

Guidelines for establishing an effective supply chain management framework for local municipalities

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ABSTRACT

South African Government introduced the supply chain management framework in 2003, with a vision of creating a seamless system which will play a pivotal role in service delivery provision to the communities, while achieving the objectives of cost effectiveness, fairness, equity transparency and ethics. The main aim of adopting this framework immediately after reform was to align the Public Sector Supply Chain management to the best practices.

Unfortunately since its inception the supply chain management, particularly in the local government, has not enjoyed good publicity, due to the following three main factors, firstly incompetency of the supply chain management practitioners on using the preference points system, writing insufficient motivation when deviating from the SCM policies and irregular extensions of validity periods.

The second main factor is the unethical conduct of the supply chain management practitioners in collusion with suppliers to overprice their respective tenders and also to supply inferior material for projects intended for community development. The last main factor is the lack of political leadership to enforce compliance, such as consequence management for those who contravened the supply chain management policies, as some councillors are also found doing business with their municipalities which is against the Municipal System Act 32 of 2000.

The aim of this study was to establish an effective supply chain management framework for local municipalities in order to achieve the primary objectives of Section 217 of the Constitution of the Republic which are fairness, equity, transparency, and competitive and cost effectiveness.

The study found that supply chain management practitioners have indicated that they have a very good understanding of how the supply chain management framework should be applied and of related legislations, but the literature differs with the views of the practitioners, as corruption, fraud and lack of consequences reports are still raised by the Auditor General South Africa and by other publications over the years.

The following are recommendations that should be taken into account for the supply framework to function effectively:

- Establish a Supply Chain Management Professional Association (SCMPA) of which the role is to provide annual online assessment for all the supply chain management practitioners;
- To use the Construction Industry Development Board (CIDB) grading certificate as evaluation minimum criteria of assessing functionality in accordance with the specific project;
- Cancel the provision to re-issue or re-advertise the tenders after the supply chain management unit has received quotations from suppliers.
- Municipalities should develop an integrated online commodity price listing supply database which should be operational 24 hours. Also to develop a Cellular phone application that will enable all the service providers to access the portal at any time to load their respective prices.
- Make provision to include members of the audit committee to be charged for negligence under financial misconduct section 171 of the Municipal Finance Management Act 56 of 2003.
- To provide the Auditor General South Africa and the Public Protector with legislative powers to refer malpractices or contravention with the supply chain policies to the SCMPA and SAPS to recover wasteful and fruitless expenditure as required by Section 102 of Municipal Finance Management Act (MFMA) of 56 of 2003 after complying with section 173 of the MFMA.

Key Terms: SCM, Local Government, NT, Auditor General, Public Protector

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LIST OF ABBREVIATIONS

BBBEE	Broad Based Black Economic Empowerment
CA	Competition Act No 15 of 2000
CIDB	Construction Industry Development Board
COGTA	Department Corporate Governance and Traditional Affairs
CPAR	Country Procurement Assessment Report
DBSA	Development Bank of South Africa
ECSA	Engineering Council of South Africa
IBRD	International Bank for Reconstruction and Development
ICSID	International Centre for Settlement of Investment Disputes
IDA	International Development Agency
IFC	International Finance Corporation
IODSA	Institute of Directors in South Africa
MFMA	Municipal Finance Management Act No 56 of 2003
MIGA	Multilateral Investment Guarantee Agency
MSCMR	Municipal Supply Chain Management Regulations
NT	National Treasury
OECD	Organisation of Economic Co-operation and Development
OGC	Office of Government Commerce
PAIA	Promotion of Information Act No 2 of 2000
PAJA	Promotion of Administrative Justice Act No 3 of 2000
PMG	Parliamentary Monitoring Group
SALGA	South African Local Government Association

SCM	Supply Chain Management
SCMPA	Supply Chain Management Professional Association
UNCITRAL	United Nations Commission on International Trade Law
UNITAR	United Nations Institute for Training and Research

CHAPTER 1

ORIENTATION AND PROBLEM STATEMENT

1.1 INTRODUCTION

The South African local government sector had not enjoyed good publicity since the inception of the supply chain management framework in 2003. The incompetence of the supply chain management officials, due to lack of training, unethical conduct and lack of political leadership to enforce compliance had consistently been raised as the main contributors to the non-contravention of the supply chain management policies.

An online publication company, The South African.Com, for instance, had reported that the major concerns of the supply chain management framework were officials' incompetence and unethical conduct. In most cases the supply chain management officials were observed to be non-compliant, as it had been found that they collude with suppliers to purchase overpriced products and services, resulting in the South African Government losing between R25 billion and R30 billion annually (Anon, 2011).

For example, in the North West Province municipalities report, the office of the Auditor General reported that fruitless and wasteful expenditure increased from R31.9 million 2010-11 to R72.3 million in the 2012-13 financial year. Fruitless and wasteful meant an expenditure that was made in vain and that would have been avoided had reasonable care been taken by supply chain management practitioners (Auditor General South Africa, 2014:17).

The South African Business Newspaper had also reported that poor supply chain management is mainly due to incompetent staff. This newspaper had also indicated that at the Matjabeng Local Municipality, this specific problem had incurred a loss of R484 million, due to irregular expenditure. This was due to interest incurred as a result of late payments to service providers, which was against the supply chain management policy (Seekoei, 2015:8).

This was money which could have been used to build schools or libraries for communities. According to the Auditor General South African, local government had incurred irregular expenditure of R11,6 billion in 2012-13 due to failure to produce

supporting financial documents of the transactions, and non-conformance with procurement policies and lack of accountability (Evans, 2014).

The Auditor General South Africa argued 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 the validity periods, insufficient motivation for deviations from supply chain management, and a lack of political leadership in enforcing disciplinary actions against the officials concerned with non-compliance (National Treasury, 2015:10).

Another publication by South African Press Association (2014), gave a picture that it is important to realise that the problem of non-compliance with supply chain management policies, was not only at local government level, but also in the Provincial and National departments in the South African Government, since the Department of Public Works had uncovered R35 billion worth of wasteful expenditure because they all used the same framework.

The Department of Cooperative Governance and Traditional Affairs (2009:54-55) raised a grave concern that the money that was lost due to the incompetence of the supply chain management officials, could have been used to develop communities by building additional roads or housing.

According to Chopra and Meindl (2010:22), the practice of overpricing and receiving inferior quality materials by the supply chain management officials, seemed to be contrary to the prime objective of the supply chain management, namely to seek to maximize the overall value for the consumer.

Department of Human Settlement had spent R2.129 billion over a period of three years repairing poorly built houses for example, because the contractors had used inferior quality materials (National Treasury, 2015:20).

In confirming the National Treasury statement above, for instance in Vryburg houses with visible defects on the walls were demolished due to inferior building material being used by the Contractor (South African Broadcasting Corporation, 2015).

In this specific case, the Chairperson of the North West Provincial Legislation Committee on local government and human settlement indicated this as a key concern of compromising on the sub-standard quality of the houses. An investigation had been launched and appropriate action called for by engaging with the contractor in order to eradicate the poor standard of productivity.

From this key incident, the chairperson had further identified that the same contractor is currently busy with another low cost housing project in Alabama near Klerksdorp in the North West Province. Complaints concerning the quality of the contractor's work had also been received from this project. It was of great concern though that the contractor had continued to receive work from the Department of Human Settlement to build low cost housing, despite the poor workmanship (South African Broadcasting Corporation, 2015).

In reports raised by the South African Broadcasting Corporation (2015), the National Treasury (2015:20) and the Auditor General South Africa (2014:47), had all identified concerns relating to the ineffectiveness of the current supply chain management framework and the various related legislations developed for public entities since 2003, as there had been a gross continuation of supply chain management policy contraventions to date.

Hence the Government's objective of establishing a South African public sector supply chain management framework had been to create uniform procurement practices that enhance economic transformation through the principles of fairness, ethics, transparency, cost effectiveness and equity (Ambe, 2009:394).

Through examining various publications, it had been noted that the public sector supply chain irregularities could be interpreted as confirmation of weaknesses in the current supply chain management framework.

In this study, the researcher aimed to describe the supply chain management framework and its six elements, which were demand management, acquisition management, logistic management, disposal management, supply performance and risk management. These will be discussed in detail in Chapter 2.

1.2 PROBLEM STATEMENT

The supply chain management framework had been introduced into the South African public sector in 2003, which made it a relatively new concept. This study attempted to establish an effective supply chain management framework for the local government.

In the South African context, the supply chain management framework was still a relatively new concept within the public sector. It was worrying though that despite factor supply chain management attending training and workshops to improve their skills in the areas of document management, irregular practices in the supply chain arena were continuing (Seekoei, 2015:8).

Thus irregular supply chain management practices made the adopted supply chain management framework ineffective.

Time and money were invested in the training and development of staff in order to ensure that they were able to execute their work according to the expected standards, as non-compliance with the current supply chain management policies had negative consequences, both financially and non-financially.

1.3 CAUSAL FACTORS

Some of the Government's development challenges were poor financial management, problems with political administrative interface, corruption and fraud within the supply chain management arena (Department of Corporate Governance and Traditional Affairs, 2009:4).

According to the office of the Auditor General South Africa, the following factors played a critical role in non-compliance with the relevant acts by municipalities:

- Poor demand management planning;
- Some officials involved in the implementation of the supply chain management policy were not adequately trained to perform their duties, such as noticing document management deviations effectively;
- Internal audits did not evaluate supply chain management controls, processes and compliance annually;
- No controls or ineffective to monitor performance of contractors;

- No consequence management.

The above-mentioned factors contributed to the inefficiencies of the current supply chain management framework within municipalities and resulted in unfavourable audit outcomes (Auditor General South Africa, 2014:55-57).

1.4 IMPORTANCE OF THIS STUDY

This study on the establishment of an effective supply chain management framework had been done in unchartered territory, due to the little research available on this topic for this geographical area.

The purpose of this study was to establish an effective supply chain management framework for local municipalities, which might assist in achieving the Government's mandate of providing quality and cost effective service delivery to the communities.

1.5 RESEARCH OBJECTIVES

The research objectives of the study were split into primary and secondary objectives.

1.5.1 Primary objective

The primary objective for this study was to investigate whether the current supply chain management framework was still applicable and relevant to the current challenges faced by the local government.

1.5.2 Secondary objectives

The secondary objective was to establish an effective supply chain managerial framework for local municipalities.

- To achieve the primary objective of this study, the secondary objectives that should be realised, were:
- To investigate whether the supply chain management officials were adequately trained;
- To evaluate to what extent the supply chain management officials understood the supply chain management framework;
- To identify the factors contributing to inadequate contract management and to make recommendations;

- To investigate whether internal audits had evaluated the supply chain management processes and controls; and
- To identify the factors contributing to inadequate supply chain management controls and to make recommendations.

1.6 RESEARCH METHODOLOGY

1.6.1 Literature review

The literature and theoretical reviews were limited to the sources that were readily available on the Internet at the time, as well as publications available in South African libraries up until 30 April 2015.

1.6.2 Empirical Study

The empirical study consisted of the research design, data collection methods and data analysis procedures.

Research Design

A semi-structured questionnaire was used to collect data. The statements were categorical and responses evaluated on a sliding scale. Respondents were also offered the opportunity to describe the challenges they were facing with regard to the current supply chain management framework.

Participants

Only supply chain management officials, managers and chief financial officers of the 19 local municipalities of the North West Province were identified as the target participants, due to cost and practicality factors.

Data Analyses

The data were analysed using descriptive and inferential statistics.

1.7 LAYOUT OF THE STUDY

This mini-dissertation was divided into four chapters, which were presented as follows:

CHAPTER 1 ORIENTATION AND PROBLEM STATEMENT

This chapter discussed the background and context of the topic, the contributing factors to the study as well as the problem statement. It presented an overview of the research design and layout of the next chapters.

CHAPTER 2 LITERATURE REVIEW

This chapter investigated, through a literature review, the primary objective, which was to identify factors that were contributing to the contravention of the supply chain management policy within the current supply chain management framework of the Government.

CHAPTER 3 RESEARCH METHODOLOGY AND FINDINGS

This chapter presented the research methodology by discussing the sampling methods used for the research, as well as the compilation of the survey instrument, namely the questionnaire, the study participants and the data collection.

The results of the investigation were also presented and discussed.

CHAPTER 4 CONCLUSIONS AND RECCOMENDATIONS

The conclusion of the study, based on the literature review and empirical investigation, as well as the recommendations for further studies, were presented in this final chapter.

1.8 CONCLUSION

Supply chain management is an integral part of the procurement process. It is a policy tool used in the management of the procurement process. Despite such a tool being introduced through supply chain management, local government sectors continued to face challenges in terms of compliance with supply chain policies over a period of 10 years.

These irregular practices, according to various reports, had a direct impact on service delivery.

Observed in context of a lack of leadership in the political fraternity, non-enforcement of consequence management had developed a culture of fraud and corruption, due to the easily manipulative manual process of supply chain management.

1.9 CHAPTER SUMMARY

Taking the various reports into consideration it was clear that a lack of competency plays a fundamental role in the failure to implement the supply chain management policies successfully. The concern was that, despite officials attending numerous training sessions and workshops, there was no satisfactory improvement.

The other prime problem was lack of commitment from political leadership to enforce compliance with the supply chain management policies. Leadership played a critical role, which was normally characterised by values such as responsibility, accountability, fairness and transparency. Problems arose when leadership was implicated in the contravention of the supply chain management, lacking commitment to enforce compliance (Institute of Directors in South Africa, 2009:9).

CHAPTER 2

LITERATURE REVIEW

2.1 INTRODUCTION

Supply chain management (SCM), beyond any doubt, plays a crucial role in both the private and public sector environments. Though the private sector's objective is to make a profit, while the public sector's goal is to provide quality service to the communities, their common denominating factor is sourcing quality services and goods at a cost effective price, which can play a direct role on the organisation's bottom line.

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 and Badenhorst-Weiss, 2011:73).

Normally public sector supply chain management frameworks serve as reference for the composition of public sector supply chain management and various networks (Migro & Ambe, 2008:231). The public sector supply chain management frameworks serve as national public procurement policy frameworks, which must be used when goods and services are procured by any public entity.

The literature research on this study commences with an overview of the Supply Chain or Public Sector Management Processes in general.

Furthermore the focus will fall on supply chain management in the South African context and the legislation impacting on the successful implementation of the supply chain management policies in local government.

Below is a list of a few of the legislations:

- Constitution of the Republic of South Africa Act No. 108 of 1996;
- The Preferential Procurement Policy Framework Act No. 5 of 2000;
- Construction of Independent Development Board Act 38 of 2000;
- Municipal Supply Chain Management Regulations of 2005 ;
- Promotion of Information Act No. 2 of 2000;
- Promotion of Administrative Justice Act No. 3 of 2000;

- Competition Amendment Act No. 15 of 2000;
- Prevention and Combating of Corrupt Activities Act No. 12 of 2004;
- Public Audit Act No. 25 of 2004; and
- Public Protector Act No. 23 of 1994.

