose of this study plays an important role. Without marketing, brands will not be illuminated and organisations would be lifeless. An organisation's success is not only determined by the prudent application of funds to the various portfolios of investment but also by the relationship established with the customers, which is a function of marketing.

2.5.3 Production department

Production as a functional area of management is responsible for turning inputs into finished outputs through a series of processes. The Production manager is responsible for making sure that raw materials are provided and turned into finished goods effectively. This manager must make sure that work is carried out smoothly, and must supervise procedures for making work more efficient and more enjoyable (Olaore & Olayanju, 2013). There are many functions of the production department. Below are some of the most common functions of this department, as mentioned by Hasenkamp (2012), which are:

- The production department manufactures goods for the organisation which are then sold to bring in revenue.
- The production department is responsible for the designing of goods or products which are sold to the general public.
- Every aspect of production is controlled by the production department. By controlling production, the department efficiently uses resources such as labour, machines and materials judiciously in order to prevent any wastage.
- The production department improves on the products of the organisation through measured changes and innovations.
- The production department makes sure that it produces goods or products at low cost in order to maximize profit.
- The production department works in collaboration with the purchasing department in order to make sure that materials needed for production are always available.
- The production department also needs to ensure that the machines and equipment used in production are serviced and properly maintained at all times (Olaore & Olayanju, 2013).

The main purpose of functional areas is to ensure that all important business activities are carried out efficiently. This is essential if the business is to achieve its aims and objectives. In addition, specific areas will be responsible for supporting specific types of aims and objectives; for example, sales and marketing will be involved in achieving targets linked to developing new markets or increasing sales, human resources will be involved in arranging staff training activities and supporting the continuous professional development of all staff, finance will be expected to monitor and support aims and objectives linked to keeping costs low to improve profitability, and production will set targets relating to quality or meeting planned production schedules. The subsequent section of discussion is the finance department.

2.5.4 Finance department

The discussion of functional areas is covered in the following section because the focus of this study is financial management. Ramayah and Omar (2010) show how supply chain managers make decisions and use organisational resources that eventually impact the financial outcomes of an organisation. To do so effectively, they need to link the results of supply chain decisions to the financial goals and related metrics of the organisation. Lasher (2010) explains that the finance department of a business takes responsibility for organising the financial and accounting affairs, including appropriate accounts records, and the provision of financial information for managers. The financial department is also involved in the trend of various areas as explained below.

The finance function, as explained by Learning (2010), refers to maintaining close ties with the external investment community (stockholders, creditors, bankers, financial analysts, and other fund managers). For example, an organisation's or corporation's finance management has ongoing communication with industry analysts or specialists who follow, evaluate, and report on the business activities of the organisation. The finance department has many critical areas of responsibility that make effective management of the function essential to an organisation's success (Pickett, 2010). The CEO depends on sound advice in these areas from the chief financial officer (CFO) and other members of the finance staff. This communication may take the form of regular conferences conducted by the organisation to which the industry analysts are invited. Soh and Martinov-Bennie (2011) argue that financial managers audit and report on the performance of all other departments in the organisation. Auditing other departments, while also maintaining positive relationships, is a difficult undertaking (Williams & Naumann, 2011). Without the support of the investment community, the corporation will not receive the capital needed to survive and grow. Chiu (2014) mentions that the finance function carries the primary fiduciary responsibility for the organisation.

Most recent evidence suggests that finance departments are taking on added responsibilities and playing an even more influential role in the management of the organisation. The 1980s was a period of financial innovation in which debt was used creatively to make acquisitions and build shareholder value (Mazzucato, 2013). At the same time, intense global competition in North America, Europe and Asia placed greater demands on financial managers to participate in strategic and operational planning (Ross, 2013). Finance departments started to play a supportive role in quality improvement programmes by monitoring the cost of poor quality and improving financial and non-financial processes. As part of this responsibility, finance personnel were expected to do special studies and act more as consultants to other departments. This proved difficult for finance personnel who tried to preserve some independence (in the interest of objectivity) from other functions (Goode, 2014). At the same time, other demands, such as increased shareholder activism, created added pressure to improve relationships outside organisations (Tricker & Tricker, 2015). Thus, today, members of the finance department face more pressure than ever before from senior management, interacting with other departments, outside investors, financial standards boards, and government regulators.

In conclusion, the functional areas of management as explained above give a clear understanding of how each function in an organisation operates to achieve goals and objectives. Since this study is based on financial management; the financial management department is one of the most important parts of overall management; the functional areas of management cannot move smoothly without a successful supply chain management. SCM, then, coordinates and integrates all of these functional areas of management activities into a seamless process. It embraces and links all of the functions in the chain and within the organisation; the supply chain refers to a wide range of functional areas. The subsequent section of discussion introduces financial management which is the focus area of the research study and is explained in detail.

2.6 Financial management

Financial management refers to the efficient and effective management of money (funds) in such a manner as to accomplish the objectives of the organisation. It is the specialised function directly associated with top management. Financial management is one of the important parts of overall management, which is directly related to the various functional departments addressed above. The subsequent section of discussion is based on the understanding of financial management as addressed below.

2.6.1 Understanding financial management

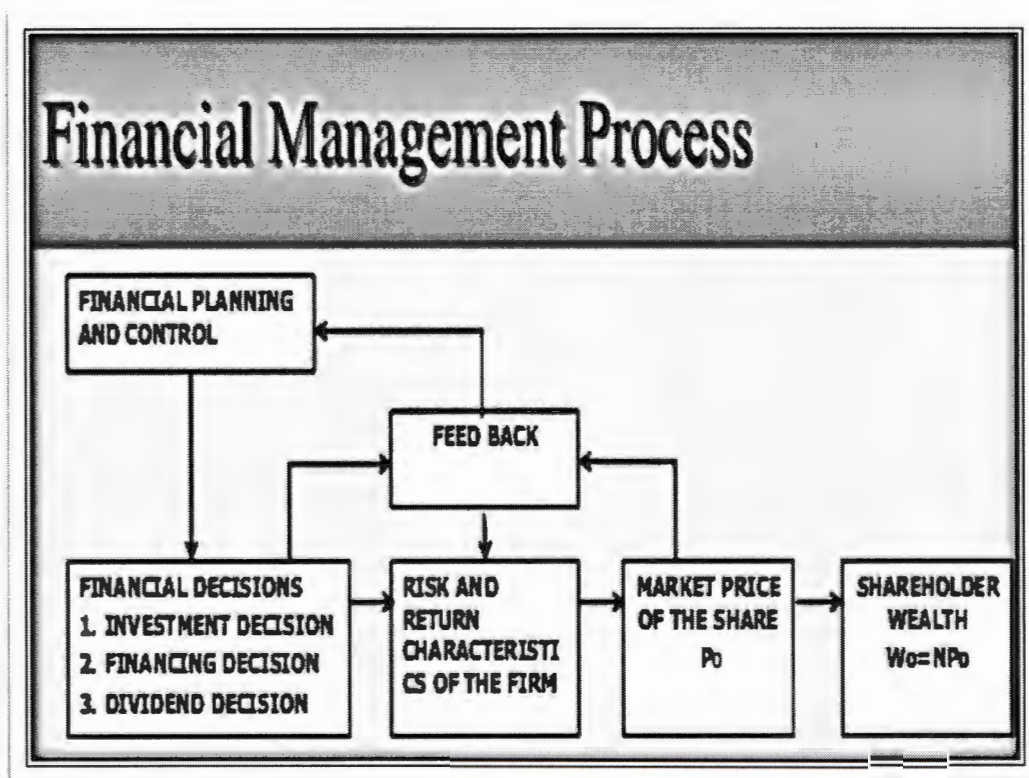
The operational activity of a business that is responsible for obtaining and effectively utilising the funds necessary for efficient functioning and concern with duties of financial managers is referred to by

Sunday (2011). Solomon (2011) explains “the efficient use of an important economic resource namely, capital funds.” Lewis and Messy (2012) refer to financial management as an area of financial decision-making, harmonizing individual motives and organisational goals. Kerzner (2013) further mentions financial management as one of several functional areas of management but it is central to the success of any business. Financial management is an integral part of overall management. The term financial management has been defined by most authors, but the acceptable definition of financial management, as given by Ambe and Badenhorst (2012), is that financial management deals with procurement of funds and their effective utilisation in the business. This definition emphasizes the central role and position of financial management in relation to the other specific areas of business management. Financial management, for the purpose of this study, is mainly concerned with the effective management of funds in an organisation.

2.6.2 Financial management as a process

The financial management process, as explained by McKinney (2015), is a method by which costs (or expenses) incurred on a project are formally identified, approved and paid. Typical types of costs include labour (staff, external suppliers, contractors and consultants), equipment (computers, furniture, building facilities, machinery and vehicles), materials (stationery, consumables, building materials, water and power) and administration (legal, insurance, lending and accounting fees). Financial management as a process is illustrated in Figure 2.4.

Figure 2:4: Financial management as a process



Source: Compiled from McKinney (2015)

Financial management process for the purpose of this study is regarded as the record of actual financials (or expenses) which accrue during a business process. Organisation financials are formally documented through the completion of the project expense form. Figure 2.4 shows an overview of the financial management process.

(1) Financial planning and control financial decisions

Financial planning and control refers to money-related operations within an organisation (Lasher, 2010). Financial, in its broader sense, is concerned with the process, institution, markets and instruments involved with the transfer of money. This is an area that requires knowledge, skill and experience with goals that include: maximising profits, sales, capturing a particular market share, minimising staff turnover and internal conflicts, survival of an organisation and maximising wealth.

(2) Financing decision

To ensure that standard financial decisions are made, a financial management system becomes a source of financial information so that financial management or expenditure management, including risk management, is properly managed in order to improve good governance (Brigham, 2014). The South African Public Service Operationally, a financial management system (FMS), assists departments in ensuring that expenditure patterns in relation to their programmes and projects are done within a budgeted vote, information about the financial standing of a department is known and can be monitored (National Treasury, 2015). Kirui (2012) indicates that at the operational level, spending is accounted for through a financial management system (FMS) as a computerised accounting system. Additionally, the aim of a FMS is to facilitate expenditure management, as well as other aspects of financial management such as providing budgetary information (Hendriks, 2013). To draw a synergy between the explanation by the former and latter authors, it is noticeable that a FMS serves as a financial information tool so that critical financial decisions are made in relation to expenditure and the management of public finances.

(3) Investment Decision

Investment decision as indicated by De Visscher (2016) refers to one of the most important finance functions; to intelligently allocate capital to long-term assets. This activity is also known as capital budgeting. It is important to allocate capital in those long-term assets so as to get maximum yield in the future. Following are the two aspects of investment decision.

- Evaluation of new investment in terms of profitability
- Comparison of cut-off rate against new investment and prevailing investment.

Since the future is uncertain, therefore, there are difficulties in calculation of expected return. Along with uncertainty comes the risk factor which has to be taken into consideration. This risk factor plays a very significant role in calculating the expected return of the prospective investment. Therefore while considering an investment proposal it is important to take into consideration both expected return and the risk involved, as mentioned by (Keynes, 2016).

Peppard and Ward (2016) are of the view that investment decision not only involves allocating capital to long-term assets but also involves decisions about using funds which are obtained by selling those assets which become less profitable and less productive. It is a wise decision to dispose of depreciated assets which are not adding value and utilise those funds in securing other beneficial assets.

(4) Dividend Decision

Dividend decision as explained by Adediran and Alade (2013) refers to earning profit or a positive return which is a common aim of all businesses. But the key function a financial manager performs in case of profitability is to decide whether to distribute all the profits to the shareholders, or retain all the profits, or distribute part of the profits to the shareholders and retain the other half in the business. Brigham (2014) explains that it is the financial manager's responsibility to decide an optimum dividend policy which maximizes the market value of the firm. Hence an optimum dividend pay-out ratio is calculated. It is a common practice to pay regular dividends in cases of profitability; another way is to issue bonus shares to existing shareholders.

To put a FMS into operation, standardised procedures should be established; for example standardised forms are used for internal charges, receipts, petty cash, general payments, electronic fund transfers, and also periodic payments (Hendriks, 2013). More importantly, a FMS not only records transactions for accounting purposes but is a valuable instrument for fund management because a FMS provides a regular updated record of spending patterns through which the following are determined:

- Spending to date compared to the budget.
- Current expenditure and future commitments compared to the budget.
- Deviations from the budget.
- Increased or decreased spending.

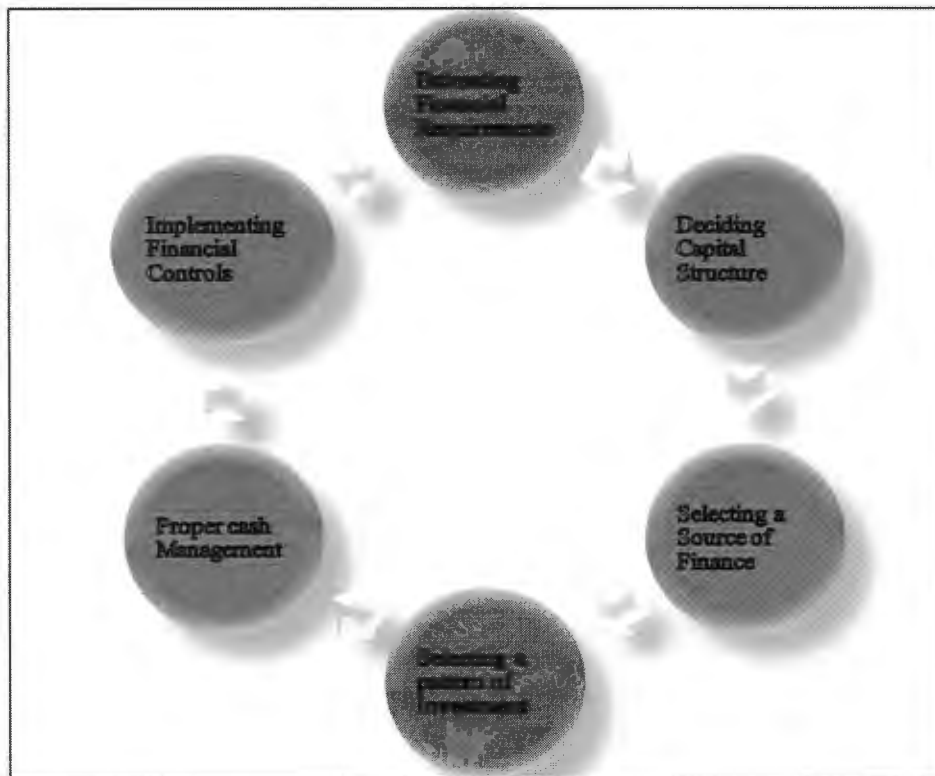
The above signals the fact that a FMS is crucial in ensuring that spending is done according to an approved budget. This means that expenditure trends are monitored so that deviations are reported. In this instance, matters relating to under-spending and overspending could be detected if early warnings are functional. The National Treasury of South Africa has a FMS implemented in both public and private sectors which provide financial information that could assist departments in carrying out their mandates and also understand the expenditure trends (Solomons, 2012), after understanding the financial management process of an organisation.

The following section of discussion will be the scope of financial management.

2.7 Scope of financial management

The main objective of financial management is to arrange sufficient finances for meeting short-term and long-term needs (Gitman, Juchau & Flanagan, 2015). A financial manager will have to concentrate on various areas of the finance function as included in Figure 2.5.

Figure 2.5: Scope of financial management



Source: Compiled from Gitman, et al (2015)

The following finance function areas as illustrated in Figure 2.5 will be explained as follows:

(1) Estimating financial requirements

The first task of a financial manager, as mention by Tirole (2010), is to estimate the short-term and long-term financial requirements of an organisation. For this purpose, an organisation will prepare a financial plan for the present as well as for the future. The amount required for obtaining fixed assets, as well as for working capital, will have to be ascertained (Teece, 2016).

(2) Deciding capital structure

The capital structure, as mention by Ahmed and Wang (2011), refers to the kind and proportion of different methods for raising funds. After deciding about the quantum of funds required, it should be decided which type of funds should be raised. It may be wise to finance fixed assets through long-term debts, and current assets through short-term debts. Ganguli (2013) postulates that in order to achieve its optimal capital structure an organisation must resolve agency conflicts by minimizing the amount of

free cash flow available to managers. However, although these theories have been tested empirically, all of them have explained the capital structure decision (Graham & Leary, 2011).

(3) Selecting a source of finance

After preparing the capital structure, Chandra (2011) suggests that an appropriate source of finance then be selected. Various sources from which finance may be raised include, for example: share capital, debentures, financial institutions, commercial banks or public deposits. If finance is needed for a short period then banks, public deposits and financial institutions may be appropriate. Flannery (2016) on the other hand suggests if long-term finance is required, then share capital and debentures may be appropriate.

(4) Selecting a pattern of investment

The pattern of investment means when funds have been procured then a decision about the investment pattern is to be taken (Lee, Johnson & Joyce, 2012). The selection of an investment pattern is related to the use of funds. A decision will have to be taken as to which asset to be purchased (Lasher, 2013). Funds should be spent first on fixed assets and then an appropriate portion will be retained for working capital. Drury (2013) mentions that decision-making techniques, such as capital budgeting and opportunity cost analysis, may be applied in making decisions about capital expenditures.

(5) Proper cash management

Cash management embodies all income and payments made within a certain period and potential inconsistencies of cash management practices is highlighted (Bobitan & Mioc, 2011). Good cash management is necessary because too much cash is costly due to interest payments. Too little cash is also costly, because the organisation will not be able to reap the advantages from economies of scale, according to Mungal and Garbharran (2014). Good cash management practices are crucial because an organisation becomes insolvent when it fails to meet its debt timeously. Consequently, organisations need to manage costs efficiently and effectively. Proper cash management prevents bankruptcy, thereby increasing profitability and the sustainability of an organisation (Mbroh, 2012).

(6) Implementing financial controls

An efficient system of financial management necessitates the use of various control devices, as mentioned by Vraniali (2010). Financial control devices generally used are budgetary control, break-even analysis, cost control and ratio varies. Rummler and Brache (2012) explain the use of various techniques by the financial manager will help in evaluating the performance in various areas and take corrective measures when and where needed.

In conclusion, the six areas of financial management in this study help the organisation to meet the expenses of the firm and have a suitable capital structure for the organisation which has been developed by the finance manager.

The subsequent section of discussion will be objectives of financial management.

2.8 Objectives of financial management

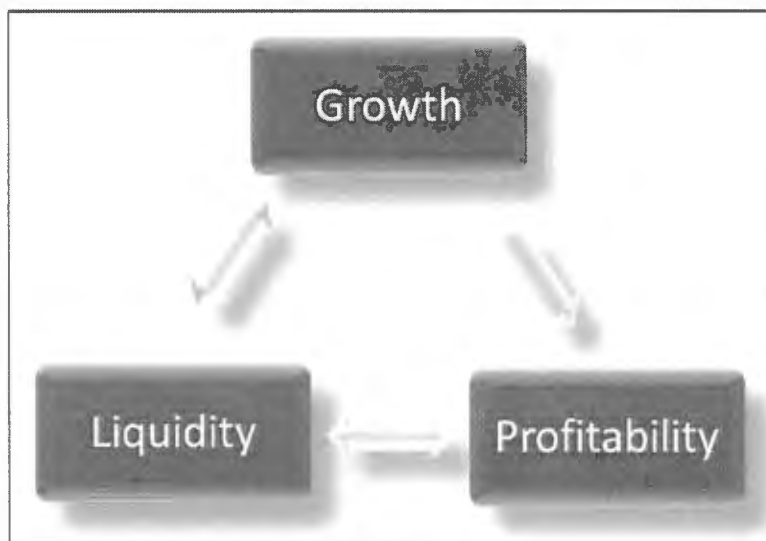
Similar to many other management sciences, financial management needs to establish goals and objectives. Objectives of financial management are foundations or bases for comparing and evaluating the efficiency and effectiveness of financial management. The final goal of financial management is to maximize the financial wealth of an organisation (Chandra, 2011) and this goal can be viewed in terms of two more specific objectives: profitability and liquidity:

(1) Profitability management is concerned with maintaining or increasing the organisation's earnings through attention to cost control, pricing policy, sales volume, stock management, and capital expenditures. This objective is also consistent with the goal of most businesses.

(2) Liquidity management, on one hand, ensures that the organisational obligations such as wages, bills, loan repayments, tax payments are all paid to avoid any damage to an organisation's image and/or credit rating, due to a temporary inability to meet obligations by anticipating cash shortages, maintaining the confidence of creditors and/or bank managers and pre-arranging finance to cover cash shortages (Ikpefan, 2016) On the other hand, liquidity management minimises cash balances, which could be profitable if invested.

In addition to the two objectives mentioned above, Thompson (2014) views growth as another objective of financial management where emphasis is placed on the relationships between the three objectives by placing them in a triangle, as illustrated in Figure 2.6.

Figure 2.6: Triangle objective of financial management



Source: Compiled from McKinney (2015)

Cameron and Green (2015) state “a managerial objective is the intended goal which prescribes safe and suggests direction to the efforts of a manager”. Further objectives can either be short-term or long-term. An organisation’s activity involves the allocation of resources among alternative uses; expected return must be balanced against its opportunity cost. It is a fact to observe organisations wishing to pursue several goals, of which profit maximisation is a primary objective. Every organisation wishes to maximise profits while at the same time minimizing expenses, and financial management is generally concerned with procurement, the allocation and control of financial resources. The objectives according to Healy and Palepu (2012) are as follows:

- To ensure a regular and adequate supply of funds for the organisation.
- To ensure adequate returns to shareholders; this will depend upon the earning capacity, market price of the share and also the expectations of shareholders.
- To ensure optimum fund utilization. Once funds are procured, they should be utilized in the best possible way.
- To ensure safety of investment. Funds should be invested in safe ventures so that an adequate rate of return can be achieved.
- To plan a sound capital structure. There should be a sound and fair composition of capital so that a balance is maintained between debt and equity capital.

In conclusion, financial management has several objectives in a business which need to be adhered to. Most of the objectives serve in a support capacity to provide business owners with relevant information about the company. The subsequent section deals with the elements of financial management.

2.9 Elements of financial management

In ensuring good governance and public financial management system in the Public Service, certain elements, according to McKinney (2015), are critical to note and these will now be dealt with.

- **Budgetary and expenditure control**

Expenditure control is an important element of budget execution and financial resources management accountability system; through an effective expenditure control system, the organisation will not only be able to maintain a high level of fiscal discipline but will also be able to implement planned activities within the approved appropriations, as mentioned by Khan and Pessoa (2010). Expenditure control includes elements such as administrative and financial sanctions, ascertaining availability of budgets, recording and processing controls including delegation and segregation, proper recording and processing, verification and certification, and finally approving and disbursing the payments (Nkini, 2013).

For the purpose of proper classification and recording, Cummins (2016) mentions that expenditures are broadly classified under two categories, namely: (1) Current expenditures which are expenditures to finance the daily and routine activities such as expenditures on pay and allowances, maintenance of buildings and properties, office supplies, utilities. (2) Capital expenditures which are expenditures incurred either for a short or medium-term which entail long-term expenditures on acquisition of immoveable properties, trainings, structures, plant and equipment, vehicles (McKinney, 2015).

- **Financial planning and reporting**

Financial planning and reporting in smaller companies are responsible for all banking and finance activities. This includes negotiating lines of credit and vendor agreements, as well as reviewing all financial contracts, financing agreements and insurance policies and also responsible for providing accurate and comprehensive financial information to executive management for long-term financial strategising (Gitman *et al*, 2015). Unless a company has a CFO to provide the leadership for long-term financial planning, the controller will be required to fulfill this responsibility as well. In any case, an organisation must provide crucial financial data and work with executive management to coordinate all financial planning functions with business operations. Financial reporting duties include preparing financial statements, balance sheets, cash flow reports, budgets, budget-to-actual and financial projections (National Treasury, 2015).

- **Management of assets and liabilities**

Asset Liability Management (ALM) can be defined as a mechanism to address the risk faced by a bank due to a mismatch between assets and liabilities either due to liquidity or changes in interest rates (Bessis, 2011). Liquidity is an organisation's ability to meet its liabilities either by borrowing or converting assets. Apart from liquidity, a bank may also have a mismatch due to changes in interest rates as banks typically tend to borrow short-term (fixed or floating) and lend long-term (fixed or floating) (Bank, 2013). A comprehensive ALM policy framework focuses on profitability and long-term viability by targeting the net interest margin (NIM) ratio and Net Economic Value (NEV), subject to balance sheet constraints. Significant among these constraints are maintaining credit quality, meeting liquidity needs and obtaining sufficient capital (Gikonya, 2011).

- **Financial control, particularly payroll control**

Financial control, according to Altamuro and Beatty (2010), refers to the responsibility for establishing and executing internal controls over the company's accounting and financial procedures. This includes reviewing and approving all invoices to be paid, as well as reviewing accounts receivable aging reports. In smaller companies, the financial controller will often handle collections on invoices, especially ones that are 45 days to 60 days overdue. A financial controller is also responsible for coordinating with external tax accountants for income tax preparation and auditors who prepare internal audits of the company. This includes keeping company records organized and readily available for examination (Beke, 2011).

- **Procurement policy**

A procurement policy is simply the rules and regulations that are set in place to govern the process of acquiring goods and services needed by an organisation to function efficiently as mentioned by Monczka, Handfield, Giunipero and Patterson (2015). The exact process will seek to minimize expenses associated with the purchase of those goods and services by using such strategies as volume purchasing; the establishment of a set roster of vendors, and establishing reorder protocols that help to keep inventories low without jeopardizing the function of the operation. Both small and large organisations as well as non-profit organisations routinely make use of some sort of procurement policy (Njogu & Gichinga, 2016).

There is no one right way to establish a procurement policy. Factors such as the size of the business, the availability of vendors to supply necessary goods and services, and the cash flow and credit of the

organisation will often influence the purchasing procurement approach. The size of the organisation is also likely to make a difference in the formation of procurement policy, in that a small organisation may not be able to command the volume purchase discounts that a large corporation can manage with relative ease (Kerzner, 2013). The above elements of financial management suggest that with specific duties and job descriptions, all persons associated with a government institution operate under the umbrella of financial management. That is, the organisation has to be operated in a financially viable manner. At all levels, individuals who make decisions affecting the future of the organisation being informed with accurate and timely financial information is crucial to the facility's future (McKinney, 2015).

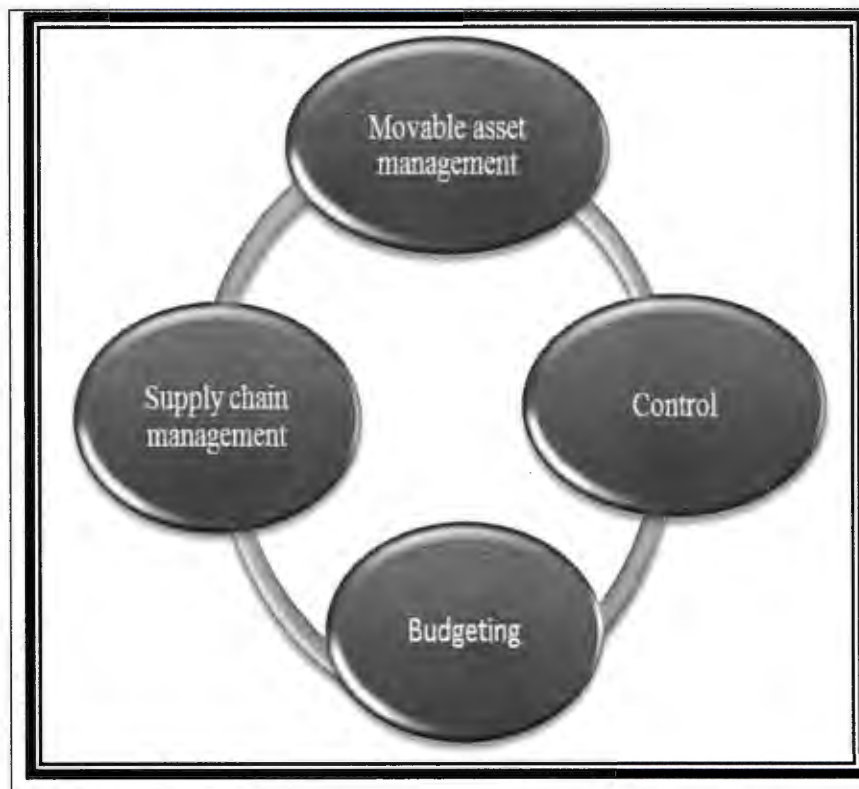
2.9.1 Financial management practices

Financial management objectives (as derived from strategic and tactical control) cannot be achieved without budget planning, implementation, monitoring and adjustment as a cycle whereby resources are assigned to objectives. The introduction of the concept of an integrated procurement system for Government is considered by National Treasury as contributing significantly towards the improvement of financial management in the broader public sector (National Treasury, 2004a). Financial management practices are defined and demarcated as the practices performed by the accounting officer in the areas of budgeting, supply chain management, movable asset management, and control (Mathiba, 2011). Accounting officers must personally account for all the financial transactions and activities of their departments (Hackethal, Haliassos & Jappelli, 2012). To execute their functions properly, accounting officers must have full control over the finances and other activities of their departments (Kerzner, 2013). Accounting officers do not keep the accounts and other financial records personally – they are not the bookkeepers of the department. They also do not physically compile the draft budget of the department. An accounting officer is also the minister's chief advisor on policy and departmental financial matters (Allen, Hemming & Potter, 2014). Areas of financial management practices are the following section of discussion.

2.9.2 Areas of financial management practices

Financial management practices are defined and demarcated as the practices performed by an accounting officer, chief financial officer and other managers in the areas of budgeting, movable asset control and supply chain management (Kitonga, 2013).

Figure 2.7: Areas of financial management practices



Source: Adapted from Kitonga (2013)

Figure 2.7 above illustrates the areas of financial management practices which include (1) budgeting, (2) movable asset management, (3) control and (4) SCM, as it illustrates that financial management cuts across all levels of management or personnel of an organisation. The budget itself is the culmination of the budget process, and is a powerful policy statement declaring the goals and specific objectives that an authority wishes to achieve by means of the expenditure concerned. An overview of the area of financial management practices will be explained below.

(1) Movable asset management

In the management of movable assets, the acquisition of capital assets can most certainly exert an effect on an organisation's competitive advantage over the long-term. Capital equipment is characterised by large expenditure and non-recurring expenditure (Mathiba, 2011) and these are:

- *Large expenditure*

Purchasing capital equipment usually requires a relatively large capital outlay, which may sometimes amount to millions of Rand and which may have particular financial implications. Buying capital

equipment can therefore be regarded as an investment which is financed from long-term, rather than from working capital. It is important to consider not only the purchase price of capital equipment, but also the total cost of ownership (Goode, 2014).

- ***Non-recurring expenditure***

Capital equipment is usually purchased at irregular intervals. It is gradually used up in the production process, rather than as a part of the end product. Owing to the relatively long lifespan of equipment, it could take several years before it needs to be replaced and, at the time of replacement, old equipment could prove to be technologically obsolete. If the correct purchasing decision is made, capital equipment generates profits for an organisation. Incorrect decisions may have disastrous consequences for an organisation, since it will not be able to sell capital equipment over the short-term. For the above reason, according to Burt, Dobler and Starling (as cited in Mathiba, 2011), top management should consider the acquisition of capital equipment with care.

(2) Control

Strategic control is exercised at top management level, and entails a close study of the organisation's total effectiveness, productivity and management effectiveness (Nieuwenhuizen & Rossouw, 2010). Control mainly involves the process through which a manager ensures that activities are carried out as originally planned. Armstrong and Taylor (2014) further mention two types of control: a priori control, (which is the control that takes place before a task is undertaken) and ex-post facto control, which is the control that takes place after a task has been undertaken. Armstrong & Taylor (2014) further indicate that the utilisation of the budget for financial control is a comparatively easy task: a comparison is made between the real amounts of money spent and budgeted amounts. The controls in place to uphold expenditure management are very important, and can be used as a basis for determining the process of budgetary control on the route to accomplishing a desired goal, which can be linked to a certain outcome (Kpedor, 2012).

(3) Budgeting

The accounting officer has the following two functions: the preparation and submission of the department's draft budget to the national treasury, and the execution of the approved budget of the department (Mathiba, 2011). Budgeting is part of the organisational planning process, which starts with the aim and the mission of an organisation (Riccaboni & Luisa, 2010). Through the strategic management process, senior management develops the strategic plans which involve a process of developing the mission and long-term objectives, and determining in advance how they will be accomplished (Kerzner, 2013). The strategic plan leads to the operational plan, indicating how an

organisation will conduct its activities on a day-to-day basis. The strategic plan defines a broad set of goals for the organisation. Generally, strategic plans do not have specific financial targets; however, they set the stage for specific, detailed budgets that will be established to achieve the goals (Grant, 2016).

(4) Supply chain management

Strategic supply chain management is directly linked to the overall business strategy of an organisation, and is therefore directly involved in and supportive of the overall objective of an organisation (Ageron, Gunasekaran & Spalanzani, 2012). The supply chain has, in effect, been in place for many decades but it was only in the 1980s that, because of the spectrum of associated activities, it became useful to conceptualise the essential mainstream of procurement transactions as a sequenced range of events and actions, and to build these into a useful management model (Cheung, 2011). Every organisation, whether it is a manufacturer, wholesaler or retailer, buys materials, services and supplies to support operations. Historically, purchasing has been perceived as a clerical or low-level managerial activity charged with responsibility to execute and process orders initiated elsewhere in the organisation. The role of purchasing was to obtain the desired resource at the lowest possible purchase price from a supplier. This traditional view of purchasing has changed substantially in the past decades. The modern focus is on total spent, and the development of relationships between buyers and sellers. As a result, procurement has been elevated to a strategic activity (Meehan & Bryde, 2011).

SCM is acknowledged as an integral part of financial management in the public sector in South Africa. With regard to procurement in the public sector in South Africa, there are enabling legislative frameworks that seek to ensure that services are provided through procurement and give value for money. The process adheres to elements of good governance, such as accountability and responsibility, including fairness and transparency Mutula and Mostert (2010) explain that, most importantly, procurement is done within the broader framework of the government financial management plan, not just as an isolated exercise for financial or procurement officers within a department. Procurement procedures must be followed and departments must hold to such procedures, and public money should not to be wasted due to non-compliance with procurement policies and procedures. Non-compliance could result in a financial burden for government and financial management could also be negatively affected (Mutula & Mostert, 2010).

Procurement has been criticised by the general public and bidders. Some criticism is that procurement procedures and processes are monotonous and bureaucratic, with unclear responsibilities and levels of accountability; value for money is in most cases undermined or not evaluated, and corruption is prevalent or reported in most cases (Myowela & Ergete, 2012). To accomplish its tasks of ensuring uniform standards in procurement, in the 2001/2 financial year, National Treasury embarked on a

Country Procurement Assessment Review (CPAR) in collaboration with the World Bank. One of the issues raised in terms of CPAR was a need to monitor value for money assessment and to replace the outdated and inefficient procurement and provisioning in Government with the SCM function. Additionally, on the basis of the above state of affairs, CPAR was of the view that the issues raised above should be fully integrated within financial management processes in government (National Treasury, 2011).

On the basis of the above, the government took a firm stand by transforming procurement in South Africa by benchmarking against international standards so that the broader financial management in government is improved. Subsequently, procurement in South Africa has shifted towards SCM. Government views SCM as an integral part of financial management that seeks to introduce internationally accepted best practices (National Treasury, 2012) SCM has to play a significant role in financial management; however, to impact positively and valuably, certain essentials have to be taken into account, because it is believed that to improve financial management and monitor value for money, the following aspects are fundamental: (1) Promotion of uniformity regarding procurement (2) Devolution of responsibilities and promotion of accountability for procurement related functions to accounting officers (3) Replacing outdated provision and outdated procurement with SCM which has been one of government's priority for the public sector in general (National Treasury, 2014a).

National Treasury (2012) indicates that procurement is also faced with policy-related problems, particularly policy compliance, and with regard to procurement itself; the procedure towards tender approval has been tedious and fragmented. Sandford (2015) explains that in some situations, value for money is undermined. Elements of corruption and fraud are evident through financial misconduct cases that seem to be a problem in the public service. Within the context of SCM, the procuring of services takes place in a well-established ethical environment. Since the devolution of powers to departments regarding procurement, departments are unable to manage such a form of transformation due to a lack of skills on procurement (Alam, 2015). Procurement is a technical process. In some situations some departments are unable to formulate a policy due to the technicality of procurement. The new approach of SCM might be too complicated for some departments, particularly at the implementation stage. As concerns the introduction of SCM in the public service (National Treasury, 2014b), departments are expected to do the following. The accounting officer or accounting authority of an institution to which these regulations apply must establish a separate SCM unit within the unit of the chief financial officer (CFO) to implement the institution's SCM system. An official in the SCM unit who becomes aware of a breach or failure to comply with any aspect of the SCM system must immediately report the breach or failure to the accounting officer or accounting authority in writing. To implement SCM requirements, the CFO is charged with the responsibility to establish a SCM unit in her or his office so that financial management is promoted.

For the purpose of the study, financial management practices are defined as the practices performed by the accounting officer, the chief financial officer and other managers in the areas of budgeting, supply chain management, asset management and control; all these practices are important for efficient financial management in an organisation. The subsequent session of discussion is a summary of the chapter.

2.10 Summary

This chapter has provided an overview on management by reviewing literature and has also provided an over view of management, financial management practices and also the four areas of financial management which include: budgeting, movable asset management, control, and supply chain management. Within the responsibility chain it is clear that supply chain management is responsible for the actual financial management and the accountability aspect linked to it. It has also been made clear that financial management cannot be insulated from political influence. It should be managed within a legal framework. SCM is an important process for the procurement of goods and services in all government institutions.

The chapter also looked at financial management, understanding financial management, financial management as a process, and the scope of financial management, objectives of financial management, and the elements of financial management, financial management practices and finally took a closer look at the areas of financial management practices. This chapter also gave a basic understanding of management and how management is interrelated to financial management. Management is a vital aspect of the economic life in any society, which is an organised group activity. Since the research study is on the level of compliance with SCM policy, the next chapter presents an overview of SCM policy within a municipality.

CHAPTER THREE

SUPPLY CHAIN MANAGEMENT WITHIN A MUNICIPALITY

3.1 Introduction

Literature study has described the origin of the topic and key literature sources, key issues, and also refined the focus of the research in a way that it can lead to more research questions. In order to get relevant information with regard to the keywords derived from the research questions, primary and secondary sources were consulted (Gray, 2014). The literature review in this chapter consists of previous researches conducted on the SCM policy within municipalities. Supply chain management in the South African public sector is a fairly new concept but internationally it has been a long-standing institution. It has played a crucial role in international governments' abilities to execute their respective service delivery projects (Ambe & Badenhorst-Weiss, 2011).

3.2 Meaning of the phase SCM

SCM covers all interactions that link customer and supplier companies to deliver products to consumers. Management within the supply chain department must allow delivery of products in terms of quality, price, and place so that value is added for a customer. To achieve this, members of a supply chain must make changes constantly to functional processes, and implement collaborative strategies along the supply chain (Thomas & Esper, 2010).

According to Maloni and Benton (2012), power reflects the ability of an organisation to influence the intentions, decisions, and actions of another organisation. Similarly, interactions between organisations are usually asymmetric more than symmetric, imbalanced more than equilibrate and different more than the same over time. Qrunfleh & Tarafdar (2013) present a strategic view of collaboration and integration that demonstrates the benefits from both individual business performance and whole supply chain business. Positive performance is crucial to organisations in competing business environments, especially when related to risk, a principal factor that explains why both academics and managers seek consensus between profit and risk related to asymmetric network relationships. Stadtler (2015) also indicates that SCM is a type of interaction that represents an alternative to improve competitive power. The following section discusses theories of SCM.

3.3 Theories of SCM

There is currently very little literature available on supply chain management studies according to Winter and Knemeyer (2013), and there is also little theoretical support for explaining the existence and the boundaries of SCM. Short, Ketchen, Shook and Ireland (2010) attempted to prove theoretical foundations for different areas related to supply chain employing organisational theories. Theories

include the following: Resource based view (RBV); Knowledge based view (KBV), Agency theory (AT), Institutional theory (ST), Network Perspective (NP), and Materials Logistics Management.

The main problem with the definition of SCM is that it lacks an universally accepted definition, as some people are defining it as a public sector supply chain, while others use public procurement - it seems to depend on an individual according to Naslund & Williamson (2010).

Table 3.1 presents a few definitions considered in view of this study.

Table 3.1: Supply chain management definitions

Authors	Years	Description
Chopra and Meindl	2010	The supply chain can be seen as the process which includes all the relevant stakeholders in fulfilling the customer’s needs.
Badenhorst-Weiss and Ambe	2011	SCM is a term used in business literature to refer to the control of materials, information and finances as they move in a process from supplier to manufacturer to wholesaler to retailer to consumer.
Mnguni	2012	The system that involves all the activities that are required to acquire raw materials and transform them into goods that will be consumed by the end-user.
Alfalla-Luque <i>et al.</i>	2013	SCM is defined as the management of physical, logistical and financial flows in networks of intra- and inter-organisational relationships, jointly adding value and achieving customer satisfaction.
Stadtler	2015	Supply chain management is the alignment of firms that bring products or service to market. Safae <i>et al.</i> (2010) also define supply chain management as a network of facilities and distribution options that performs the function of transforming these materials into intermediate and finished products, and the distribution of these finished products to customers. Johnson and Templar (2011) argue that supply chain is the systematic, strategic coordination of the traditional 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.

Following the above definitions, it can be asserted that SCM encompasses the planning and management of all the activities involved in sourcing and procurement, conversion, and all logistics management activities. Importantly, it also includes coordination and collaboration with channel partners, which can be suppliers, intermediaries, third-party service providers and customers. SCM can also be approached from different disciplines (Arlbjørn, Freytag & de Haas, 2011), namely logistics,

purchasing, transportation, operations management, marketing and research (De Haas & Kleingeld, 2012). The concept of SCM can also be applicable to different industries, sectors and countries. However, it should be reiterated that most research on SCM is from the private sector perspective. Little research has been conducted on the public sector, especially in a municipal context.

The subsequent section discusses the objective of SCM.

3.4 Objective of SCM

The overall objective of SCM is to maximise value in the supply chain. The value generated by a supply chain is the difference between what the final product is worth to the customer and the costs the supply chain incurs in filling the customer's request (Chopra & Meindl, 2010). SCM has continued to be adopted by organisations as a medium for creating and sustaining competitive advantage (Fawcett, Magnan & McCarter, 2008). Competitive advantage is built upon a well-planned and executed SCM strategy that is sustainable (Seuring, 2011). After looking at a brief explanation of the objective of SCM, the following section of discussion is based on the historical development of SCM.

3.5 Historical development of supply chain management

The historical development of supply chain management, according to Ross (2013), acknowledges that many contemporary authors writing on the topic of SCM refer to this trend as a new or relatively new concept in management theory. However, Ross (2013) further mentions that the role of SCM has changed considerably over the past 30 years, thereby concluding that the concept has been around for a considerable period of time. Blanchard (2010) claims that Forester is the true father of the philosophy of SCM. Further, as noted by Venus (2014), the literature often claims that SCM is an "extension of logistics" and also that it is a further development in managing the supply base and therefore a development of the purchasing function. Carter and Liane (2011) believe that physical distribution (logistics) has been expanded into the broader concept of SCM. Waters and Rinsler (2014) have another belief, namely that there is no distinction between SCM and logistics, and the former is an evolutionary extension of logistics.

SCM has become an exceptional strategic concept not only in the private sector, but also in government institutions (Ross, 2013). In recent years, the regulation of government spending has gained significance due to SCM, especially with regard to the procurement of goods and services by means of fair, competitive and cost-effective systems and processes (Bent, 2014). As indicated by Bent (2014), in line with regulated systems and processes, government has realised the importance of SCM as a socioeconomic development tool. For example, SCM is one of the key tools and mechanisms enabling the South African government to implement policy for socioeconomic development and transformation.

Traditionally, SCM has been misunderstood and undervalued. Its strategic importance has not been recognised, and it has been under-capacitated (National Treasury, 2015b). SCM was adopted in South Africa based on the findings of the review of the Joint Country Assessment Review with the World Bank initiated by the National Treasury in 2001. In 2003, a SCM policy document titled “Supply chain management: a guide for accounting officers and authority in municipalities and municipal entities” was developed to guide the implementation of SCM. The main objective for the adoption was to use SCM as a tool to manage procurement, since there was lack of interpretation, accountability and implementation of the preferential procurement policy adopted after the first democratic elections. The system functioned under the banner of the tender board (centralised system of procurement). With the adoption of SCM, a roll-out implementation plan was established and a generic SCM policy developed.

Each government institution had to customise a generic SCM policy to suit its needs and establish SCM units to give effect to the requirements of the legislation (Bent, 2014). Within the timeframe, the National Treasury also embarked on training to educate and capacitate SCM practitioners, and numerous education and training institutions came to the fore.

However, from the years 2005 to 2017, SCM in municipalities has been characterised by fraud and corruption despite the efforts of National Treasury. To a great extent, the intended outcomes for the adoption of SCM policies have not fully been achieved. National Treasury (2015b) asserted that, despite the adoption of SCM policies and practices in municipalities, its implementation remains a challenge.

SCM practices in South African municipalities are deteriorating (Turley & Perera, 2014). While some municipalities are improving, the majority of municipalities still derail due to supply chain failures. According to the Auditor General South Africa (AGSA) Audit Report (2014), none of the municipalities in the North-West Province had a clean audit. SCM plays a large role in poor audit outcomes such as irregular expenditure, lack of basic controls, as well as lack of supply chain skills. Ambe (2016b) asserts that municipalities are under increasing pressure to tackle issues around SCM. This pressure does not only come from the service providers and the general public, but the media is also becoming more interested in stories about procurement and SCM (Business Day Report, 2011), and there are daily reports in the media of irregularities, which are signs that communities feel that they are not receiving the quantity or quality of services they expect. SCM has a critical role to play in service delivery in municipalities.

Furthermore, the National Treasury SCM Review (2015) revealed that there are constant allegations of corruption and inefficiency in municipalities. SCM was considered to be a strategic function in 2014, hence the reason for imperfection and challenges. National Treasury (2015) reported that SCM has, therefore, been offered a strategic position and the office of the chief procurement officer was established to oversee and reinforce the implementation of SCM. In light of the discussion above, this

research intends to shed light on the level of compliance with SCM policy in a municipal context in South Africa. The subsequent section discusses the evolution of procurement and logistics pertaining to SCM.

3.6 Evolution of procurement and logistics pertaining to supply chain management

According to Poza (2013), by the late 80's material costs made up approximately 60% of costs of goods sold in the United States. The impact of materials and purchasing management on organisation assets became very significant and very visible. The U.S. manufacturing industry (and many service firms) emulated most of Japanese quality improvement initiatives in the likes of Kansban, Quality Circles, Just In Time, and Kaizen (Continuous improvement). These changes, coupled with electronic purchasing systems and growing recognition by senior management of the critical role that must be played by purchasing and SCM, provided the stimulus for more change.

Smith and Rupp (2013) noted that purchasing and SCM began to recognise the need for two types of resources in organisations, namely a team of people who manage the operational and tactical activities of purchasing and materials management (Material Coordinators) and supply chain managers who are involved in the development of the broader strategic aspect of the functions. Material coordinators are responsible for placing orders against purchase agreements (purchase agreements identify approved sources of supply, prices and delivery criteria for carefully defined materials and services). Supply managers participate in new product development and are involved in selecting sources, managing costs, developing nurturing supplier partnerships and strategic alliances. Furthermore, Material Coordinators are responsible for issuing and entering long-term agreements with carefully selected suppliers (Blecken, 2010).

The era during which strategic logistics management developed into a critically important business activity was in the 1990's. The focus of logistics changed from internal efficiency to external relations between parties in the supply chain (Hendrix & Noland, 2015). It was also the era in which business experienced the most dramatic changes. Some of the changes, which impacted most definitely on the further development of the concept of supply chain management are summarised by Chesbrough (2010) as follows:

- Increasing national and international competition.
- Growing number of strategic alliances between organisations.
- Reduction in the number of suppliers.
- Outsourcing of non-core activities.
- Sharing information between vendors and customers.
- Shift from mass production to customised products.

The impact of these changes on supply chain development was profound. It became an accepted doctrine that all players within the supply chain sectors are highly involved, including suppliers, and downstream extending to customers. Customers have a role to play in understanding customer requirements and satisfying market demand. Optimising customer satisfaction/demand is the focus point of the entire supply chain. It was also accepted that no single organisation has the technology or resources to meet market demand on its own, culminating in the integration of management, processes and infrastructure across organisational borders. In addition, due to the availability of information and technology, the need for sharing information across the entire supply chain was recognized as the main enabling factor in establishing an integrated supply chain (Park, Nayyar & Low, 2013).

In September 2003, the Cabinet of the state government adopted a SCM policy, to replace the outdated procurement and provisioning practices across government with a SCM function that will form an integral part of financial management and conform to international best practices. The new arrangements promote uniformity in SCM processes and also in the interpretation of governments' preferential procurement legislation and policies, which should themselves be seen in the context of other related legislative and policy requirements. Above all, these arrangements mean that responsibility and accountability for SCM related functions would be delegated to accounting officers /authorities. The evolution of procurement and logistics of SCM followed more or less the same sequence of events in both the private and public sectors. The solution to the challenge of continuous improvement resulted in the implementation of SCM (Ambe, 2016b). The subsequent section of discussion is on SCM policy within the government.

3.7 The SCM policy within the government

The SCM was adopted in the South African public sector, based on the national SCM policy. Each government entity was expected to adopt and implement an SCM policy. According to the Treasury regulations, the SCM policy of each entity is expected to be fair, equitable, transparent, competitive and cost-effective and to comply with management that covers the following range of SCM processes that an entity may use, including tenders, quotations, auctions, and various other types of competitive bidding within the SCM policy. The situations in which municipalities must use a particular type of process include procedures and mechanisms for each type of process, procedures and mechanisms for more flexible processes where the value of a contract is below a prescribed amount, and open and transparent pre-qualification processes for tenders or other bids (MFMA Act 56 of 2003). The SCM policy entails five major objectives adopted by cabinet (National Treasury, 2004; Rampedi, 2010) and are listed below:

- Transform government procurement and the provisioning practices into an integrated SCM function.

- Embark on introducing a systematic approach to the appointment of consultants.
- Create common understanding and interpretation of the preferential procurement policy.
- Ensure best value for money while improving service to achieve delivery, thus moving away from the lowest price scenario to the best value for money scenario.
- Consistently promote the application of best practices throughout government's supply chain.

After getting a clear understanding on the SCM policy that the study wants to obtain, the subsequent section of discussion is on guiding pillars of SCM policy within the municipalities of South Africa.

3.8 Guiding pillars of SCM policy

The SCM policy is guided by certain value systems called the pillars of SCM, which are embedded in the constitution (Hlakudi, 2015) and are also named pillars of procurement. These are discussed briefly below.

(1) Value for money

This is an essential test against which a department must justify a procurement outcome. Kerzner (2013) mentions a lower price is not the best indicator, since a lower price does not ensure the awarding of the business. The department is not obliged to accept the lowest price, because it does not guarantee value for money. The best value for money means the best available outcome when all relevant costs and benefits over a procurement cycle are considered. Aitken (2015) indicates that a procurement function must provide value for money and be carried out in a cost-effective way. In organisations that are centrally located or devolved, individual departments should:

- Avoid any unnecessary costs and delays for themselves or suppliers,
- Monitor the supply arrangements and reconsider them if they cease to provide the expected benefits, and
- Ensure continuous improvement in the efficiency of internal processes and systems.

(2) Open and effective competition

Open and effective competition requires a framework of procurement laws, policies, practices and procedures that are transparent; that is, they must be readily accessible to all parties. It encourages effective competition through procurement methods suited to market circumstances (Biramata, 2014). Denscombe (2014) explains that government entities need to apply these principles and do research to get the best possible outcome from the market by ensuring that:

- Potential suppliers have reasonable access to procurement opportunities and available opportunities are published at least in the Government Tender Bulletin.
- Where market circumstances limit competition, departments recognise that fact and use procurement methods that take account of it.
- Adequate and timely information is provided to suppliers to enable them to bid.
- Bias and favouritism are eliminated.
- The costs of bidding for opportunities do not deter competent suppliers. .

(3) Ethics and fair dealing

In procurement, if all parties comply with ethical standards they can deal with one another on a basis of mutual trust and respect and conduct their business in a fair and reasonable manner and with integrity (Ambe & Badenhorst-Weiss, 2012). All government staff associated with procurement, particularly those dealing with suppliers or potential suppliers, are required to:

- Recognise and deal with conflicts of interest or the potential for it.
- Deal with suppliers even-handedly.
- Ensure they do not compromise the standing of the state through acceptance of gifts or hospitality.
- Be scrupulous in their use of public property.
- Provide all assistance in the elimination of fraud and corruption.

(4) Equity

Equity as stated by Hlakudi (2015), derived from the context guidelines, meaning application and observance of government policy that are designed to advance persons or categories of persons disadvantaged by unfair discrimination. This fourth pillar is vital to public sector procurement in South Africa. It emphasises economic growth by implementing measures to support industry in general, and especially to advance the development of Small, Medium and Micro Enterprises (SMMEs) and historically disadvantaged communities. SMMEs and HDIs have to play a bigger role in the economy and more diversified ownership in terms of race and gender is necessary (Hlakudi, 2013). To ensure equal treatment, councillors are prohibited from participation in tender committees, lest they influence tender awards.

(5) Accountability and reporting

Accountability and reporting as explained by Munyera (2014) involves ensuring that officials and organisations are answerable for their plans, actions and outcomes. Openness and transparency in administration, by external scrutiny through public reporting, is an essential element of accountability within the procurement framework. Shaoul, Stafford and Stapleton, (2012) explain the following:

- Heads of departments are accountable to their ministers for the overall management of procurement activities.
- Heads of procurement and senior procurement directors are accountable to heads of departments for various high-level management and co-ordination activities.
- Individual procurement officers are accountable to heads of procurement, and to their clients, for the services they provide.
- All people exercising procurement functions must follow these guidelines and are accountable to management.

The subsequent section of discussion is on problems faced by supply chain management policy.

3.9 Problems faced by supply chain management policy

Chopra and Meindl (2010) mention that supply chain consists of all stages, direct and indirect, involved in fulfilling customer requests. An illustration of the stages will now be dealt with as presented in Figure 3.1.

It is important to note that SCM is an integral part of procurement in the South African public sector. Therefore, SCM policy is a tool for the management of public procurement practices. However, despite the employment of SCM as a strategic tool, public procurement in South Africa still faces enormous problems. The problem as illustrated in Figure 3.1 will now be highlighted.

(1) Distribution network configuration

Smelser (2013) mentions that arrangements appear since a supplier no longer relies only on its internal resources but rather is required to be able to combine these resources in new ways and to gain additional resources, and to do this repeatedly. Wilson and Daniel (2010) indicate that there is need for multi-channel arrangements which deals with two aspects of distribution variety. Firstly, they contribute to handle the diversity between various customer groups. Secondly, arrangements make it possible for a specific customer to select the distribution solution that is most appropriate in a particular situation.

(2) Distribution Strategy

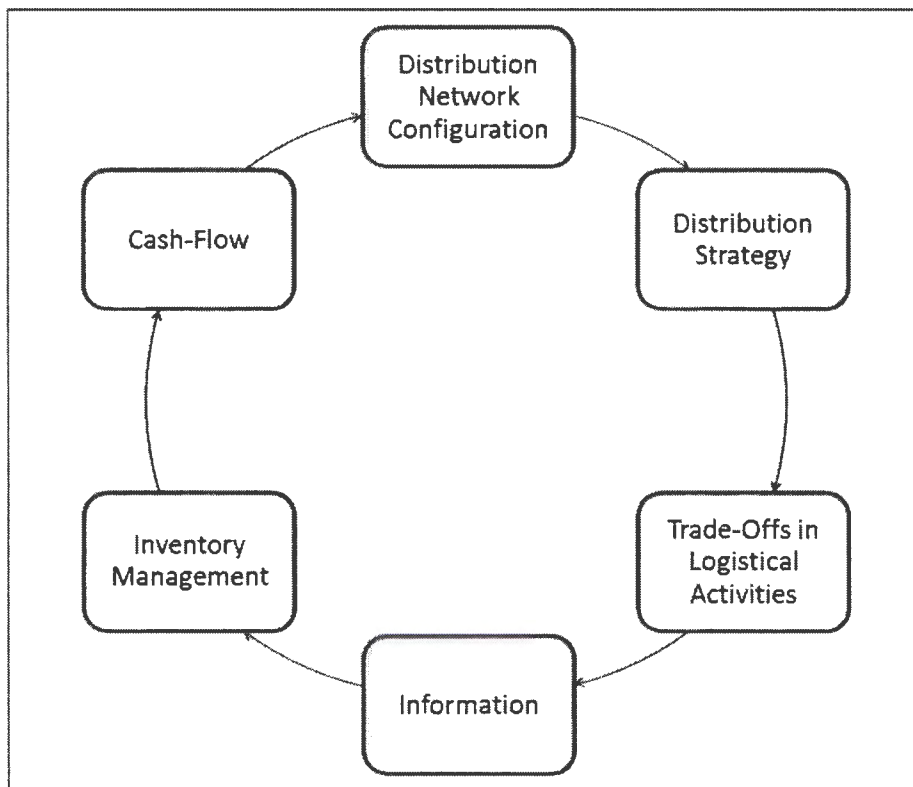
Distribution strategy or marketing channels act as a system of mutually dependent organisations included in the process of making goods or services available for use or consumption. Moreover, Christopher (2016) mentions that a distribution strategy or a market channels is the external contractual organisation that management operates to achieve its distribution objectives. Distribution strategy provides downstream value by bringing finished products to end users. This flow may involve the physical movement of the Product or simply the transfer of title to it. It is also known as a distribution channel, a distribution chain, a distribution pipeline, a supply chain, a marketing channel, a market channel, and a trade channel. Rosenbloom (2012) similarly explains distribution strategy is one or more organisations or individuals who participate in the flow of goods and services from the manufacturer to the final user or consumer.

(3) Trade-offs in logistical activities

Managers need accurate information to identify cost reduction opportunities and to re-engineer their logistics processes with the aim of making managers more efficient (Mukopi & Iravo, 2015). The success of these attempts depends on the ability of the cost analysis system to identify the resources consumed for a specific product, procurement channel or logistic activity. The detail and complexity level of this information depend on the products, services and delivery channels used.

The cost analysis for each activity allows a more efficient assignment of the resources identified. The cost managers need accurate information to identify cost reduction opportunities and to re-engineer their logistics processes with the aim of making managers more efficient (Mukopi & Iravo, 2015). The success of these attempts depends on the ability of the cost analysis system to identify the resources consumed for specific product, procurement channel or logistic activity. The detail and complexity level of this information depends on the products, services and delivery channels used. The cost analysis for each activity allows a more efficient assignment of the resources by identifying the cost reduction and new technology investment opportunities since it updates real profitability for every client and production service. The identification and development of more profitable activities present along a supply chain should create an improvement in the performance of an organisation.

Figure 3.1 Problems faced by supply chain management policy



Source: Adapted from Chopra and Meindl (2010)

(4) Information

An information system in the distribution networking plays an important role in a supply chain, and therefore in distribution strategy or marketing channels. Information technologies can play various roles within a supply chain. Bowersox, Closs, and Cooper, (2010) and Zott, Amit and Massa (2011) mention the following roles:

- They facilitate managerial decision making.
- They help to monitor and control operations.
- They enable the initiation of activities and monitoring of process-related information.
- They allow the creation of simulation systems.
- They allow data storing and processing.
- They allow data analysis needed for creating useful information.
- They facilitate the communication among individuals, companies and devices.
- They allow the development of information systems.

(5) Inventory Management

Inventory management permeates decision-making in countless firms and has been extensively studied in the academic and corporate spheres (Rosa, 2013). The key questions are usually influenced by a variety of circumstances inventory management seeks to answer: when to order, how much to order and how much stock to keep as safety stock. Inventory management involves a set of decisions that aim at matching existing demand with the supply of products and materials over space and time in order to achieve specified cost and service level objectives, observing product, operation, and demand characteristics (Hugos, 2011).

(6) Cash-Flow

Cash flow as explain by Silva and Carreira (2012) contains information about investment opportunities and potential profitability of existing assets and companies without financial constraints may decide for capital adjustments as a response to investment opportunities. Therefore, companies without financial constraints would have higher levels of cash flow. Silva and Carreira (2012) boldly state that cash flow may contain valuable information about investment opportunities. In other words, they argue that difficulties associated with Tobin Q ratio can affect sensitivity of cash flow. Chen and Chen (2012) comment that the investment-cash flow sensitivity has declined over time.

After looking at the problems faced by SCM policy, the next section of discussion is on prerequisites for the implementation of SCM policy.

3.10 Prerequisites for the implementation of SCM policy

In terms of section 217 of the Constitution of the Republic of South Africa, when government contracts for goods and services it should be done in such a way that is fair, equitable, transparent, competitive and cost-effective. In addition, the SCM system must provide for the advancement of categories of persons disadvantaged by unfair discrimination. These are the cornerstones of South Africa's public sector procurement system (National Treasury, 2015). This includes the public sector approach and private sector approach as explained below.