Lastly the research will reflect on the challenges faced by the municipal supply chain management.

2.2 OVERVIEW OF SUPPLY CHAIN MANAGEMENT

2.2.1 Supply Chain Management

According to Naslund & Williamson (2010:11), the main problem with supply chain is that it lacks a universal accepted definition, as some people are defining it as a public sector supply chain, while others uses public procurement - it seems to depend on individuals' opinions.

Below are a few definitions to be considered in view of this study.

Table 2.1: Supply Chain Management Definitions

Goedhals-Gerbe (2010:21)	Supply chain is a sequential business process within a business enterprise which ensures that the customer is satisfied.
Gianakis & Mccue (2012:11)	They view supply chain as a value chain that starts at purchasing and contract management and continues right through to ensuring that quality products are supplied to the client.
Chopra & Meindl (2010:20)	The supply chain can be seen as the process which includes all the relevant stakeholders in

	fulfilling the customer's needs.
For the purpose of this study, the supply chain management definition of Vanichchinchai & Igel (2009:251)	The supply chain as a process where goods and services are delivered to the customer through efficient processes, for instance, the delivery of quality materials as quickly as possible at a cost effective price.

2.2.2 Public sector supply chain management

Public procurement or public sector supply chains can play a key strategic role in the 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. This can only happen by way of effective supply chain management frameworks, managed by competent officials (Hanks, Davies & Perera, 2008:4).

This statement is supported by the United Nations' for Training and Research, reinforcing that the public sector supply chain, plays a vital role in the Government's ability to execute service delivery (United Nations Institute for Training and Research, 2014).

In support of the above statements, the Office of Government Commerce (2011:3), further brought it to the researcher's attention that procurement is not only limited to complex projects like construction, but, that smaller items can also be obtained within this policy.

2.2.3 Supply Chain Management within the South African Public Sector Context

Ambe (2009:427-435) informs us that the supply chain management (SCM) framework in the South African public sector is a fairly new concept, introduced only as recently as in 2003. Internationally though, it has long been employed by respective 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.

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 supply chain management framework, and advises on how to align with the supply chain management framework's best practices.

The importance of the World Bank's Country Procurement Assessment Report (CPAR) is discussed in detail in Section 2.3.1.

The South African Government wishes to implement the supply chain management 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 has been 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, 2014:1-3).

The Model Law on Procurement has been used during the Government's reforms, and it set out procedures aimed at achieving competition, transparency, fairness, economy and efficiency, concerning the procurement process. This was a relevant part of South Africa's reform during 1994 (United Nations Commission on International Trade Law, 2014:1).

The 1994 Model Law on Procurement was updated in 2011, to align with new technological development. On international scale, the adoption, implementation and objectivity of this framework are aimed at maximizing the economy and efficiency of procurement, for example:

- Fostering and encouraging participation in procurement proceedings by suppliers and contractors, regardless of nationality, thereby promoting international trade;
- Promoting competition among suppliers and contractors for the supply of the subject matter of the procurement, providing for the fair, equal and equitable treatment of all suppliers and contractors; and
- Promoting integrity, fairness and public confidence during the procurement process and achieving transparency in the procedure relating to the procurement of goods and services (United Nations Commission on International Trade Law, 2014:1-3).

2.2.3.1 Country Procurement Assessment Reports (CPAR)

Country Procurement Assessment Reports (CPAR) is a quality control tool used by the World Bank to assess the credibility, capacity and capability of the country procurement management system in association with its laws. This is a pre-requisite for member countries who apply for grants or interest free loans from the World Bank (World Bank, 2014).

This assessment serves as a risk management system, which in turn serves as a guideline for the bank when deciding whether to provide financial assistance (loans or grants) to the applicant. It also provides the bank with the confidence that the money will be used for the intended project and in compliance with the known procurement laws and regulations (World Bank, 2014).

According to the World Bank (2014), it provides a vital source of financial and technical assistance to developing countries around the world. It is not a bank in the ordinary sense but a unique partnership to reduce poverty and support development.

- The World Bank Group consists of the following five institutions, which functions are managed by member countries: The International Bank of Reconstruction and Development (IBRD) that lends money to governments of middle income and credit worthy low income countries.
- The International Development Association (IDA) provides interest free loans, called credits and grants, to governments of the poorest countries, while these countries are in reform status, where they are rebuilding infrastructure after civil wars.

- The International Finance Corporation (IFC) focuses exclusively on the private sector, providing long-term financing not available in the market place (equity and loans), as well as advisory services to various industries.
- The Multilateral Investment Guarantee Agency (MIGA), which promotes foreign direct investments into developing countries, in order to support economic growth, to reduce poverty and improve peoples' lives.
- The International Centre for Settlement of Investment Disputes (ICSID) that provides international facilitation for conciliation and arbitration of investment disputes (World Bank, 2015).

According to the World Bank, a total of 44 African Countries are members of the World Bank and have benefited from various degrees of financial assistance, because they have met the Bank's pre-qualification criteria. This includes an assessment of the country's supply chain management framework, which should be in line with their Government's international best practices (World Bank, 2011a:14).

Arrowsmith & Tillipman (2010:248) recommend a World Bank Country Procurement Assessment, as it does not only improve a country's procurement system to be in line with the best practices, but also provides an incentive opportunity to the member country to access international donor aid from the World Bank and other international donor funders after reforms.

It is clear that the World Bank and other international donors place a degree of reliance on the member county's procurement systems, as sound policies are essential for good governance. This will ensure that money is well spent on respective intended projects and that the probability of the loan being repaid is high (World Bank, 2011b).

2.2.4 Legislations impacting the local government supply chain

Supply chain management in the South African local government is regulated and affected by various legislations. For the purpose of this study, the following legislations and their respective roles are discussed, in order to obtain a clear understanding of the impact that these legislations have on the implementation of the supply chain management framework.

- Constitution of the Republic of South Africa Act No. 108 of 1996;

- The Preferential Procurement Policy Framework Act No. 5 of 2000;
- Construction of Independent Development Board Act 38 of 2000;
- Municipal Supply Chain Management Regulations of 2005 ;
- The Promotion of Information Act No. 2 of 2000;
- The Promotion of Administrative Justice Act No. 3 of 2000;
- The Competition Amendment Act No. 15 of 2000;
- Prevention and Combating of Corrupt Activities Act No. 12 of 2004;
- The Public Audit Act No 25 of 2004; and
- The Public Protector Act No. 23 of 1994.

2.2.4.1 Constitution of the Republic South Africa, 1996 (Act No. 108 of 1996)

Section 217(1) of the Constitution of the Republic of South Africa, states that when an organ of state in the national, provincial or local spheres of the Government, or any other institution in the national legislation, contracts for goods and services, it must do so in accordance with a system which is fair, equitable, transparent, competitive and cost effective.

This is the guideline which must be adhered to by all public entities when developing their own supply chain management policies.

2.2.4.2 Preferential Procurement Policy Framework Act No 5 of 2000 (PPPFA)

Section 217(2) of the Constitution of 1996, further states that organs of state are not prevented from implementing a procurement policy providing for categories of preference in the allocation of contracts and the protection of persons disadvantaged by unfair discrimination.

Section 217(2) also gave effect to the Preferential Procurement Policy Framework Act No. 5 of 2000, which instructs an organ of state to determine its preferential procurement policy and to implement it within the framework. The municipality can determine its own threshold amounts with regard to sourcing strategies, when to use its petty cash, quotations, three quotation systems and open tenders.

Preferential procurement policy frameworks intend to promote people who have previously been disadvantaged to access the mainstream economy. For example, in order to promote small, medium and micro-enterprises, municipalities should pay service providers within 30 days of receiving their invoice. Failure to do this effectively will result in the contravention of the supply chain management policy.

The Matjabeng Municipality lost R448 million to irregular expenditure due to their failure to pay their service providers within the 30 day period. This is a massive wasteful expenditure as a result of incompetence by the supply chain management officials, which has a direct effect on the municipality's cash flow (Seekoei, 2015:8).

In conclusion, as a result of incompetence, the service providers will eventually have cash flow problems and will also be unable to complete work on projects in time.

2.2.4.3 Construction Industry Development Board Act No. 38 of 2000 (CIDBA)

The Construction Industry Development Board registers and provides contractors with grading certificates, which enable contractors to participate in the public sector competitively. Bidding without this certificate will result in the service provider being disqualified and not considered for the business opportunity. The grading is normally valid for three years, but can be updated when the contractor submit their certificate of completion after successful conclusion of a particular project.

The CIDBA Act 2000 requires that the national minister responsible for public works must prescribe the manner in which public sector construction may be invited, awarded and managed, within the framework of the register of contractors and the framework of the policy on procurement.

The following are powers and functions that directly affect the procurement process at the municipalities:

- To provide strategic leadership by promoting and implementing policies amongst other, supporting emerging enterprises through standardisation and uniformity in procurement documentation, practices and procedures;

- Best practices and value for money with regard to design; and
- Procurement reform.

2.2.4.4 Municipal Supply Chain Management Regulations, 2005 (SCM Regulations).

The SCM regulations provide a clear explanation of the execution process to be followed within the supply chain management 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 application should be in line with the objectives of Section 217(1) of the Constitution, which requires that goods and services should be procured in a manner which is fair, transparent, equitable, competitive and cost effective.

These six elements are explained in detail at a later stage on pages 20-26.

2.2.4.5 Promotion of Information Act No. 2 of 2000 (PAIA)

PAIA intends to capacitate Section 32 of the Constitution of 1996, which stipulates that everyone has the right of access to the information held by the state. Service providers can use this section to access information about any tender which they feel that its awarding is not in line with supply chain management policies.

PAIA intends to emphasise the objectives of Section 217(1) of the Constitution, which requires that the procurement of goods and services should be done in a way that is fair, transparent, equitable, competitive and cost effective, while considering exceptions of economic transformation.

2.2.4.6 Promotion of Administrative Justice Act No. 3 of 2000 (PAJA)

PAJA gives effect to Section 33 of the Constitution of 1996, which stipulates that everyone has the right to administrative action that is lawful, reasonable and procedurally fair.

PAJA intends to support the objectives of Section 217(1) of the Constitution which requires that the procuring of goods and services should be done in a way that is fair, transparent, equitable, competitive and cost effective. Service providers can use PAIA or perhaps PAJA to access bid documents if they have the suspicion that the process was procedurally flawed.

2.2.4.7 Competition Amendment Act No. 15 of 2000 (CA)

The purpose of the CA is to promote competition. This is achieved through Section 217(1), by following the objective of procuring high quality goods and services in a way that is fair, transparent, equitable, competitive and cost effective.

2.2.4.8 Prevention and Combating of Corrupt Activities Act No. 12 of 2004

The local government as a state organ adheres to the provision of the prevention and combating of corrupt activities. This Act regulates offences in respect of corrupt activities relating to contracts, activities pertaining to the acceptance or offering of any unrecorded, unapproved gratification, and the improper influence of another person as an offence in the respect of corrupt activities relating to procurement and withdrawal of tenders and auctions.

This Act also provides for various offences relating to possible conflicts of interest and other unacceptable conduct, such as the acquisition of private interest in contracts, agreements or the investment of a public body. It also provides that the National Treasury should blacklist defaulters.

Act No 12 of 2004 seeks to promote fairness and discourage conflict of interest by the officials who are expected to administer the bid processes.

2.2.4.9 The Public Audit Act No. 25 of 2004

Section 188 of the Constitution of 1996 gives the Auditor General the power to audit and report on the accounts and financial statements of the organs of state, annually. The Act further allows the Auditor General to provide audit opinions on the financial affairs,

including compliance with all the legislations that affect the municipalities, including compliance with Section 217 of the Constitution.

The Auditor General is regulated under Chapter 9 of the Constitution, reports to Parliament and does not have legislative enforcement powers, but can make recommendations on remedial action that may be taken to correct irregularities.

2.2.4.10 Public Protector, Act No. 23 of 1994

The Public Protector Act is legislated on the South African Constitution. It was established to investigate irregular practices in the public sector and to provide recommendations on how to address the findings. The Public Protector has to report to Parliament, but does not have legislative enforcement powers.

2.3 THE IMPORTANT ROLE PLAYERS IN SUPPLY CHAIN IMPLEMENTATION AND MANAGEMENT

2.3.1 National Treasury

The role of the National Treasury is to introduce and oversee the implementation of supply chain management, develop Treasury regulations, and issue guidelines and general conditions of contracts and bid documentation to the accounting officer. The National Treasury also sets minimum reporting standards and monitors policy outcomes (Ambe, 2009:430).

2.3.2 National Treasury's Practice Notes

The supply chain management regulations in terms of the Municipal Finance Management Act No. 56 of 2003 (MFMA), empowers the National Treasury to issue practice notes to ensure minimum norms 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 web page: <http://www.treasury.gov.za/organisation/specialistfunctions/supplychainmanagement: normsandstandards>.

The introduction of various legislations is also a challenge to the supply chain practitioner, as there are many and it can be confusing since new legislation is introduced during the course of the year.

The supply chain management framework is legislated and customized for the local government and has various key role players, including those who pay important oversight to ensure the effectiveness of the supply chain management framework. It is possible though, that it can only achieve its objectives when the correct implementation is followed by adhering to the municipal supply chain management regulations.

2.3.3 Accounting Officers

The role of the chief executive officer is:

- To establish a supply chain management 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; and
- Comply with ethical standards (Ambe, 2009:427).

These actions fulfil the objectives of Section 217 of the Constitution, namely that goods and services should be procured in a manner which is fair, transparent, equitable, competitive and cost effective.

2.3.4 Chief Financial Officer/SCM Practitioners

The responsibilities of the chief financial officer is: recruiting, selecting, developing and managing skills to build and maintain effective SCM units, training, procuring skills and

resources to develop managers and supervisors to operate and manage varieties of SCM activities, facilities and networks (Ambe, 2009:427).

2.4 LOCAL GOVERNMENT SUPPLY CHAIN MANAGEMENT (SCM) PRACTICES

SCM is an integral part of the South African Government's ability to execute service delivery to communities. It was introduced to be in line with internationally accepted best practice principle, while, at the same time, addressing the Government's preferential procurement policy objectives (OGC, 2005:11).

SCM practices aim to add value at each stage of the SCM process; from the demand of goods or services to their acquisition, managing the logistic processes and finally, after use, their disposal. When an asset has reached the end of its life span, and is no longer able to produce productive cash inflows, for example, the asset can be disposed of through the disposal process or it can be refurbished to its normal productive capabilities if it is well maintained for throughout its life span.