(1) Public sector approach

The public sector supply chains play a key strategic role in government's ability to execute its mandate of service delivery to communities in terms of the construction of roads, the supply of water, sanitation and sewerage systems, and the provision of electricity. Johnson (2014) mentions that this can only happen by way of effective SCM frameworks, managed by competent officials (Giannakis, 2011). An example from Ambe (2012a) mentions that a government sector focus area could be in the health sector,

where the focus may be more on logistics and the effective movement of goods and services in and out of hospitals whereas SCM in the education sector may focus on streamlining the chain through which teaching materials are delivered to students. The shape of the supply chain and the supply chain management processes employed will vary considerably, depending on a range of different considerations (Ambe & Badenhorst-Weiss, 2011).

Public sector SCM offers a reference framework for the composition of public sector supply and multilevel networks (Migiro & Ambe, 2008). Actors in the public sector supply chain are: (1) private organisations receiving orders from public sector agents and (2) accounting institutions cooperating in goods and services, and also how these enterprises are involved with enterprises operating at other levels. This statement is supported by the United Nations Institute for Training and Research, reinforcing that the public sector supply chain plays a vital role in government's ability to execute service delivery (United Nations Institute for Training and Research, 2014).

In support of the above, the Office of Government Commerce (2011) further brought it to the researcher's attention that procurement is not only limited to complex projects such as construction, but that smaller items should also be obtained within this policy. The following section will explain the private sector approach in relation to the implementation of SCM policy in the private sector.

(2) Private sector approach

This section presents an overview of the private sector SCM in South Africa. The private sector procurement has evolved from the acquisition of goods and services to an in-depth and complicated management philosophy referred to as supply chain management (Coe, 2017). Supply chain management incorporates all aspects of the production process, from the acquisition of raw goods to the delivery of finished products or services (Haines, 2015). The supply chain encompasses all activities associated with the flow and transformation of goods from the raw materials stage through to the end user, as well as the associated information flows (Forrer, Kee, Newcomer, & Beyer, 2010). Material and information flow both up and down the supply chain. SCM is the integration of these activities through improved supply chain relationships to achieve a sustainable competitive advantage (Wolf, 2011).

Practitioners and academics alike have addressed the concept of SCM as an extension of logistics, the same as logistics, or as an all-encompassing approach to business integration Heller (2013). The current literature demonstrates that these conceptualizations are inadequate and clearly identify the need for some level of strategic coordination of activities and processes within and between organizations in the supply chain that extends beyond logistics (Madhani 2012).

Gold *et al.* (2010) pinpoint that implementing SCM requires making the transition from a functional organisation to a focus on process, first inside the firm and then across firms in the supply chain, and further argue that there must be:

- Understanding of the degree of change that is necessary.
- Agreement on the SCM vision and the key process.
- The necessary commitment of resources and empowerment to achieve the stated goals, as per (Kerzner, 2013).

The subsequent section discusses the SCM within the South African public sector.

3.11 Supply chain management within the South African public sector

SCM is a proven business strategy that has gained wide acceptance in recent years due to increasing customer demands for quality, delivery and speed. The integration of SCM in the public sector has played a critical role in optimising logistics support and improving the management of secondary inventory (Waters & Rinsler, 2014). Public SCM is a concept that offers a reference framework for the composition of public supply chains and multilevel networks. The concept, characterised by the fact that it is not solely focused on the analysis of cost reduction, emphasises the question whether, and if so which, management processes and actions are necessary for public multilevel networks. The SCM framework in the South African public sector is a fairly new concept, introduced as recently as 2003. Internationally though, it has long been employed by international governments that utilise it as a guide and policy to govern appropriate channels which explain the processes to be followed when goods and services are procured by the public sector (Ambe, 2009).

Prior to the implementation of this supply chain management framework in South Africa, the South African Government consulted with the World Bank to conduct an assessment known as Country Procurement Assessment (CPAR). This assesses the capability and the capacity of the public sector SCM framework, and advises how to align with the SCM framework's best practices. The South African Government has implemented the SCM framework, which is in line with the international public sector supply chain framework, known as the Model Law on Procurement of Goods, Construction and Services. The Model Law on Procurement was introduced in 1994 by the United Nations Commission on International Trade and is used by several international governments (United Nations Commission on International Trade Law, 2014).

The public SCM concept not only concentrates on the question of which institutions cooperate in goods and services, but also how these enterprises are involved with enterprises operating at other levels (Ross, 2013). Thus, analyses of intra-network-relationships as well as analyses of inter-network-relationships

which are essentially necessary elements of SCM, have been implemented in various countries with the view to managing public funds and growing the economy sustainably. Countries such as the United Kingdom (UK), Canada, Denmark and South Africa have fully-integrated SCM systems. Also, countries such as Ghana and Namibia have also adopted SCM. According to Levenger, Onger, Wolde and Kagoya (2013), SCM is popular in Namibia and has addressed the deficiencies in the health care system. The public services sector in the UK, for example, has an expenditure of approximately \$150 billion a year on the goods and services necessary for the delivery of services (European Commission, 2007). It is expected that a government should practise the highest professional standards when it expends funds on behalf of the taxpayer to make sure the requirements of quality and quantity meet the needs of the people. In South Africa, SCM is an integral part of financial management.

The subsequent section discusses understanding municipal SCM processes.

3.12 Understanding municipal SCM processes

Municipalities in South Africa are governed according to the structure of local government, dealt with in terms of the Municipal Structures Act 117 of 1998. This Act sets out the categories and types of municipalities and provides for elections and other matters. The Local Government: Municipal Structures Act 117 of 1998 defines a municipality as “an organ of state within the local sphere of government consisting of political structures, office bearers and administration of the municipality”. The Constitution of the Republic of South Africa, 1996, provides for three categories of municipalities. These are Category A (metropolitan), Category B (district) and Category C (local) as explained in Chapter One (South African Yearbook, 2014, 2015).

The key Acts, regulations and guidelines guiding SCM in municipalities, as listed by National Treasury (2014) are as follows:

- Municipal Finance Management Act 56 of 2003 (MFMA).
- Municipal Systems Act 32 of 2000.
- Preferential Procurement Policy Framework Act 5 of 2000.
- Preferential Procurement Regulations 2011.
- Supply Chain Management: A Guide for Accounting Officers of Municipalities and Municipal Entities 2005.

SCM processes have been developed in accordance and in conjunction with other pieces of legislation to develop and shape SCM within municipalities. These include Section 217 of the Constitution, which compels all organs of state to implement a SCM system which is fair, transparent and adjudicating bids. Treasury Regulations 868 of 2005 (SCM Regulation) and SCM: A Guide for Accounting Officers of

municipalities and municipal entities provides a step-by-step illustration for the implementation of the SCM policy for the accounting officers. Table 3.2 presents the summaries of the SCM role players and functions in municipal SCM units in municipalities.

Table 3.2: Key role players and functions in municipal SCM

Role player	MFMA Act Function
National Treasury	Develops and oversee the implementation of the Act.
Provincial Treasury	Supports municipalities in implementing the MFMA Act and further provides assistance to municipalities in terms of capacity building.
Municipalities and municipal entities	The council approves the SCM structure of a municipality and ensures that <i>municipal managers execute the council's SCM policy</i> .
Accounting officer	Establishes the SCM unit, which will be under the supervision of the CFO. Each municipality in terms of Section 165 of the MFMA is required to establish an Internal Audit unit that must examine and report on the effectiveness, efficiency and economic use of SCM to achieve the objectives of the municipality.
External auditors	Examine and report on the compliance of municipalities with the SCM policy to the municipal managers of the municipality.
SCM officials	Custodians of the SCM process implement the policy and carry out the SCM operational activities. External role players are the suppliers and the community within the municipal jurisdiction.

Source: adapted from National Treasury (2005)

The SCM regulations provide a clear explanation of the execution process to be followed within the SCM framework and how to properly manage the six elements of the framework, which are demand management, acquisition management, logistics management, disposal management, risk management and performance management. The SCM Regulations (2005) serve as a formal requirement to accounting officers to ensure the implementation of SCM processes as an integral part of their financial systems. According to the SCM regulations, municipalities must establish SCM units to develop and implement their SCM policy (RLM, 2014). Table 3.2 shows the key role players and functions in a municipal SCM unit.

Each municipality in terms of Section 165 of the MFMA is required to establish an internal audit unit that must examine and report on the effectiveness, efficiency and economic use of the SCM to achieve the objectives of the municipality. External auditors examine and report to the mayor of the municipality on the compliance of the municipalities with the SCM policy. The audit committee renders an advisory service to the municipality on matters relating to Section 2 (a) I – ix of the MFMA. SCM officials, who are the custodians of the SCM process, implement the policy and carry out the SCM operational activities.

The following are the SCM role players and functions in municipal SCM units in municipalities:

(1) National Treasury

The role of the National Treasury is to introduce and oversee the implementation of SCM, develop treasury regulations, and issue guidelines and general conditions of contracts and bid documentation to the accounting officer. National Treasury also sets minimum reporting standards and monitors policy outcomes (National Treasury, 2014).

National Treasury's Practice Notes indicates that the SCM regulation in terms of the Municipal Finance Management Act (56 of 2003) empowers the National Treasury to issue practice notes to guarantee minimum rules and standards within the government. In the event of such practice notes impacting on the substance of the municipal policy, its policy must be amended to give effect to the provision. All documents relevant to SCM are made available electronically on the National Treasury webpage: (<http://www.treasury.gov.za/organisation/specialistfunctions/supplychainmanagement:normsandstandards>).

The introduction of various legislation is also a challenge to the supply chain practitioner, as there are many and it can be confusing since new legislation is introduced continuously. The SCM framework is legislated and customised for local government and has various key role players, including those who play important roles to ensure the effectiveness of the SCM framework. It is possible though, that it can only achieve its objectives when the correct implementation is followed by adhering to the municipal SCM regulations (National Treasury, 2014).

(2) Provincial Treasury

Provincial Treasury is operating at the provincial level. It is responsible for preparing and controlling the provincial budgets and oversees the implementation of this Act in its province (Matseke, 2015). A provincial Treasury, as mention by McKinney (2015), must prepare and submit financial statements for its departments, for public entities that fall under its control, and for the provincial legislature. The consolidated financial statements must then be made public.

(3) Municipalities and municipal entities

Municipalities and municipal entities are independent organisations that perform municipal services on behalf of a municipality and the municipality has the majority shareholding.

- ***Municipal entities***

The municipality is also responsible for ensuring that its municipal entities comply with all relevant legislation, that they are managed responsibly and transparently, and that they meet their statutory and contractual obligations. The primary role of the municipal council is that of political overseer of the municipality functions, programmes and the management of the administration. All of the powers of local government are vested in the municipal council. The municipal council has the power to make by-laws (legislative authority) and the powers to put those laws into effect (executive authority) (National Treasury, 2015).

- ***Municipal SCM unit***

The SCM unit operates under the direct supervision of the Chief Financial Officer (CFO) or an official to whom duty has been delegated in terms of Section 82 of the Act. The municipality and the municipal entity under sole or shared control may establish a joint SCM unit (SCMU) to implement their respective supply SCM policies. SCM is an integrated part of the financial management and the SCM unit should preferably operate under the direct supervision of the CFO. Municipalities and municipal entities should ensure a clear line of authority and accountability as well as performance criteria that will contribute toward minimising risk in the municipality (SALGA, 2015).

(4) Accounting officer (AO)

The CFO plays an essential function in supporting the accounting officer to carry out financial management responsibilities in areas ranging from budget preparation to financial reporting and the development and maintenance of internal control policies and procedures.

The CFO as defined by Bragg (2010) refers to the corporate officer primarily responsible for managing the financial risks of a business. Bragg further describes the responsibilities of the CFO as financial planning and record keeping. However, in recent years, the role of a CFO has expanded to encompass communicating financial performance and forecasts to the analyst community. The key functions or responsibilities of a CFO are: recruiting, selecting, developing, making policies and managing skills to build and maintain effective SCM units, training, procuring skills and resources to develop managers and supervisors to operate and manage a variety of SCM activities, facilities and networks (Ambe, 2011). According to Bragg (2010), the CFO is responsible and accountable for all the income and expenditure of a municipality, all assets and the discharge of liabilities and the proper and diligent compliance with applicable municipal finance management and legislation. Section 81(1) (b) of the MFMA, charges the CFO with the responsibility of advising the AO on the abovementioned responsibilities.

The intention of this section 81(1) (b) of the MFMA is to make the CFO responsible to give advice to the municipal manager in relation to the financial matters. The advice will assist the municipal manager to make well-informed decisions on financial aspects (National Treasury, 2015). The role of the AO (Migiro & Ambe, 2008) includes the following:

- To establish a SCM unit under direct supervision of the chief financial officer.
- Compile and implement SCM policies.
- Follow the guidelines supporting the documentation for the implementation, as issued by the National Treasury.
- Develop internal procedures and processes.
- Ensure that the officials are trained and adequately skilled.
- Report to the National Treasury.
- Comply with ethical standards.

(5) External auditors

External auditing, according to Act No. 26 of 2005 is an independent body which resides outside of the organisation which it is auditing. The auditors are focused on the financial accounts or risks associated with finance and are appointed by the municipality (Healy & Palepu, 2012). The main responsibility of external auditing, according to Bank (2011), is to perform the annual statutory audit of the financial accounts, providing an opinion on whether they are a true and fair reflection of the company's financial position. As part of this, external auditors often examine and evaluate internal controls put in place to manage the risks which could affect the financial accounts, to determine if they are working as intended (Knechel & Salterio, 2016).

External auditors are doing two types of audit opinions, namely, (1) regularity audits and (2) performance audits. According to National Treasury (2004), regularity auditing are conducted annually for all institutions and involve both compliance and financial auditing, as well as audits of the economy, efficiency and effectiveness with which the audited entity uses its resources in carrying out its responsibilities, while performance auditing is an independent external evaluation of the extent to which an institution complies with any legislation, regulations, policy, control measures, procedures, motivations and authorisations related to financial matters and which apply to the municipality.

(6) SCM officials

External role players are the suppliers and the community within the municipal jurisdiction. Municipal SCM policy requires the creation of bid committees. The various committees to be created include: the

bid specification committee, bid evaluation committee and the bid adjudication committee. Table 3.3 shows the bid committees, the constituents of the committees and their roles.

Table 3.3: Bid committees, constituents and roles

Bid committee	Constituent of the committee and functions
Bid specification committee	Comprises one or more officials, preferably a manager responsible for the function including external specialist advisors (cross-functional principle); accounting officers or delegated official to be appointed as chairperson. ROLES: Compile technical specifications; terms of reference; requirements; conditions of contract; evaluation criteria; determine goals; and indicate method of procurement.
Bid evaluation committee	Comprises a SCM practitioner; technical expert from the department requiring the good or service. ROLES: Accounting officer must appoint the chairperson and members; evaluate bids in accordance with the criteria (PPPFA); evaluate bidders' tax matters; submit a report for recommendation regarding the award; check list for restricted bidders; consult the register for tender defaulters.
Bid adjudication committee	Comprises at least four senior managers which include: the CFO; at least one senior SCM practitioner to ensure compliance and a technical expert who is an official to ensure compliance with the specification. ROLES: Accounting officer must appoint the chairperson and members; a member of the bid evaluation committee may present its case to the bid adjudication committee; neither a member of the bid evaluation committee nor a person assisting it, or any advisor, may be a member of this committee.

Source: Ambe and Badenhorst-Weiss (2011)

SCM in municipalities is considered an under-girdle for spending on capital projects and operational expenditure (day-to-day expenses), monitoring the manner in which the spending is undertaken, and fostering spending that advances the RDP goals, LED initiatives, BBBEEA principles and ensuring value for money on each spending. The following section discusses the municipal SCM challenges.

3.13 Municipal SCM challenges

It is indisputable that municipalities face enormous SCM challenges. This situation is not unique to the North West province, but is a challenge to municipalities in general. The challenge may be as a result of a need for appropriate understanding regarding the concept of SCM policy and its inextricable link to long-term quality service delivery, human capital development and associated socioeconomic growth (Ambe & Badenhorst-Weiss, 2012). National Treasury (2015) concedes that municipalities are challenged by constant allegations of corruption and inefficiency. There are daily reports in newspapers, on television, and radio and social media, of allegations and instances of irregularities in SCM.

However, there are municipalities who are starting to value the strategic importance of SCM to service delivery, value creation, socioeconomic transformation and fiscal prudence. The establishment of the office of the Chief Procurement Officer within the National Treasury reflects government's commitment to quality service delivery at the right place and time (National Treasury, 2015). Some of the key challenges for inappropriate SCM compliance in municipalities can be ascribed to various reasons and some of them are elaborated below.

(1) Lack of organisational structures and systems in place

Since the implementation of SCM, many municipalities do not have appropriate organisational structures and systems in place, partly owing to a lack of skills, knowledge and capacity. Also, there has been a lack of strategic leadership and shared vision (SCM Review, 2015).

(2) Lack of compliance and accountability

Many SCM defaulters have not been held accountable. Municipal SCM practitioners who have defaulted in processes have been able to move jobs within government without any action being taken against them (Gorla, 2010). There is, therefore, an urgent need to rethink innovative ways of curbing corruption and some other administrative malpractices within municipalities. There must be consequences for those who are not willing to play their part for the public good (National Treasury, 2015).

(3) Lack of clarity of roles and responsibility

The lack of clarity about the roles and responsibilities of technical staff and of political office-bearers creates scope for interference, and this gives rise to allegations or instances of corruption (Ambe, 2016a).

(4) Policies and regulations overlap are confusing and cumbersome

SCM-related policies and regulations are numerous, often confusing and cumbersome. This creates confusion not only to SCM practitioners as custodians, but also to suppliers. This inhibits proper implementation thereby leading to poor service delivery. Ambe and Badenhorst-Weiss (2012) noted that there are inadequate controls and procedures for the handling of bids, and the appointment of bid committee members are not aligned to policy requirements. Moreover, the defaulters do not even provide sufficient motivation for deviations from SCM procedures.

(5) Lack of supplier management relationships

Supplier relationship management is an important part of SCM. However, municipalities underestimate how important supplier management is. This is sometimes misunderstood to be linked to corruption. Municipalities in the country need to form long-term strategic relationships with their suppliers (Hungwe, 2017).

(6) Ethics and professionalism

There has been a lack of ethics and professionalism among municipality internal control systems to ensure fair, equitable, transparent, competitive and cost-effective SCM processes that could prevent and detect fraud, non-performance by suppliers, and non-compliance with SCM legislation (Ambe, 2016a).

(7) Strong ethical leadership

Ambe (2016b) indicates that in the current climate of SCM practices in municipalities, ensuring a strong ethical culture is critical. Non-compliance with SCM across the management of municipalities should have consequences and accountability should be enforced. Political and municipal leadership need to take action against transgressors. Only when leadership has set the tone of decisively dealing with malpractices would the citizenry have confidence in the SCM systems (National Treasury, 2014).

To conclude, SCM is the area where the bulk of the activities are concentrated in municipalities. Continued non-adherence to SCM policy, therefore, defers restoration of the public confidence in the ability of municipalities to systematically take care of their interests and deprives citizens of much-needed services in all areas of service delivery. The level of service delivery to citizens and the degree to which socioeconomic objectives are promoted are directly and significantly helped or frustrated by the degree to which the SCM systems of municipalities comply with legislation and prescripts.

The subsequent section discusses the municipal SCM business model.

3.14 Municipal SCM business model

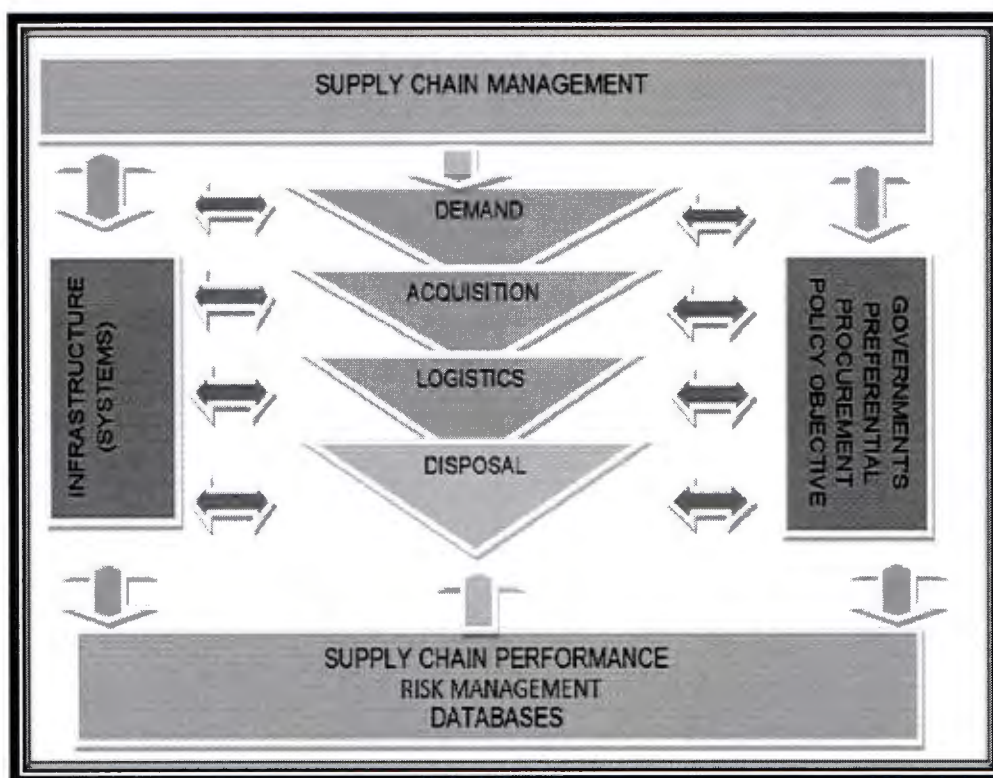
According to the SCM guide for accounting officers, SCM in the South African public sector is guided by the SCM model. The model consists of six elements of SCM, namely demand, acquisition, logistics, disposal, risk management and performance evaluation (Mnguni, 2012). Figure 3.2 presents the municipal SCM business model.

According to the South African Local Government Association (SALGA), the accounting officer is mandated by the National Treasury to develop an effective and efficient supply chain management (SCM) system within the entity for the acquisition of goods, services and assets, as well as the disposal

and letting of state assets, including unserviceable, redundant and obsolete moveable assets (South African Local Government Association, Supply Chain Management Policy, 2013).

This system should make provision for demand management, acquisition management, logistics management, asset management, risk management and performance management. These are known as the six elements of the Government's supply chain management and are essential for managing the supply chain proactively, to ensure delivery (South African Local Government Association, Supply Chain Management Policy, 2013).

Figure 3.2: Supply Chain Management model



Source: Adapted from National Treasury (2005)

3.14.1 Demand Management

In terms of demand management, Regulation 10 of the Municipal Supply Chain Management Regulations of 2005 (MSCMR), requires that “an SCM policy must provide for an effective system of demand management in order to ensure that the resources required to support the strategic and operational commitment of the municipality or municipal entity, are delivered at the correct time, at the

right price and at the right location, and that the quantity satisfies the needs of the municipality or municipal entity”.

This process plays a crucial part in ensuring that municipalities achieve their strategic objectives as reflected in the Independent Development Plan. It also has a direct effect on municipalities’ financial stability, by conducting proper need assessments and analyses of the industry, providing municipalities with a clear indication of what the average costs of goods and services are. This information should be used by the municipalities to create their budgets (National Treasury, 2005). Ambe (2009) agrees with the above statement and makes an additional point, claiming that demand management is the first element of supply chain management which can achieve its strategic objective, if the supply chain management practitioner is brought closer to the end.

3.14.2 Acquisition management

Acquisition management is usually mistaken for procurement. Brown (2010) explains acquisition management as a well-established activity within government with a set of management responsibilities that are perceived to be broader in scope compared to procurement. Brown further states that the core acquisition principle is to deliver on a timely basis best value products or services to customers while maintaining and fulfilling policy objectives. The calling for tenders to secure supplies of goods and services is an integral part of procurement, as legislation compels public institutions to procure goods and services through that process according to Ngobeni (2011). A thorough knowledge of the different phases of the tendering process, and the accompanying procedures is, therefore, necessary to ensure that public officials procure goods and services in good time and according to requirements (Motuba, 2014).

3.14.3 Logistics management

Copacino (2010) mentions that the aspect of SCM addresses the logistics management issues which entail among other things, the coding of items, setting of inventory levels, placing of orders, receiving and distribution of material, stores/warehouse management, expediting orders, transport management and vendor performance. Ismail and Sharifa (2008) state that logistics management is the most important element of SCM; it is that part of SCM that plans, implements and controls the effective storage of goods, services and related information between the point of origin to the point of consumption, in order to meet the customer requirements.

According to the National Treasury (2014), every municipality must establish an effective system of logistics management in order to provide for the setting of inventory levels; placing of orders; receiving and distribution of goods; stores and warehouse management; expediting orders; transport management;

vendor performance; and maintenance and contract administration. When ordering stock or goods, certain procedures need to be followed.

3.14.4 Disposal management

SCM policies must provide an effective system of disposal management for the disposal or letting of assets, including unserviceable, redundant or obsolete assets, as prescribed in Regulation 40 of the Municipal Supply Chain Management Regulations (MSCMR). Furthermore, in terms of Regulation 40, the SCM policy must specify the ways in which assets may be disposed of. This should include the transferring of assets to an organ of state, either at the market related price or free of charge, selling, or destroying the asset (Bent, 2014). Consideration should be given to obsolescence planning, maintaining a database of redundant material, inspecting material for potential re-use, determining a disposal strategy and executing the physical disposal process (Ambe & Badenhorst-Weiss, 2011).

In addition, SALGA maintains that, in order for the disposal process to be fair, the decision to dispose should be systematic and not left to one individual, in an attempt to avoid the process from being biased. The process should be systematic and there should be separate committees with one in charge of bid evaluation, while another committee should be responsible for bid adjudication. The latter makes recommendations to the chief financial officer, who may approve or disapprove (South African Local Government Association, Supply Chain Management Policy, 2013).

3.14.5 Risk management

In terms of Section 41 of Municipal SCM Regulations of 2005, risk management includes the identification, consideration and avoidance of potential risks in the SCM system. Risk management must include:

- The identification of risks on a case-by-case basis.
- The allocation of risks to the party best suited to manage such risks.
- Acceptance of the cost of the risk where the cost of transferring the risk is greater than that of retaining it.
- The management of risks in a proactive manner and the provision of adequate cover for residual risks.
- The assignment of relative risks to the contracting parties through clear and unambiguous contract documentation.

3.14.6 Performance management

SCM performance, according to Catekaya, Cuthbertson, Ewer, Klass-Wissing, Piotrowicz and Tyssen (2011), is a tool to manage the organisation's performance and to improve performance, improving profit and reducing negative impacts. Deshpande (2012) defines SCM performance as multiple measures of performance developed by the organisation to gauge the ability of a supply chain to meet an organisation's long-term and short-term objectives. SCM performance is necessary to plan actions and monitor how a selected strategy is realised and the defined goals achieved.

Supply chain performance is critical. It depends on the actions and decisions of all the members within SCM and finance, who have to support the systems in place to achieve the set objectives of the organisation. The norms and standards will determine the processes and mechanism followed. Effective and efficient supply chain performance monitoring will contribute to practical public finance management (Christopher, 2016).

In conclusion, the above elements are the basis on which an efficient SCM system is implemented across all spheres of government, including municipalities, and SCM is an integral part of financial management in municipalities. To be able to provide a perspective of SCM, it is important to review the transformation processes leading up to the adoption of SCM.

The following section discusses the performance measurement of SCM challenges by South African municipalities.

3.15 Performance and compliance measurement of SCM

Performance management and measurement should, as its ultimate goal, improve organisational performance and compliance on a continuous basis (Heinrich, 2012). According to Chong (2010), "organisational performance is an indicator which measures how well an organisation accomplishes its objectives". Importantly, Chong (2010) also reflects on the definition of Li *et al.* (cited in Chong, 2010) regarding organisational performance, relating it to how well an organisation achieves its market orientation and financial goals. This is also in line with the statement by Chong (2010) that "valid measurements help identify the performance levels and compliance level that can be expected from an organisation's processes, and the deviations from its targets".

Although organisational performance is measured by both financial and market criteria, if one draws this closer to SCM, it is observed that the short-term objectives of SCM are to enhance productivity and reduce inventory and lead time, whilst the long-term objectives of SCM are to increase the market share and the integration of supply chain (Chong, 2010).

Wagner (2010) states that “performance management is one approach for measuring and improving performance and compliance in the supply chain”. This is because the performance measurement process between customer and supplier consists of the activities of selecting performance variables, defining metrics, setting targets, measuring and analysing (Forslund & Jonsson, 2010). Among other things, this involves the measurement of actual performance and the elimination of inefficiencies not contributing towards attaining objectives across the total supply chain, according to Hugo (2010). Their research also revealed that there has been a shift away from measuring supply chain compliance to a more strategic approach, which may involve, for example, measuring the ability of the supply chain to add to customer value (Hugo, 2010).

As is the case for organisational performance measurement and compliance, a practical SCM performance assessment tool should also be able to quantify both the efficiency and effectiveness of supply chain action (Banomyong & Supatn, 2011). Banomyong and Supatn (2011) further assert that the assessment of supply chain performance can be categorised into: (1) qualitative and (2) quantitative measures in which quantitative techniques, such as benchmarking, are frequently used. Thus, performance measurement provides “the means by which an organisation can assess whether its supply chain has improved or degraded” (Banomyong & Supatn 2011). Banomyong and Supatn (2011) further mention that measuring SCM performance and compliance is important due to the following reasons:

- Measurements are important to directly control behaviour and indirectly to control performance.
- A few key measurements will go a long way towards keeping a company on track in achieving its supply chain improvement objectives.
- Seemingly relevant, but cumbersome, measurements are of little use, and are possibly a hindrance in helping to improve supply chain performance.
- Picking the wrong measures and leaving out important ones could lead to SCM performance degradation.

Driving SCM based only on after-the-fact measures, such as losing an important customer or having poor financial performance, is not very effective (Asif & Ohdar, 2015)

Banomyong and Supatn (2011) found that in order to assess supply chain efficiency, performance evaluation of the entire supply chain is of the utmost importance, and they define total supply chain performance as the efficiency which takes into account multiple performance measures related to supply chain members, as well as the integration and coordination of members’ performance. In order for this performance to come to fruition, the supply chain must be viewed as one entity and any measurement system should span the entire supply chain and ultimately enable managers to see the areas where supply

chain performance can be improved, so that they focus their attention and obtain higher levels of performance (Bent, 2014).

Supply chain performance should not just be measured externally, but should also be measured within an organisation. This is because the internal performance of an organisation can affect the performance of the entire supply chain and it is therefore important to be able to measure internal supply chain performance even before trying to assess total supply chain performance (Banomyong & Supatn, 2011). The importance of internal supply chain performance measures lies in their ability to evaluate the efficiency and effectiveness of a function in producing its outputs and services, such as the cost, lead time, and reliability (Banomyong & Supatn, 2011). Ultimately, the effectiveness of and support from internal supply chain functions are key to making organisations work smoothly and successfully when managing their supply chain (Banomyong & Supatn, 2011).