In doing so, it addresses deficiencies in current practices, related to procurement, contract management, inventory, asset control and obsolescence planning. Therefore, by adopting a SCM policy, it ensures uniformity in bid and contract documentation and options, as well as bid and procedure standards, among others. This should promote the standardisation of supply chain management practices (National Treasury, 2003:3).

The supply chain management policy framework environment requires highly ethical and principled officials who are fully aware of related laws and regulations of the supply chain management environment and its objectives.

2.4.1 Principles of SCM

The SCM environment requires practitioners who comply with the SCM's best practices and principles when conducting their work.

The following are the SCM's best practices principles (Ambe, 2009:429):

- SCM is a philosophy of conducting business. It is a philosophy of sharing risks, benefits and rewards for long-term cooperation and trust between partners, as well as for joint planning and the mutual exchange of information across all the nodes of the supply chain.

- SCM implies optimised performance from all supply chain members across all processes and activities and ultimately the development of consumer driven performance measures, aimed at ensuring the continuous improvement of the supply chain as a whole.
- SCM is the integration of multiple layers of municipalities, striving as a team to optimise the shared supply chain processes in support of the strategic objectives of the supply chain of the municipality and the stakeholders in the supply chain.
- SCM is the management of all links and interfaces in the supply chain. However, all these links and interfaces are not of equal importance and therefore the management's task of various nodes or interfaces in the supply chain will differ according to the impact on the relevant supply chain processes on the creation and delivery of consumer values.
- SCM is guided by the principle of co-operative governance and intergovernmental relations, as stipulated in the Constitution, enshrining the autonomy of each sphere, whilst regulating the relationships between those spheres.
- SCM is based on the shared vision of what consumer value is and therefore compatibility with municipal philosophies is essential in achieving the necessary levels of planning and coordination.

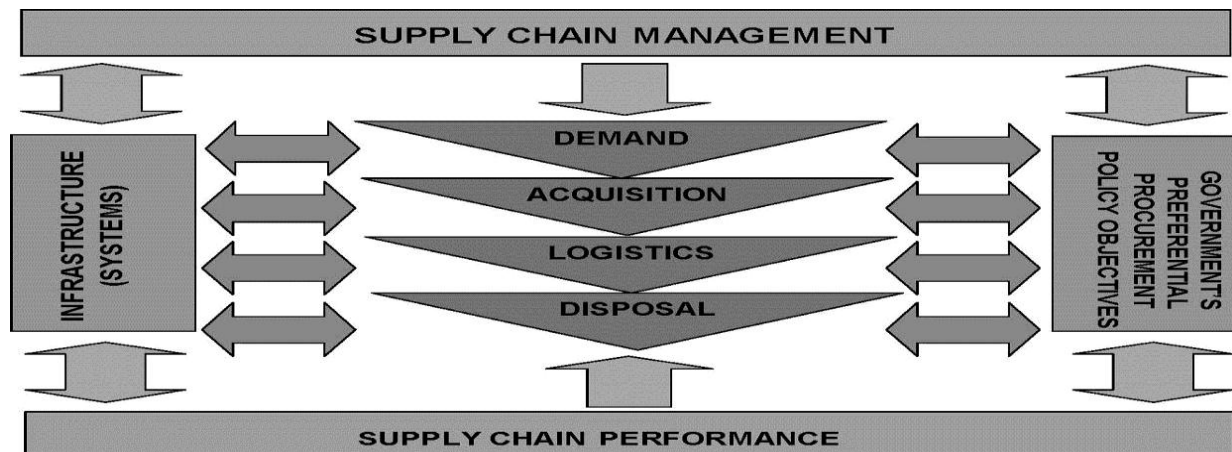
2.4.2 The six elements of SCM as prescribed by legislation

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, 2013:6).

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, 2013:6).

In explaining the functions of these six elements, this study used the South African Local Government Association's, Supply Management Policy of 2013, as reference. These elements are grammatically depicted in Figure 2.1, which provides a process map for the implementation of the SCM system within the organs of state.

Figure 2.1: Framework of Supply Chain Management



Source: National Treasury (2005:11)

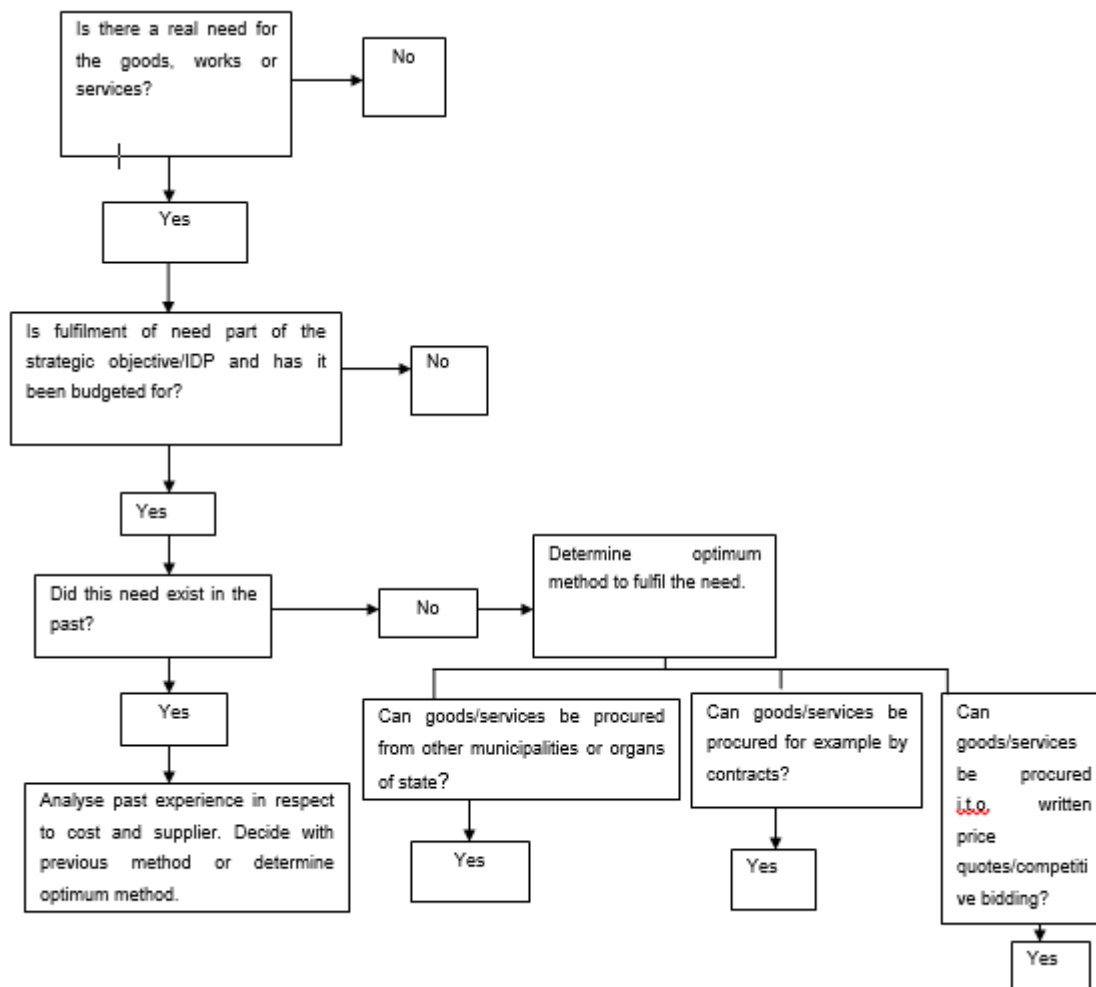
2.4.2.1 Demand Management

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 satisfy 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, 2005:25).

Ambe (2009:429) 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 users Figure 2.2 Demand Management Process.

Figure 2.2 Demand Management Process



Source: National Treasury (2005:24)

The demand management process flow provides a grammatical picture of how the SCM practitioner should approach the process of demand management.

2.4.2.2 Acquisition management

Municipal supply chain management regulations prescribe, in terms of Regulation 11, that the SCM's policy "must provide for an effective system of acquisition management".

Such a system should be implemented to ensure:

- That goods and services are procured by the municipality or municipality entity in accordance with authorised processes only;
- That expenditure on goods and services is incurred in terms of an approved budget;
- That the threshold values for the different procurement processes are complied with;
- That bid documentation, evaluation and adjudication criteria and the general conditions of a contract are in accordance with any applicable legislation; and
- That any treasury guidelines on acquisition management are properly taken into account.

This system is a process of the procurement of goods and services and assists in terms of the manner in which the market should be approached; the establishment of the total cost of ownership of a particular type of asset; ensuring that bid documentation is complete and includes evaluation criteria; that bids are evaluated according to the published criteria; and that contract documentation are signed properly (National Treasury, 2005:12).

In agreement with this study, the South African Local Government Association (SALGA) maintains that the process can function effectively when independent bid specification, evaluation and adjudication committees are established and pre-approved by the accounting officer (South African Local Government Association, supply chain management policy, 2013:12).

The committees and their roles are explained in the table below.

Table 2.2

Bid Committees

Bid	Constituent of the committee and functions
Bid specification committee	Comprises of at least 4 officials, including a manager of the department requesting the

service. Officials may also include an external specialist working for the public sector.

The committee has to compile technical specifications, terms of reference, evaluation criteria and methods of procurement.

Bid evaluation committee	Comprises of the same team that are on the specification committee. They use functionality to assess suppliers who meet the minimum requirements. The committee has to compile a report for the adjudication committee, listing the service providers who met the minimum requirements.
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Bid adjudication committee	The committee is chaired by the SCM practitioner and considers only service providers shortlisted by the evaluation committee. It uses a comparative price schedule which utilises two indicators; price and a BBBEE formula to award the contract.
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Source: SALGA (2013:20)

2.4.2.3 Logistics Management

Regulation 39 of the municipal supply chain management regulations requires that “an SCM policy must provide for 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”.

An automated ordering system assists warehouse managers in making strategic decisions, as the system provides managers with daily, weekly and monthly reports

which indicate stock that have reached acceptable minimum levels. According to this information, the requestor can write out the necessary requisitions and the acquisition department can place the order (Hanks, Davies & Perera, 2008:6).

2.4.2.4 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 MSCMR. Furthermore, in terms of regulation 40, the SCM policy must specify the ways in which the 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.

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 (National Treasury, 2005:12).

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 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 the other 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, 2013:24).

An auctioneering company can be appointed to manage the disposal process depending on the value to the assets compared with the cost of service provider.

2.4.2.5 Risk Management

Risk management is the process of understanding, evaluating and addressing risks, in order to maximize the chance of objectivity being achieved and ensuring that individual organisations and communities are sustainable (The Institute of Risk Management, 2015).

With regard to risk management; Regulation 41 of the Municipal Supply Chain Management Regulations, prescribes that “an SCM policy must provide for an effective

system of risk management for the identification, consideration and avoidance of potential risks in the SCM system”.

Furthermore, Regulation 41 prescribes that 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 risks is greater than that of retaining it , the management of risks in pro-active manner and the provision of adequate cover for residual risk, and the assignment of relative risks to the contracting parties through clear and unambiguous contract documentation.”

The South African Local Government Association is in agreement that development and implementation of effective risk management is the responsibility of the risk management department (South African Local Government Association, supply chain management policy, 2013:24).

2.4.2.6 Performance Management

In relation to performance management, Regulation 42 of the Municipal Supply Chain Management Regulations requires that “an SCM policy must provide for an effective internal monitoring system in order to determine, on the basis of a retrospective analysis, whether the authorised supply chain management processes are being followed and whether the desired objectives are being achieved”.

Some of the issues that such a system should also address are the cost benefits of the system and the strategic objectives of the Government, with regard to economic transformation policies (National Treasury, 2005:12).

SALGA agrees with this view and adds that the following should be used as key indicators that can be measured: variances between the predetermined objectives and the actual achievements, financial performance (actual against budget) and compliance to supply chain management regulations and laws (South African Local Government Association, supply chain management policy, 2013:25).

2.5 CHALLENGES FACED BY MUNICIPAL SUPPLY CHAIN MANAGEMENT (SCM)

The successful implementation of an effective supply chain management is not only limited to the supply chain management framework, but its success depends on the equation which includes related legislations, the supply chain management officials/practitioners, as it is a team dependent function.

The following are various challenges faced by municipalities which will be discussed.

- Municipal Finance Management Act No. 56 of 2003;
- Local Government Audit Committee and its function;
- Auditor General;
- The Public Protector;
- Lack of consequences management;
- Lack of proper knowledge, skills and capacity;
- Inadequate planning and linking demand to the budget;
- Inadequate and inconsistent risk management;
- Inadequate monitoring and evaluation of contracts;
- Lack of political leadership; and
- Ethics and conflict of interests.

2.5.1 Municipal Finance Management Act No. 56 of 2003

The Municipal Finance Management Act No. 56 of 2003 was introduced in line with the National Treasury's strategy of establishing a modern customized financial management system for local government entities. The objectives of this Act is to develop local governments that are financially sustainable and who are accountable for implementing their policies in line with Section 217 of the South African Constitution and within the supply chain management framework (Public Protector South Africa, 2010:10).

Section 102 of the Municipal Finance Management Act (MFMA) requires Accounting Officers to report any irregular or fruitless and wasteful expenditure in writing to the Mayor and the Auditor General, indicating the steps taken to recover the expenditure and the preventative action plan to curb recurrence. The next step would be for the

board of directors or the council to recover the expenditure by reporting the irregular expenditure to the South African Police Service, since it is constituted as a criminal offence.

Contrary to the above statement, the Municipal Manager of Nketoana Local Municipality who is the Accounting Officer, indicated during his written report to the Public Protector, that he agree that supply chain management procedures were not followed - but it was not the Municipal Manager's decision though, but the council's resolution. The next step, however, of recovering the expenditure, was never executed which is in line with Section 102 of MFMA (Public Protector South Africa, 2010:8-9).

In this specific case, the Municipal Manager of Nketoana Local Municipality admitted that the correct supply chain management procedure was not followed when they procured furniture to the value of R1 million, and stated that it was a council resolution (Public Protector South Africa, 2010:8).

There was no evidence of any disciplinary actions taken against the municipal manager and also no evidence that the money was recovered, even though a case was opened with the South African Police Service to report the incident.

2.5.2 Local Government Audit Committee and its function

The function of the Audit Committee is to oversee integrity of the financial and performance management reports and ensuring compliance with legal and regulatory requirements by reviewing the internal control systems annually by the internal audit of the organisation (PriceWaterhouseCoopers, 2015).

It is a legal requirement that each local municipality should have an independent audit committee who should advise the accounting officer with regard to financial management regulations. In an effort to strengthen the internal audit section, the National Treasury issued the Municipal Finance Management Finance Circular 65, with a directive that each municipality should have an independent audit committee that will advise the municipal manager and office bearers on accounting policies and effective governance (Municipal Finance Management Act Circular 65, 2012:14-15).

Even after the Circular was issued, the Auditor General South Africa still identified non-compliance within the supply chain management yearly. According to Dlamini (2015:4), the office of the Auditor General South Africa uncovered corruption, flawed procurement processes and weak internal control in the Johannesburg Metro Municipality's 2013-14 financial report.

This occurred despite the fact that the Audit Committee was supposed to play a pivotal and strategic oversight role that should strengthen compliance with the supply chain management policies.

According to SALGA, this outcome normally manifests as result of Audit Committees sometimes are failing to meet at least four times in a year to review the adequacy, reliability and accuracy of the financial information, as required by law (South African Local Government Association, 2012:6).

The Audit Committee is not liable for non-performance of the municipality, thus they are not compelled legally to meet quarterly, as there are no consequences management.

2.5.3 Auditor General

The office of the Auditor General is normally constituted to provide an audit opinion on the management of public funds. This is to ensure accountability and good governance. The office of the Auditor General should be an independent office that is permitted by law to audit all public entities and to provide an audit opinion, as well as recommendations concerning the financial affairs of audited public entities.

The office of the Auditor General is accountable to Parliament and its powers and functions are vested in the audit Act, with the authority to access relevant information on public entities for audit purposes (Victorian Auditor-General Office, 2014).

The office of the Auditor General should always be impartial and independent, reporting directly to Parliament (Office of the Auditor General of Australia, 2013). The office of the Auditor General is expected to be independent and to perform its functions as regulated by the Public Audit Act No. 25 of 2004. It should carry out these responsibilities without

fear or favour, reporting directly to the National Assembly (Auditor General of South Africa, 2014).

According to the office of the Auditor General, only 9% of the 319 local government audits achieved clean financial audits for the 2012-13 financial year. This shows a 10% achievement since the introduction of the supply chain management framework (Auditor General of South Africa, 2014).

The office of the Auditor General highlights the following as the root causes of failed audits:

- Lack of oversight and training for new councillors;
- Lack of internal control on areas such as proper record keeping and document control, reviewing and monitoring of compliance with legislation, implementation of controls, daily and monthly processing and reconciling of transactions;
- Failure to pay service providers within the 30 day period of receiving the invoices; and
- Overspending on the operating budgets (Auditor General Report, 2012-13:79-81).

The office of the Auditor General has limited authority, as it has no constitutional powers to enforce remedial actions. It may only make recommendations.

2.5.4. Public Protector

In terms of section 182(1) of the Constitution, the Public Protector has the power to investigate any conduct of state affairs or public administration in any sphere of the Government that is alleged or suspected to be improper or prejudice (Public Protector South Africa, 2010:7).

Public Protector South Africa is an institution constituted under law to seek to promote transparency and accountability with regard to financial management in the public sector, but also has limited powers when it comes to enforcement, as it is required to provide its opinion or recommendations based on the findings of the investigation.

2.5.5 Lack of consequence management

The consolidated general report on the audited outcomes of the local government for the financial review for 2012-13, indicated that of the 71% audited municipalities there

were findings of a lack of consequence management for poor performance and transgressions; compared to 75% in the 2011-12 financial year (Auditor General South Africa Report, 2014:25).

In the North West Province Municipalities Report, the office of the Auditor General indicated that unattended findings on consequences management increased from 71% in the 2011-12 to 84% in the 2012-13 financial year (Auditor General South Africa Report, 2014:18).

The office of the Auditor General views a lack of consequence management for people who fail to perform at their work, despite support and encouragement, as a clear highlight of an absence of accountability (National Treasury, 2015:5).

Consequence management is a management tool used to change or improve a particular negative behaviour which is against the organisational code of conduct.

2.5.6 Lack of proper knowledge, skills and capacity

Knowledgeable officials who are highly skilled and are well capacitated can play a pivotal role in the successful implementation of the supply chain management framework. Supply chain management officials have attained a lot of capacity building over the years, but municipalities continue to obtain unfavourable audit opinions from the office of the Auditor General (Migiro & Ambe, 2008:241).

During their presentation at the Standing Committee on Appropriations, all key stakeholders, including the South African Local Government Association (SALGA), Department of Cooperative Governance and Traditional Affairs (COGTA) and the Development Bank of South Africa (DBSA), have agreed that there is a shortage of critical skills within municipalities. Therefore the local government is sourcing consultants for these areas of financial management (Parliamentary Monitoring Group, 2010).

The National Treasury proceeded by questioning the quality of training provided by various service providers. The municipal budget offices for example are still

incompetent, as they cannot prepare annual financial statements (Parliamentary Monitoring Group, 2010).

In the North West Province municipalities report, the office of the Auditor General gave a concerning report that competencies of the financial/supply chain management/ chief financial officer were not assessed or reports with prescribed competency levels were not submitted to treasuries (Auditor General South Africa Report, 2014:18).

To resolve this problem, The National Treasury conducted an independent competency assessment among supply chain management officials. The assessment identified significant gaps of skills. This concern led the National Treasury to develop a supply chain management training manual which is still a work in progress (National Treasury, 2015:5).

2.5.7 Inadequate planning and linking demand to the budget

Poor demand and procurement result in large deviations and price escalations, which have a negative effect on the local government budget, as the wasted money could have been allocated to other community projects to promote development (National Treasury, 2015:15).

Procurement through demand management plays a direct role in the development of municipal budgets through need assessment and industry analysis, in order to determine the external market price of certain commodities (Organisation of Economic Co-operation and Development, 2008:55).

According to the office of the Auditor General South Africa Report (2014:16), lack of strategic planning and performance management in North West Province municipalities grew from 68% in the 2011-12 financial year to 89% in the 2012-13 financial year.

2.5.8 Inadequate and inconsistent risk management

Effective risk management can play a crucial role in resolving supply chain management policy non-compliances, such as poor demand and procurement planning, which could result in price deviations and escalations, poor contracts and ineffective supplier management.

2.5.9 Inadequate monitoring and evaluation of contracts

Constant monitoring and evaluation of skills play a critical role in the implementation of any project, to regulate quality within the time frame and budget.

For instance in the North West Province Municipalities Report , the office of the Auditor General South Africa found that there is either no or inadequate contract performance contracts to monitor progress on a monthly basis, and this was due to a lack of training and a reliable record management system (Auditor General South Africa, 2014:19-20).

2.5.10 Lack of political leadership

Due to lack of political leadership, supply chain officials deliberately fail to comply with the policies and procedure or laws and regulations knowing that disciplinary steps will not be taken against them (Auditor General South Africa, 2014:26).

This may be as result of councillors not understanding their role and responsibilities with regard to non-compliance with legislation but it can also be because some councillors are also service providers of the same municipality and they cannot take action against themselves when there are irregularities that favour them.

2.5.11 Ethics and conflict of interest

Leadership in any form of environment plays a crucial role. Leaders are always expected to display good ethical conduct and be an example at all times. When leaders fail to promote good governance, it cannot be expected that officials will follow the correct procedures, as they learn from their leaders.

For instance, in terms of the Local Government's Municipal System Act 32 of 2000 Schedule 1 and Schedule 2 codes of conduct for councillors and staff members respectively, councillors and staff members are expected to declare their individual business interests. Failure to declare such interests should be met with disciplinary action as a corrective measure (University of Pretoria and South African Legal Information Institute, 2011:118-131).

In direct contrast to Act 32 of 2000, contracts to the value of R95 million were given to suppliers where employees and councillors had personal interests. Contracts to the value of R445 million were awarded to suppliers where other state officials had interests.

In another example in North West Province municipalities, the office of the Auditor General South Africa found that contracts are still awarded to employees and councillors, and 83% and 7% of suppliers and councillors have not declared their interest as required by the law. Further an overall of R1.8 million was awarded to suppliers in which close family members of employees and councillors have been working for the municipality, that the employees and councillors concerned did not declare (Auditor General South Africa, 2014:19).

2.6 CONCLUSION

In order for local governments to achieve their policies, they need 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 pay oversight.

It is clear that councillors cannot be expected to be referees, as they are also players in the system. This really necessitates the constitutional powers of the legislative institution, such as the Public Protector, who is given limited powers to investigate irregularities, but only to provide recommendations, which are expected to be enforced by the referees who are, in this case, the councillors.

It is clear that there is a structural weakness in the current supply chain management framework and its related regulations and laws. As a result of this, it cannot achieve the objective of Section 217 of the Constitution, until structural solutions have been found.

2.7 CHAPTER SUMMARY

It can be summarised that though there are applicable legislation of which the strategic objective is to strengthen accountability and clean governance, in many cases the study has shown various institutions that raised two pertinent prime factors as lack of skills and consequence management, as the main function of none compliance.

For example, in terms of the Local Government's Municipal System Act 32 of 2000 Schedule 1 and Schedule 2 codes of conduct for councillors and staff members respectively, councillors and staff members are expected to declare their individual business interests. Failure to declare such interests should be met with disciplinary action as a corrective measure (University of Pretoria and South African Legal Information Institute, 2011:120-131).

Despite this, officials and councillors continue to transgress knowing there is no culture of consequence managements as their principals who some are councillors cannot report themselves.

Suppliers or Service Providers' lack of understanding of important Acts and their reason for existence such as the Promotion of Access of Information Act and the Promotion of Administrative Justice Act, it is a grave concern since immediately service providers start to use this Act to request information about certain tenders which they believe was not awarded fairly, it will change the behaviour of the tender evaluation and adjudication committee knowing that service providers know their rights but this can only work if the service providers themselves are not part of the equation of overpricing and corruption.

The other important weakness in the whole system of which the supply chain management practitioners are taking advantage of, is the lack of enforcement powers by the Auditor General and Public Protector, since they cannot report the misconduct directly to the South African Police Services.

In conclusion, the role of the Audit Committee is very paramount in the success of the effectiveness of the supply chain management value chain, but it can be achieved if the committee members also become liable with the Accounting Officer as their constituted to provide quality assurance on the financial management of the Public Sector.

CHAPTER 3

RESEARCH METHODOLOGY AND FINDINGS

3.1 INTRODUCTION

The literature review in Chapter 2 of this study provided an overview of the supply chain management. Specific attention was given to supply chain management within the local government sphere. Numerous sources indicated concern for the effectiveness of the current supply chain management framework in the public sector, due to the high number of negative audit findings by the Auditor General.

The focus of this chapter was on the research methodology followed to assist in meeting the research objectives, as explained in Chapter 1. The investigation procedures, data analyses, as well as the results are described in this chapter. All statistical analyses were done by the Statistical Consultation Services of the North-West University on the Potchefstroom Campus, using the software package, SPSS (2015).

3.2 PROCEDURE AND SCOPE OF THE QUANTITATIVE RESEARCH

The empirical study focussed on the local government of the North West Province. After determining the demographic profile of the respondents, the study attempted to establish whether poor demand planning, current training interventions, the inability of the internal audit to evaluate supply chain management policies and controls, inadequate contract management control or a lack of consequence management, had an effect on the effectiveness of the current supply chain framework.

3.3 PROCEDURE AND SCOPE OF THE QUALITATIVE RESEARCH

Respondents in the study were asked to elaborate on specific answers. These comments were analysed in a qualitative manner to add value to the results obtained from the quantitative research in this study.

3.4 SAMPLE GROUP, SIZE AND RELIABILITY

The total group of potential participants in a research study to which a researcher would want to generalise the results of an empirical study, is called the population (Welman, Kruger & Mitchell, 2010:55). For the purpose of this study, the population consisted only

of individuals who worked with supply chain management daily, also known as supply chain management practitioners. These included supply chain management officers, supply chain managers and chief financial officers from all 19 local municipalities in the North West Province.

The sample size was not relevant because in no stage a random sample was drawn. Responses were obtained from relevant respondents (survey) and only a few of them answered, which is called the available sample, thus importantly the results will not be generalised as it is only applicable to the sample.

The author decided to take a non-probability convenience sample from the study population. A convenience sample refers to data collection from members of the study population who are conveniently available to participate in the study. This was chosen by the author as a way to collect the data quickly and efficiently, due to very little variation in the study population (Sekaran & Bougie, 2009:276; Welman et al., 2010:70).

The convenience sampling method was chosen to ensure voluntary representation from all the earmarked municipalities (Levine, Stephan, Krehbiel & Berenson, 2008:256; Sekaran & Bougie, 2009:272; Welman et al., 2010:69). In this case, no sampling method was used as the author targeted only people who had the credentials for working in the supply chain environment.

All 19 municipalities were given three questionnaires each, equating to a total of 57 questionnaires. A total of 49 questionnaires were returned, of which 44 were compliant and 5 were discarded due to technical difficulties. A subsequent response rate of 77% was achieved for the questionnaires and 79% regarding the participating institutions.

For the purpose of the study the sample size was small. According to Rosenthal, Rosnow & Rubin (2010:55) when one is confronted with a “non-significant” p and “large” effect size we must not conclude that nothing happened we would be making a serious mistake because a smaller sample size may have led to failure to detect the effect in which case we should continue the line of investigation with a larger sample size.

All the questions were analysed separately and were not grouped into underlying constructs, thus reliability was irrelevant.

Although p-values were reported for completeness, Cramer's V was used for the interpretation, as the author did not have a random sample, and the sample size was too small to establish sufficient statistical power.

Non-responses were expected which could have been due to

- An inability of respondents to respond, due to work loads, time constraints or other reasons.
- Refusal of respondents to complete the questionnaire without valid reasons (Welman et al., 2010:73).

Overall a satisfactory total percentage of 77% of completed questionnaires were received with no errors.

3.5 SURVEY INSTRUMENT

Two schools of thought exist for the capturing of research information, namely quantitative and qualitative approaches. The quantitative method is an objective approach and seeks the precise measurement and analysis of the target concept. This method is not time consuming.

The qualitative research approach is a descriptive form of research and is subjective, in the sense that the researcher interprets the data as the answers to open ended questions, as was done by the participants in this study (Welman et al., 2010:207).

A quantitative as well as a limited qualitative approach was followed. Both approaches were followed to meet the research objectives as set out in Chapter 1. Only one open ended question was based on the qualitative approach in the interest of saving the respondent's time, taking into consideration the nature of their busy work schedules.

The survey instrument used was a questionnaire, because it is an inexpensive instrument that is easy to administer, quick to deliver, and the respondents can complete it during their free time. Ethical clearance was obtained from the Ethics committee of the North-West University's Support Office.