The subsequent section discusses the challenges faced by South Africa municipalities.

3.16 Challenges faced by municipalities

The successful implementation of SCM is not only limited to the SCM framework, but success depends on the equation which includes related legislation and the SCM officials/practitioners, as it is a team dependent function. That following are various challenges faced by municipalities, according to the Municipal Finance Management Act (No. 56 of 2003).

(1) Non-compliance with policies and regulation

Compliance with policies and regulation is a major problem in SCM because most practices are exposed as being due to non-compliance and incorrect use of the preference points system. Not adhering to SCM policies when appointing service providers is prohibited by law (Aku Kokor, 2014).

(2) Lack of proper knowledge, skills and capacity

While the system contains many excellent people, competency assessments show significant gaps in SCM skills and knowledge (National Treasury, 2015). Many municipal SCM actors have attended a number of training workshops on SCM, but they still lack the appropriate knowledge for proper implementation (National Treasury, 2015). National and provincial treasuries embark on programmes that educate practitioners, but implementation of their programmes always falls short.

(3) Planning and demand management

Planning is crucial, since it initiates a process. Assessment, drafting of the specifications and analysis of the market culminates in linking the needs with the budget. End-user departments do not submit their

demand plans on time to demand management (Maleka, 2016). It is a yardstick in the supply chain because it is a planning phase in achieving the set objectives. In this stage the shared decision-making strategy should be identified, focusing on providing the right goods and services in the right place and at the right time (Meihami & Meihami, 2014).

(4) Ineffectiveness of broad-based black economic empowerment

According to the government of the Republic of South Africa, black economic empowerment (BEE) was implemented to redress the imbalances of the past, when black communities did not have the opportunity to engage in business ventures. Government later adopted the Broad-Based Black Economic Empowerment Act (BBBEE), which aimed at the expansion and wider opening of opportunities for workers and smaller enterprises to facilitate ownership and management among disadvantaged groups. BEE had a negative effect on the economy and promoted fronting and tender abuse (Smart Procurement, 2013).

(5) Lack of transparency within SCM

Lack of transparency within the SCM structures is still a major challenge in the public sector. Research has been done and training has been offered to accelerate and improve the system, but municipality challenges still exist. The Organisation for Economic Co-operation and Development (2011) states there are various problems with transparency, SCM processes are not clear to bidders, tender information is incomplete and non-competitive procedures are used.

(6) Strategic importance of SCM

Currently, SCM falls under the finance department of government. It has not been seen as a core and strategic discipline and, therefore, the strategic importance of SCM is not valued. Ellram and Cooper (2014) indicate certain guidelines and principles for a concept to be a discipline. Based on those guidelines, SCM should be given strategic status as a discipline and should not fall under the finance division within government spheres. What is evident in the daily newspapers and on social media is that SCM has resulted in different approaches and a lack of standardisation. According to McCarthy (2010), the completeness of tender documents in many municipalities is difficult to verify. De Lange (2011) notes that taxpayers were fleeced of R30 billion (3.675 billion USD). Among government entities probed for procurement irregularities was the Tshwane Metro where about 65 municipal officials were investigated for striking business deals worth about R185 million with their own Council (Pauw, 2011).

National Treasury (2015) indicates that the government has a priority to pay career officials adequate salaries with the view to insulate them from politics. This is an important goal, but is only part of the

task of creating a professional civil service. Officials tend to use their position for unlawful private economic gain. Incentives from suppliers are affecting fairness and transparency in public and private SCM. There are many people in companies or businesses all over South Africa who use their spouses and people with disabilities as a front to protect their image and to win government tenders. Such practices are discouraged by the implementation of the Preferential Procurement Policy Framework Act (PPPFA) (Act 5 of 2000).

Conflict of interest may also arise from the participation of consulting firms or contractors in government procurement. Diligent policy implementation is required to prevent this. Public officers who are involved in government procurement, especially the chairperson and members of the three committees involved in SCM, officials opening tenders and consultants should, at all costs avoid conflict arising between their official duties and their private interests (Shaw, 2010). SCM regulations for municipalities state that the award of a bid to a close family member of an employee in the service of government, or to a person who left a position in any sphere of government fewer than 12 months previously, must also be disclosed in the annual financial statements of the municipality. Provisions also apply to ensure that suppliers do not corrupt supply chain officials; their bids will be disqualified subsequent to such activities (RLM, 2011).

(7) Corruption and fraud by municipal officials

There are many variations in the nature and scope of corrupt behaviour, and different measures or remedies are enforced to combat corruption. Habtemichael & Cloete (2010) state that phenomenon can be found in virtually every organ of government. It exists in the private sector as well (Rabodiba, 2010). Corruption is used in reference to a large range of illicit activities. Although there is no comprehensive definition of what constitutes corrupt behaviour, its known and most prominent definition shares a common emphasis on the abuse of public power or position for personal advantage, which eliminates initial competition (Fletcher & Herrmann, 2012). Bribery, according to Rohlfen (2012) is offering or promising any undue pecuniary or other advantage by a director, officer, employee or agent of a private enterprise in order to obtain or retain a business or other improper advantage. In government, no one should pay any portion of a contract payment to a government employee or official or other contrary party or use intermediaries such as agents, subcontractors, consultants or third parties (Forssbaeck & Xelheim, 2008).

To conclude, SCM is the area where the bulk of activities are concentrated in municipalities. Continued **non-adherence to SCM regulations, therefore, defers restoration of the public's confidence in the ability** of municipalities to systematically take care of their interests – and deprives citizens of much needed services in all areas of service delivery. The level of service delivery to citizens and the degree to which

socioeconomic objectives are promoted are directly and significantly helped or frustrated by the degree to which the SCM systems of municipalities comply with legislation and prescripts.

The next section summaries what has been discussed in Chapter three.

3.17 Summary

This chapter introduced the meaning of the phase SCM, theories of SCM, definitions of SCM, objective of SCM, historical development of SCM, evolution of procurement and logistics pertaining to SCM, the SCM policy, guiding pillars of SCM policy and the problems faced by SCM policy. The chapter also highlighted SCM within the South African public sector context, understanding municipal SCM processes, key role players and functions in municipal SCM, and the municipal SCM business model. The chapter thereafter introduced some SCM challenges faced by municipalities.

In order for local government to implement its policies, it needs to remember that objective ethics, integrity and transparency play important roles and should be strengthened. It should also be noted that when leadership is also a part of the problem, enforcement will suffer, as there will be no one to give oversight. Finally it is clear that there is a structural weakness in the current SCM policy. As a result of this, it cannot achieve the objective of Section 217 of the Constitution, until structural solutions have been found.

CHAPTER FOUR

RESEARCH DESIGN AND METHODOLOGY

4.1 Introduction

The previous chapter provided a comprehensive overview of the rationale for this study. This was done by reviewing relevant literature in order to extract the points of view of various authors in relation to the topic of study, and the aim of the study was to obtain an understanding of the level of compliance with SCM policy within the Ngaka Modiri Molema District Municipality of the North West Province.

In this chapter, focus is placed on the appropriate research methods to be adopted for the collection of data from prospective respondents and participants to achieve the objectives of this study. The chapter map, aims of the research, pragmatic paradigm choice, research approach, and research design are presented. Furthermore, the research methodology, population of the study, sampling techniques, data collection techniques, data analysis, and the ethical issues that guide the process of research are discussed.

Murray (2015) affirms that a document map represents the association of topics under study using diagrams. The chapter map as presented in Figure 4.1 and embodies the flow of the different contents and/or topics which are discussed in this chapter. This enables an easy understanding of the relationships existing among the different topics when viewed at a glance. Supporting this assertion, Novak and Cañas (2008) and Chukwuere (2015) opine that the ideology of inventing a chapter map is to vividly understand and showcase the concept and structure under study. Figure 4.1 shows the link from the paradigm choice down to the methodology chosen and it can be referred to as the blue print.

Flowing from the problem statement and research questions as presented in Chapter One, the objectives of this study are restated.

4.2 Research aim

The primary aim of this study is to obtain an understanding of the level of compliance with SCM policy in the Ngaka Modiri Molema District Municipality of the North West Province.

Secondary aims

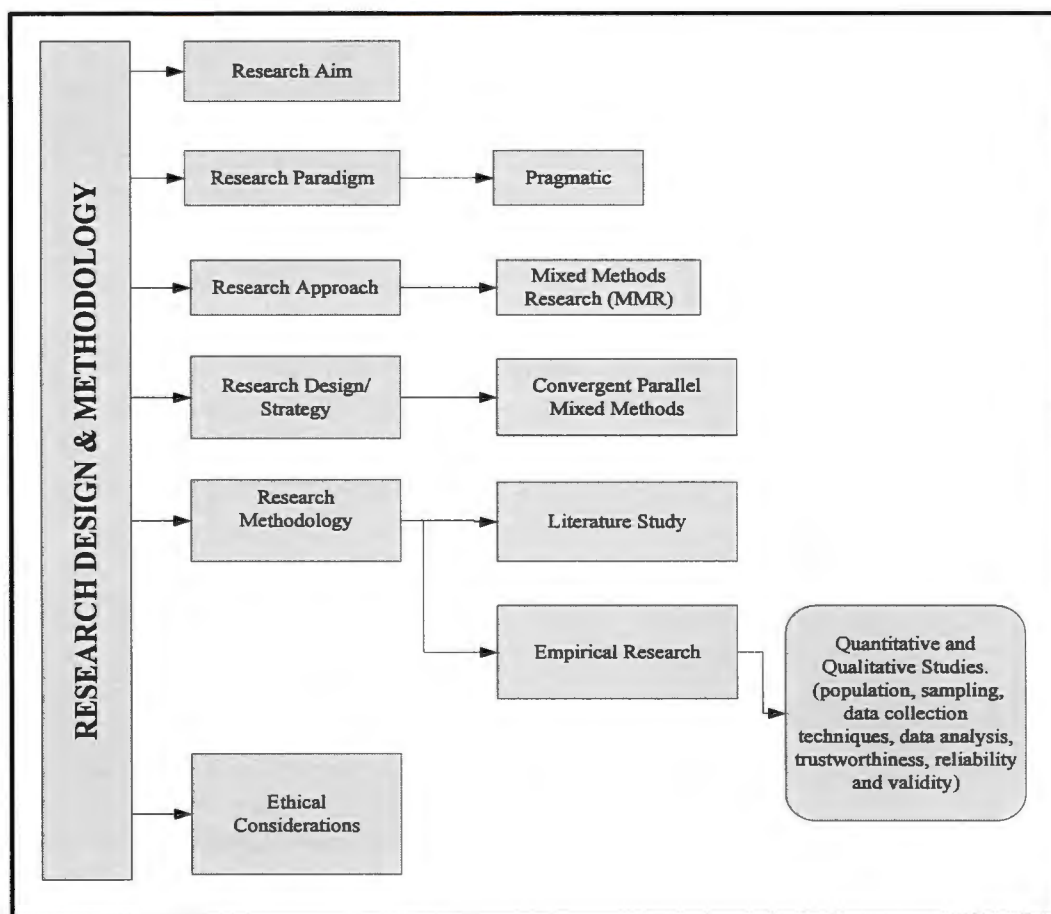
The secondary aims of this study are as follows:

- To establish to what extent SCM officials and senior managers of departments are familiar with the SCM policy.

- To investigate whether the SCM procedure/regulation and measurement are communicated effectively in all the functional areas of the municipality district.
- To determine what impact the policy has on successful compliance with the SCM policy.
- To identify the challenges arising from inadequate compliance with SCM policy and to make recommendations.

The research paradigm is the subsequent section of discussion.

Figure 4.1 Chapter map



Source: Adapted from Chukwuere (2015)

4.3 Research paradigm

A paradigm is a fundamental belief that directs a process of research (Creswell, 2014). Paradigms are regarded as worldviews because they bring together the totality of a researchers' perception, or choice of a study and the methods involved in conducting the research (Creswell, 2014; Pekala, 2013). Anfara and Mertz (2014) are of the view that paradigms are clusters of beliefs that influence the totality of a

study, research process, and the data analysis. For the purpose of this study, the pragmatic paradigm was adopted. According to Bibri, (2015) the pragmatic paradigm was theorized out of actions, situations and consequences and it views research design as a multi-purpose or a pluralistic approach that adopts every necessary method to find answers to the research questions. Supporting this assertion, Leavy (2016) affirms that the pragmatic paradigm is a problem-centred paradigm that seeks to understand a problem under investigation and further devise different strategies for solving the problem.

Pragmatic paradigm is problem-centred, and it is concerned with these primary questions: “What”, “How” and “When”. These philosophical assumptions assisted in identifying the problem of the level of compliance with the SCM policy in the Ngaka Modiri Molema District Municipality of the North West.

The pragmatic paradigm does not rely on any type of philosophy but uses different types of philosophies for solving problems (Creswell, 2014). In this study, the pragmatic worldview helped in adopting the mixed method design by collecting data through interviewing senior managers of departments and distributing questionnaires to department officials of the five local municipalities.

The next section of discussion will be the research approach.

4.4 Research approach

In social research, the philosophical assumptions, design and methods contribute to the research approach (Creswell & Poth, 2017). There are several research approaches such as the qualitative method, the quantitative method and the mixed methods of research (Brannen, 2017). For the purpose of this study, the mixed methods research approach was adopted. A mixed methods research can be defined in its simplest form as the procedure of collecting, analysing and mixing both quantitative and qualitative data in the research process within a single study in order to have an extensive understanding of the phenomenon under study (Padgett, 2016).

The choice for this approach helped to gain a detailed understanding of trends and patterns, and even an understanding of variables through a quantitative and qualitative study (Walsh, 2015) and the advantages of choosing a mixed methods approach for this study are also identified by Creswell (2014) and Gray (2014) and include:

- Strengthening the content of the research findings by comparing and discussing both qualitative and quantitative results.
- Encouraging clarity of findings by discussing the quantitative results before the qualitative result.
- Enabling development by using the findings of the quantitative results to inform the qualitative investigation.

- Encouraging initiation by the discovery of a paradox and contradictions thereby generating new perspectives to reformulate questions for future study.

The following section of discussion will be the research design.

4.5 Research design

Research design refers to a plan or strategies and procedures for research comprising decisions from the underlying world views to the detailed methods of data collection and analysis (Yazan, 2013). The research design used in this study is the mixed method research design. A research design is the method of collecting data in the process of conducting research (Walliman, 2017). Confirming this assertion of research design, Punch (2013) indicates that research design situates a researcher in the empirical world, and connects the research question to data. Therefore, research design is a basic plan for a piece of research that describes how, when and on whom the study will be conducted as well as the procedure for conducting the research. Research design places a researcher in the practical world and connects research objectives and questions to data and can be defined as the basic plan which includes four main ideas (Creswell & Poth, 2017). These ideas are the strategies to follow, the conceptual framework, data collection procedure and data analysis.

The research design used in this study is the mixed method research design, where both qualitative and quantitative data have been used. Qualitative data was collected first, followed later by quantitative data collection. Qualitative researches make use of individual interviews and document analysis. Individual interviews were conducted with senior managers of departments based on their experience, in order to determine the level of understanding of the SCM policy. A document analysis was used to collect various records in respect of the SCM policies within the five local municipalities. The quantitative component of this study used a questionnaire to collect data. The added advantage is that findings can be interpreted numerically. Also, through closed ended questions, it was possible to collect data on participants' viewpoints concerning their impressions of the level of compliance with the SCM policy.

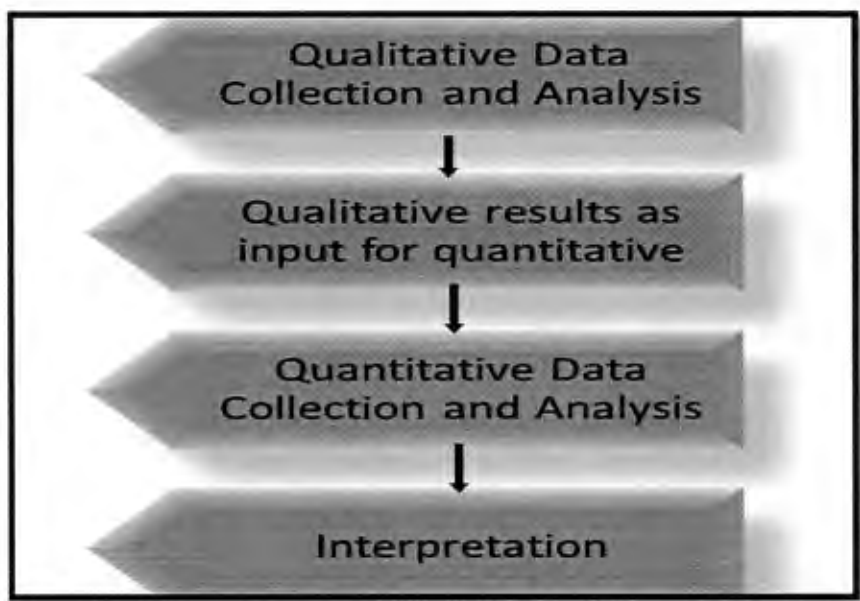
There are two possible approaches to follow in a mixed method design. The first approach is the **exploratory design**. In this design, the qualitative data is collected first before the quantitative phase follows. The qualitative approach is typically used in the initial phase with a few individuals first to identify themes, ideas and perspectives that can be used to design the quantitative component of the study.

The second approach is the **explanatory design**, where quantitative data is collected first and depending on the results, qualitative data are gathered to explain the quantitative findings.

In this study, an exploratory design was used. Self-administered questionnaires comprising structured and unstructured questions were used to gather data from the target population. Questionnaires were distributed to the SCM officials, operations officials, internal audit officials, financial officials, human resource officials, and also marketing officials at the municipalities. This was done after the data had been collected through the semi-structured interviews with selected senior managers of the departments in the five local municipalities, as suggested by the exploratory design.

Figure 4.2 illustrates the exploratory sequential design, where qualitative data is collected first before the quantitative phase follows, and finally interpretation of both methods. Research methodology will now be dealt with in more detail.

Figure 4.2: The Exploratory Sequential Design



Source: Adapted from Creswell (2014)

For this study, the mixed method research design was deemed most appropriate. The exploratory sequential approach followed was preferred as the study started by collecting qualitative data before moving on to collecting quantitative data. Going forward, a closer look will be taken at the research methodology that aligns with the research design.

4.6 Research methodology

Methodology, according to McGregor and Murnane (2010), refers to a branch of knowledge that generates principles, rationales, philosophy, and also invents new knowledge. O’Leary (2010) indicates

that methodology is a macro-level framework that generates principles while Clough and Mertens (2014a) also suggest that methodology is a framework that provides reasons for using methods. Research methodology is a plan of action that links the methods used to collect and analyze data to answer the existing research questions. For the purpose of this study, a case study was used and a mixed method design was followed. Gray (2014) stipulates that a case study is a form of qualitative inquiry which deals with in-depth analysis of a phenomenon. Hancock and Algozzine (2015) elaborate by saying that a case study of a particular individual, programme or event is often studied in depth. This study, therefore, focuses on the Municipal Manager, SCM managers, chief financial officers, SCM officials, Human resource managers and officials, Marketing managers and officials, Operational managers and officials and the Internal audit managers and officials within the Ngaka Modiri Molema District Municipality of the North West province because a case study research deals with trying to understand the uniqueness and idiosyncrasy of a particular case in all its complexity (Thomas, 2015).

The following section of discussion will be empirical research.

4.7 Empirical research

The empirical study incorporates both the quantitative and qualitative studies to find answers to the research questions. The population of the study, sampling selection, data collection methods, data analysis, and trustworthiness will be discussed. Population of the study will be the subsequent section of discussion.

4.7.1 Population of the study

A population refers to a group to which a researcher wants to generalize the results and O'Leary (2010) defines a population as the total group that a researcher is interested in learning more about. A population is a term used to describe the total quantity of cases which is the subject of a study that consists of objects, people, and events (Bhattacharjee, 2012). Kumar (2011) affirms that population (N) is a set from which the subset called sample (n) is drawn for analysis and decisions. The population of this study was selected from:

- Senior managers of departments
- Department officials

4.7.2 Population statistics of this study

Statistics obtained on the total population for each municipality for the year 2014/2015 indicate that Mahikeng municipality has a total of 847 employees (www.mafikeng.gov.za), Ditsobotla municipality is second with a total of 653 employees (www.ditsobotla.co.za), and Ramotshere Moiloa municipality

is the third with 384 employees (www.ramotshere.gov.za). This is followed by Tswaing municipality with 355 employees (www.tswaing.gov.za), and Ratlou municipality has only 176 employees (www.ratlou.gov.za).

4.7.3 Target population

The target population, as defined by Hulley, Cummings, Browner, Grady and Newman (2013), refers to that group, usually people, from which a researchers is required to draw conclusions. In this study, the target population is the total of employees for each municipality. The participants that were used in this study are the SCM managers, municipal mangers, CFO managers, human resource managers, marketing managers, operational managers, internal audit managers. One manager from each department mentioned above was interviewed from all five of the local municipalities; Mahikeng, Ditsobotla, Ramotshere, Tswaing and Ratlou Municipality.

4.7.4 Sampling frame

A sampling frame is a list of population elements from which units to be sampled can be selected. Burns and Bush (2010) and Clow and James (2014) are of the view that a sample should be representative of the research population, which ideally is the same as the population. However, due to time and financial limitations, it was practically impossible to compile an all-inclusive sample frame of all workers in the five local municipalities during the course of this study.

4.7.5 Sample selection

In order to know the behaviour of the entire population, subsets called samples which are similar within the population are examined (Gray, 2011). Bhattacharjee (2012) maintains that sampling should be done in a way that the outcome of the study will represent the true characteristics of the entire population. Sampling is done in order to study the characteristics of the larger group and to minimise the expenses, save time and avoid the inconveniences of scheduling appointments with the entire population (Gray, 2011).

In this study, a non-probability method of sampling was adopted. Bhattacharjee (2012) affirms that non-probability sampling selection involves a method where the opportunities of selecting respondents cannot be adequately determined because of the non-randomness or convenience in selection; this is in concurrence with Gray (2011), who states that a non-probability sampling method does not involve chance selection but a personal judgment of the researcher. The non-probability sampling method used in this study includes convenience sampling and purposive sampling.

Convenience sampling is a type of sampling where the first available primary data source will be used for the research without additional requirements, as indicated by Ritchie, Lewis and Elam (2013). In other words, this sampling method involves getting participants wherever you can find them and typically wherever is convenient (Mackey & Gass, 2015).

Purposive, also referred to as judgmental sampling, refers to the selection of participants or sites that will best explain the problem under study (Relmer & Ryzin, 2011). This method of sampling selection in this study ensured that data collected was accurate because of the exceptional knowledge and SCM policy experience of senior management and department officials. The samples for this study were selected from the local municipalities, senior managers of the departments and department officials.

4.7.5.1 Qualitative sampling: senior managers

Thirty (30) senior managers of the five local municipalities were selected for the purpose of this study; a purposive sampling method was used to select the managers. A purposive method of sampling involves the selection of respondents in a research process based on exposure, experience, nature of roles and duties (Relmer & Ryzin, 2011). Senior managers of departments were chosen due to their vast knowledge, expertise and experience in dealing with the level of compliance with the SCM policy and managerial tasks. The purposive sampling method enhances originality, validity of data collection and ensures that the data collected is a true representation of the population (Relmer & Ryzin, 2011).

4.7.5.2 Quantitative sampling: department officials

A questionnaire was distributed to the second target population, 400 targeted workers of the various departments of the municipalities, namely, SCM officials, operations officials, internal audit officials, financial officers, human resource officials and marketing officials. This survey was the collection of a larger quantity of evidence, mainly numeric, or evidence that could be converted into numbers, normally by means of questionnaires (Levy & Lemeshow, 2013). The statistics obtained on the total population for each municipality was used to get the target group. Leedy and Ormond (2010) emphasise that a sample is chosen where every member of the population has an equal chance of being selected, (Cooper & Schindler, 2011) which is the concept of random selection. Ritchie *et al.* (2013) posit that probability sampling involves each unit in the population. The non-probability sampling method which was used in this study includes convenience sampling and purposive sampling.

The convenience sampling method entailed selecting the respondents based on their availability and proximity and also their knowledge of SCM policy matters in local municipalities. The sample size of the municipality workers was determined by using www.research-advisors.com (2006) which indicated a sample size calculator by following a 95% confidence interval and a 0.05 degree of accuracy/margin

of error (see Table 4.1.) According to the research advisor’s guide, the sample size for the municipality workers is 430.

Table 4.1 presents the sample size for the total population in the five selected local municipalities using the Research Advisor’s sample guide while Table 4.2 presents the sample fraction of the municipality workers in the five local municipalities using proportional stratified sampling fraction.

Table 4.1: Sample size for employees in the five local municipalities

Local Municipalities	Population size
Mahikeng	827
Ditsobotla	646
Ramotshere	379
Tswaing	353
Ratlou	176
Total no. of employees	2381

Sampling fraction= $\frac{n}{N} = \frac{430}{2381} = 0.180596388$

Mahikeng = 0.180596388* 827= 149

Ditsobotla = 0.180596388*646 = 117

Ramotshere = 0.180596388* 379= 68

Tswaing = 0.180596388*353 = 64

Ratlou = 0.180596388*176 = 32

Table 4.2: Sample fraction of municipality workers in the five local municipalities

Local Municipalities	Population size	Sample fraction
Mahikeng	827	149
Ditsobotla	646	117
Ramotshere	379	68
Tswaing	353	64
Ratlou	176	32
Total no of employees	2381	430

The study sampled 430 members from the five local municipalities; 30 sample members for the qualitative sample, and 400 for the quantitative sample.

The subsequent section describes the data collection method used in this study.

4.8 Data collection method

Data collection method refers to the procedure by which data are collected from respective respondents (Gray, 2011). In this study, semi-structured interviews, a document analysis, and self-administered questionnaires were selected to collect the data needed.

4.8.1 Semi-structured interviews

An interview is referred to as a means of data collection where an interviewer collects facts, feelings, opinions, motives, behaviours and beliefs by asking a series of questions to an interviewee (Leedy & Omrod, 2010). In a semi-structured interview, an interviewer uses an interview guide to maintain the flow of the interview which helps to get new ideas and in-depth findings about the phenomenon under study (Whiting, 2007; Leedy & Omrod, 2010).

Interviews were conducted with 30 selected employees, SCM managers, the municipal managers, CFO managers, human resource managers, marketing managers, operational managers, and internal audit managers. The reason for selecting this target group is because they are in a position to provide an overall view of the policy of SCM in a municipality. Table 4.3 presents a breakdown of the interview schedule.

Table 4.3: Interview schedule for the municipal managers and senior managers

Local Municipality	Date of the interview	Time
Ditsobotla	06-01-2017	9:00-10:00am
Mafikeng	16-01-2017	8:00-9:00am
Ramotshere	19-01-2017	9:00-10:00am
Ratlou	23-01-2017	11:00-12:00pm
Tswaing	26-01-2017	9:00-10:00am

The advantages of using semi-structured interviews in a study as pinpointed by Maree (2010) and Creswell (2014) include:

- Semi-structured interviews are most appropriate when the participants are not directly observed.
- It provides detailed and historical information of the phenomenon under study by having a direct contact or conversation with the participant.
- The researcher guides and controls the flow of questions, responses and makes amendments where necessary.

The semi-structured interviews in this study were conducted according to the interview guide (see annexure A) and comprised an introduction for reading of protocol of the interview. The protocol of the

interview served to indicate to respondents that the interview will be recorded and later transcribed verbatim. The protocol also covered areas of ethics including anonymity, confidentiality and that the tapes would be discarded as soon as transcribing was completed. Open-ended questions served to explore the phenomenon under study and to get in-depth information about the research problem. Chapter 1 of the study presented the research questions of the study among other things and the interview questions were mainly formulated from the research questions of the study.

4.8.2 Document analysis

The document analysis for the purpose of this study involved both primary and secondary sources of data (Maree, 2010). A document analysis was used to collect various records in respect of the SCM policy within the five local municipalities of the Ngaka Modiri Molema District of the North West. Documents were collected from each of the five local municipalities containing information on the SCM policy as implemented in each municipality. Circulars, minutes of meetings, policy documents and any other documents that could shed light on the implementation of SCM in the local municipalities were incorporated together with governmental sources and analysed.

4.8.3 Self-administered questionnaire

A questionnaire, as indicated by Gray (2011), refers to an instrument that is used to collect information in an empirical study. A questionnaire is a data collection instrument that consists of a series of questions and other prompts for the purpose of gathering information from respondents (Bryman & Bell, 2015). The choice of a questionnaire in this study has various advantages over other methods of data collection and, according to Bastict and Matalon (2011) and Maree (2010), questionnaires have the following advantages:

- They are easy to administer.
- They are suitable to administer, thereby saving time and other arrangements involved in other methods of data collection.
- Questionnaires are easy to answer.
- Questionnaires are easy to code and to analyse.
- Questionnaires save cost.

The choice of this method helped in formulating questions that were easy for the respondents to answer, easy to code and to analyze. The questionnaire was divided into five sections namely; Sections A, B, C, D and E. Section A deals with the biographical information of respondents, Section B deals with the presentation, interpretation and discussion on the views of SCM policy and experience. Section C deals with presentation, interpretation and discussion on the views, procedure and regulation, and

measurement. Section D deals with the presentation, interpretation and discussion on the views of compliance with the SCM policy. Section E deals with presentation, interpretation and discussion on the views on the challenges facing SCM practitioners and the municipality. Department officials were targeted to respond to this questionnaire. Likert-type scales were used to obtain the responses from respondents because a Likert-type scale questionnaire, according to McCoach, Gable, and Madura (2013), measures the degree of negative and positive perceptions (strongly disagree, disagree, unsure, agree, strongly agree) of respondents towards the phenomenon under study. A five (5) point response scale format was used in formulating the structured questions. A mixture of continuous questions were used to get negative and positive responses from respondents and the reason for using “unsure” as one of the responses was because during the pre-testing of the questionnaire, respondents were not sure about some of the statements and could not agree or disagree. Respondents were instructed to mark an ‘X’ as their choice of answer in the structured questions. A total of 400 questionnaires were distributed.

The subsequent section describes the pre-testing of the questionnaire.

4.9 Pre-testing the questionnaire

Reliability of this study was safeguarded by using a pilot test as a source of pre-test (also known as constancy) by administering questionnaires to one group of individuals for referring purposes after which the instrument was administered to the entire sample. In the quest to maintain reliability, 10 questionnaires were taken as a pilot study to ensure that the questions were clear, simple and easily understood by respondents. It was discovered that it will take less than twenty minutes to complete the questionnaire.

In maintaining internal reliability, each question in the questionnaire was measured using Cronbach’s alpha. The values of Cronbach’s alpha ranges from 0 to +1 and Pallant (2011) maintains that values above 0.8 are preferred while values above 0.7 are acceptable. According to Table 4.3, all questions are close to 1, above 0.7, suggesting that the items in the scale have relatively high internal consistency

Table 4.4: Cronbach’s Alpha test

Dimension	Cronbach’s Alpha (α)	No. of items	Variables
Views of SCM Policy/experience	0.801	10	6-15
Views on procedure/regulation and measurement	0.778	9	16-24
Views on compliance of the SCM policy	0.783	8	25-32
Views on the challenges facing SCM practitioners and the municipality.	0.510	15	33-47

Also, objectivity is used through the methodology of measurements, data collection, and data analysis through which reliability and validity are established (Susanne, 2012). Objectivity was attained by creating an appropriate distance between the researcher and respondents in order to reduce bias. The researcher in this study remained distant so as not to influence respondents or their responses, nor to influence the study in any way whatsoever. The final questionnaire was administered to all the departmental officials who were targeted for this study (See annexure B).

The above discussion elaborated on the data collection methods used; the qualitative part with semi-structured interviews, and the document analysis, and the quantitative part with self-administered questionnaires to collect the data needed. Data analysis will be the following section of discussion.

4.10 Data analysis

Data analysis is a process of interpreting the data that was collected to produce a statistical summary that will be meaningful and reasonable (Pallant, 2013). The data collected through the semi-structured interviews and questionnaires for this study was analysed in relation to the objectives of the study.

4.10.1 Qualitative data analysis

In the qualitative component of this study, data collected from semi-structured interviews will be analysed through open coding. The process starts with the transcribing of the data from the audio tapes. The data is rated into themes and categories and the major issues related to the compliance with the SCM policy, as identified and further discussed during the interviews.

4.10.2 Open coding data analysis

Open coding is “a process of breaking down, examining, comparing, conceptualizing and categorizing data” (Cho & Lee, 2014). Grbich (2012) recommends five steps that are essential in analysing qualitative research data. The steps, as explained below, guided the analysis of the qualitative data obtained from this study.

Step 1: Deciding on the themes or concepts under which the data will be labelled, sorted and compared.

The qualitative data obtained from the interviews was transcribed from tape recordings into field notes as advised by Merriam and Tisdell (2015). The data then was grouped into themes by using the research questions as the basis for organising the data. This will facilitate turning the data into meaningful information (Ngulube, 2015).

Step 2: Sorting and grouping of themes

This is done under a small number of broader, higher-order categories (according to scale of preference) and placed within an overall framework. After the researcher had identified the themes, the themes used were related according to their scale of preference in order to identify themes in order of importance (Fakis, Hilliam, Stoneley & Townend, 2014).

Step 3: Indexing of data

This involves reading each phrase, sentence and paragraph in fine detail and deciding what it is about in order to determine which part or parts of the index are related. Bloomberg & Volpe (2012) suggest that a researcher should read the transcripts in their entirety several times and get immersed in the details, trying to get a sense of the interview as a whole before breaking it into parts. In this study, after sorting and grouping themes according to how each phrase aligns with and addresses the objectives of the study, sentences and paragraphs of the responses were read and re-read to identify the interrelatedness of the data collected, as well as reducing overlap and redundancy of themes and categories.

Step 4: Sorting the data in some way so that materials with similar content or properties are located together

The responses of the participant were read and identified and were then sorted according to their relatedness, and categorised as indicated by Cho and Lee (2014).

Step 5: Summarising or synthesizing the original data while retaining its context and the language in which it was expressed

Participants' responses at this final stage were then summarised to reflect their authentic experiences (Fakis *et al.* 2014).

4.10.3 Quantitative data analysis

Data analysis is a process of interpreting quantitative data that was collected from respondents in order to produce a statistical summary that will be meaningful and reasonable (Bastick & Matalon, 2010). The data collected through questionnaires in this study was analysed in relation to the objectives of the study.

The Statistical Package for Social Sciences (SPSS) 24 was used to organise the numerical data that was obtained from the questionnaires. Responses were coded into numeric values for proper statistical

analysis and Microsoft Excel was used to create a data sheet which was later imported into the SPSS platform. The statistical analysis obtained in this section includes descriptive statistics, correlation analysis, chi-square test of independence and analysis of variance. Descriptive statistics helped to summarise the set of data associated with the population in the empirical study; the correlation analysis explains if there are relationships existing between two or more variables in a study; the chi-square test of independence measures the relationship between two different variables while the analysis of variance test compares the average responses of more than two populations in the study.

For this purpose, firstly all the variables were assigned names and coded for computer entry. Secondly, all the responses were coded to facilitate computer data input. Thirdly, once the data entry was completed, the negatively-worded scale items were recorded and assigned new values. Fourthly, in order to obtain composite scores for items on a scale, target variables were computed. Fifthly, data files were carefully screened in order to eliminate any possible data entry errors. In this regard, frequencies for each variable were checked in order to detect the out-of-range values, and values entered that were greater than 5 (which is the maximum frequency level) were rectified after reconciling with the questionnaires. The subsequent section describes trustworthiness, validity and reliability.

4.11 Trustworthiness, validity and reliability

The concept of validity and reliability is posited as originating from the quantitative methods of research which have been recently adopted in a qualitative study (Relmer and Ryzin, 2011). In agreement, Susanne (2012) affirms that methods used to establish trustworthiness in scientific research include internal validity, external validity, reliability and objectivity.

Validity refers to the degree of an instrument's ability to measure what it is supposed to measure (Bastick & Matalon, 2010; Maree, 2010; Kumar, 2011). Furthermore, the instrument that is meant for data collection is supposed to be of a good standard and dependable to be able to measure the desired opinion competently. In this study, content validity was ensured by formulating the questionnaire and the interview guide from the literature review and other experiences gathered from the five local municipalities. The questionnaire was formulated using understandable English, while questions were easy to understand, to be coded and to be analysed. Validity was also maintained by ensuring that the questionnaires were distributed only to the SCM officials and all departmental officials mentioned above, while only the municipal managers and departmental managers were interviewed for clarity purposes.

Reliability refers to the degree of consistency of an instrument (Maree, 2010). Furthermore, reliability measures the dependability, stability, honesty and accuracy of a measuring instrument (Martin & Austin, 2010; Van der Veen & Song, 2010; Maree, 2010; Bastick & Matalon, 2010). Reliability ensures

that the processes of data collection are done in an accurate way and ensures that relevant data were duly attributed to the research questions. Reliability is important to quantitative research because it is a basis for validity, clarity and measures whether or not a study obtains the same results each time (Susanne, 2012).

Objectivity means the willingness and ability to examine evidence dispassionately (Nahrin, 2015). 'Objective research' is value-free research. It is a major condition of good research. Objective research is opposite to value judgment (subjectivity/ value relevance). Value judgment as purported by Schwarcz (2012) includes the rating of one thing against another. This is seen as a fundamental aspect of humans and is dependent on belief and experiences of everyday life that are expressed by approval or disapproval of some moral or social ideals and also claims that the possibility of a value-free empirical research in terms of 'appraising judgment' is a technical matter, not a theoretical impossibility.

Ethical considerations will be the following section of discussion.

4.12 Ethical considerations

Ethical considerations as explained by Hammersley and Traianon (2012) refers to what researchers ought to do and what not to do, and how this should be decided in the process of conducting research. It should be clearly noted that there are some ethical principles which guide the conduct of research and should be duly observed (Maree, 2010, Bastic & Matalon, 2010; Spencer, Detrich & Slocum 2012; Farrimond, 2012; Kincheloe, 2012). Also, Bhattacharjee (2012) maintains that an unethical procedure in the process of research does not depict illegality of conduct; the researcher may not be guilty in the eyes of the civil law but remains guilty in the precept and ethics of the profession.

For the purpose of this study, clearance was obtained from the Ethics Committee of the Faculty of Economic and Management Sciences to commence with the process of researching in Ngaka Modiri Molema District Municipality. Afterwards, the municipal managers and departmental managers of Ngaka Modiri Molema District Municipality were approached with a letter from the Ethical Committee to request permission to conduct research on the level of compliance with SCM policy in Ngaka Modiri Molema District municipality.

Ethical protection was observed through the course of this study according to contemporary social sciences. Voluntary participation of respondents was maintained by ensuring that none of the respondents were being coerced into participating and they also had the right to discontinue at any stage of the study. They were also guaranteed confidentiality by not sharing their identity with anyone. Anonymity was also ensured by keeping respondents anonymous throughout the study by not allowing for any form of identification on the questionnaires.

Table 4.5 represents the ethical considerations observed during the course of conducting this study.

Table 4.5: Observed ethical considerations

Research process	Ethical considerations observed
Before conducting the research	• The Ethical Committee was approached with the proposed study. • The clearance certificate was issued to the researcher by the Ethics Committee of the Faculty of Economics and Management Sciences NWU, Mafikeng Campus to collect data from the participants and respondents. (See annexure C)
Commencement of the research and data collection	During the collection of data, the respondents were assured of the following: • Participants were informed adequately during the interview phase and an agreement was made on the date and time of the interview. • An assurance was made to ensure the confidentiality and /or anonymity of respondents and participants. • The researcher briefed participants and respondents that participation is voluntary in the process of research; it was assured that respondents can quit on request. • Participants were assured that no harm or danger is involved in participating. • Participants were not oppressed during data collection.
Data analysis	• All multiple perspectives and contrary findings were reported. During the coding and discussion of the qualitative data, no bias was introduced but both positive and negative results were revealed, and the privacy and secrecy of respondents were maintained.
Data Reporting	• The use of wrong information by respondents was avoided.

This above discussion deals with trustworthiness, validity and reliability and also the ethical considerations, in order to ensure confidentiality, and participants’ interests were assured to be protected during the reporting phase.

4.13 Summary

In this chapter, the methodological approach of the study was discussed and its relevance to the data collected. Moreover, the chapter explained the processes or procedures adopted in collecting data. This chapter look at the choice of the researcher in selecting the method and design for this study. The pragmatic paradigm was selected while the mixed method approach was used in the study. The chapter looked at the research population of the study, the sampling method used, data analysis and data collection strategy that was used to draw rich detailed data from participants. Furthermore, the researcher collected data using semi-structured questions from senior managers of departments and a

questionnaire for the department officials in all five of the local municipalities. The statistical package for social sciences was selected as a data analysis technique to effect clarity in the presentation phase while qualitative data was coded, categorised and discussed. Other aspects such as researcher's role, contribution to the study and limitations to the study were also covered in this chapter. Research findings will be the subsequent section of discussion.

CHAPTER FIVE

RESEARCH RESULTS

5.1 Introduction

This study is an investigation of staff compliance with the SCM policy in the Ngaka Modiri Molema District Municipality of the North West with the aim of obtaining an understanding of the viewpoint of senior managers of departments and departmental officials concerning their compliance with the SCM policy.

The findings in this chapter are presented in two sections, because this study was based on a mixed method research approach, firstly qualitative and then quantitative. The qualitative findings outline and summarise viewpoints concerning compliance with the policy in municipalities and present the perceptions of senior managers of departments regarding the SCM policy. The second section, which is quantitative, outlines a summary of the outcomes of compliance with the policy as seen by department officials concerning their compliance with the SCM policy within their municipalities.

5.2 Qualitative data presentation

The presentation of qualitative data involves the presentation of the findings as obtained from the semi-structured interviews conducted with the 30 senior managers from the five selected local municipalities. A 80% participation rate was recorded since not all 30 of the senior managers selected for the interview were interviewed due to their in availability. In analysing the data, as outlined by Creswell (2010), this involved capturing participant's responses through field notes, organising the data, reading through all data, coding the data into themes and categories, interrelating themes and discussing the findings. Thus, a systematic procedure was followed.

5.2.1 Sampling for qualitative data

Sampling for qualitative research is not prescriptive as is the case with quantitative studies, according to Grix (2010). Grix alludes that there are no clearly defined rules governing qualitative sampling, however, sampling in qualitative research usually relies on sampling participants with in-depth knowledge of the research problem in order to acquire reliable data that can significantly contribute to the investigated phenomenon. Therefore, it was decided to include people in managerial positions to participate in the interviews. A purposive sampling approach was used for this part of the study as already elaborated upon in Chapter Four.

The following section presents and interprets the empirical outcomes from the analysis of the qualitative data obtained during the interviews.

5.2.2 Sampling of senior managers of departments

A total of 30 managers from the five local municipalities in the Ngaka Modiri Molema District were target participants. For each municipality, one senior manager was selected from every department as indicated in Table 5.1. The purposive sampling method was used to select the managers and involved the selection of respondents in a research process based on exposure, experience, the nature of their roles and their duties (Relmer & Ryzin, 2011). The municipal managers and senior managers of departments were decided upon due to their knowledge, expertise and experience in managing compliance with SCM policy and their managerial tasks. Table 5.1 presents an overview of the sample members targeted as relevant participants during the qualitative empirical phase of this study.

The names of senior managers of departments have been omitted for the sake of confidentiality and each group was therefore given a unique code, as per Table 5.1.

Table 5.1: Senior staff members for sampling

Code	Participant	Target participants	Total responses	Roles
MM	Municipal managers	5	2	Accounting for the municipality's overall activities.
SCM	Supply chain managers	4	3	Help in the planning and management of all activities involved in sourcing and procurement.
CFO	Chief financial managers	4	4	Responsible and accountable for all the income and expenditure of the municipality.
OM	Operational managers	4	4	Responsible for managing the process of creation of goods and services.
MKM	Marketing managers	4	3	Responsible for satisfying the needs and wants of consumers.
HRM	Human resource managers	4	3	Responsible for ensuring those department employees are well-versed in their areas of expertise.
IAM	Internal audit managers	5	5	Provide independent assurance that an organisation's risk management, governance and internal control processes are operating effectively.
Total		30	24	

The table reflects the sampling of participants from each municipal department for the purposes of the qualitative fieldwork.

5.2.3 Interview response rate - qualitative

The sampling plan indicated that 30 managers from the five local municipalities were approached to participate and one manager was selected from every department from all the municipalities. Out of the 30 targeted, only 24 participations were realised and this represents a participation rate of 80% due to the 6 managers who did not partake. Drawing from the views of Serame (2011), it is stated that a valid and reliable conclusion can be drawn by a researcher if a 70% response rate is obtained from interviews. It can thus be said that, with a response rate of 80%, this study collected sufficient data to arrive at valid and reliable conclusions.

5.2.4 Qualitative data collection

Interviews were planned to be conducted with 30 selected employees; SCM managers, Municipal managers, CFO Managers, Human resource managers, marketing managers, operational managers, and internal audit managers. The reason for selecting this target group is that they are in a position to provide an overall view of the SCM policy compliance in their respective municipalities. Participants who took part in the interviews were drawn from all five local municipalities within the Ngaka Modiri Molema District Municipality of the North West province. Interviews were scheduled and were estimated to take fifteen minutes each and the process took 4 weeks to complete. As indicated earlier, considering the complexity and the sensitivity of the researched subject, many people were very sceptical about providing information and in some cases preferred not to be interviewed but rather preferred to complete the interview guide as if it was a questionnaire. Details on how the data was captured during the interviews have been explained in Chapter Four.

5.2.5 Qualitative data processing

The entire process of the study, from identifying the research objectives to the collection and presentation of the research findings was aimed at obtaining a deeper understanding of the research topic. In this study, the qualitative data was collected using semi-structured interviews. This tool was used to collect data from the senior managers of the departments and the participant's responses were transcribed in order to obtain relevant themes and categories. These themes were also cross-referenced with the research questions to ensure that the themes were appropriate and in line with the research objectives. The subsequent section presents the results and interpretations pertaining to each developed theme and category.

5.2.6 Qualitative data analysis

The qualitative data collected for the purpose of this study from senior managers of departments through semi-structured interviews was prepared and organised by transcribing the interviews from audio-tapes. It was further sorted and arranged while the central ideas were identified, coded into themes and categories, and analysed with regards to the research questions.

The subsequent section describes the presentation of the qualitative result.

5.2.7 Results presentation qualitative

The presentation of the qualitative data involves presenting the findings as obtained from the semi-structured interviews conducted with the senior employees from the five selected local municipalities. As outlined by Creswell (2014), this was followed by capturing the participants’ responses through field notes, organising the data, reading through the data, coding the data into themes and categories, interrelating themes and discussing the findings.

Table 5.2 presents a summary of (1) themes, and (2) categories of the data according to the interview guide and the categories that emerged during data analysis.

Table 5.2: Themes and categories

	Categories of findings	Themes of findings
1	Working experience of managers.	• Limited working experiences. • Sufficient working experiences. • Qualification of managers.
2	Knowledge of the Supply Chain Management policy.	• Awareness of the policy. • Proper knowledge and skills. • Proper training of the policy.
3	Compliance and implementation of the SCM policy.	• Suppliers’ knowledge about SCM policy. • Officials with technical know-how. • Lack competencies.
4	The flow of SCM Policy at all levels in the municipality.	• Flow of policy to all levels of the municipality. • Flow of policy in some levels of the municipality. • No flow of the policy at all levels of the municipality.
5	Role of internal audit in the supply chain management policy.	• Strong accountability and end-of-year financial report. • Positive contribution. • Fighting against fraud and corruption.
6	Challenges faced by SCM practitioners in understanding their day-to-day activities.	• Lack of clarity. • Lack of technological skill. • Human resource problems.

7	Current challenges confronting compliance with supply Chain management system policy in the municipality.	• Policies and regulations overlap. • Inadequate controls. • Ethics and fair dealing.
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5.2.8 Presentation of the qualitative findings

The findings from the empirical data reflect the development of a number of themes which emerged from the data. The emerging themes are clustered and presented under the main categories that were used during the interviews. The first category is relating to working experience of managers. Three themes were developed and are regarded as appropriate for advancing the findings of the category.

5.2.8.1 Category 1: Work experience of managers

Discussion on the work experience of managers as part of this study and also as the research objective plays an important part in the SCM policy. It is believed that all managers require work experience to execute the day-to-day activities of the municipality. Staff with sufficient work experience in the sector are expected to be in place to ensure proper alignment between what is purchased and what is needed.

This category investigated the impact of work experience to the level of work capacity of the SCM staff of departments. Work experience is an important factor impacting work capacity of staff in any organisation and across departments. Work experience surfaced as an indication of the capabilities of relevant personnel to appropriately perform their tasks as stated in the policy and as required for effective implementation. Work experience was aimed at investigating the length of employment of participants. The length of employment was used to establish whether the longer an employee has been in his or her job, the greater the possibility they will be effectively executing the job description. The category on assessing work experience reveals that participants have a mix of working experience. Some have limited work experience, others have sufficient work experience and for others, their efficiency is more connected to their qualification. This mix of experience produces themes on three main perspectives. The themes are expanded on below.

(1) Limited work experience

Data from the semi-structured interviews conducted with senior managers of departments across the different local municipalities revealed that some of the managers have limited work experience. They have been working for a short period of time as managers. Those who have been working for a short period and are considered to have limited experience have less than five years' experience as managers. Although this group of managers confirm to be in the right direction in terms of the current evaluation of their performance, they also acknowledge that their limited work experience has an impact on their

performance when compared to those who have sufficient work experience. To further elaborate on this result the following direct responses are related to the aforementioned outcomes.

Direct responses

A HRM as respondent indicated:

“I am very new here, I have been around for less than three years and I do have very limited experience in the job and cannot perform exactly like someone who has been around for much longer”.

Another HRM respondent indicated:

“After my internship, I have been working for 2 years and 6 month, while my colleagues whom we are working together have been working for 5 years and more. I cannot compare my experience with them, I do have limited working experience.”

(2) Sufficient work experience

Sufficient work experience was to determine if the employees have the experience in performing their duties. Sufficient work experience was used to determine whether the more experience an employee has in his or her job, the greater the possibility in effectively executing the job description. Data from the semi-structured interviews conducted with senior managers of departments across the different local municipalities revealed that some managers have sufficient work experience. Those who attested to having sufficient work experience confirm to have more than five years work experiences as managers. Participants with sufficient work experience tend to have improved performance when compared to those with limited work experience. To further elaborate on this result the following direct responses are related to the aforementioned outcomes.

Direct responses

“I have been working with the municipality for more than ten years and I do have sufficient working experience.” (MM)

“I have been around for more than eight years and I am very experienced.” (SCM)

“I have been working with the municipality for seven good years. That has made me to gain sufficient working experience on the day-to-day running of the municipal activities.” (COF)

“Working as a HR manager for three different municipalities for more than ten years, my experience is of a high level.” (HRM)

(3) Qualification of managers

Qualifications were to determine if employees ought to have completed training in a relevant field for effective understanding and the application of the supply chain discipline. Data from the semi-structured interviews conducted with senior managers of departments across the different local municipalities revealed managers have various qualifications. There is a mix of managers with higher qualifications and others with lower qualifications. The empirical findings also reflect that managers with higher qualifications tend to perform on a more advanced level compared to those with lower qualifications. To further elaborate on this result the following direct responses are related to the aforementioned outcomes.

Direct responses

"I have a Master's degree in SCM and have been working with the municipality for six years. I think I am experienced enough and that is also reflected in my work. However, apart from my years of experience, I think my qualification is my strength because most of what I apply here are things I learnt from school and other trainings." (SCM)

"I have a diploma but not directly in the field of SCM. However, I have a lot of experience in HRM which I bring to the position" (HRM)

5.2.8.2. Category 2: Knowledge of the supply chain management policy

In terms of knowledge of the SCM policy as part of the objectives of the study, it is understood that knowledge about the SCM policy would enable managers to have good executive and administrative leadership skills and achieve good governance. This category investigated the level of knowledge of SCM policy that senior staff have. Knowledge is an important factor impacting the work capacity of staff in any organisation and across departments. Knowledge was used for reflecting the capabilities of relevant personnel in appropriately performing their tasks as stated in the policy and as required for effective implementation. Knowledge of the SCM policy was aimed at investigating how well informed managers are, have knowledge and skills as well as proper training about the SCM policy. Data from this category reveal that senior managers in municipalities are all aware of SCM policy and they do possess the necessary skills to implement the policy. Moreover, the more employees are aware, have knowledge and skills as well as proper training on the SCM policy, the greater the possibility that they will effectively execute their job description. The category was assessing knowledge from three main perspectives as explain below.

(1) Awareness of the policy

Data from the semi-structured interviews conducted with senior managers of departments across the different local municipalities revealed that in response to the category on knowledge of the SCM policy by managers, all senior managers emphasised that they are aware of the SCM policy. It is very important for managers to be aware of the SCM policy because without awareness of the policy, effective job performance in municipality will not be achieved. Notably, participants had the following to say:

Direct responses

"I am aware of the policy in our municipality and I have also been trained on it and I am well skilled and have the capacity to carry out the policy, which is why I was appointed as a manager." (SCM)

"In our department we do work in accordance with the SCM policy, we cannot do without knowing the policy." (MKM)

(2) Proper knowledge and skills.

The empirical findings obtained reflect that managers do have proper knowledge and skills about the SCM policy. Their knowledge and skills of the policy influences how effectively they evaluate their responsibilities within the municipalities. Those who have knowledge and skills in their positions are most likely to execute their responsibility in accordance with policy. Notably, participants had the following to say:

Direct responses

A MM mentioned specifically that the *"I do have skill on SCM policy is basically more important in the municipality where we procure goods and services. I always say the only thing that comes through the municipality without procurement, without following the procurement processes is payroll and salaries and everyone relies on procurement. It plays a bigger role in fulfilling our daily responsibilities."*

"Understanding of the policy, yes I do, but I do not implement all the time. Reason being my experience is still minimal so there is not much that I know basically." (MM)

(3) Proper training about the policy

Finally, proper training in the policy was to determine if employees have gone through relevant on-the-job training on how to implement the SCM policy in their various municipalities. Without appropriate

training, employees will not be able to perform their tasks as expected. Data from the semi-structured interviews conducted with senior managers of departments across the different local municipalities revealed that managers are properly trained on the policy. Because they are properly trained, and because they are aware of SCM policy and are knowledgeable and skilled enough to implement it, they are most likely to execute their responsibilities in accordance with principles of SCM. However, managers who are not properly trained could find it difficult to execute their mandates due to lack of or limited training and also evaluating in accordance with the SCM policy. Notably, participants had the following to say:

Direct responses

"I am aware of the policy in our municipality and I have also been trained on it and I am well skilled and have the capacity to carry out the policy, which is why I was appointed as a manager." (SCM)

5.2.8.3 Category 3: Compliance and implementation of the SCM policy

Compliance and implementation, the 3rd theme as per Table 5.2 of the SCM policy as related to this study plays an important part in the municipality. All managers involved in the compliance and implementation of SCM policy must meet the prescribed competency levels. If they fail to do so, they must be provided with relevant training. However, for sustainable compliance, there is need for continuous provision of relevant training. This category investigated the compliance and implementation of the SCM policy by senior staff managers of departments. Compliance and implementation is important as it impacts work effectiveness and efficiency in any organisation and across all departments. Compliance and implementation was used to determine the capabilities of managers in appropriately performing their tasks as stated in the policy and as required for effective implementation. The category of compliance and implementation is regarded from three perspectives and these are:

(1) Lack of officials with technical know-how

Lack of officials with technical know-how was aimed at investigating how well managers are capable of handling their teams and resources in an effective manner so as to obtain optimum output. Technical know-how was used to determine whether the greater the ability to get the most out of technology the greater the possibility of effectively executing the job description. The empirical findings reveal that participants have a mixture of officials with technical knowhow. Some senior managers have good technical know-how while others lack technical know-how. Moreover, the data also reveal that the level of technical know-how is tightly linked to performance. Managers with good technical know-how are executing their responsibility in accordance to the policy while managers who do not have technical

know-how in performing their duties, are not as effective in executing their mandates. To elaborate further, the following direct responses are relevant in this regard:

Direct responses

“To tell you the honest truth, it’s very difficult to, I don’t know whether it’s difficult for end-users or if it’s ignorance, but from our side we enforce it. If somebody submits something that is not adhering to the procurement policy, we reject the requisition. We reject it until such time that you fully adhere to the policy. So we enforce policy adherence.” (SCM)

An OM respondent indicated: *“some of our managers do not have time to implement the policy at all time, and some give most of their responsibility to their assistants who are not trained and experienced on how the policy works.”*

(2) Lack of suppliers’ knowledge about SCM and policy

The empirical findings reveal that a high number of senior managers confirmed supplier knowledge about SCM policy while a few do not have; this finding further reveals that employers with supplier knowledge about SCM and policy who have been through training effectively understand and implement the policy correctly, while those who do not have supplier knowledge about SCM and policy and have not been through training do not effectively understand and implement the policy correctly. Therefore, the existence of challenges in municipalities are evidenced by lack of supplier knowledge about SCM and policy despite the fact that a large number of the managers have supplier knowledge about SCM and policy.

Direct responses

“Not everyone in my municipality does understand the SCM policy, reason why so much challenges.” (CFO)

“All I know our municipality compliance and implement the SCM policy.” (SCM)

As respondent IAM indicates, *“we lack an effective SCM monitoring system and also lack of supplier’s knowledge about SCM regulations and policies prevents them from complaining about irregularities of SCM officials.”*

(3) Lack of competencies

The empirical findings reveal that all senior managers confirm they are competent about the compliance and implementation of the policy. This finding also indicates that managers who are competent about the compliance and implementation are executing their responsibility in accordance with principles of SCM. However, managers who lack competencies in compliance and implementation are not as effective in executing their mandates due to a lack of the above mentioned skills. To further elaborate, the following direct responses are relevant in this regard:

Direct responses

"I think the term SCM policy what I understand; I think what I am doing in the SCM field I am competent." (SCM)

"I can say I am competent about the SCM policy and I believe most other senior managers are competent too. That is why we are entrusted with the responsibility." (SCM)

"I am not neglecting the policy, and I do work in accordance with the policy and advice other to work in accordance with it in other for us to achieve the objectives of the municipality. You see, once you know the policy inside out, and you apply it accordingly, every aspect of SCM falls in place and that's what I do." (MM)

5.2.8.4 Category 4: The flow of SCM policy at all levels in the municipalities

Looking at the flow of SCM policy at all levels in the municipalities as the fourth theme as indicated in Table 5.2, related to this study, it is very important for the SCM policy to flow at all levels of the municipality because if it does, it will help improve job efficiency and high productivity in the municipality. The flow of policy to all levels of the municipality aimed at investigating how best the policy flows in all departments of a municipality. The flow of the policy at all levels was to determine that flow of the policy at all levels will enable the increase in productivity and enhance the possibility of effectively executing a job description. This theme assessed the flow of SCM policy at all levels in municipalities from three main perspectives which will be explained below.

(1) Flow of policy at all levels of the municipality

Based on the semi-structured interviews conducted with senior managers, the theme on assessing flow of policy at all levels of the municipality reveals that participants have a mixed response on the flow of policy at all levels of the municipality. This finding indicates that the flow of the policy at all levels will enable the increase in productivity and enhance the possibility in effectively executing a job description,

while flow of the policy at only some levels will reduce productivity. Notably, participants had the following to say:

Direct responses

“Being employed as a manager, the policy is well explained to you, so you need to make it flow in your department.” (MM)

An HRM said: *“We work according to the policy and together with the SCM management department the policy flow at all level.”*

A CFO *“We do know about the policy as managers, but the policy do not flow at all the level and not all staffs members are trained about the policy.”*

“But, you must remember we, SCM, we need to follow what the government is saying.” (SCM)

(2) Flow of policy at some levels of the municipality

The empirical findings reveal that there is flow of policy at some levels of a municipality. This finding determines that some of the departments are in compliance and implement the policy, while others do not comply and do not implement the policy; this will lead to poor performance and low productivity in those departments and collectively for the municipality. Notably, participants had the following to say:

Direct responses

“If the policy flowed in all level, it means they won't be any problem facing the sector; If it flow for one only, the policy does not flow in all the level.” (SCM)

As respondent IAM indicates, *“due to the current statistics on the financial record of the municipality, it indicates there is a lot of mismanagement of municipality funding, this policy do not flow in all the level of the organisation.”*

(3) No flow of the policy at all the levels of the municipality

Based on the semi-structured interviews conducted with senior managers, one manager mentioned no flow of the policy at all is a serious problem for any municipality because the municipality cannot function without the policy. No flow of the policy at all levels indicates a zero percentage in productivity and enhances the possibility of ineffectively executing a job description. Notably, participants had the following to say:

Direct responses

As respondent IAM indicates, *“due to the current challenges at our municipality I see no flow of the policy.”*

5.2.8.5 Category 5: Role internal audit plays in the supply chain management policy

In this study it is very important for internal audit to work in accordance with the SCM policy, because the policy guides the internal audit to give strong financial accountability on how the budget was spent in the financial year. This category was investigating the level of importance of the role played by internal audit in the SCM policy. Internal audit is an important factor impacting good working conditions and accountability of staff in any organisation and across its departments. Internal audit was used in determining appropriate performing and accountability of employees' tasks in the department. The category was assessing the role played by internal audit in the SCM policy from three main perspectives which are expanded below.