The questionnaire was developed with the assistance of the study leader and the Statistical Consultation Services of the North-West University. The questionnaires were

distributed physically. A total 15 days were allowed for completion of the forms. Reminders were sent after a week.

The questionnaire was constructed by the author and was based on the literature study conducted and reported on in Chapter 2. The questionnaire consisted of 27 questions of which only Question 27 was an open-ended question, which reflected subjective comments. Questions 1, 23 and 25 required yes or no answers, while Questions 23 and 25 had an additional 'I don't know' option. Questions 2, 3 and 4 displayed a selection type answering system, where respondents could choose from 'none' to 'more than twice'. Questions 6-13 displayed 'not at all' through to 'excellent' options to choose from, while Questions 14-21 displayed options from 'not at all' through to 'to a large extent'.

Only supply chain practitioners were asked to participate.

3.6 DEMOGRAPHICAL PROFILES OF RESPONDENTS

This section introduces the biographical profile of the respondents. Biographical information constitutes gender, age, race, qualification and the positions of all the officials working daily with supply chain management.

A total of 57 questionnaires were distributed to respondents, and a total of 44 questionnaires were received back, while 13 were discarded due to mistakes.

Table 3.1: Gender of the respondents

	Frequency	Valid Percentage
Male	19	43.2
Female	25	56.8
Total	44	100

The first category of the demographical profile shows that more females than males participated in this exercise.

Table 3.2 Race of respondents

	Frequency	Valid Percentage
Black	27	61.4
White	6	13.6
Coloured	8	18.2
Indian	3	6.8
Total	44	100.0

Table 3.3 Age of respondents

	Frequency	Valid Percentage
18-25	5	11.4
26-35	20	45.5
36-45	12	27.3
46-55	7	15.9
Total	44	100.0

Table 3.2 shows that a total of 61% black people participated in the study followed by 18% coloured people, 13% white people and 6% Indian people.

Table 3.3 indicates that the majority of the respondents were between 26-35 years of age, which reflected 45% of the total, followed by the age group 36-45 years (27.3%), and the age group 46-55 years, which represented 15% of the total. The smallest age group was the group between 18-25 years, which constituted 11% of the total.

Table 3.4 Qualification of the respondents

	Frequency	Valid Percentage
Grade 12	2	4.5
Diploma	9	20.5
Bachelor's Degree	21	47.7
Honours degree	10	22.7
Master's degree	2	4.5
Total	44	100.0

Table 3.5 Position of respondents

	Frequency	Valid Percentage
SCM Officer	18	40.9
SCM Manager	16	36.4
CFO	10	22.7
Total	44	100.0

Table 3.4 indicates that the majority of the respondents had a Bachelor's degree (47%), followed by Honours degrees (22%), and then diplomas (20%), with only a few that held matric qualifications or Master's degrees (4.5% respectively).

In conclusion Table 3.5 specifies that a total of 59% of the practitioners who participated are in management and 41% is officers.

It could therefore be concluded that the demographic profile of the target group in this study was representative of a local government environment.

3.7 EMPIRICAL STUDY: RESULTS

3.7.1 Frequency analysis and Descriptive statistics

Neither the factor analysis nor the combination of questions were utilised to get the total count. Items were individually assessed. All the questions were analysed separately, not grouped.

Table 3.6 When you joined the municipality did you attend induction on supply chain management?

1. When you joined the municipality did you attend induction on Supply chain Management?					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Yes	41	69.5	93.2	93.2
	No	3	5.1	6.8	100.0
	Total	44	74.6	100.0	
Missing	System	15	25.4		
Total		59	100.0		

Table 3.6 indicates that 93.2% of respondents attended the supply chain management induction while only 6.8% did not. The induction process is very critical as it aims to acclimatise the incumbent with the local government policies, systems and procedures when executing his or her duties.

Table 3.7 How often did you attend supply chain management training in the past two financial years?

2. How often did you attend supply chain management training in the past two financial years?					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	None	3	5.1	6.8	6.8
	Once	5	8.5	11.4	18.2
	Twice	24	40.7	54.5	72.7
	More than Twice	12	20.3	27.3	100.0
	Total	44	74.6	100.0	
Missing	System	15	25.4		
Total		59	100.0		

Table 3.7 indicates that 54.5% attended supply chain management training twice, 27.3% attended more than twice, 11.4% attended once and only 6.8% did not attend any training. A satisfactory 93.2% have attended supply chain management training which aims to capacitate the practitioners to solve the daily supply chain challenges.

Table 3.8 Of how many of these training did you write an assessment test?

3. Of how many of these training did you write an assessment test?					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	None	25	42.4	56.8	56.8
	Once	7	11.9	15.9	72.7
	Twice	9	15.3	20.5	93.2
	More than Twice	3	5.1	6.8	100.0
	Total	44	74.6	100.0	
Missing	System	15	25.4		
Total		59	100.0		

While table 3.8 indicates that 93.2% attended training, Table 3.13 indicates that 56.8% of the employees who attended supply chain management training did not write assessments, while only 20.5% wrote the assessment twice and 15.9% only wrote once and 6.8% wrote it more than twice respectively.

The assessment should be compulsory and included in the individual performance contracts.

Table 3.9 How often does your internal audit department perform risk assessment?

4. How often does your Internal Audit Department perform risk assessment?					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	None	1	1.7	2.3	2.3
	Once	6	10.2	13.6	15.9
	Twice	23	39.0	52.3	68.2
	More than Twice	14	23.7	31.8	100.0
	Total	44	74.6	100.0	
Missing	System	15	25.4		
Total		59	100.0		

Table 39 indicates that 52.3% of the internal audit departments performed risk assessments twice in year, while 31.8% did it more than twice in a year, 13.6% did it only once and 2.3% never did it.

According to PriceWaterhouseCoopers (2015), normally assessment of the internal control system is conducted annually. A reason for conducting the assessment more than it should be, the Internal Audit Unit wants to measure progress made after implementing certain controls.

Table 3.10 How often does your department perform performance evaluation?

5. How often does your department perform performance evaluation?					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Half Yearly	2	3.4	4.5	4.5
	Quarterly	10	16.9	22.7	27.3
	Annually	32	54.2	72.7	100.0
	Total	44	74.6	100.0	
Missing	System	15	25.4		
Total		59	100.0		

The results in Table 10 indicate that 72.7% of supply chain departments evaluated their performance annually, while 22.7% evaluated them quarterly and only 4.5% did it half yearly. Normal practice of performance evaluation is quarterly as this practice assist in resolving problems retrospectively and in time rather than waiting for a year and then try to solve the whole year's problems, which might be costly.

Table 3.11 To what extend do you rate the effectiveness of your municipality contract management system?

6. To what extend do you rate the effectiveness of your municipality contract management system?					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Poor	3	5.1	6.8	6.8
	Good	32	54.2	72.7	79.5
	Excellent	9	15.3	20.5	100.0
	Total	44	74.6	100.0	
Missing	System	15	25.4		
Total		59	100.0		

Table 3.11 indicates that 72.7% of the supply chain management departments had effective contract management systems, 20.5% maintained excellent systems and 6.8% had poor contract management systems. This is contrary to the Auditor General South African Report (2014:19) particularly on North West Municipalities, as 33% of the audited municipalities do not monitor contractors on a monthly basis due to no or ineffective contract management systems.

Table 3.12 To what extend do you rate the effectiveness of your municipality policy?

7. To what extend do you rate the effectiveness of your municipality return work policy?					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Poor	4	6.8	9.1	9.1
	Good	34	57.6	77.3	86.4
	Excellent	6	10.2	13.6	100.0
	Total	44	74.6	100.0	
Missing	System	15	25.4		
Total		59	100.0		

Table 3.12 indicates that 77.3% of the supply chain management departments had effective return work policy systems, 13.6% had excellent systems and only 9.1% had poor systems. This is also contrary to the literature as return policy is part of the contract management system.

Table 3.13 To what extend do you rate the effectiveness of municipal official and council vetting system?

8. To what extend do you rate the effectiveness of municipal officials and council vetting system?					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Poor	5	8.5	11.4	11.4
	Good	31	52.5	70.5	81.8
	Excellent	8	13.6	18.2	100.0
	Total	44	74.6	100.0	
Missing	System	15	25.4		
Total		59	100.0		

Table 3.13 indicates that 70.5% of the supply chain management had good vetting systems, 18.2% had excellent systems and 11.4% had poor systems. This is contrary to the literature as councillors and officials are conducting business with the public entities while they are fully aware that it is considered as misconduct.

Table 3.14 To what extend do you rate the effectiveness of current three quotations and tender system?

9. To what extend do you rate the effectiveness of current three quotations and Tender system?					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Poor	3	5.1	6.8	6.8
	Good	28	47.5	63.6	70.5
	Excellent	13	22.0	29.5	100.0
	Total	44	74.6	100.0	
Missing	System	15	25.4		
Total		59	100.0		

The results in Table 3.14 indicate that 63.6% of the supply chain management had effective quotation and tender systems, 29.5% had excellent systems and 6.8% had poor systems. This is contrary to the literature as service providers supplied government with overpriced goods as a result of collusion with SCM units (Anon, 2011).

Table 3.15 Rate your understanding of the Promotion of Equity and the prevention of unfair discrimination ACT of 2000?

10. Rate your understanding of the Promotion of Equity and the Prevention of unfair discrimination Act 4 of 2000?					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Not at all	3	5.1	6.8	6.8
	Poor	3	5.1	6.8	13.6
	Good	33	55.9	75.0	88.6
	Excellent	5	8.5	11.4	100.0
	Total	44	74.6	100.0	
Missing	System	15	25.4		
Total		59	100.0		

Table 3.15 indicates that 75% of the supply chain management practitioners have a good understanding of the Promotion of Equity and Prevention of Unfair Discrimination Act 4 of 2000, while 11.4% had an excellent understanding, 6.8% had a poor understanding and 6.8% did not understand it at all.

While 86% of the practitioners understand the Act, they still continue to contravene the supply chain management policies. According to the literature the practitioners are colluding with suppliers to overcharge the local government and thus discriminate against other service providers.

Table 3.16 Rate your understanding of the Prevention and Combatting of Corrupt Activities Act 12 of 2004?

11. Rate your understanding of the Prevention and Combating of Corrupt Activities Act 12 of 2004?					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Not at all	2	3.4	4.5	4.5
	Poor	6	10.2	13.6	18.2
	Good	28	47.5	63.6	81.8
	Excellent	8	13.6	18.2	100.0
	Total	44	74.6	100.0	
Missing	System	15	25.4		
Total		59	100.0		

Table 3.16 indicates that 63.6% of the supply chain management had a good understanding of the Prevention and Combating of Corrupt Activities Act 12 of 2004, while 18.2% had an excellent understanding, 13.6% had a poor understanding and 4.5% did not understand it at all. While 81% practitioners have indicated they have fairly good understanding of this Act, corrupt activities and unethical practices do not stop.

Table 3.17 Rate your understanding of Promotion of Administration Justice Act No 3 of 2000?

12. Rate your understanding of the Promotion of Administration Justice Act No 3 of 2000?					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Not at all	3	5.1	6.8	6.8
	Poor	4	6.8	9.1	15.9
	Good	31	52.5	70.5	86.4
	Excellent	6	10.2	13.6	100.0
	Total	44	74.6	100.0	
Missing	System	15	25.4		
Total		59	100.0		

Table 3.17 indicates that 70.5% of the supply chain management had a good understanding of the Promotion of Administration Justice Act No 3 of 2000, 13.6% had an excellent understanding of the Act, while 9.1% and 6.8% had a poor understanding and did not understand it at all, respectively.

A satisfactory 84% of the practitioners have a fairly good understanding of the Act and its objectives but the implementation of the fair practices is not supported by literature.

Table 3.18 Rate your understanding of the current supply chain management framework?

13. Rate your understanding of the current supply chain management framework?					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Not at all	2	3.4	4.5	4.5
	Poor	2	3.4	4.5	9.1
	Good	29	49.2	65.9	75.0
	Excellent	11	18.6	25.0	100.0
	Total	44	74.6	100.0	
Missing	System	15	25.4		
Total		59	100.0		

Table 3.18 indicates that 65.9% of the supply chain management had a good understanding of the current supply chain management framework, 25% had an excellent understanding, while two groups of 4.5% respectively, had a poor understanding or did not understand it at all. This happens while a satisfactory 91% of practitioners indicated that they have fairly good understanding of the supply chain management framework, its objective literature disagrees, as the supply chain management practitioners continue to contravene the supply chain management policies.

Table 3.19 To what extend does the SCM Framework promotes fairness?

14. To what extend does the SCM Framework promotes fairness?					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Not at all	2	3.4	4.5	4.5
	Small Extend	3	5.1	6.8	11.4
	Moderate	33	55.9	75.0	86.4
	Large Extend	6	10.2	13.6	100.0
	Total	44	74.6	100.0	
Missing	System	15	25.4		
Total		59	100.0		

Table 3.19 indicates that 75% of the supply chain management believed that the current supply chain management framework promotes fairness moderately, while 13.6% believed that it promotes fairness to a large extent, 6.8% believed that it happened to a small extent, while 4.5% did not believe that it promotes fairness at all. While 88% of the practitioners indicated that the SCM framework promotes fairness, the literature does not agree as SCM practitioners are still colluding with service providers discriminating against some service providers.

Table 3.20 To what extend does the SCM framework promotes equity?

15. To what extend does the SCM Framework promotes Equity?					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Not at all	2	3.4	4.5	4.5
	Small Extend	4	6.8	9.1	13.6
	Moderate	16	27.1	36.4	50.0
	Large Extend	22	37.3	50.0	100.0
	Total	44	74.6	100.0	
Missing	System	15	25.4		
Total		59	100.0		

Table 3.20 indicates that 50% of the supply chain management believed that the current SCM framework promotes equity to a large extent, while 36.4% believed that it did so moderately, 9.1% to a small extent and 4.5% did not believe that it promotes equity at all.

Though 86% of the practitioners believed that SCM framework promotes equity, literature disagrees as corruption and fraud continues to be in the lime light.

Table 3.21 To what extend does the SCM framework promotes transparency?

16. To what extend does the SCM Framework promotes Transparency?					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Not at all	2	3.4	4.5	4.5
	Small Extend	5	8.5	11.4	15.9
	Moderate	22	37.3	50.0	65.9
	Large Extend	15	25.4	34.1	100.0
	Total	44	74.6	100.0	
Missing	System	15	25.4		
Total		59	100.0		

Table 3.21 indicates that 34.1% believed that the current SCM framework promotes transparency moderately, 34.1% to a large extent, 11.4% believed that it does happen to a small extent and 4.5% did not believe that it happens at all.

While 84% of practitioner's belief that the SCM framework promotes transparency in practice, there is no transparency according to literature.

Table 3.22 To what extend does the SCM framework promotes honesty?

17. To what extend does the SCM Framework promotes Honesty?					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Not at all	2	3.4	4.5	4.5
	Small Extend	5	8.5	11.4	15.9
	Moderate	34	57.6	77.3	93.2
	Large Extend	3	5.1	6.8	100.0
	Total	44	74.6	100.0	
Missing	System	15	25.4		
Total		59	100.0		

Table 3.22 indicates that 77.3% believed that the current SCM framework promotes honestly moderately, 11.4% believed to a small extent while 6.8% believed that it does happen to a large extent and only 4.5% believed it does not promote honesty at all. Literature disagrees that there is honesty when practitioners are conducting business with the service providers, as there is collusion to overcharge and to supply low quality materials.

Table 3.23 To what extend does the SCM framework promotes cost effectiveness?

18. To what extend does the SCM Framework promotes cost effectiveness?					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Not at all	2	3.4	4.5	4.5
	Small Extend	4	6.8	9.1	13.6
	Moderate	30	50.8	68.2	81.8
	Large Extend	8	13.6	18.2	100.0
	Total	44	74.6	100.0	
Missing	System	15	25.4		
Total		59	100.0		

Table 3.23 indicates that 68.2% of the supply chain management believed that the current SCM framework promotes cost effectiveness moderately, 18.2% believed that it does so to a large extent, 9.1% thought that it does to a small extent and only 4.5% believed that it does not happen at all.

One of the main objectives of the supply chain management framework is cost effective but unfortunately it is not achieved due to unethical conduct by supply chain management practitioners.

Table 3.24 To what does the SCM framework prevents fraud and corruption?

19. To what extend does the SCM Framework prevents fraud and corruption?					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Not at all	1	1.7	2.3	2.3
	Small Extend	5	8.5	11.4	13.6
	Moderate	34	57.6	77.3	90.9
	Large Extend	4	6.8	9.1	100.0
	Total	44	74.6	100.0	
Missing	System	15	25.4		
Total		59	100.0		

Table 3.24 indicates that 77.3% of the supply chain management believed that the current SCM framework prevents fraud and corruption moderately, 11.4% believed that it does so to a small extent, 9.1% believed that it does so to a large extent and 2.3% did not believe that it prevents fraud at all.

Though there is overwhelming belief that the SCM framework prevents fraud and corruption, it is a concern that literature indicates that in practice corruption and fraud is prevalent on a high rate without consequences.

Table 3.25 To what extend is your municipality complying with supply chain management policies?

20. To what extend is your municipality complying with supply chain management policies?					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Not at all	1	1.7	2.3	2.3
	Small Extend	2	3.4	4.5	6.8
	Moderate	21	35.6	47.7	54.5
	Large Extend	20	33.9	45.5	100.0
	Total	44	74.6	100.0	
Missing	System	15	25.4		
Total		59	100.0		

Table 3.25 indicates that 47.7% of the respondents believed that their municipalities comply with the supply chain management policies moderately, while 45.5% believed that they do to a large extent, 4.5% believed to a small extent and only 2.3% said that they did not comply at all.

While a fairly good 93.2% of practitioners believed that they are complying with supply chain policies, literature disagrees with their belief.

Table 3.26 To what extend is remedial action taken against all who are contravening the SCM policies?

21. To what extend is remedial actions taken against all who are contravening the SCM policies?					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Not at all	2	3.4	4.5	4.5
	Small Extend	4	6.8	9.1	13.6
	Moderate	34	57.6	77.3	90.9
	Large Extend	4	6.8	9.1	100.0
	Total	44	74.6	100.0	
Missing	System	15	25.4		
Total		59	100.0		

Table 3.26 indicates that 77.3% of the supply chain management agreed moderately that remedial action for the contravention of SCM policies is taken at their respective municipalities, while 9.1% agreed to a large extent, another 9.1% to a smaller extent, while 4.5% indicated that no remedial action was taken.

Unfortunately the result of the survey contradicts the findings of the Auditor General South Africa (2014:17) concerning remedial action.

Table 3.27 What budgetary system is your municipality employing?

22. What budgetary system is your municipality employing?					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Zero Based Budgetting	36	61.0	81.8	81.8
	Incremental Budget	8	13.6	18.2	100.0
	Total	44	74.6	100.0	
Missing	System	15	25.4		
Total		59	100.0		

Table 3.27 indicates that 81.1% of the supply chain management uses the zero based budgeting system and 18.2% uses the incremental (inflation based) budget system. Though an overwhelming 81% practitioners are indicating that their municipalities are

employing zero budgets, in disagreement literature indicated that municipalities do not have critical skills in compiling of budgets.

Table 3.28 Does your municipality have a commodity price list?

23 Does your municipality have a Commodity Price List?					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	I don't know	21	35.6	35.6	35.6
	Yes	9	15.3	15.3	50.8
	No	29	49.2	49.2	100.0
	Total	59	100.0	100.0	

Table 28 indicates that 49.2% of the supply chain management did not have the commodity price listing system, while 35.6% indicted that they did not know what the commodity price list system was. Only 15.3% had the commodity price list system.

In agreement with the literature, 84% practitioners have indicated they don't know or have a commodity price list hence there is overcharging.

Table 3.29 To what extend do you compare prices on with market relates price lists?

24.. To what extend do you compare prices on with the market related price list?					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Not at all	2	3.4	4.5	4.5
	Small Extend	5	8.5	11.4	15.9
	Moderate	36	61.0	81.8	97.7
	Large Extend	1	1.7	2.3	100.0
	Total	44	74.6	100.0	
Missing	System	15	25.4		
Total		59	100.0		

Table 3.29 indicates that 81.8% of the supply chain management compared prices (quotes) with the market related price lists, 11.4% did that to a small extent, 4.5% did not compare it at all, and only 2.3% did it to a large extent.

The outcome of the survey is contrary to the literature, as service providers are supplying government with overpriced goods and services.

3.7.2 INFERENTIAL STATISTICS

In this section only results that displayed a practical significant association with biographical variables, were discussed using the Cramer's Method.

Cramer's rule is a mathematical method of involving the determinants of the coefficient, for calculating a unique solution for a given system of linear equations.

The empirical study therefore used Cramer's V for practical significance to determine whether a relationship between two variables is practically significant. For random samples, the statistical significance of relationships are determined with Chi-square test, as individuals would want to determine whether there is a relationship large enough to be important .

For the purpose of this study a random sample was not used.

The following guideline will be used to interpret the current case.

- Small effect : $w=0.1$
- Medium effect $w=0.3$
- Large effect $w=0.5$

Generally a relationship with $w \geq 0.5$ is considered as practically significant (Ellis & Steyn, 2003:51-53).

Table 3.30 To what extend does the SCM framework prevents fraud and corruption?

Crosstab							
			19. To what extend does the SCM Framework prevents fraud and corruption?				Total
			Not at all	Small Extend	Moderate	Large Extend	
Gender	Male	Count	0	3	16	0	19
		% within Gender	0.0%	15.8%	84.2%	0.0%	100.0%
	Female	Count	1	2	18	4	25
		% within Gender	4.0%	8.0%	72.0%	16.0%	100.0%
Total		Count	1	5	34	4	44
		% within Gender	2.3%	11.4%	77.3%	9.1%	100.0%

Symmetric Measures			
		Value	Approx. Sig.
Nominal by Nominal	Phi	.323	.205
	Cramer's V	.323	.205
N of Valid Cases		44	

In this question, the phi coefficient was 0.323, indicating a medium effect. Although not statistically significant, it was most probably due to the small sample size. When viewing Table 3.30, a cross tabulation of 84% of the male participants moderately agree that the

return policy is effective, while 72% of the female participants also agree moderately but a further 16% to a large extend.

Table 3.31 To what extend do you rate effectiveness of your municipality return work policy?

Crosstab						
			7. To what extend do you rate the effectiveness of your municipality return work policy?			Total
			Poor	Good	Excellent	
Qualification	Grade 12	Count	1	1	0	2
		% within Qualification	50.0%	50.0%	0.0%	100.0%
	Diploma	Count	1	7	1	9
		% within Qualification	11.1%	77.8%	11.1%	100.0%
	Degree	Count	2	17	2	21
		% within Qualification	9.5%	81.0%	9.5%	100.0%
	Honnours	Count	0	8	2	10
		% within Qualification	0.0%	80.0%	20.0%	100.0%
	Masters/ PHD	Count	0	1	1	2
		% within Qualification	0.0%	50.0%	50.0%	100.0%
Total	Count	4	34	6	44	
	% within Qualification	9.1%	77.3%	13.6%	100.0%	

Symmetric Measures			
		Value	Approx. Sig.
Nominal by Nominal	Phi	.428	.428
	Cramer's V	.303	.428
N of Valid Cases		44	

For this question a Cramer's V coefficient of 0.303 was applied, since the table consisted of unequal numbers of rows and columns. This coefficient indicated a medium effect, and although not statistically significant, it was most probably due to the small sample size.

When viewing the cross tabulation on Table 3.31, it is noted that 50% of the officials with Grade 12 certificates rated the effectiveness of the return policy as poor, while a total of 50% rated it as good. A total of 50% of the participants who held Masters Degrees or PHDs rated the effectiveness of the return policy as good and excellent, respectively.

The effectiveness of the return policy was rated by an overall total 9.1% as poor, while 77.3% indicated a good rating and 13.6% indicated an excellent rating.

Table 3.32 To what extent does the SCM framework promotes fairness?

Crosstab						
			14. To what extent does the SCM Framework promotes fairness?			
			Not all	Small Extend	Moderate	Large Extend
Qualification	Grade 12	Count	0	1	1	0
		% within Qualification	0.0%	50.0%	50.0%	0.0%
	Diploma	Count	0	1	8	0
		% within Qualification	0.0%	11.1%	88.9%	0.0%
	Degree	Count	2	1	15	3
		% within Qualification	9.5%	4.8%	71.4%	14.3%
	Honours	Count	0	0	8	2
		% within Qualification	0.0%	0.0%	80.0%	20.0%
	Masters/ PHD	Count	0	0	1	1
		% within Qualification	0.0%	0.0%	50.0%	50.0%
	Total	Count	2	3	33	6
		% within Qualification	4.5%	6.8%	75.0%	13.6%

Symmetric Measures			
		Value	Approx. Sig.
Nominal by Nominal	Phi	.548	.353
	Cramer's V	.317	.353
N of Valid Cases		44	

In this question the author applied a Cramer's V coefficient of 0.317, since the table consisted of unequal numbers of rows and columns. This coefficient indicated a medium effect, and although it was not statistically significant, it was most probably due to the small sample size.

When regarding the cross tabulation on Table 3.32, it is noted that the results indicated a 50% return for both 'to a small extent' and 'moderate', where participants with a Grade 12 certificate were concerned, while a total of 88.9% of officials with diplomas rated the statement as moderate.

A total of 50% of the officials who held Masters and PHDs, rated the statement as 'moderate' and 50% 'to a larger extent'. A total average of 75% of participants indicated that the current SCM framework promotes fairness to a moderate extent, while 13% thought that it did to a larger extent.

Table 3.33 To what extent does SCM Framework promotes Equity?

Crosstab						
			15. To what extent does the SCM Framework promotes Equity?			
			Not all	Small Extend	Moderate	Large Extend
Qualification	Grade 12	Count	0	1	1	0
		% within Qualification	0.0%	50.0%	50.0%	0.0%
	Diploma	Count	0	1	2	6
		% within Qualification	0.0%	11.1%	22.2%	66.7%
	Degree	Count	2	1	10	8
		% within Qualification	9.5%	4.8%	47.6%	38.1%
	Honours	Count	0	1	2	7
		% within Qualification	0.0%	10.0%	20.0%	70.0%
	Masters/ PHD	Count	0	0	1	1
		% within Qualification	0.0%	0.0%	50.0%	50.0%
	Total	Count	2	4	16	22
		% within Qualification	4.5%	9.1%	36.4%	50.0%

Symmetric Measures			
		Value	Approx. Sig.
Nominal by Nominal	Phi	.513	.478
	Cramer's V	.296	.478
N of Valid Cases		44	

In this question the author applied a Cramer's V coefficient of 0.296, since the table consisted of unequal numbers of rows and columns. This coefficient indicated a medium effect, and although it was not statistically significant, it was most probably due to the small sample size. When viewing the cross tabulation on Table 3.33, it is noted that 50% of the officials with Grade 12 certificates either agreed with the statement to a small or moderate extent, respectively. A total of 66% of officials with diplomas and 50% of officials with Honours degrees agreed with the statement to a large extent. This was followed by 50% officials with Master's degrees and PHDs, who chose 'moderate' and 'to a larger extent', respectively.

An average of 36.4% of the participants indicated that the current SCM framework promotes equity to a moderate extent and 50% thought that it did to a larger extent.

Table 3.34 To what extend does the SCM Framework promotes Honesty?

Crosstab						
			17. To what extend does the SCM Framework promotes Honesty?			
			Not at all	Small Extend	Moderate	Large Extend
Qualification	Grade 12	Count	0	1	1	0
		% within Qualification	0.0%	50.0%	50.0%	0.0%
	Diploma	Count	0	2	5	2
		% within Qualification	0.0%	22.2%	55.6%	22.2%
	Degree	Count	2	2	17	0
		% within Qualification	9.5%	9.5%	81.0%	0.0%
	Honours	Count	0	0	10	0
		% within Qualification	0.0%	0.0%	100.0%	0.0%
	Masters/ PHD	Count	0	0	1	1
		% within Qualification	0.0%	0.0%	50.0%	50.0%
	Total	Count	2	5	34	3
		% within Qualification	4.5%	11.4%	77.3%	6.8%

Symmetric Measures			
		Value	Approx. Sig.
Nominal by Nominal	Phi	.669	.074
	Cramer's V	.386	.074
N of Valid Cases		44	

For this question the author applied a Cramer's V coefficient of 0.386, since the table consisted of unequal numbers of rows and columns. This coefficient indicated a medium effect, which although not statistically significant, was most probably due to the small sample size.

When viewing the cross tabulation on Table 3.34, it is noted that 'to a small extent' and 'moderate' were chosen by 50% of the officials with Grade 12 certificates respectively. A total of 55% of officials with diplomas indicated 'moderately' and 22% chose 'to a large extent'. A total of 100% of officials with Honours degrees chose 'to a large extent', followed by 50% of officials with Master's degrees and PHDs who chose 'moderate' and 'to a larger extent', respectively.

An average of 77% in total rated that the current SCM framework promotes honesty to a moderate extent, while 6.8% indicated that it does to a larger extent.

Table 3.35 To what extent does the SCM Framework prevents fraud and corruption?