(1) Positive contribution

The semi-structured interviews conducted with senior managers indicate that some of the senior managers agree that internal audit plays an important role in the SCM policy, while some do not agree that internal audit plays an important role in the SCM policy. The positive contribution by internal audit defines that the more competent an employee is in carrying out his or her job, the greater the possibility in effectively executing the job description, while the less competent an employee is in carrying out his or her job, the less the possibility in effectively executing their job description. To further elaborate, the following direct quotes are in line with the aforementioned outcome:

“We can see that companies that understand and support their internal audit systems sharpen their financial management system edge. Their internal auditors have acquired the skill to identify a system's effectiveness as well as ensure compliance.” (SCM)

“What I can see in our municipality, the internal audits persuade management to implement recommendation for changes leading to improvements in the system and its performance.” (HRM)

(2) Strong accountability and end of year financial report

The empirical findings reveal that some managers are in support of the strong accountability at end of year financial report while some do not support the above statement. The strong accountability by internal audit reveals that the more competent and reliable an employee is in carrying out his or her job, the greater the possibility in effectively executing the job description; if not, it can spell failure for a

municipality. To further elaborate, the following direct quotes are in line with the aforementioned outcome:

Direct responses

MM mention *“that the Internal audit provides independent and objective assessments of the information used for decision making and on the relationship between risk, control and the achievement of the organisation objectives,”*

“Lack of accountability at the end of a financial year report, a lot of mismanagement on the municipal finance is been discover by auditors.” (IAM)

(3) Fighting against fraud and corruptions

Fighting against fraud and corruption was aimed at investigating how best internal audit can produce a clean audit report without any fraudulent issue identified. The empirical findings reveal that senior managers are faced with fraud and corruption in their municipality. Fighting against fraud and corruption by internal audit indicates that the more transparent and reliable an employee is in carrying out his or her job, the greater the possibility in effectively executing the job description, while those who are not transparent and reliable in carrying out their job, the greater the possibility of ineffectively executing the job description. To further elaborate, the following direct quotes are in line with the aforementioned outcome:

Direct responses

“Through internal audit, an organisation can identify a system’s ineffectiveness, take corrective action, and ultimately support continuous improvement. Unfortunately, a poorly deployed internal auditing system can lead to increased, no-value-added costs, many hours of wasted resources, and an eventual, inevitable LGA breakdown.” (MM)

IAM mentioned that *“insufficient budget and lack of working facilities such as computers, printers, and transport facilities have been their major obstacle for them to perform their tasks efficiently. For example they are unable to reach and verify existence of council projects and it is difficult to undertake value for money audit.”*

OM *“indicate that a lot of instability in the accountability of end-of-years financial reports presented by the internal audit department.”*

"Some internal audits do not disclose fraud and corruptions due to the friendship and benefit they get from senior managers." (OM)

"Unethical behaviour of internal auditors, help to increases fraud and corruptions in our municipality, which management needs to take into account." (MKM)

5.2.8.6 Category 6: Challenges facing SCM practitioners in understanding their day-to-day activities

In relation to this study, it is important for management to take into account the challenges facing SCM practitioners in understanding their day-to-day activities, as those can hinder staff from performing their duties as well stopping them working in accordance with the policy. This category was investigating the challenges faced by SCM practitioners in understanding their day-to-day activities. Challenges faced by SCM practitioners are an important factor to be taken into consideration in any organisation and across its departments. Challenges facing SCM practitioners was used in determining the capabilities of relevant personnel in appropriately performing their task as stated in policy and as required for effective implementation. The category for assessing challenges faced by SCM practitioners in undertaking their day-to-day activities is reported from three main perspectives:

(1) Lack of clarity

The empirical findings reflect that a number of senior managers lack clarity about their roles which affects them on a daily basis. The finding indicates that managers with clarity of their roles and responsibility in their position are executing their responsibility in accordance with principles, while managers who have no clarity execute their mandates poorly due to limited experience. To further elaborate, the following direct quotes are in line with the aforementioned:

Direct response

As respondent MM indicates, *"there is conflict of interest among SCM staff, which has been a big challenge in our municipality."*

MKM, *"when the SCM staffs are experienced, communication become more easily and the movement of good and service are given to the right people, place and time."*

HRM mention that, *"the lack of clarity in SCM guidelines is a reason for non-compliance with the SCM policy."*

(2) Lack of technological skill

In the semi-structured interviews conducted, some managers agreed there is a lack of technological skill while others disagree with the above statement. The empirical findings reflect that a number of managers lack technological skills, which affects them on a daily basis. Managers with good technological skills in their position are executing their responsibility in accordance to principles, while managers who lack technological skill execute their mandates poorly due to limited experience in the above category. To further elaborate, the following directs quotes are in line with the aforementioned.

Direct responses

SCM mention that *“better technology, well skilled staffs and better training facilities is what we need in our municipality to reach our objective.”*

“When it comes to technology I understand so fast, which help make my work easy to do.” (IAM)

(3) Human resource problem

Human resource problem was aimed at investigating the selection process of employees. The semi-structured interviews conducted reveal that senior managers indicated their municipalities are faced with a human resource problem. This finding indicates that municipalities with good human resource capacity will employ quality and productive workers, while those with poor human resource capacities will employ low quality workers who will not help to achieve the objectives of the municipalities. The findings further reveal that managers with good human resource capacity in their position are executing their responsibility in accordance with principles, while managers with limited human resource capacity execute their mandates poorly due to limited experience in the above category. To further elaborate, the following directs quotes are in line with the aforementioned.

Direct responses

As respondent CFO indicates, *“Lack of SCM skilled personnel.”*

“From what I have notice we lack proper training of our SCM staff required to help in our day-to-day operation.” (OM)

5.2.8.7 Category 7: Current challenges confronting the compliance with SCM system policy in the municipality

For the current challenges confronting the compliance with SCM system policy in the municipality as related to this study, management need to consider those challenges that have been identified by staff and try to solve them, in order not to hinder the municipality attaining its objectives. This category was investigating the current challenges confronting the compliance with SCM system policy in the municipality. Challenges are an important factor in the municipality that need to be dealt with in all functional areas and employees, because, if those challenges are not dealt with, it will affect the municipality's productivity and performance.

(1) Policies and regulations overlap

The semi-structured interviews conducted with the senior managers reveal that some manages accept policy and regulations overlap indicating that some employees are confused while few senior managers do not support the above statement. The empirical findings reflect that the lack of policy and regulations overlap in the municipality lead to staff executing their mandates poorly, while those managers who disagree with the above statement will execute their responsibility in accordance to principles. Notably, participants had the following to say:

Direct responses

"I for one the SCM policy and regulations is been implemented in our municipality." (MM)

Respondent IAM107 indicates *"Lack of clarity on SCM policy is the reason for non-compliance with SCM policy and regulation."*

Respondent confirmed from OM104 that, *"lack of knowledge about SCM regulations and policies prevented them from complaining about irregularities of SCM officials."*

(2) An adequate control

During the semi-structured interviews conducted with the senior managers, a large number of senior managers accepted that there is a lack of an adequate control system in their municipality, while a few senior managers disagreed with the above statement. Inadequate controls are key challenges currently facing compliance with SCM systems. The finding indicates that managers with inadequate controls in their position execute their mandates poorly while those managers who disagree with the above statement will execute their responsibility in accordance with principles. Notably, participants had the following to say:

Direct responses

“Due to the challenges, some participants stated that their municipally have resolved to send their staff for short learning programmes because education and training empower people to become competent which will translate to efficiency and effectiveness.” (OM and IAM)

“The money is there, but unfortunately because we are so limited at the moment we often find that we don’t have enough time to go on the necessary training. But it’s a little bit difficult at the moment, you know when you take time off to go on training, then you get back, you know your work has piled up again.” (CFO)

“Our municipality do have adequate controls system” (HRM)

“I think it’s the challenge maybe the municipally needs to employ more people who are qualified in the supply chain.” (OM)

(3) Ethics and professionalism

Ethics and professionalism was also one of the themes which looked at the behavioural aspect of employees. The lack of ethics and professionalism among internal control systems that ensure fair, equitable, transparent, competitive and cost-effective SCM processes could prevent and detect fraud, non-performance by suppliers, and noncompliance with SCM policy. The semi-structured interviews conducted with the senior managers reveal senior managers accepted that ethics and professionalism are current challenges that affect work performance within their municipalities. The finding reveals that managers with no ethics and professionalism in their position execute their mandates poorly, while those managers who display ethics and professionalism will execute their responsibility in accordance with principles. Notably, participants had the following to say:

Direct responses

“Strong ethical leadership is required to move SCM to a strategic level.” (IAM)

“Sometimes the problem it’s them (management). Sometime you as a manager, maybe you are a pure academic and they give you the Directorate like procurement. It must be somebody who is in that field. You cannot take, for an example; you can’t take somebody who is in the field of economic and engineering get that person to lead ICT.” (IAM)

“There is a skills shortage in the first place, so we’re just sitting with people who don’t have the relevant qualifications in SCM.” (IAM)

“SCM officials are sometimes corrupt; we are sometime challenged with cases of SCM fraud by officials.” (MM1).

5.3 Quantitative data presentation

A total of 400 questionnaires were delivered to department officials in the selected local municipalities and a total of 288 completed questionnaires were received, achieving a 72% response rate.

5.3.1 Sampling for quantitative data

This survey is the collection of a large quantity of evidence usually numeric, or evidence that will be converted to numbers, normally by means of questionnaire (Levy & Lemeshow, 2013). From the total population, sampling was used to obtain the target group. Convenience sampling, which involved the selection of respondents based on convenience and accessibility (Maree, 2010), was used to select respondents. This method of sampling enhances willingness or access to respondents which ensures that data is collected in the quickest possible time. Convenience sampling selection saves time and reduces cost.

The following section presents and interprets the empirical outcomes from the analysis of the quantitative data.

5.3.2 Sampling of department officials

For the entire six departments that were targeted, out of the 400 questionnaires that were distributed a total of 288 questionnaires were completely filled by department officials of the five local municipalities.

5.3.3 Self-administered questionnaire

Out of the 400 anticipated, only 288 valid responses were received and this represents a response rate of 72%, with 112 departmental officials who did not partake. Drawing from the views of Fellows and Liu (2015) who aver that a valid and reliable conclusion can be drawn if a 70% response rate is obtained from a questionnaire, it can thus be said that with a response rate of 72% this study collected sufficient data to arrive at valid and reliable conclusions.

5.3.4 Quantitative data collection

Questionnaires were scheduled to be distributed to selected employees; SCM officials, human resource officials, marketing officials, operational officials, financial officials and internal audit officials. The reason for selecting this target group is that they are in a position to provide an overall view of the

policy of SCM in their respective municipalities. Participants who took part in responding to the questionnaires were drawn from all five local municipalities within the Ngaka Modiri Molema District Municipality of the North West province. Details on how the questionnaires were captured have been explained in Chapter Four.

5.3.5 Quantitative data processing

The entire process of the study, from identifying the research objectives to the collection and presentation of the research findings was aimed at obtaining a deeper understanding of the research topic. In this study, the quantitative data was collected using questionnaires. Permission for access to departmental officials was secured from the municipal managers. 400 questionnaires were distributed to the sampled officials and 288 were completed. The researcher distributed the questionnaires to the five local municipalities in person and the same procedure was used to retrieve them from respondents. All the distributed questionnaires were recorded in order to determine the response and no-response rate.

During the quantitative analysis, all the variables were assigned names and coded for computer entry. Secondly, all the responses were coded to facilitate computer data input. Thirdly, once the data entry was completed, the negatively worded scale items were recorded and assigned new values. Fourthly, in order to obtain composite scores for items on a scale, target variables were computed. Fifthly, data files were carefully screened in order to eliminate the data entry errors by checking frequencies for each variable in order to detect any out-of-range values, and values entered that were greater than the maximum frequency per question were rectified after reconciling them with the questionnaires. The subsequent section presents the quantitative data analysis. Data cleaning requires the researcher to prepare the raw data for analysis; reading the data, and checking for incomplete, inaccurate, inconsistent or irrelevant statistics.

A letter introducing the researcher and requesting permission to conduct the research was obtained from the North-West University and it was forwarded to the five local municipalities through an email. A copy of the letter is attached as Annexure B. Secondary data were collected through a questionnaire. Appointment were set up telephonically and through e-mails with the departmental officials who were responsible for providing data relevant for the study. Relevant data were collected and analysed at various municipalities' premises between 03 July 2017 and 28 August 2017.

5.3.6 Quantitative data analysis

The Statistical Package for Social Sciences (SPSS) 24 was used to organise the numerical data that was obtained from questionnaires. The responses were coded into numeric values for statistical analysis.

Microsoft excel was used to create new data which was later taken to the SPSS platform. The statistical analysis obtained in this section includes descriptive statistics, correlation analysis, Chi-square test of independence and analysis of variance. Descriptive statistics facilitated summarising the set of data associated with the population in the empirical study; the correlation analysis assisted in explaining if there is a relationship existing between two or more variables in the study; the Chi-square test of independence measured the relationship between two different variables while the analysis of variance was used for testing or comparing the average responses of more than two populations in the study.

5.3.7 Presentation of quantitative results

The presentation of the quantitative results involves presenting the findings as obtained from the questionnaire. The results are presented using graphs, charts, tables, frequencies and percentages. These statistical analyses were undertaken to find answers to the research questions and to suit the purpose of this study. The subsequent section presents the quantitative findings.

5.3.7.1 Biographical description

This section provides the biographical characteristics of department officials who responded to the questionnaires.

(1) Gender

This item was intended to find out the gender of the respondents who took part in the study. Table 5.3 shows the responses.

Table 5.3: Gender

Gender	Frequency	%
Male	125	43.4
Female	163	56.6
Total	288	100

Table 5.1 show that more respondents were female than male. The females were 56.6% (163) and the males accounted for 43.4% (125).

(2) Age

The age was aimed to identify the different age categories of respondents who took part in the study. Figure 5.1 show the age responses.

Figure 5.1: Age category

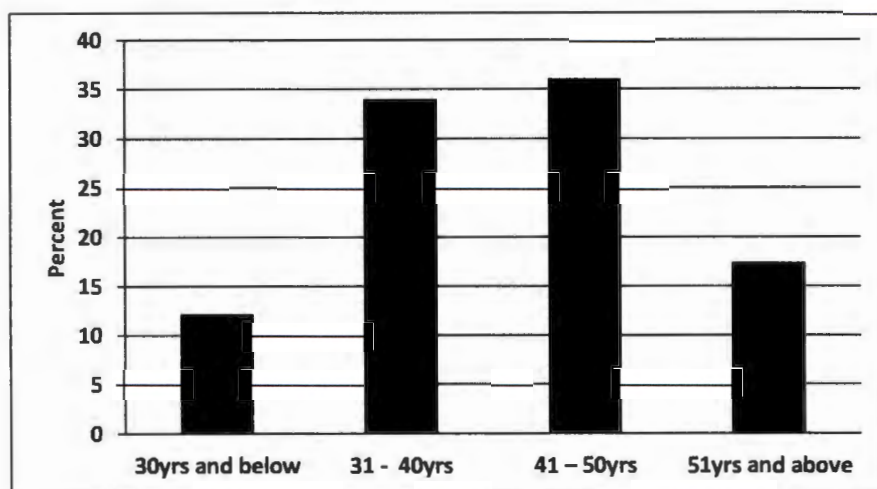


Figure 5.1: The respondents' age groups

As reflected in Figure 5.1, the largest proportion of respondents, 36.1% (104), are within the ages of 41 to 50, and 34% (98) are between 31 and 40 years of age. Figure 5.1 also shows that about 17.4% of the respondents are 51 years of age and above and 12.2% of the respondent are below 30 years of age.

(3) Educational qualification

The item was intended to identify the level of educational qualification of the respondents in this study. Table 5.4 revealed the qualification responses.

Table 5.4: Highest educational qualification

Educational qualification	Frequency	%
Grade 12	15	5.2
Diploma	30	10.4
Bachelor's	161	55.9
Honours	75	26
Master's	7	2.4
Total	288	100

Table 5.2 respondents were asked to indicate their qualification by choosing from the five levels. In this item most respondents hold a bachelor's degree 55.9% (161), Honours degree with 26% (75), Diploma with 10.4% and Grade 12 with the lowest responses of 5.2% (15). These responses indicate that 82.6% of the employees have indeed acquired relevant qualifications for the demands of the work at hand.

(4) Department

This was aimed at identifying the department of respondents in this study. Table 5.5 show the responses from each department.

Table 5.5: Department

Department	Frequency	%
Supply Chain Management	52	18.1
Internal Audit	51	17.7
Marketing	48	16.7
Financial	48	16.7
Human Resource	46	16
Operational	43	14.9
Total	288	100

Table 5.5 revealed that the highest number of respondents, 18.1% (52), were from the SCM department, followed by internal audit department with 17.7% (51), the marketing and financial departments had the same rate of 16.7% (48) and the last was operational department with 14.9% (43) responses.

(5) SCM Experience

The element was aimed at identifying the SCM experience of respondents in this study. Figure 5.2 show the responses from each department

Figure 5.2: SCM Experience

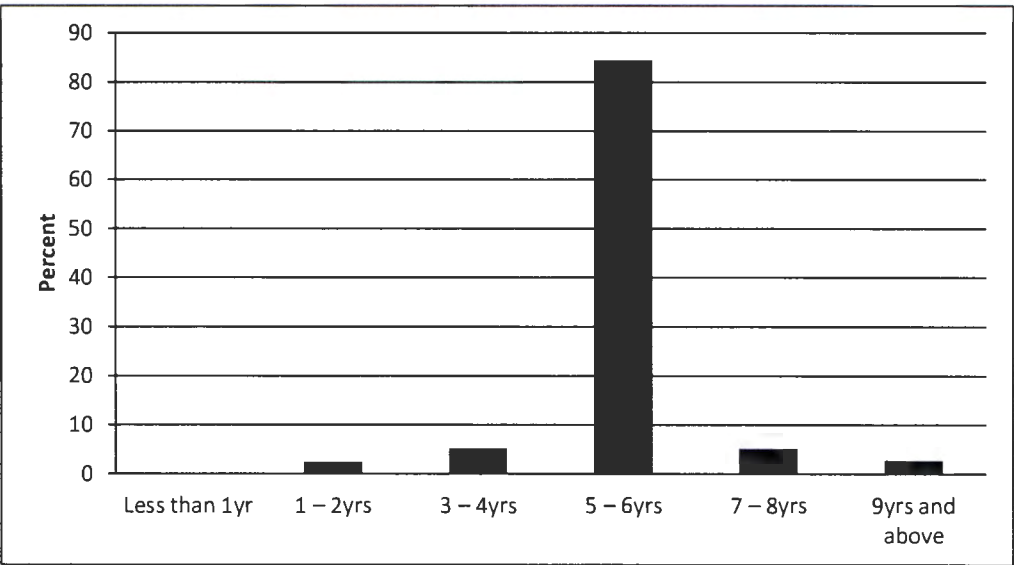


Figure 5.2 illustrates the greater percentages (84.4%) have work experience from 5 to 6 years, while the lowest level of working experience is 1 to 2 years.

(5) Views on working experience

The respondents were asked some questions related to work experience. The essence of asking these questions was to determine how much they agree or disagree with factors related to working experience which will help the researcher to gather measures to maximise the implementation and understanding of the SCM policy. The key measurements in this category were mixed continuous responses such as strongly agree, agree, unsure, disagree and strongly disagree.

Working experience

For the purpose of this study, policy and experience were important aspects in the municipality because, for a municipality to succeed, employees in the organisation who understand the policy and do have experience play an important role as they assist management in any way. The responses from this category were captured in Table 5.6. In this section, the interpretation of the result will be presented while the presentation of results follows.

5.3.7.2 Views of SCM policy and experience

Table 5.6: Views SCM policy and experience

No.	Rating	Strongly Agree	Agree	Unsure	Disagree	Strongly Disagree
1	Staff with a longer duration in their positions execute their responsibility in accordance with the policy.	70.8	28.1	0	0.7	0.3
2	Staff that have not been in service for a long period of time tend to execute their mandates ineffectively due to limited experience.	5.6	4.9	0.7	82.6	6.3
3	Staff with a higher qualification tend to perform on a more advanced level.	30.2	66.7	0	2.8	0.3
4	Staff with low qualifications tend to perform poorly.	2.1	18.8	4.9	50	24.3
5	I am aware and do have required levels of knowledge about the SCM policy in the municipality.	34	48.3	1	14.2	2.4
6	I understand and apply SCM policy as rules and regulations that are set in place to govern the process of acquiring goods and services needed by our municipality to function efficiently.	5.6	40.6	21.2	30.9	1.7
7	As staff, we are actively involved in developing policy and oversee the implementation of the policy in our municipalities.	5.2	58.7	13.2	22.9	0
8	I am provided and oriented on the guidelines supporting the documentation for the implementation of the SCM policy as issued by the National Treasury.	7.6	49.3	22.2	19.1	1.7
9	As staff, we do receive training on the procedure on how to implement the policy and carry out the SCM operational activities in our municipalities.	19.4	34.7	17.7	24.7	3.5

10	SCM policies as applied in this municipality promote consistence and operational efficiency, enhance the municipality mission and mitigate significant institutional risk.	8.3	52.4	21.9	16.7	0.7
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In this section, the presentation and interpretation of the result is covered. In statements 1 to 15, the respondents were asked the content of the SCM policy and experience; if the municipalities made them understand the SCM policy and also how experienced they are in implementing the policy in their various municipalities. In statement 1 and 2, the respondents were asked questions based on the length of employment in the municipality. A high percentages of the respondents are in agreement that staff with a longer duration in their positions execute their responsibility in accordance with the policy with 95.5%, while on the other hand 95.8% do not support the statement that staff that has not been in service for a long period of time tends to execute their mandates ineffectively due to limited experience. The finding reveal that staff with longer duration execute their responsibility in accordance, but it does not mean staff that has not been in service for a long period of time perform poorly.

For statement 3 and 4, the respondents were asked questions based on their qualification. 3, (96.9%) are in support of that fact that staff with a higher qualification tend to perform on a more advanced level while for statement 4, 74.3% do not support the statement that staff with low qualifications tend to perform poorly. This reveals that a low qualification does not imply low performance.

In statements 5, 6, 7 and 8, the respondents were asked questions based on the SCM policy in their municipality. For respondents from statement 5, 82.3% are in support of the statement that staff are aware and do have required levels of knowledge about the SCM policy, for statement 6, 46.2% are in support of the statement that staff understand and apply SCM policy as rules and regulations that are set in place to govern the process of acquiring goods and services needed by our municipality to function efficiently. For statement 7, 63.9% are in support of the statement that staff actively involved in developing policy and oversee the implementation of the policy in our municipalities and for statement 8, 56.9% are also in support of the statement that they are provided with and oriented on the guidelines supporting the documentation for the implementation of the SCM policy.

Finally for statement 9, 54.1% are in support that as staff, they do receive training on the procedure on how to implement the policy and carry out the SCM operational activities in their municipalities, while for statement 10, 60.7% support that policy as applied in this municipality promotes consistency and operational efficiency. Views obtained in this category indicate that a majority of the respondents are lacking competency in applying the policy and lacking experience in the policy, while on the other

hand, respondents understand some of the issues with regard to policy and experience in the municipalities, while some are not certain with regard to some issues.

5.3.7.3 Views of SCM procedure/regulation and measurement

The responses were obtained from the respondents on the understanding of SCM procedure, regulation and measurement. A five (5) point Likert scale measurement with strongly agree, agree, unsure, disagree and strongly disagree was used to obtain the views of the respondents. For the above statement the respondents were asked if they understand how the SCM procedure, regulation and measurement work in their municipalities. The responses from this category were captured in Table 5.7.

Table 5.7: Views on SCM Procedure/regulation and measurement (%)

No.	Rating	Strongly Agree	Agree	Unsure	Disagree	Strongly Disagree
1	As staff, our knowledge of SCM clearly gives the understanding that policies and procedures are not the same.	27.1	29.9	12.5	28.1	2.4
2	I understand and apply SCM procedures as step-by-step descriptions of the tasks required to support and carry out municipality policies.	5.6	16.7	14.2	58	5.6
3	Regulatory dimension in this municipality is a sign of good governance	6.9	59	20.5	12.8	0.7
4	SCM regulation in this municipality has a substantial impact on productivity growth through its distorting effects on investment and innovation.	15.6	62.8	12.8	8.7	0
5	For capacity of the regulatory system, staff in this municipality are involved in regulatory policy and oversight across departments.	21.2	38.2	28.5	11.8	0.3
6	Staff in the departments participate in training on regulatory policy and oversight as an alternative measure for the capacity of regulatory systems.	2.4	7.6	16.3	68.1	5.6
7	The department in charge of SCM in this municipality consistently provide training to staff on the impact of regulation to SCM.	1.7	5.2	14.6	68.4	10.1
8	SCM administrations in this municipality currently measure the effectiveness of their compliance improvement strategies solely on revenue return.	4.9	56.6	29.9	8.3	0.3
9	Staff in this municipality are aware of, and do develop ways to measure performance compliance of workers in order to determine their overall effectiveness.	13.9	55.2	24	6.6	0.3

In this section, the presentation and interpretation of the result are covered. In statements 1 to 9, the respondents were asked if they understand how the SCM procedure, regulation and measurement work in their municipalities. For statements 1 and 2 the respondents were asked whether knowledge of SCM clearly gives the understanding of that policy. For statement 1, 57% are in support that as staff, their knowledge of SCM clearly gives the understanding that policies and procedures are not the same, while in 2, 63.6% do not support the statement that they understand and apply SCM procedures as step-by-step descriptions of the tasks required to support and carry out municipality policies.

For Statements 3, 4 and 5, the respondents were asked to respond based on the SCM regulatory dimension. 65.9% support the statement that regulatory dimension in a municipality is a sign of good governance. 78.4% support the statement that SCM regulation in this municipality has a substantial impact on productivity growth through its distorting effects on investment and innovation and 59.4% also support the statement that for capacity of the regulatory system, staff in this municipality are involved in regulatory policy and oversight across departments.

For statements 6 and 7 the respondents were asked to respond based on training on policy. 673.7% do not support the statement that staff in the departments participate in training on regulatory policy and oversight as an alternative measure for the capacity of regulatory systems, while 78.5% do not support that the department in charge of SCM in this municipality consistently provides training to staff on the impact of regulation to SCM policy. The finding reveals that staff are not provided with training with regard to regulation on the SCM policy.

For statements 8, and 9, 61% and 69.1% respectively support that SCM administrations currently measure the effectiveness of compliance improvement strategies solely on revenue return and also support that staff are aware of, and do develop ways to measure performance compliance of workers in order to determine their overall effectiveness.

However, it is also important to note that some of the respondents have indicated that despite having attended a number of workshops pertaining to SCM procedure, regulation and measurement, they still have difficulties understanding their expected roles in the monitoring and reviewing of the SCM policy, and some respondents are unsure of the of the SCM procedure, regulation and measurement in their various municipalities.

Now that frequencies have been presented, the advanced statistics will be explained further.

5.3.7.4 Views of compliance with SCM policy

The views on compliance with the SCM policy as obtained from the respondents. The respondents were asked some questions on compliance the SCM policy and if it are implemented by the municipal workers. A five (5) point Likert scale measurement with responses ranging from strongly agree, agree, unsure, disagree and strongly disagree was used to obtain the negative or positive views of the respondents. In statements 1 to 8, the respondents were asked about the level on which they comply with the SCM policy in their municipalities. The responses from this category are captured in Table 5.8.

Table 5.8: Views on compliance of SCM policy (%)

No.	Statement	Strongly Agree	Agree	Unsure	Disagree	Strongly Disagree
1	Staff with supplier knowledge on policy and who are competent about the compliance and implementation of the policy, are executing their responsibility in accordance with principles.	5.6	86.8	3.5	3.8	0.3
2	Staff who lack better knowledge and competence of the policy in compliance and implementation are unable to execute their mandates properly.	33.7	61.1	3.8	1.4	0
3	Flow of the policy at all levels in this municipality enables increase in productivity and enhances the possibility of effectively executing a job description.	27.1	68.4	3.8	0.7	0
4	The flow of policy at some level of a municipality determines that some of the departments are in compliance and implement the SCM policy.	30.9	64.9	3.5	0.7	0
5	The positive contribution by internal audit determines competence of employees in carrying out their job.	38.5	53.8	6.9	0.7	0
6	Strong accountability and end-of-year financial report is used to determine the extent to which employees have gone through relevant training appropriate for effective understanding and application of the supply chain discipline.	34	59.7	4.9	1.4	0
7	The negative contribution by internal audit is used to prove fraud and corruption on SCM in this municipality.	27.8	62.8	6.9	1	1.4
8	The SCM sector of this municipality does have and implements effective policies to monitor compliance.	26.6	52.4	18.5	2.4	0

In this section, the presentation and interpretation of the result are covered. In statements 1 to 8, the respondents were asked about their views on compliance with the SCM policy in their municipalities and to find out if the employees actually implement the policy. The respondents were asked if they have sufficient knowledge of the policy. 92.4% and 94.8% support of the statement that staff with better knowledge of the policy, are executing their responsibility in accordance with principles, while 4.1% and 1.4% respectively do not support the statements.

In statements 3 and 4, the respondents were asked if flow of the policy at all levels in the municipality and in some levels will determine that the departments are in compliance and implement the SCM policy. A high percentage of the respondents support both statements with 95.5% and 95.8% respectively.

In statements 5, 6 and 7, the respondents were asked whether a positive contribution by internal audit determines competence of employees in carrying out their job, and strong accountability determines the extent to which employees have gone through relevant training appropriate for effective understanding and application of the supply chain discipline. High percentages of the respondents support all three statements with 92.3%, 93.7% and 90.6% respectively.

Finally 79% support the statement that the SCM sector of the municipality does have and implements effective policy to monitor compliance. The results of the empirical study showed that a majority of SCM officials and senior managers do not comply with the SCM policy in all the five local municipalities.

Now that frequencies have been presented, the advanced statistics will be explain further.

5.3.7.5 Views of challenges facing SCM practitioners and the municipality

The views on challenges facing SCM practitioners and the municipality were obtained from the respondents. The respondents were provided with a set of statements related to challenges faced in running the day-to-day activities by municipal workers. A five (5) point Likert scale measurement ranging from strongly agree, agree, unsure, disagree and strongly disagree was used to obtain the views of the respondents. In statements 1 to 15, the respondents were asked about the various challenges facing their municipalities. The responses from this category are captured in Table 5.9.

Table 5.9: Views on challenges facing SCM practitioners and the municipality (%)

No.	Statement	Strongly Agree	Agree	Unsure	Disagree	Strongly Disagree
1	SCM staff with clarity of their roles and responsibility are executing their responsibility in accordance to principles	39.2	53.1	5.2	2.4	0
2	SCM staff who have no clarity do execute their mandates poorly due to lack of training	29.9	68.4	0.7	1	0
3	SCM staff with sufficient human resource capacity in their position are executing their responsibility in accordance to principles	35.1	60.8	2.8	1.4	0
4	SCM staff with limited human resource capacity do execute their mandates poorly	29.5	65.6	2.4	2.4	0
5	Having good technological skill help SCM staff to execute their responsibility in accordance to policy	21.5	76.4	1	1	0
6	Employees who are confused and cumbersome cause SCM policies and regulations to overlap in this municipality	26.4	69.4	1.7	2.4	0
7	The lack of ethics and professionalism among internal control systems help to increase fraud, non-performance by suppliers, and noncompliance with SCM policy	20.5	72.6	0.7	5.9	0.3
8	There is lack of proper infrastructure for SCM services in this municipality	10.1	67.7	1	15.6	5.6
9	There is lack of transparency within our SCM system	39.6	60.1	0.3	0	0
10	The SCM sector of this municipality is challenged with poor planning	18.8	62.8	0.7	17.4	0.3
11	The SCM sector of this municipality lacks effective SCM monitoring system	29.5	69.4	1	0	0
12	The SCM sector of this municipality lacks adequate capacity	30.2	69.8	0	0	0
13	The SCM sector of this municipality lacks skilled personnel	5.6	15.6	27.8	35.4	15.6
14	The SCM sector of this municipality is sometimes challenged with cases of SCM fraud by officials	44.8	54.2	0.3	0	0.7
15	Staff with lack of technological skills do execute their mandates poorly	48.3	51.7	0	0	0

In this section, the presentation and interpretation of the result is covered. Responses from statements 1 and 2 show 92.3% and 88.3% respectively support the statement that SCM staff with clarity of their roles and responsibility are executing their responsibility in accordance with principles while staff with no clarity do execute their mandates poorly due to lack of training.

In statements 3, 4 and 13 the respondents were asked if SCM staff with sufficient human resource capacity are executing their responsibility in accordance with principles and also SCM staff with limited human resource capacity execute their mandates poorly, and if the SCM sector of this municipality lacks skilled personnel. A high percentage of the respondents support statements 3 and 4 with 95.9% and 95.1% respectively, while for statement 13, 51% do not support the statement. The responses as obtained in this category indicate that staff lack human resource capacity, but have skilled personnel that help in achieving the objectives of the municipality.

Responses from statements 5, with 97.9%, and 15, with 100% show support of the statement that having good technological skill helps SCM staff to execute their responsibilities in accordance with policy, while staff with lack of technological skills execute their mandates poorly. 95.8% support that employees who are confused and cumbersome cause SCM policy and regulations to overlap in this municipality, which will led to low productivity in output.

For statements 7, 9 and 14, 93.1%, 99.7%, and 99% respectively support that lack of ethics and professionalism, lack of transparency and sometimes challenges with cases of SCM fraud by officials among internal control systems help to increase fraud, non-performance by suppliers, and non-compliance with SCM policy. In statements 8 and 12 the respondents were asked if there is a lack of proper infrastructure for SCM services in their municipality and also if the SCM sectors of their municipality lack adequate capacity; a high percentage of the respondents are in support of both statement with 77.8% and 100% respectively.

Finally for statement 10, 81.6% are in support that the SCM sector of this municipality is challenged with poor planning, that leads to poor performance within the five local municipality and statement for 11, 98.9% support the statement that the SCM sector of those municipalities lacks an effective SCM monitoring system. The results of the empirical study showed that the majority of the SCM officials and senior managers of departments are faced by many challenges that cause ineffective performance in their day-to-day activities in the municipalities.

5.3.7.6 Reliability analysis

Reliability analysis is used to ascertain the constancy of measures which are administered at different times or the similarity of sets of objects occurring in different tests (Kimberlin & Winstertein, 2008). Below are the different reliability tests undertaken;

(1) Cronbach’s alpha

Cronbach’s alpha (α) reliability coefficient, whose numerical value ranges from 0 to 1, measures the reliability (or internal consistency) of the items in the Likert scales. A high value (close to 1) for Cronbach’s alpha reliability coefficient indicates good internal consistency of the items in the scale. The Cronbach’s alpha coefficients in Table 5.10 row (2) are close to 1, suggesting that the items in the scale (views on SCM policy, SCM procedure, SCM compliance and challenges facing SCM practitioners) have relatively high internal consistency. Table 5.10 presents the reliability analysis of questions administered as questionnaires to the department officials.

Table 5.10: Reliability analysis of the questionnaires

Dimension	Cronbach’s Alpha (α)	No of Items	Variables
SCM policy	0.801	10	6 – 15
SCM procedure	0.778	9	16 – 24
SCM compliance	0.783	8	25 – 32
Challenges facing SCM practitioners	0.510	15	33 – 47

According to Table 5.10, variables 6-15, 16-24 and 25-32 have values which are above 0.7, close to 1, suggesting that the items in the scale have relatively high internal consistency. However it should be noted that challenges facing SCM practitioners is the only item with a value of 0.510, which is moderate, and is accepted according to Streiner & Norman (2008). Cronbach’s alpha is the measure of the reliability and consistency of the sampling instrument and examines whether all the data were measuring the same underlying construct. If the alpha result is 0.5, it is acceptable but weak.

(2) Chi-square Test of Independence

This test of independence is concerned with the relationship between two different factors (or categories) in a population under study. There is a significant relationship between the two categories if the probability value (p-value) is less than or equal to 0.05 level of significance. A chi-square test of

independence and the observed frequencies, chi-square statistics and the p-value with 2 degrees of freedom (df) are shown in Table 5.11.

Table 5.11: Views of respondents about training on SCM operational activities in our municipalities by age.

	As SCM staff, we do receive training on the procedure on how to implement the policy and carry out the SCM operational activities in our municipalities.			
Age	Agree	Unsure	Disagree	Total
21< 40	86	16	31	133
40< 65	70	35	50	155
Total	156	51	81	N = 288
	p-value = 0.003 chi-square statistic = 11.56 df = 2			

Since the p-value (0.003) is less than 0.05 level of significance, then the views of the respondents about training on SCM operational activities in municipalities are significantly dependent on their age. It means that a large percentage ($86/156 = 55\%$) of respondents who agree with the item are at most 40 years of age, whereas the majority ($50/81 = 62\%$) of respondents who disagree are over the age of 40, while ($16/51=31\%$) of the respondents who were unsure with the item listed in Table 5.11. A chi-square test of independence and the observed frequencies, chi-square statistics and the p-value with 2 degrees of freedom (df) are shown in Table 5.11.

Table 5.12: Views of respondents about knowledge of SCM by age.

	As staff, our knowledge of SCM clearly gives the understanding that policies and procedures are not the same.			
Age	Agree	Unsure	Disagree	Total
21< 40	94	8	31	133
40< 65	70	28	57	155
Total	164	36	88	N = 288
	p-value = 0.00003 chi-square statistic = 20.74 df = 2			

Since the p-value (0.00003) is less than 0.05 level of significance, then the views of the respondents about knowledge of SCM are significantly dependent on their age. It means a large percentage ($94/164 = 57\%$) of the respondents who agree that as staff, their knowledge of SCM clearly gives the understanding that policies and procedures are not the same are, at most, 40 years of age, whereas the large percentage ($57/88 = 65\%$) of the respondents who disagree are over the age of 40 and ($8/36=22\%$) respondents who were unsure with the item listed. A chi-square test of independence of the observed

frequencies, chi-square statistics and the p-value with 2 degrees of freedom (df) are shown in Table 5.12.

Table 5.13: Views of respondents about regulatory policy by age.

	For capacity of the regulatory system, staff in this municipality are involved in regulatory policy and oversight across departments.			
Age	Agree	Unsure	Disagree	Total
21 < 40	87	37	9	133
40 < 65	84	45	26	155
Total	171	82	35	N = 288
	p-value = 0.024 chi-square statistic = 7.45 df = 2			

Since the p-value (0.024) is less than 0.05 level of significance, then the views of the respondents about regulatory policy are significantly dependent on their age. It means that the larger percentage ($87/171 = 51\%$) of the respondents who agree with the item listed in Table 5.13 are at most 40 years of age, whereas the larger percentage ($26/35 = 74\%$) of the respondents who disagree are over the age of 40, while a larger percentage ($37/82 = 45\%$) of the respondents who were unsure with the item listed in Table 5.13.

(3) Analysis of Variance (ANOVA) Test

The purpose of the ANOVA test is to compare the average responses of more than two populations. Samples are selected randomly from these populations and the variances of the population responses are assumed to be equal. The population responses are also assumed to be normally distributed.

Minitab and SPSS software packages were used to perform an ANOVA test for the data in Table 5.14. The responses of the five local municipalities are assumed to be normally distributed. The population variances of the responses in the five local municipalities are also assumed to be equal. Since the p-values are all less than 0.05 level of significance, then there is a significant difference between the population means of responses among the five local municipalities. It means that the staff in the five municipalities do not equally agree or disagree on the items listed in Table 5.14.

Table 5.14: ANOVA One-Way Analysis of Variance for SCM Data

Factor: Department (4)

Statements			Sum of Squares	df	Mean Square	F	Sig.
6	Staff with a longer duration in their positions execute their responsibility in accordance with the policy.	Between Groups	6.728	5	1.346	4.772	.000
		Within Groups	79.518	282	.282		
		Total	86.247	287			
7	Staff that has not been in service for a long period of time tend to execute their mandates ineffectively due to limited experience.	Between Groups	14.903	5	2.981	4.364	.001
		Within Groups	192.597	282	.683		
		Total	207.500	287			
8	Staff with a higher qualification tend to perform on a more advanced level.	Between Groups	9.099	5	1.820	4.990	.000
		Within Groups	102.845	282	.365		
		Total	111.944	287			
9	Staff with low qualifications tend to perform poorly.	Between Groups	34.918	5	6.984	6.520	.000
		Within Groups	302.068	282	1.071		
		Total	336.986	287			
10	I am aware and do have required levels of knowledge about the SCM policy in the municipality.	Between Groups	202.589	5	40.518	91.270	.000
		Within Groups	125.189	282	.444		
		Total	327.778	287			
11	I understand and apply SCM policy as rules and regulations that are set in place to govern the process of acquiring goods and services needed by our municipality to function efficiently.	Between Groups	185.129	5	37.026	108.547	.000
		Within Groups	96.191	282	.341		
		Total	281.319	287			
12	As staff, we are actively involved in developing policy and oversee the implementation of the policy in our municipalities.	Between Groups	87.839	5	17.568	33.993	.000
		Within Groups	145.741	282	.517		
		Total	233.580	287			
13	I am provided and oriented on the guidelines supporting the documentation for the implementation of the SCM policy as issued by the National Treasury.	Between Groups	141.495	5	28.299	70.831	.000
		Within Groups	112.668	282	.400		
		Total	254.163	287			
14	As staff, we do receive training on the procedure on how to implement the policy and carry out the SCM operational activities in our municipalities.	Between Groups	210.951	5	42.190	68.689	.000
		Within Groups	173.212	282	.614		
		Total	384.163	287			
15	SCM policies as applied in this municipality promote consistency and operational efficiency, enhance the municipality mission and mitigate significant institutional risk.	Between Groups	117.178	5	23.436	59.651	.000
		Within Groups	110.791	282	.393		
		Total	227.969	287			
16	As staff, our knowledge of SCM clearly gives the understanding that policies and procedures are not the same.	Between Groups	286.174	5	57.235	110.705	.000
		Within Groups	145.795	282	.517		
		Total	431.969	287			
17		Between Groups	167.774	5	33.555	75.066	.000

	I understand and apply SCM procedures as step-by-step descriptions of the tasks required to support and carry out municipality policies.	Within Groups	126.056	282	.447		
		Total	293.830	287			
18	Regulatory dimension in this municipality is a sign of good governance	Between Groups	114.735	5	22.947	79.796	.000
		Within Groups	81.095	282	.288		
		Total	195.830	287			
19	SCM regulation in this municipality has a substantial impact on productivity growth through its distorting effects on investment and innovation.	Between Groups	61.424	5	12.285	30.269	.000
		Within Groups	114.451	282	.406		
		Total	175.875	287			
20	For capacity of the regulatory system, staff in this municipality are involved in regulatory policy and oversight across departments.	Between Groups	126.253	5	25.251	53.799	.000
		Within Groups	132.358	282	.469		
		Total	258.611	287			
21	Staff in the departments participate in training on regulatory policy and oversight as an alternative measure for the capacity of regulatory systems.	Between Groups	9.907	5	1.981	3.247	.007
		Within Groups	172.093	282	.610		
		Total	182.000	287			
23	SCM administrations in this municipality currently measure the effectiveness of their compliance improvement strategies solely on revenue return.	Between Groups	78.536	5	15.707	59.912	.000
		Within Groups	73.933	282	.262		
		Total	152.469	287			
24	Staff in this municipality are aware of, and do develop ways to measure performance compliance of workers in order to determine their overall effectiveness.	Between Groups	43.490	5	8.698	14.303	.000
		Within Groups	171.496	282	.608		
		Total	214.986	287			
25	Staff with supplier knowledge on policy and who are competent about the compliance and implementation of the policy, are executing their responsibility in accordance to principles.	Between Groups	7.658	5	1.532	6.162	.000
		Within Groups	70.089	282	.249		
		Total	77.747	287			
26	Staff who lack better knowledge and competence of the policy in compliance and implementation are unable to execute their mandates properly.	Between Groups	11.689	5	2.338	7.230	.000
		Within Groups	91.186	282	.323		
		Total	102.875	287			
27	Flow of the policy at all levels in this municipality enable increase in productivity and enhance the possibility of effectively executing a job description.	Between Groups	11.129	5	2.226	8.707	.000
		Within Groups	72.090	282	.256		
		Total	83.219	287			
28	The flow of policy at some level of a municipality determines that some of the departments are in compliance and implement the SCM policy.	Between Groups	13.089	5	2.618	9.925	.000
		Within Groups	74.380	282	.264		
		Total	87.469	287			
29		Between Groups	12.458	5	2.492	7.008	.000
		Within Groups	100.261	282	.356		

	The positive contribution by internal audit determines competence of employees in carrying out their job.	Total	112.719	287			
30	Strong accountability and end of year financial report is used to determine the extent to which employees have gone through relevant training appropriate for effective understanding and application of the supply chain discipline.	Between Groups	15.337	5	3.067	9.340	.000
		Within Groups	92.608	282	.328		
		Total	107.944	287			
31	The negative contribution by internal audit is used to prove fraud and corruption on SCM in this municipality.	Between Groups	11.728	5	2.346	5.082	.000
		Within Groups	130.147	282	.462		
		Total	141.875	287			
32	The SCM sector of this municipality does have and implement effective policies to monitor compliance.	Between Groups	14.721	5	2.944	5.806	.000
		Within Groups	141.995	280	.507		
		Total	156.717	285			
39	The lack of ethics and professionalism among internal control systems help to increase fraud, non-performance by suppliers, and noncompliance with SCM policy	Between Groups	21.027	5	4.205	10.260	.000
		Within Groups	115.584	282	.410		
		Total	136.611	287			
41	There is lack of transparency within our SCM system	Between Groups	3.450	5	.690	2.895	.014
		Within Groups	67.213	282	.238		
		Total	70.663	287			
42	The SCM sector of this municipality is challenged with poor planning	Between Groups	177.417	5	35.483	127.385	.000
		Within Groups	78.552	282	.279		
		Total	255.969	287			
43	The SCM sector of this municipality lacks effective SCM monitoring system	Between Groups	4.144	5	.829	3.283	.007
		Within Groups	71.186	282	.252		
		Total	75.330	287			
44	The SCM sector of this municipality lacks adequate capacity	Between Groups	5.026	5	1.005	5.090	.000
		Within Groups	55.693	282	.197		
		Total	60.719	287			
45	The SCM sector of this municipality lacks skilled personnel	Between Groups	71.606	5	14.321	14.768	.000
		Within Groups	273.474	282	.970		
		Total	345.080	287			

Since the p-values (shown in the last column of Table 5.14) are all less than 0.05 level of significance, then there is a significant difference of the population means of responses among the respondents in the six departments (SCM, operational, marketing, human resource, internal audit and financial departments). It means that the respondents in these six departments do not equally agree or disagree on the items listed in Table 5.14 and the reason for this should be further investigated.

(1) Correlation Analysis

This test is concerned with the relationship between two ranked variables (X and Y). Correlation analysis helps to explain if there is an association or relationship between two variables in the study. It measures the strength, weakness and the direction of linear relationships between two variables which are always between +1 and -1. The relationship is statistically significant if the p-value is less than 0.05 level of significance.

The coefficient of Spearman's rank correlation is given by the following formula:

$$r = 1 - \frac{6 \sum D^2}{N(N^2 - 1)}$$

Where

D = differences of ranks of corresponding values of X and Y

N = number of paired values in the data

$$-1 \leq r \leq 1$$

(6) Correlation between age and views of respondents about SCM policy, procedure and challenges.

SPSS 24 software package was used to perform the correlation analysis between age and views of respondents about SCM policy, procedure and challenges and the results are shown in Table 5.15. Since all the p-values are less than 0.05 level of significance, then the correlation between age and views of respondents about the items listed in Table 5.14 is significant. Negative correlation coefficients imply that older respondents tend to agree with the listed statement, whereas younger respondents tend to disagree. Positive correlation coefficients imply that older respondents tend to disagree with the listed items, whereas younger respondents tend to agree.

Table 5.15: Spearman’s rank correlation between age and views of respondents about SCM policy, procedure and challenges

No.	Statement	Correlation Coefficient (r)	p-value
1	I understand and apply SCM policy as rules and regulations that are set in place to govern the process of acquiring goods and services needed by our municipality to function efficiently.	0.161	0.006
2	I am provided and oriented on the guidelines supporting the documentation for the implementation of the SCM policy as issued by the <i>National Treasury</i> .	0.135	0.022
3	As SCM staff, we do receive training on the procedure on how to implement the policy and carry out the SCM <i>operational activities in our municipalities</i> .	0.176	0.003
4	SCM policies as applied in this municipality promote consistency and operational efficiency, enhance the municipality mission and mitigate significant institutional risk.	0.159	0.007
5	As SCM staff, our knowledge of SCM clearly gives the understanding that policies and procedures <i>are not the same</i> .	0.224	0.000
6	SCM regulation in this municipality has a <i>substantial impact</i> on productivity growth through its distorting effects on investment and innovation.	0.150	0.011
7	For capacity of the regulatory system, staff in this municipality are involved in regulatory policy and oversight across departments.	0.118	0.045
8	SCM administrations in this municipality currently measure the effectiveness of their compliance improvement strategies solely on revenue return.	0.169	0.004
9	Staff in this municipality are aware of, and do develop ways to measure performance compliance of workers in order to <i>determine their overall effectiveness</i> .	0.141	0.016
10	Employees who are confused and cumbersome causes SCM policies and regulations to overlap in this municipality	-0.131	0.026
11	There is lack of proper infrastructure for SCM services in this municipality	-0.130	0.027
12	The SCM sector of this municipality is sometimes challenged with cases of SCM fraud by officials	-0.161	0.006

Figure 5.3 presents the graph of views on SCM policy, procedure and challenges versus age group as obtained from the Spearman’s rank correlation. It portrays that the older people agree with the listed items while the younger population disagrees with the items.

See Figure 5.3 below to display negative and the positive correlation diagrammatically.

Figure 5.3 (a): Views of respondents versus age ($r < 0$)

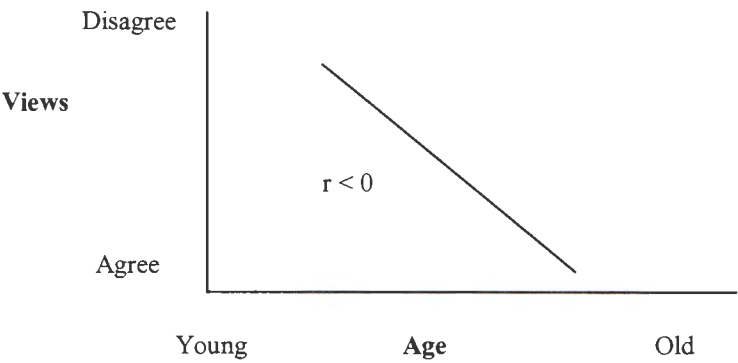


Figure 5.3 (b): Views of respondents versus age ($r > 0$)

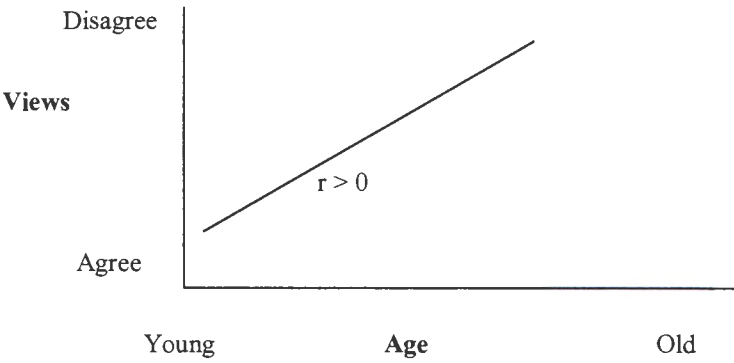


Table 5.16, as shown below presents the correlation analysis between educational level and views of respondents about SCM policy, procedure and challenges.

Table 5.16: Spearman's rank correlation between educational level and views of respondents about SCM policy, procedure and challenges.

No.	Statement	Correlation Coefficient	p-value
1	Staff with a higher qualification tend to perform on a more advanced level.	-0.189	0.001
2	Staff with low qualifications tend to perform poorly.	-0.164	0.005
4	I am aware and do have required levels of knowledge about the SCM policy in the municipality.	-0.246	0.000
5	I understand and apply SCM policy as rules and regulations that are set in place to govern the process of acquiring goods and services needed by our municipality to function efficiently.	-0.238	0.000
6	I am provided and oriented on the guidelines supporting the documentation for the implementation of the SCM policy as issued by the National Treasury.	-0.249	0.000
7	As staff, we do receive training on the procedure on how to implement the policy and carry out the SCM operational activities in our municipalities.	-0.138	0.019
8	SCM policies as applied in this municipality promote consistency and operational efficiency, enhance the municipality mission and mitigate significant institutional risk.	-0.123	0.036
9	As staff, our knowledge of SCM clearly gives the understanding that policies and procedures are not the same.	-0.196	0.001
10	Regulatory dimension in this municipality is a sign of good governance	-0.256	0.000
11	For capacity of the regulatory system, staff in this municipality are involved in regulatory policy and oversight across departments.	-0.159	0.007
12	SCM administrations in this municipality currently measure the effectiveness of their compliance improvement strategies solely on revenue return.	-0.180	0.002
13	Staff who lack better knowledge and competence of the policy in compliance and implementation are unable to execute their mandates properly.	-0.147	0.012
14	The positive contribution by internal audit determines competence of employees in carrying out their job.	-0.190	0.001
15	Strong accountability and end of year financial report is used to determine the extent to which employees have gone through relevant training appropriate for effective understanding and application of the supply chain discipline.	-0.141	0.017
16	The SCM sector of this municipality does have and implement effective policies to monitor compliance.	-0.133	0.025
17	Staff who have no clarity do execute their mandates poorly due to lack of training	0.118	0.045
18	There is lack of proper infrastructure for SCM services in this municipality	-0.215	0.000
19	The SCM sector of this municipality is challenged with poor planning	0.169	0.004

SPSS 24 software package was used to perform the correlation analysis and the results are shown in Table 5.16. Since all the p-values are less than 0.05 level of significance, then the correlation between educational level and views of respondents about the statement listed in Table 5.16 is significant. Negative correlation coefficients imply that more educated respondents tend to agree with the listed items, whereas less educated respondents tend to disagree. Positive correlation coefficients imply that more educated respondents tend to disagree with the listed items, whereas less educated respondents tend to agree. See Figure 5.4 below to display the negative and the positive correlation diagrammatically.

Figure 5.4 (a): Views of respondents versus educational level ($r < 0$)

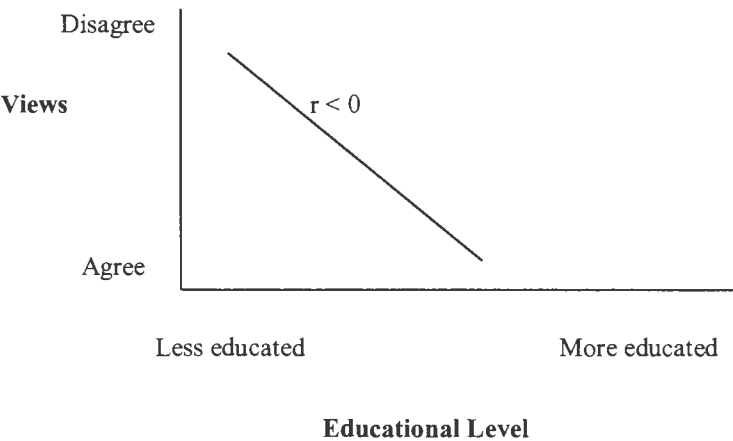


Figure 5.4 (b): Views of respondents versus educational level ($r > 0$)

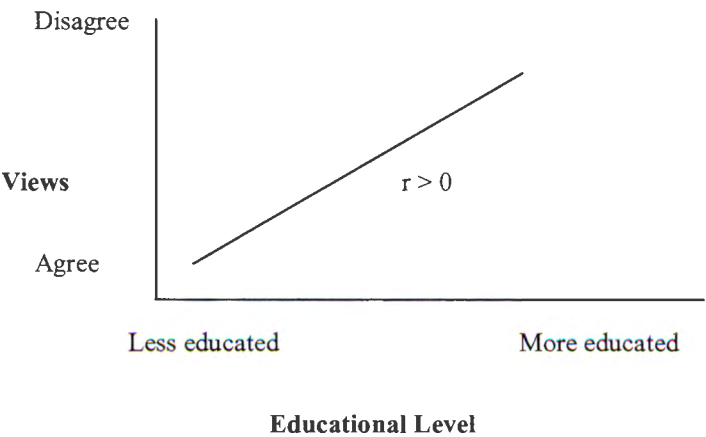


Table 5.17 presents the correlation analysis between SCM experience and views of respondents about SCM procedure and policy compliance

Table 5.17: Spearman’s rank correlation between SCM experience and views of respondents about SCM procedure and policy compliance

No.	Statement	Correlation Coefficient (r)	p-value
1	Staff in the departments participates in training on regulatory policy and oversight as an alternative measure for the capacity of regulatory systems.	-0.122	0.039
2	Staff with supplier knowledge on policy and who are competent about the compliance and implementation of the policy, are executing their responsibility in accordance to principles.	0.121	0.027

SPSS 24 software package was used to perform the correlation analysis and the results are shown in Table 5.17. Since all the p-values are less than 0.05 level of significance, then the correlation between SCM experience and views of respondents about the items listed in Table 5.17 is significant. Negative correlation coefficient implies that the respondents who are more experienced in SCM tend to agree with the listed items, whereas respondents who are less experienced in SCM tend to disagree. Positive correlation coefficient implies that more experienced respondents in SCM tend to disagree with the listed items, whereas less experienced respondents in SCM tend to agree. See Figure 5.5 below to show this correlation diagrammatically.

Figure 5.5 (a): Views of respondents versus SCM experience ($r < 0$)

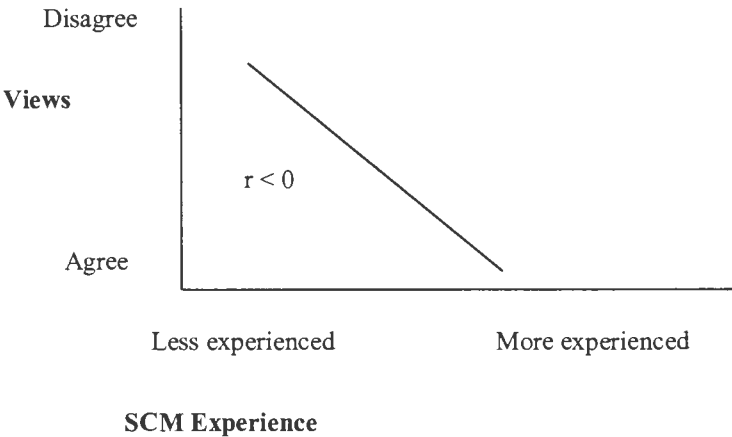
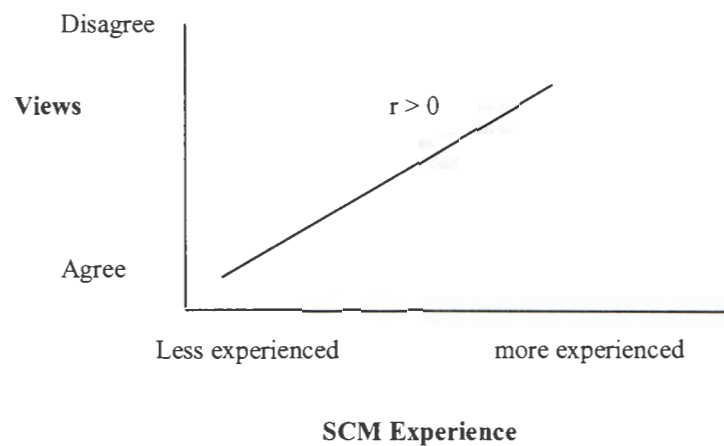


Figure 5.5 (b): Views of respondents versus SCM experience ($r > 0$)



All the statistical tests were done in this section to find answers to the research questions and to suit the purpose of the study. The subsequent section presents the summary of the chapter.

5.4 Summary

This chapter provided the presentation and discussion of empirical and non-empirical findings of the study. The empirical studies focused on the qualitative and quantitative studies. The qualitative study provided the coding of semi-structured interviews into themes and categories while the central ideas were identified and discussed. It should be noted that the quantitative and qualitative studies were structured to find answers to research questions 1-4. The quantitative study provides the presentation and interpretation of findings such as biographical information of the department officials; presentation of findings as obtained in views of SCM policy experience, views on procedure, regulation and measurement, views on compliance of the SCM policy and views on the challenges facing SCM practitioners and the municipality. The findings of the non-empirical studies (literature review) was presented to establish the best understanding on the level of compliance with the SCM policy that will be implemented by the local municipalities of the selected district to enhance adequate level of compliance. From the above findings, one can presume that the compliance with the SCM policy in the Ngaka Modiri Molema District Municipality of the North West has not been successful so far. This is consistent with the findings of Luthuli (2007) who avers that “policy implementation in South Africa has not been as successful as the policy formulation phase”. The next chapter presents the overview, summary of findings, recommendations and conclusions of the study.