Crosstab						
			19. To what extent does the SCM Framework prevents fraud and corruption?			
			Not all	Small Extent	Moderate	Large Extent
Qualification	Grade 12	Count	0	1	0	1
		% within Qualification	0.0%	50.0%	0.0%	50.0%
	Diploma	Count	0	1	8	0
		% within Qualification	0.0%	11.1%	88.9%	0.0%
	Degreee	Count	0	3	16	2
		% within Qualification	0.0%	14.3%	76.2%	9.5%
	Honours	Count	1	0	8	1
		% within Qualification	10.0%	0.0%	80.0%	10.0%
	Master/ PHD	Count	0	0	2	0
		% within Qualification	0.0%	0.0%	100.0%	0.0%
	Total	Count	1	5	34	4
		% within Qualification	2.3%	11.4%	77.3%	9.1%

Symmetric Measures			
		Value	Approx. Sig.
Nominal by Nominal	Phi	.566	.295
	Cramer's V	.327	.295
N of Valid Cases		44	

In this question the author applied a Cramer's V coefficient of 0.327, since the table consisted of unequal numbers of rows and columns. This coefficient indicated a medium effect, which although not statistically significant, was most probably due to the small sample size.

When viewing the cross tabulation on Table 3.35, it is noted that 50% of the officials with Grade 12 certificates chose 'to a small extent' and 50% indicated 'to a large extent' for this statement. A total of 88% of officials with diplomas chose 'moderately' and 11% indicated 'to a smaller extent'. A total of 80% of officials with Honours degrees chose 'to

a moderate extent', followed by 100% of officials with Master's degrees and PHDs who chose 'moderate' for this statement.

An average of 77% of participants rated that the current SCM framework prevents fraud and corruption to a moderate extent and 9 % believed that it does to a larger extend.

Table 3.36 To what extend do you compare prices on with market prices related price list?

Crosstab								
			24.. To what extend do you compare prices on with the market related price list?				Total	
			Not at all	Small Extend	Moderate	Large Extend		
Qualification	Grade 12	Count	0	0	1	1	2	
		% within Qualification	0.0%	0.0%	50.0%	50.0%	100.0%	
	Diploma	Count	0	0	9	0	9	
		% within Qualification	0.0%	0.0%	100.0%	0.0%	100.0%	
	Degree	Count	1	4	16	0	21	
		% within Qualification	4.8%	19.0%	76.2%	0.0%	100.0%	
	Honours	Count	1	1	8	0	10	
		% within Qualification	10.0%	10.0%	80.0%	0.0%	100.0%	
	Masters/ PHD	Count	0	0	2	0	2	
		% within Qualification	0.0%	0.0%	100.0%	0.0%	100.0%	
	Total		Count	2	5	36	1	44
			% within Qualification	4.5%	11.4%	81.8%	2.3%	100.0%

Symmetric Measures			
		Value	Approx. Sig.
Nominal by Nominal	Phi	.763	.012
	Cramer's V	.440	.012
N of Valid Cases		44	

In this question, the author applied a Cramer's V coefficient of 0.440, since the table consisted of unequal numbers of rows and columns. This coefficient indicated a medium effect which, although not statistically significant, was most probably due to the small sample size.

When viewing the cross tabulation on Table 3.36, it is noted that 50% of officials with Grade 12 certificates chose 'to a moderate extent' and 'to a large extent' respectively for this statement. A total of 100% of officials with diplomas and 80% of officials with Honours degrees, rated this statement as moderate. Finally, 100% of officials with Master's degrees and PHDs chose moderate for this statement.

An average of 81% of the participants rated that prices are compared to the market price list to a moderate extent, while 9% indicated that this only happens to a smaller extent.

Table 3.37 When you joined the municipality did you attend induction on supply chain management?

Crosstab					
			1. When you joined the municipality did you attend induction on Supply chain Management?		Total
			Yes	No	
Position	SCM Officer	Count	15	3	18
		% within Position	83.3%	16.7%	100.0%
	SCM Manager	Count	16	0	16
		% within Position	100.0%	0.0%	100.0%
	Chief Financial Officer	Count	10	0	10
		% within Position	100.0%	0.0%	100.0%
Total	Count		41	3	44
	% within Position		93.2%	6.8%	100.0%

Symmetric Measures			
		Value	Approx. Sig.
Nominal by Nominal	Phi	.325	.098
	Cramer's V	.325	.098
N of Valid Cases		44	

In this question, the phi coefficient was 0.325, indicating a medium effect. Although this was not statistically significant, it was most probably due to small sample size. When viewing the cross tabulation on Table 3.37, it is noted that only 16.7% of the SCM Officers have never attended supply chain management induction, while SCM managers and chief financial officers have attended the induction.

Table 3.38 How often did you attend supply chain management training in the past two financial years?

Crosstab							
			2. How often did you attend supply chain management training in the past two financial years?				Total
			None	Once	Twice	More than twice	
Position	SCM Officer	Count	3	3	11	1	18
		% within Position	16.7%	16.7%	61.1%	5.6%	100.0%
	SCM Manager	Count	0	1	7	8	16
		% within Position	0.0%	6.3%	43.8%	50.0%	100.0%
	Chief Financial Officer	Count	0	1	6	3	10
		% within Position	0.0%	10.0%	60.0%	30.0%	100.0%
	Total	Count	3	5	24	12	44
		% within Position	6.8%	11.4%	54.5%	27.3%	100.0%

Symmetric Measures			
		Value	Approx. Sig.
Nominal by Nominal	Phi	.519	.065
	Cramer's V	.367	.065
N of Valid Cases		44	

In this question, the author applied a Cramer's V coefficient of 0.367, since the table consisted of unequal numbers of rows and columns. This coefficient indicated a medium effect which, although not statistically significant, was most probably due to the small sample size.

When viewing the cross tabulation of Table 3.38, it is noted that 61% of SCM officers indicated that they have attended supply chain management training twice, while 16% indicated that they have attended training only once, and another 16% indicated that they have never attended training.

A total of 10% of the chief financial officers indicated that they have attended training only once, 60% indicated that they have attended training twice and 30% indicated that they have attended training more than twice.

An overall average of 11% of the participants indicated that they have attended training once, 54% have attended training twice, while 27% have attended training more than twice.

Table 3.39 To what extent do you rate the effectiveness of your municipality return policy?

Crosstab						
			7. To what extend do you rate the effectiveness of your municipality return work policy?			Total
			Once	Twice	More than twice	
Position	SCM Officer	Count	2	15	1	18
		% within Position	11.1%	83.3%	5.6%	100.0%
	SCM Manager	Count	1	14	1	16
		% within Position	6.3%	87.5%	6.3%	100.0%
	Chief Financial Officer	Count	1	5	4	10
		% within Position	10.0%	50.0%	40.0%	100.0%
Total	Count		4	34	6	44
	% within Position		9.1%	77.3%	13.6%	100.0%

Symmetric Measures			
		Value	Approx. Sig.
Nominal by Nominal	Phi	.429	.088
	Cramer's V	.303	.088
N of Valid Cases		44	

In this question the author applied a Cramer's V coefficient of 0.303, since the table consisted of unequal numbers of rows and columns. This coefficient indicated a medium

effect which, although not statistically significant, was most probably due to the small sample size.

When viewing the cross tabulation of Table 3.39, it is noted that 11% of SCM officers indicated that they assessed the effectiveness of the municipality's return policy once a year. A total of 83% indicated that the assessment was conducted twice a year, while only 5% indicated that it happened more than twice in a year.

A total of 6% of SCM managers indicated that the assessment of the effectiveness of the municipality's return policy was conducted once a year, while a massive 87.5% indicated that the assessment was conducted twice during the year and 6% indicated that this happened more than twice a year.

A total of 77% of the participating chief financial officers indicated that the assessment of the effectiveness of the municipality's return policy was conducted twice a year and 13.6% indicated that the assessment was conducted more than twice in a year.

3.7.2.2 Qualitative Analysis

Unfortunately all the participants did not complete the open-ended question thus I could not do a qualitative analysis.

Question 26

In your personal experience explain the supply chain management?

3.8 CONCLUSION

In this chapter, the results of the empirical research study were presented and analysed. The explanation of the results started with the discussion of the demographic profiles of the respondents, firstly focussing on Gender where more females participated than males, then followed Race which majority of the participants were Black, and third Age which reflected that 45% of the participants were between 26-35 age group, followed by 27% being on the 36-45 age groups and 15% of the participants on the 46-55 age group.

Lastly on the demographic was qualification and positions of the participants which reflected that 84.5% respondents had a post matric qualification and 59% of the participants were Supply Chain Managers and Chief Financial Officers.

The results indicated that supply chain management practitioners are fully trained and aware of the legislation applicable to strengthen the supply chain management compliance, but the literature does not agree with the outcome of the survey.

3.9 SUMMARY

This chapter focussed on the research methodology and findings of the empirical study. The procedure and scope of the quantitative as well as qualitative research done in the study, the sample size and survey instrument used (a questionnaire), were discussed. The demographical profile of the respondent was then analysed.

Descriptive and Inferential statistics using correlations between selected constructs and the questionnaire were done utilising SPSS software packages including Cramer's V methods. Lastly, the open ended questions were reported on.

The outcome of the survey did not agree with the literature in general. Supply chain management practitioners are not implementing the supply management policies in accordance with the law as they are colluding with suppliers to overprice and to supply inferior material.

Though an overwhelming 81% of the participants have indicated they have attended training more than twice, National Treasury raised the concern on the quality of training and its relevance to the point.

CHAPTER 4

CONCLUSION AND RECOMMENDATIONS

4.1 INTRODUCTION

The primary objective for this study was to investigate whether the current supply chain management framework in the South African local government is still relevant and effective.

The secondary objectives that had to be realised, in order to achieve the primary objectives, were

- firstly to investigate whether the supply chain management officials were adequately trained;
- secondly to evaluate the extent to which the supply chain management officials understood the supply chain management framework;
- thirdly to identify the factors that contribute to inadequate contract management, and to make recommendations;
- fourthly to investigate whether internal audits evaluated the supply chain management process and controls;
- Lastly to identify the factors that contributes to inadequate supply chain management controls and to make recommendations.

The literature review in Chapter 2:

- firstly covered an overview of supply chain management, focussing on the public sector supply chain management in South Africa;
- secondly elaborated on the role that the Country Procurement Assessment Reports (CPAR) plays;
- thirdly focussed on the legislation impacting on the local government supply chain management that was also discussed;
- the fourth point of discussion was the important key role players, in terms of implementation;
- the fifth point discussed was the local government's supply chain management practices. The other important discussion focussed around the six elements of supply chain management, as prescribed by the legislation; and

lastly the challenges faced by the municipal supply chain's managerial environment were also discussed. The findings regarding the empirical study, as described in Chapter 3, were done in relation to the literature studied in Chapter 2.

In Section 1.8.4 it was stated that, in Chapter 4, conclusions would be drawn from the literature review as discussed in Chapter 2, as well as the empirical study, as reported on in Chapter 3. Subsequent recommendations were put forward for a more effective supply chain management framework to be used by the local government in South Africa.

4.2 CONCLUSIONS AND RECOMMENDATION REGARDING THE EFFECTIVENESS OF THE SUPPLY CHAIN MANAGEMENT FRAMEWORK FOR LOCAL GOVERNMENT IN SOUTH AFRICA

4.2.1 The first secondary objective, as discussed in s.1.5.2 (a), was not realised as the results from the literature, and the empirical study which indicated that supply chain management officials were trained adequately do not agree.

- The results of the empirical study showed that supply chain management officials were adequately trained, though the majority indicated that their training only consisted of workshops that were not assessment based. Also importantly looking at Table 3.4 indicates to us that majority (85.8%) of the supply chain management staff have post matric education.
- In contrary to the survey sources such as SALGA, COGTA and DBSA presented a report at the Standing Committee on Appropriates that there is shortage of critical skills in municipalities which justify their reasons of appointing consultants.
- The problem could be that there are more attitudes in relation to supply chain management compliance.

4.2.2 The second secondary objective, as discussed in s.1.5.2 (b), was not realised as the results from the literature differed from the empirical study. This indicated that supply chain management officials understood the supply chain management framework.

- The results of the empirical study showed that the supply chain management officials had a good understanding of the current supply chain management framework, as well as the following objectives of the framework, namely fairness, equity, transparency, honesty, and cost effectiveness;
- Reading from table 3.31 to 3.34 the following can be deduced;
- The majority of the participants moderately believed that the current supply chain management framework promotes fairness;
- The majority of the participants believed that the current framework largely promotes equity;
- The majority of the participants believed it to be moderately transparent;
- The majority of the participants believed that the current supply chain management framework moderately promotes honesty;
- The majority of the participants believed that the current supply chain management framework moderately promotes cost effectiveness;
- The majority of the participants believed that the current supply framework moderately prevents fraud and corruption; and
- Contrary to the survey the Auditor General South African (2014:19), reported that contracts are still awarded to municipal officials and councillors which is contravention of local government code of conduct.
- Recommendation is to provide Public Protector and Auditor General with legislative powers to report contraventions to the SAPS.

4.2.3 The third secondary objective, as discussed in s.1.5.2 (c), was not realised as the results from the literature differed from the empirical study. This indicated that the municipalities' contract management systems were effective.

- The results of the empirical study from table 3.11 more than 72.7% rate their system effectiveness good while 20.5% rates their system excellent.
- However according to literature that is not the case as Department of Human Settlement had spent R2.129 billion over a period of three years repairing poorly built house (National Treasury, 2015:20).
- Recommendation is that the manual contract system should be replaced with automated system.

4.2.4 The fourth secondary objective, as discussed in s.1.5.2 (d), was not realised as the results from the literature differed from the empirical study.

- The survey indicated that the internal audit department did evaluate the supply chain management controls and processes with 52.3% indicating more than twice on table 3.19 which above one annual which a normal industry practice according to PWC (2015).
- In contradiction of the survey the literature according to Auditor General South Africa (2014:19), found that there is constant or no inadequate contract management systems on monthly basis.
- Recommendation of automated contract management to improve the current process.

4.2.5 The fifth secondary objective, as discussed in s.1.5.2 (e), was not realised as the results from the literature differed from the empirical study. This indicated that there were adequate controls at the disposal of the supply chain management.

- The results of the empirical study showed that the municipalities had effective vetting systems for officials and councillors according to table 3.13 which indicates that municipalities have 70.5% good vetting systems and 18.2% rated their system as excellent.

In contradiction of the survey Dlamini (2015:4), the office of the Auditor General South Africa uncovered corruption, flawed procurement processes and weak internal control at Johannesburg Metro Municipality.

Recommendation of new reporting standard template is suggested.