CHAPTER SIX

FINDINGS, RECOMMENDATIONS AND CONCLUSION

6.1 Introduction

The previous chapter presented the empirical findings as obtained from both the qualitative and quantitative studies where data was presented and analysed. This study focused on obtaining an understanding of the level of compliance with the SCM policy in the Ngaka Modiri Molema District Municipality of the North West. In this chapter general conclusions are drawn and recommendations made based on critical issues revealed by the major findings of this empirical study. Thus the purpose of this chapter is to summarise the study, draw conclusions and suggest recommendations on critical issues raised in the five local municipalities.

The main purpose of the study was to obtain an understanding of the level of compliance with the SCM policy in the Ngaka Modiri Molema District Municipality of the North West. The main objectives for the study as indicated in chapter one were as follows:

- To establish to what extent SCM officials and senior managers of department are familiar with the SCM policy.
- To investigate whether the SCM procedure/regulation and measurement are communicated effectively in all the functional areas of the municipality district.
- To determine what impact the policy has on the successful compliance with the SCM policy.
- To identify the challenges arising from the inadequate compliance with SCM policy and to make recommendations.

The subsequent section will discuss an overview of the study.

6.2 Overview of the study

Chapter 1: Orientation and problem statement

This chapter provides a general overview of the study and the motivation of the study. The problem for this study was identified while the aims and research paradigm were specified, and the research design and methods. It explained the real reasons for this research and the research questions.

Chapter 2: The domain of management

This chapter provided an overview on management by reviewing various literature and has also provided an overview of management, financial management practices and also the four areas of financial management which include: budgeting, movable asset management, control and supply chain management. The chapter looked at financial management, understanding financial management, financial management as a process, scope of financial management, objectives of financial management, and elements of financial management, financial management practices, finally looking at areas of financial management practices. This chapter also gives a basic understanding of management and how management is interrelated with financial management. Management is a vital aspect of the economic life in any society. Other scholars' opinions and related topics were reviewed to ensure that the problem under study is extensively explored and answers to the research questions obtained.

Chapter 3: Supply chain management within a municipality

This chapter deals with literature on supply chain management and the focus is on supply chain management within a municipality setting. This chapter introduced the meaning of the phase SCM, theories of SCM, definitions, objective of SCM, historical development of supply chain management, evolution of procurement and logistics pertaining to supply chain management, the SCM policy, guiding pillars of SCM policy, problems faced by supply chain management policy. The chapter also highlighted supply chain management within the South African public sector context, understanding municipal SCM processes, key role players and functions in municipal SCM, municipal SCM challenges, and the municipal SCM business model. The chapter thereafter introduced some SCM challenges faced by municipalities.

Chapter 4: Research design and methods

This chapter outlined the research design and methodology that were followed in the research process in order to investigate the problem identified in chapter one, as well as the research population of this study, the sampling method used and the data collection techniques, data analysis, and the ethical considerations applicable to this study. This chapter discussed the choice of the method and design for this study. The pragmatic paradigm was selected while the mixed method approach was used in the study. Furthermore, semi-structured interviews were used to collect data from the municipal managers and senior managers of department while the questionnaires were used to collect data from the supply chain management officials and departmental officials in all the five municipalities. The statistical package for social sciences (SPSS) 24 was used as a data analysis technique to effect clarity in the

presentation phase while qualitative data was coded, categorized and discussed. The next chapter will present the findings of this study.

Chapter 5: Research results

Chapter five discussed the presentation and discussion of the empirical findings as obtained in both the quantitative and qualitative study. In the quantitative study, the questionnaires collected from the participants were analyzed using Statistical Package for Social Sciences (SPSS) 24 and Statistical Analysis System (SAS). The statistical analysis obtained and presented in the study included descriptive statistics, correlation analysis, and analysis of variance (One-way ANOVA). In the qualitative study, the responses collected from the semi-structured interviews were transcribed from the field notes, studied, coded into themes and categories while the identified categories were discussed in relation to the quantitative study, literature review and the underpinning theories.

Chapter 6: Findings, recommendations and conclusion

This is the final chapter of the research study. The chapter summarises the study, connecting the aims and the objectives of the study, as well as empirical assessment and theoretical assessment. In this chapter, the researcher summarises the findings, conclusion of the study, and makes some recommendations on issues raised. The next section will discuss summary of findings

6.3 Summary of findings

The summary of findings of this study as obtained from the non-empirical study (literature review) and the empirical study (qualitative and quantitative) will be presented in relation to the research questions as postulated in Chapter One of this study. It should be noted that the findings of this study were obtained according to the research questions while both the qualitative and quantitative findings were grouped together.

6.3.1 Summary of findings from both the qualitative and quantitative result

In the empirical studies (qualitative and quantitative), the findings on views on SCM policy experience) deduced that:

- Staff with a longer duration in their positions execute their responsibility in accordance with the policy.
- Staff who have not been in service for a long period of time tend to execute their mandates effectively despite the fact that they have been working for a shorter period of time.
- Staff with a higher qualification tend to perform on a more advanced level.

- Low qualifications does not mean staff perform poorly.
- Staff who are actively involved in developing policy and oversee the implementation of the policy in municipalities help in achieving the goal of the municipality.
- Staff who are provided with and oriented on the guidelines supporting the documentation for the implementation of the SCM policy as issued by the National Treasury work in accordance with the policy.
- Staff who receive training on the procedure on how to implement the policy and carry out the SCM operational activities in the five local municipalities perform better.
- SCM policy as applied in municipalities promotes consistency and operational efficiency, enhances the municipality mission and mitigates significant institutional risk.

In the empirical studies (qualitative and quantitative), the findings on views on SCM procedure/regulation and measurement revealed that:

- Better knowledge of SCM clearly gives the understanding that policies and procedures are not the same.
- Workers do not apply SCM procedures as step-by-step descriptions of the tasks required to support and carry out municipality policies.
- Regulatory dimension in a municipality is a sign of good governance.
- SCM regulation in a municipality has a substantial impact on productivity growth in the municipality.
- The municipalities do not consistently provide training to staff on the impact of regulation of SCM policy.
- Municipalities currently measure the effectiveness of their compliance improvement strategies solely on revenue return.
- Municipalities do not develop better ways to measure performance compliance of workers in order to determine their overall effectiveness.

The findings from the empirical studies (qualitative and quantitative) on the view on successful compliance with the SCM policy revealed that:

- Staff with supplier knowledge on policy and who are competent about the compliance and implementation of the policy, are executing their responsibility in accordance with the policy.
- Staff who lack better knowledge and competence of the policy in compliance and implementation are unable to execute their mandates properly.
- Flow of the policy at all levels in municipalities enables increase in productivity and enhances the possibility of effectively executing a job description.

- The flow of policy at some level of the municipality determines that some of the departments are in compliance and implement the SCM policy.
- The reliable nature of audit report contribution by internal auditing determines competence of employees in carrying out their job.
- Strong accountability and end-of-year financial report is used to determine the extent to which employees have gone through relevant training appropriate for effective understanding and application of the supply chain discipline.
- The defective audit report at the end of year by internal audit is used to prove fraud and corruption in SCM in this municipality.
- The SCM sectors of municipalities do not implement effective policies to monitor compliance.

The findings from the empirical studies (qualitative and quantitative) on the challenges arising from the inadequate compliance with SCM policy revealed that:

- Municipality staff with sufficient human resource capacity in their position are executing their responsibility in accordance with the policy.
- Limited human resource capacity in municipality causes staff to execute their mandates poorly.
- Having good technological skill help SCM staff to execute their responsibility in accordance with policy.
- Lack of ethics and professionalism among internal control systems help to increase fraud, non-performance by suppliers, and non-compliance with SCM policy.
- There is evidence of lack of proper infrastructure for SCM services in a municipality.
- The SCM sector of a municipality is sometimes challenged with cases of SCM fraud by officials.
- There is evidence of lack of transparency within the SCM system, lack of adequate capacity in the SCM sector of the municipality, lack of skilled personnel in the municipality, lack of effective SCM monitoring system, challenges with poor planning and evidence of corruption by the administrators in the local municipalities.

The subsequent section will discuss correlation of findings.

6.4 Correlation of findings

Correlation as described Richardson (2011) refers to the degree of relation between two variables that are not manipulated by the researcher. Correlation analysis was also used to establish the relationship between the qualitative finding and the quantitative findings. It has to be noted that correlations can be subject to threats to internal validity of the results, while on the other hand correlational designs have proved to be useful in approving and refuting causal relationships.

Research aim 1:

To establish to what extent municipality officials and senior managers of department are familiar with the SCM policy

The results from the qualitative study revealed that the majority of the senior managers of the departments are familiar with the SCM policy meaning they understand and implement the policy in accordance with the principle, while the quantitative findings revealed that a majority of the officials are not familiar with the SCM policy meaning they do not understand and implement the policy in accordance with the principle. The result further revealed that employees who are well educated turn out to have experience on the policy while those who are less educated tend to be less experienced. The findings also reveal that employees who have been working for a long period of time perform their duties in accordance with SCM policies, while others who have been working for a short period of time perform their duties poorly. There is also a correlation between the qualitative and quantitative findings in terms of the qualification of employees and implementation of SCM policies. It is evident in both data sets that employees with a low qualification and limited working experience do not implement the SCM policy effectively compared to those who have enough working experience and a high qualification.

Research aim 2:

To investigate whether the SCM procedure/regulation and measurement is communicated effectively in all the functional areas of the municipality district.

The results from the qualitative study revealed that large number of the senior managers of the department understand SCM procedure/regulation and measurement and this is communicated effectively in all the functional areas of the municipality, while a few senior managers disagreed with the above statement and 1 manager mentioned no flow of the policy at all. This is contrary to the quantitative finding which revealed that a majority of the officials do not understand SCM procedure, regulation and measurement and do not communicate it effectively in all the functional areas of the municipality. The result further revealed that regulatory dimension in a municipality is a sign of good governance and also that SCM regulation in the municipality has a substantial impact on productivity growth through its distorting effects on investment and innovation. Furthermore, the quantitative data reveal that employees in the departments participate in training on regulatory policy. In so doing, they tend to understand and implement SCM procedure, regulation and measurement in the municipality. Both the qualitative and quantitative findings emphasise the need for departments in charge of SCM in the respective municipalities to consistently provide training to staff on the impact of regulation to SCM policy.

Research aim 3:

To determine what impact the policy has on the successful compliance with the SCM policy.

The results from the both findings indicate that there is a significant difference in compliance with the SCM policy. The result for the qualitative study reveals that, although all senior managers confirmed they are aware of and have knowledge of the policy, a majority of the participants indicate they practically work in compliance and implement the policy within their municipalities. On the other hand, the quantitative finding reveals that a large percentage of the employees do not work in compliance with the SCM policy. The qualitative finding also reveals an intriguing question to justify lack of agreement in the findings from both data. If employees were implementing the policy correctly, why is the municipality still facing challenges in the implementation of the policy? The quantitative finding reveals that employees with knowledge on policy and who are competent about the compliance and implementation of the policy, are executing their responsibility in accordance with the policy and the flow of policy at some level of a municipality determines that some of the departments are in compliance and implement the SCM policy while other do not comply. The finding further reveals that accountability and the end-of-year financial report is used to determine the extent to which employees have gone through relevant training appropriate for effective understanding and application of the supply chain discipline. The findings further explain that the negative contribution by internal audit is used to prove fraud and corruption in SCM in this municipality. The findings also revealed that the SCM sector of municipalities do not have nor implement effective policy to monitor compliance.

Research aim 4:

To identify the challenges arising from inadequate compliance with SCM policy and to make recommendations.

From the findings of the literature survey, there are already challenges facing SCM practitioners and the municipality but the eventual truth is that findings from the empirical research also indicated certain challenges on the part of the both the qualitative and quantitative studies. The findings indicated certain challenges which include, lack of clarity in their responsibility, lack of sufficient human resources, lack of technological skill by employees, lack of ethics and professionalism among internal control systems, lack of proper infrastructure for SCM services in the municipality, lack of transparency within SCM system, challenges with poor planning, municipalities lack adequate capacity, and challenges with cases of SCM fraud by officials.

Beside these correlated challenges in the two findings, a typically new concept arises from the empirical study. This is that the municipalities should open a SCM training centre in all the five local

municipalities and employ training experts in the centre, which will enable employees to gain weekly training at the same time still performing their duties. The following section will be discussion of findings.

6.5 Discussion of findings

With regard to discussion of the findings, the researcher compared results obtained from the qualitative and quantitative data in this study related to the research questions as stated in Chapter One, thereby complying with the design of this study.

6.5.1 Discussion on the findings on SCM policy experience

With regard to SCM policy experience, data collected from both qualitative and quantitative studies indicate that the majority of the respondents from the qualitative survey agreed they are familiar with the SCM policy and do have sufficient experience, while on the other hand the quantitative finding reveals that a majority of the respondents disagreed; they are not familiar with the policy and do not have sufficient experience on the policy. Ambe and Badenhorst-Weiss (2011) express the need for proper understanding of policy, and if policy is not understood, it will lead to non-compliance with SCM due to lack of skills, capacity and knowledge of the workforce to be able to fully implement SCM policy across various spheres of government. This conforms to the research conducted by Anderson and Anderson (2010) where work experience is highly recommended for workers. It allows workers not to only gain experience of what it would be like to work in the industry and develop skills; it gives a chance to remember whilst putting theory into practice. This finding supports that the main reason for work experience is that workers will gain transferrable skills and have a chance to stand out in a company (Collis & Hussey, 2013).

6.5.2 Discussion on the findings on SCM procedure, regulation and measurement

The results from the qualitative study revealed that the majority of the senior managers of the department understand SCM procedure, regulation and measurement and those are communicated effectively in all the functional areas of the municipality, while the quantitative finding revealed that a majority of the officials do not understand SCM procedure, regulation and measurement and do not communicate it effectively in all the functional areas of the municipality. This conforms to the research conducted by Aku Kokor (2014) that compliance to procedure and regulation is a major problem in SCM because most practices are exposed as being due to non-compliance and incorrect use of the preference points system. Not adhering to SCM policies when appointing service providers is prohibited by law. Rummier and Brache (2012) also explained that procedures are step-by-step descriptions of the tasks required to support and carry out organisational policies. Procedures articulate the process for

accomplishing controls. This finding supports that the failure to comply with SCM regulations also compromises SCM processes whereby gaps in implementation were identified. It is therefore recommended that the municipalities take reasonable steps to act on abuse of SCM processes by applying appropriate sanctions as provided in Section 173 of the MFMA and the Code of Conduct for Procurement. The municipality must also take reasonable steps to improve its communication strategy by disseminating information regarding policies and procedures to all staff (National Treasury, 2014).

6.5.3 Discussion on the findings on successful compliance with the SCM policy

The results from the qualitative study revealed that, although all senior managers confirmed to be aware and have knowledge of the policy, and a majority of the participants indicated they practically work in compliance and implement the policy within their municipalities. on the other hand, the quantitative finding reveals that the majority of the employees do not work in compliance with the SCM policy. According to Ambe and Badenhorst-Weiss (2012) the issue of compliance is a major obstacle in the implementation of SCM as it affects other activities. Issues regarding noncompliance to SCM policy and regulations can be attributed to lack of the requisite SCM skill and competencies as well as the absence of a stricter regulatory culture. These may include the tendency not to utilise a competitive process for both quotations and bids, and incorrect utilisation of the preference points system. The realisation that the municipality has prioritised capacitating the SCM unit as stated in the 2011/2012 annual auditor general report reaffirms the need for this shortcoming to be corrected (Opperman, 2014).

6.5.4 Discussion on the findings on challenges facing SCM practitioners and a municipality

The result from both qualitative and quantitative findings indicate certain challenges, which include; lack of clarity in their responsibility, lack of sufficient human resource, lack of technological skill by employees, lack of ethics and professionalism among internal control systems, lack of proper infrastructure for SCM services in the municipality, lack of transparency within the SCM system, challenges with poor planning, municipalities lack adequate capacity, and challenges with cases of SCM fraud by officials. According to National Treasury (2015), despite the adoption of SCM policies and practices in municipalities, its implementation remains a challenge. SCM practices in South African municipalities are deteriorating (Turley & Perera, 2014). SCM plays a greater role in poor audit outcomes such as irregular expenditure, lack of basic controls, as well as lack of supply chain skills (Ambe, 2016a). According to a Business Day report (2011) procurement actors in government have spent millions of rand in ways that contravened laws and regulations. The national and provincial governments and their entities have notched up irregular, unauthorised, fruitless and wasteful expenditures that contravene laws and regulations. Discussion of the findings, as obtained from the qualitative and quantitative data in this study was presented.

The subsequent section will discuss recommendations of the study.

6.6 Recommendations

Based on the critical issues raised, the following recommendations are made to assist the Ngaka Modiri Molema District Municipality of the North West and other municipalities to achieve excellence in their implementation of the supply chain management policy.

The following section presents recommendations for senior managers and department officials with regard to the current study, as well as further research.

6.6.1 Summary of recommendations applicable to the senior managers of departments

The following recommendations are made with senior managers of departments in regard to the compliance with the SCM policy in the five local municipalities:

- The results from the empirical study indicate that the large percentage of the senior managers of the department are aware of the SCM policy in their various municipalities, but most of their subordinates are not aware and do not have knowledge of the policy. In this situation, managers should also ensure that their subordinates should also be educated on the SCM policy to be able to have a good understanding that will help to achieve the objectives in five local municipalities.
- There is clear evidence provided by the respondents from the five local municipalities that not all the managers comply with the SCM policy. The issue of noncompliance is a major hindrance in the implementation of SCM as it affects other activities. Issues regarding non-compliance with SCM policy can be attributed to lack of skill, competencies and training by managers on the importance of the policy to their municipality. Managers need to have the required skill, need to be competent and also go through the required training to understand how the policy operates.
- Responses from senior managers indicated that the policy does not flow at all levels of the municipality. Managers should ensure proper flow of the SCM policy at all levels which will help to increase effective productivity output in the various municipalities.
- Recommendation on the internal audit staff. Independent audit staff should be held answerable for the ineffective financial systems in the municipality which they are accountable for. They should be reported instantly to the relevant professional boards for corrective actions to be taken against them in the case of negligence on their part. This should improve their commitment when assessing the adequacy of the financial supervision controls and systems.
- The five local municipalities in the North West face a number of challenges. Based on the findings, the researcher recommends (1) better planning in the SCM sector (2) better clarity of roles and responsibilities, (2) sufficient good human resource capacity (4) training of municipal employees

tasked with the implementation of SCM policy (5) a good infrastructure system for SCM services in the municipality and (6) a better internal audit control system and well trained personnel.

6.6.2 Summary of recommendations related to departmental officials

The following recommendations are made for departmental officials in regard to the compliance with the SCM policy in the five local municipalities:

- The municipality should create better way of making the SCM policy known to its entire staff and for them to have an appropriate understanding of the policy in their various municipalities.
- The municipalities should consistently provide training and further education to their staff members on the SCM policy; that will help to achieve the objectives of the municipalities.
- The staff members should communicate adequately their needs to the municipal managers in the various departments.
- The municipality should support the staff in implementing legal actions against superiors who take advantage of their position and keep the staff unproductive in performing their duties.
- The municipalities should implement a better monitoring system to enhance compliance and to reduce corruption by the local municipal administrators in the different departments.
- All the challenges faced by the municipality staff that restrict them in carrying out their activities, should be reported immediately to the professional body of the municipality in charge of complaints for action to be taken.

The following section will discuss limitations of the study.

6.7 Limitations of the study

This study was limited to the five local municipalities of the selected district. The participants of this study were the senior managers of department and department officials in the various local municipalities. This study is confined to matters related to compliance with SCM policy in the district and may be applied to other municipalities in South Africa which fall in the same situation. All research studies have some amount of limitations caused by either time or budgetary constraints. The following limitations were encountered during the research study:

- Exposure to the subject matter - The researcher has never worked in a fully-fledged supply chain management unit of a municipality. Therefore some of the matters referred to in the research have not been explored physically before.
- Non-availability of enough material on the subject of research was also a limitation.

6.8 Recommendations for further study

The findings of this study as obtained in the empirical and non-empirical studies suggests that much needs to be done in the area of SCM policy in South African municipalities. Other studies need to be conducted in other provinces to ascertain the causes of non-compliance with policy by workers. In broader terms, a research is urgently needed to be conducted in the area of compliance and challenges of SCM policy by municipal employees in South Africa. This study therefore recommends that further studies should be undertaken to develop a framework that would update the flow of information in the municipal SCM system with a view to obtaining reliable information to be used in compliance management of the SCM policy within the municipality.

6.9 Conclusion

This study was aimed at obtaining an understanding of the level of compliance with the SCM policy in the Ngaka Modiri Molema District Municipality of the North West province. The findings of this study disclosed that the level at which the senior managers of departments and the department officials, comply with the SCM policy in their various departments is not effective. The study recommends that more studies should be conducted on compliance with SCM policy in other provinces of South Africa, or a comparative study between South Africa and other countries of the world.

In terms of the research conducted within the ambit of this dissertation, insight was obtained into aspects that have a negative impact on compliance with the SCM policy within the municipalities. This has enabled the formulation of recommendations towards resolving the impact of inefficient compliance with the SCM policy. It is acknowledged that “knowledge is power” The researcher has benefited through undertaking this study as it has equipped the researcher with necessary skills and ability to investigate areas of importance to ultimately contribute to the country and its people.

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ANNEXURE A

INTERVIEW QUESTIONS

TOPIC:

COMPLIANCE WITH SUPPLY CHAIN POLICY IN THE NGAKA MODIRI MOLEMA
DISTRICT

Interview questions for the municipal manager: SCM managers, CFO managers, human resource managers, marketing manager, operational manager, and internal audit manager.

1. How long have you been working in the municipality?
2. Has your municipality adopted the supply chain management policy?
3. Are you familiar with this policy?
4. Has the implementation of SCM policy of your municipality been flowed to all levels in the municipality?
5. Are you working in accordance with the SCM procedure/ regulation and measurement?
6. What roles does the internal audit play in the supply chain management policy?
7. What are the current challenges confronting the implementation of the supply chain management policy in the municipality and how they should be overcome?
8. What challenges are faced by SCM practitioners in terms of their day to day operations?

ANNEXURE B

QUESTIONNAIRE



NORTH-WEST UNIVERSITY
YUNIBESITHI YA BOKONE-BOPHIRIMA
NOORDWES-UNIVERSITEIT

COMPLIANCE WITH SUPPLY CHAIN POLICY IN THE NGAKA MODIRI MOLEMA DISTRICT

Dear respondents, my name are Elsie E.M and I am a Master student in Business Management with student number 23003006. I am humbly request you to spare a few minutes to respond to the questions in this questionnaire. This questionnaire is a tool to collect data on the compliance with the Supply Chain Management (SCM) policy in the Ngaka Modiri Molema District. The primary aim of this study is to obtain an understanding of the level of compliance with the SCM policy and this is strictly for academic purposes. Please respond to all the questions as genuinely as you can. There are no rights or wrong answers and therefore you need not fear any form of recrimination. You do not need to provide your name or any contact details and responses will be treated as confidential at all times.

Thank you in advance for your participation and time.

- Instructions**
- (1) Please mark the appropriate box with an "x".
 - (2) Please tick only one answer for each question according to the ranking provided.
 - (3) Please answer all questions.

Section A: Biographical information

Gender

Male		Female	
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Age

21-30		31 -40		41 - 50		51-65	
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Highest qualification

Grade12		Diploma		Bachelor's		Honours		Master's		PhD	
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Department

SCM		Operational		Marketing		Human resource		Internal audit	
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5)	0-1year		1-2years		2-4years		5-6years		7-8years		9-10years	
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Section B: SCM policy/experience

	Strongly Agree	Agree	Unsure	Disagree	Strongly disagree
Staff with a longer duration in their positions execute their responsibility in accordance with the policy.					
Staff that have not been in service for a long period of time tend to execute their mandates ineffectively due to limited experience.					
Staff with a higher qualification tend to perform on a more advanced level.					
Staff with low qualifications tends to perform poorly.					
I am aware and do have required levels of knowledge about the SCM policy in the municipality.					
I understand and apply SCM policy as rules and regulations that are set in place to govern the process of acquiring goods and services needed by our municipality to function efficiently.					
As staff, we are actively involved in developing policy and oversee the implementation of the policy in our municipalities.					
I am provided and oriented on the guidelines supporting the documentation for the implementation of the SCM policy as issued by the National Treasury.					
As staff, we do receive training on the procedure on how to implement the policy and carry out the SCM operational activities in our municipalities.					
SCM policies as applied in this municipality promote consistency and operational efficiency, enhance the municipality mission and mitigate significant institutional risk.					

Section C: SCM procedure/ regulation and measurement

	Strongly Agree	Agree	Unsure	Disagree	Strongly disagree
As staff, our knowledge of SCM clearly gives the understanding that policies and procedures are not there same.					
I understand and apply SCM procedures as step-by-step descriptions of the tasks required to support and carry out municipality policies.					
Regulatory dimension in this municipality is a sign of good governance					
SCM regulation in this municipality has a substantial impact on productivity growth through its distorting effects on investment and innovation.					
For capacity of the regulatory system, staffs in this municipality are involved in regulatory policy and oversight across departments.					
Staff in the departments participate in training on regulatory policy and oversight as an alternative measure for the capacity of regulatory systems.					
The department in charge of SCM in this municipality consistently provides training to staff on the impact of regulation to SCM.					
SCM administrations in this municipality currently measure the effectiveness of their compliance improvement strategies solely on revenue return.					
The municipality does develop ways to measure performance compliance of workers in order to determine their overall effectiveness.					

Section D: Compliance of the SCM policy

	Strongly Agree	Agree	Unsure	Disagree	Strongly disagree
Staff with supplier knowledge on policy and who are competent about the compliance and implementation of the policy, are executing their responsibility in accordance to principles.					
Staff who lack better knowledge and competence of the policy in compliance and implementation are unable to execute their mandates properly.					
Flow of the policy at all levels in this municipality enables increase in productivity and enhance the possibility of effectively executing a job description.					
The flow of policy at some level of a municipality determines that some of the departments are in compliance and implement, while others are not in compliance and implement the SCM policy.					
The positive contribution by internal audit determines competence of employees in carrying out their job.					
Strong accountability and end of year financial report is used to determine the extent to which employees have gone through relevant training appropriate for effective understanding and application of the supply chain discipline.					
The negative contribution by internal audit is used to prove fraud and corruption on SCM in this municipality.					
The SCM sector of this municipality does have and implements effective policies to monitor compliance.					

Section E: Challenges facing SCM practitioners and the municipality

	Strongly Agree	Agree	Unsure	Disagree	Strongly disagree
Staff with clarity of their roles and responsibility are executing their responsibility in accordance to principles					
Staff who have no clarity on their roles and responsibility execute their mandates poorly due to lack of training					
Staff with sufficient human resource capacity in their position are executing their responsibility in accordance to principles					
Staff with limited human resource capacity execute their mandates poorly					
Having good technological skill helps SCM staff to execute their responsibility in accordance to policy					
Employees who are confused and cumbersome causes SCM policies and regulations to overlap in this municipality					
The lack of ethics and professionalism among internal control systems helps to increase fraud, non-performance by suppliers, and noncompliance with SCM policy					
There is lack of proper infrastructure for SCM services in this municipality					
There is lack of transparency within our SCM system					
The SCM sector of this municipality is challenged with poor planning					
The SCM sector of this municipality lacks effective SCM monitoring system					
The SCM sector of this municipality lacks adequate capacity					
The SCM sector of this municipality lacks skilled personnel					
The SCM sector of this municipality is sometimes challenged with cases of SCM fraud by officials					
Staff with lack of technological skills execute their mandates poorly					

C) CONCLUDING THE QUESTIONNAIRE

Thank you for your valuable time. Is there anything else you would like to add before we conclude this questionnaire?

ANNEXURE C

ETHICS CLEARANCE CERTIFICATE



NORTH-WEST UNIVERSITY
YINHE-NI YA KOKON-19-IPHIRIMA
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Institutional Research Ethics Regulatory Committee

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ETHICS APPROVAL CERTIFICATE OF PROJECT

Based on approval by the Human Sciences Research Ethics Committee (HSREC) on 21/11/2016, the North-West University Institutional Research Ethics Regulatory Committee (NWU-IRERC) hereby approves your project as indicated below. This implies that the NWU-IRERC grants its permission that, provided the special conditions specified below are met and pending any other authorisation that may be necessary, the project may be initiated, using the ethics number below.

Project title: Compliance with supply chain policy in the Ngaka Modiri Molema District.	
Project Leader/Supervisor:	Prof M Potgieter & Mr F Potser
Student:	EM Eposi
Ethics number:	NWU-00528-16-A9
Application Type: Master application	
Commencement date: 2016-11-15	Expiry date: 2019-11-15
Risk:	N/A

Special conditions of the approval (if applicable):

- Translation of the informed consent document to the languages applicable to the study participants should be submitted to the HSREC (if applicable).
- Any research at governmental or private institutions, permission must still be obtained from relevant authorities and provided to the HSREC. Ethics approval is required BEFORE approval can be obtained from these authorities.

General conditions:

While this ethics approval is subject to all declarations, undertakings and agreements incorporated and signed in the application form, please note the following:

- The project leader (principle investigator) must report in the prescribed format to the NWU-IRERC via HSREC:
 - annually (or as otherwise requested) on the progress of the project, and upon completion of the project
 - without any delay in case of any adverse event (or any matter that interrupts sound ethical principles) during the course of the project.
 - Annually a number of projects may be randomly selected for an external audit.
- The approval applies strictly to the protocol as stipulated in the application form. Would any changes to the protocol be deemed necessary during the course of the project, the project leader must apply for approval of these changes at the HSREC. Would there be deviation from the project protocol without the necessary approval of such changes, the ethics approval is immediately and automatically forfeited.
- The date of approval indicates the first date that the project may be started. Would the project have to continue after the expiry date, a new application must be made to the NWU-IRERC via HSREC and new approval received before or on the expiry date.
- In the interest of ethical responsibility the NWU-IRERC and HSREC retains the right to:
 - request access to any information or data at any time during the course or after completion of the project;
 - to ask further questions, seek additional information, require further modification or monitor the conduct of your research or the informed consent process.
 - withdraw or postpone approval if:
 - any unethical principles or practices of the project are revealed or suspected,
 - it becomes apparent that any relevant information was withheld from the HSREC or that information has been false or misrepresented,
 - the required annual report and reporting of adverse events was not done timely and accurately,
 - new institutional rules, national legislation or international conventions deem it necessary.
- HSREC can be contacted for further information via Estie.Emmich@nwu.ac.za or 018 299 2673.

The IRERC would like to remain at your service as scientist and researcher, and wishes you well with your project. Please do not hesitate to contact the IRERC or HSREC for any further enquiries or requests for assistance.

Yours sincerely

Linda du
Plessis

Digitally signed by Linda du Plessis
DN: cn=Linda du Plessis, o=NWU,
ou=West-Orange Campus,
email=linda.duplessis@nwu.ac.za,
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Prof Linda du Plessis
Chair NWU Institutional Research Ethics Regulatory Committee (IRERC)