4.3 PRACTICAL IMPLEMENTATION RECOMMENDATIONS

It should be noted with great concern, that, while the empirical study's results indicated that the majority of the supply chain management practitioners have a good understanding of the different Acts, namely the Prevention and Combating of Corrupt Activities Act, the Promotion of Administrative Justice Act, the Promotion of Equity Act and the Prevention of Unfair Discrimination Act, literature did not agree, as various publications and reports repeatedly cited that supply chain management officials were colluding with suppliers.

Establishment of Supply Chain Management Professional Association (SCMPA) of which one key role is to provide licences to practice to all practitioners. These licences are subjective to annual online assessment which is case study based. The SCMPA should be given the legislative powers to suspend the practitioner's licence should the practitioner be involved in any supply chain management misconduct, which can be reported directly for investigation to the Public Protector and Auditor General Report.

For instance, the Auditor General will provide SCMPA, after publication, with a copy of the Audit Report, together with correlating evidence used to classify non-compliance with the supply chain management policy. SCMPA will contact the affected party to alert or inform the party that provided written response.

The second weakness was the lack of legislative powers necessary for enforcing compliance by the two most strategic stakeholders, namely the office of the Public Protector and the Auditor General. This weakness is abused by stakeholders who are aware that the enforcement of the legislation is left to the accounting officer, who is sometimes removed or suspended when attempting to implement the law.

In order to mitigate maladministration, both offices of the Public Protector and the Auditor General should be empowered with legislative powers, which would empower them to report maladministration to the National Treasury and the South African Police Service, from where the law should take its course.

It should also be a responsibility of the National Treasury to receive monthly progress reports for recommended disciplinary actions against those implicated in fraud. In the instance that accounting officers or councillors are implicated, the National Treasury should arrange for independent disciplinary action by an expert outside Government, to chair such a proceeding.

The third recommendation is that independent audit committee members should be held responsible for the ineffective financial systems in the municipality which they are responsible for. They should be reported immediately at the relevant professional boards for disciplinary 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 management systems and controls.

Lastly, it is important that the National Treasury issues notices which address the tender validities. The proper process for a competitive bid is that an advert should be placed in the newspaper and the tender should be valid for 21 days, but that the validities become silent when the tender is closed.

The recommendation is that both evaluations and specifications should be given a period of 10 working days, in order to evaluate the tender. The adjudication panel should also be afforded 10 workings days. Any adverse deviation should be reported to the Auditor General as well as the National Treasury, with proposed sitting dates.

An allowance of 5 days each should be provided for each panel. In the case of failure to close the tender within 30 days, the National Treasury should immediately require a panel of experts, preferably not working for the Government, to evaluate and adjudicate the tender in conjunction with the project leader.

Tender execution should be part of the accounting officer's performance contract management. Disciplinary action should be taken against any officials responsible for deviation from this process. This practice should ensure that projects are executed and tenders are not delayed or sent back.

4.4 PROPOSED EFFECTIVE SUPPLY CHAIN MANAGEMENT FRAMEWORK

The current supply chain management framework has six elements, which are demand management, acquisition management, logistics management, disposal management, risk management and performance management. After perusing the literature about the problem in the public sector supply chain management, it is concluded that underlying problems are in the acquisition management element.

Acquisition management is a process of the procurement of goods and services and assists in terms of the manner in which the market should be approached; the establishment of the total cost of ownership of a particular type of asset; ensuring that bid documentation is complete and include the processes of evaluation criteria that

should be compliant with National Treasury published criteria; and that contract documentation are signed properly by the approved signatories in line with National Treasury delegation of authority (National Treasury, 2005:12).

One of the critical elements which will ensure that the proposed effective supply chain management framework becomes successful is quality relevant training for the supply chain management officials, to be conversant of the new system and standard operating procedures.

All the supply chain practitioners will be required, as part of their performance contract, to write annual online assessments in which failure by the supply chain practitioner to pass the assessment, will result in not being able to practice as supply chain practitioner any longer. For the purpose of this study the researcher will use two examples, of which one will be request to supply catering and the other a request for construction of a library. Both examples could be applied in the current acquisition process as well as the proposed acquisition process.

The first process includes the acquisition threshold, namely the current procurement process when procuring catering and followed by the risks associated with the current process, and in conclusion the proposed process.

The second process will be the application of example two in both the current acquisition process and the proposed process, taking into consideration the threshold and stakeholders involved.

See below the current and proposed processes in a tabular format:

- Table 4.1 shows the current acquisition threshold when purchasing;
- Table 4.2 shows the current process of purchasing for an amount more than R2000 less than R30 000;
- while Table 4.3 shows the proposed effective process for purchases of more than R2000 and less than R30 000, Table 4.4 focuses on the purchases;
- Table 4.4.explains the current process followed during the competitive bidding process;
- Table 4.5 present the proposed process to be followed during the competitive bidding process.

Table 4.1 Acquisition Threshold

The following table explain the current three thresholds for acquiring or purchasing of goods and services for:

Amounts less than R2000	If yes	Use Petty Cash
Amounts more than R2000 less than R10 000	If yes	Obtain at least three verbal quotations, preferably from the list of accredited suppliers
From R10 000 less than R200 000	If yes	Obtain at least 3 written quotations and if the amount are more than R30 000, advertise on the notice boards for at least 7 days.
Amount more than R200 000	If yes	Use a competitive bidding process; appoint bid specification, evaluation and adjudication committees; Advertise on the local, national

		including Government newspapers for at least 21 days or 14 days if it is an emergency.
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Source: National Treasury (2015: 28-29).

The following examples can be used as a guide for implementing the proposed effective supply chain management framework.

4.4.1 First Example: Current Process for Procuring Catering Services

For the purpose of the study an amount of more R2000 less than R30 000 will be used as an example of which according to the threshold, the supply chain practitioner should obtain at least three quotations.

Both processes will be explained in a tabular format;

Table 4.2 Current Supply Chain Management Process: Request for Catering Services

Stage 1	Head of the department acquire quotations for purchases up to R30 000 from service providers.
Stage 2	Head of the department will receive prospective service providers from the supply chain management unit.
Stage 3	SCM practitioner will create an order using the quotes received from the head of department.

Source: North West Provincial Gazette No 6739 (2010:35-36)

4.4.2 Risk Associated with the current process for purchase under R30 000

The current practice is open for abuse, as Heads of Department can decide to only consider the same suppliers who submitted quotations, in ensuring that the preferred supplier is always the lowest which give the preferred service provider to overcharge. This can happen as the supplier data base is only updated quarterly or once a year (North West Provincial Gazette No 6739, 2010:25-26).

When analysis from the results of Table 3.33 (page 57), of which the question was to determine if the municipalities have commodity price lists. The outcome of this question was that only 15% of the municipalities have commodity price systems and the rest do not have the system, compared to the results of Table 3.34 (page 58), which indicate that 81.8% moderately compare quotes received with market related prices, and only 2.3% does the comparison to a large extent.

In conclusion, the supplier database is currently used to select names which must be used to obtain quotations. This practice creates an opportunity for the official to manage prices between the three selected service providers, with the two of the service providers requested to submit expensive dummy quotations and the preferred service provider to submit a lower quotation, but in reality is an over charged price.

4.4.3 First Example Proposed Effective Supply Chain Management Process for Amount less than R30 000

The primary objective of this effective supply chain management system is to achieve the objective of section 217 of the Constitution of the Republic of South Africa which are:

- Fairness;
- Equity;
- Transparency;
- Competitiveness; and
- Cost Effectiveness.

Table 4.3 Proposed Effective Supply Chain Management Process: Request for Catering Services

Stage 1	The municipality should internally develop or acquire an online commodity price listing supplier database.
Stage 2	The online database should be operational 24 hours and should be automated to update at 07H30 am every day and only be used by Supply Chain Management Practitioners.
Stage 3	The municipality should also design a cell phone application (APP) which all the registered service providers should use to update their price in the convenience of their home.
Stage 4	The municipality should conduct a full day induction and awareness programs (Radio and Print Media) to educate service providers of the benefits of the SCM innovation, training manuals should also be available on municipalities' websites and to switch board operators.

Stage 5	The objective of the online commodity price list is to use the current prices of commodities reflected on the system on the day after update.
Stage 6	All the departments should sent their request for service to the Supply Chain Management Unit.
Stage 7	Supply Chain Officials log into the system and select a catering commodity, then select the lowest supplier on the system.
Stage 8	Supply Chain Officials contact the lowest service provider by email and telephone to check if the supplier can provide the service on the expected delivery date.
Stage 9	If the service provider cannot provide the service with the expected date, a written consent should be submitted, and the second lowest supplier will be considered following the same process in stage 8, and if the supplier indicates he can deliver within the expected date, the supply chain official should obtain an approval of deviation

	signed by the Accounting Officer.
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4.4.4 Benefits of the Proposed Effective Supply Management System

The system will provide all the service providers with an equal opportunity as they can submit recent prices before the system update each day, which will be a great improvement as the current practice is that municipalities can update their supplier database at least quarterly and at least once per year (North West Provincial Gazette No 6739, 2010:25-26).

The user, in this case the supply chain official, will concentrate on the lowest price supplier on the system on the day and do not need to contact the other service providers. This practice will save both the municipality telephone and printing cost and the service providers will also benefit from cost saving, as they do not have to travel to the internet café or to fax the submission of their respective prices.

The user can only overlook the lowest price supplier, when the supplier or service provider indicate in written consent that the service provider has no stock or cannot deliver on the expected date of delivery, in which case an approval for deviation from the Accounting Officer should be sorted by the supply chain official.

In conclusion, the supply chain management can conduct a value chain cost analysis to obtain the average cost for catering which will assist the supply chain office during the price negotiation with suppliers.

4.4.5 Second Example: Procuring of Construction of Library Process

This example will be based on the threshold of more than R200 000 which require a competitive bidding process will be explained on tabular format below:

Table 4.4 Current Competitive Process for Library Construction

Stage 1	Establishment and approval of Bid specification, evaluation and adjudication committees by the
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	Accounting Officer.
Stage 2	Development of the terms of reference which should not be biased, agreeing on minimum functionality which will be informed by the experience and track record of the organisation by Specification and Evaluation Committee.
Stage 3	<p>Adjudication committee is also approved by the Accounting Officer to provide the adjudication criteria which is guided by the budget of the project which is 80/20 for projects less than R 1000 000; where 80% of the point allocation will be price and 20% of points will be in accordance with South African National Accreditations System, Broad Based Black Economic Empowerment Act No 53 of 2003.</p> <p>While 90/10 points allocation is for projects who are more than R1000 000.</p>
Stage 4 (Validity)	Bids are advertised for a period of 21 working days after the publication of the notice by

	Supply Chain Management Unit.
Stage 5 (Opening of Bids)	Bids will opened immediately after the closing date and checked for compliance. The Supply Chain Practitioner will read out the compliant service provider's details and amount, while the information is recorded in bid register. Bids will be considered invalid if they do not meet the all the returnable documentation.
Stage 5 (Evaluation)	Tender specification and evaluation committees will sit to evaluate bids, and those who meet the minimum functionality ratio will be recommended to the adjudication committee.
Stage 6 (Adjudication and Awarding)	The adjudication committee will apply the 90/10 principle to make recommendation or award depending on the delegation of authority.
Stage 6 (Disputes Management)	If the Bid Adjudication Committee or the Accounting Officer, depending on the delegations, decides to overlook the recommended service provider, the Accounting Officer should within a period of 10

	days inform Auditor General, Provincial and National Treasury of the reasons for deviation from recommendation.
Stage 8 Cancellation of Bids	Bids maybe cancelled after the receiving of quotes and be re-advertised after a report has been submitted to council for noting.

Source: North West Provincial Gazette No 6739 (2010:31-54)

4.4.6 Risk Associated with the current Competitive Bidding Process

The current practice is open for abuse, firstly it has provision to cancel the bid process after receiving quotes, which can be interpreted that if the preferred service provider prices are not favourable to the supply chain officials, then the process can be restarted giving the preferred service provider to modify prices to be the lowest in the next process.

Also the lack of an integrated online commodities price list used by municipality, provide an opportunity for service providers to overprice for the same work they did in another local municipality.

Table 4.5 Proposed Effective Supply Chain Managerial for Competitive Bidding Process

Stage 1	Establishment of integrated online commodity supplier price list for Public Sector
Stage 2	Sign a memorandum of understanding with ECSA (Engineering South Africa) in relation to access to the latest design and schematics for

	<p>example for construction of library as revenue enhancement strategy.</p> <p>The design of the plan should have cost breakdown for each stage of construction to assist during contract management process.</p>
Stage 3	Use the Construction Industry Development Board Grading as criteria for evaluation and BBBEE Scoring to adjudicate valid bids.
Stage 4	Cancel the provision of the bid - cancellation as it is unfair to the whole prices.

4.4.7 Benefits of the Proposed Effective Supply Chain Management Process

Establishment of an integrated online supplier commodity price list will immediately cut the culture of overcharging by service providers for the same work they have done in another public sector at a lower cost.

ECSA, (Engineering Council of South Africa) is the custodian of the engineers in South Africa, and can play a very critical role in assisting the municipalities, by providing or assisting them to analyse the designs and cost related to the project, which will serve as budget basis and contract management which is a problem in the Public Sector (ECSA, 2015).

CIDB (Construction Industry Development Board) is a public entity established by an Act of Parliament, Act 38 of 2000, of which the mandate is to register contractors who wish to participate in the public tendering system to build schools, clinics, bridges, stadiums and other public infrastructures, meaning that if the company is not registered

with CIDB, its bid submission will be invalid and not considered by the Tender Specification Committee.

The CIDB further grades contractors on their respective capability to perform projects and also facilitate public sector procurement (CIDB, 2010:1).

The role of CIDB as public entity is very critical in the equation of evaluation, since they are the custodian of contractors' registration and grading, which will make the work of specification and evaluation committee easier, as they will only focus on the suppliers who have the necessary grading to complete a particular project and of certain budgetary magnitude.

This will make the process fair and not biased as the company are graded by a credible public entity.

This will also ensure that the adjudication committee only focus on the price and BBBEE as the criteria to award.

4.5 LIMITATIONS AND IMPLICATION FOR FURTHER RESEARCH

When making recommendations and drawing conclusions from empirical research, the limitations and implications of further research should be identified and considered.

Only officials working within the supply chain management environment in the North West local government participated in this study. The findings reported cannot be generalised across all the South African local governments, due to the use of non-probability convenience samples.

Another limitation of this study was that the empirical research focussed on the effectiveness of the supply chain management framework. Further studies could investigate the different variables.

Despite these limitations, this study added value to the empirical body of supply chain management in local government. The findings of this study presented numerous challenges for further research.

4.6 RECOMMENDED FURTHER STUDIES

This mini-dissertation was concluded by identifying future opportunities. Since not much research had been done before with regard to the effectiveness of the supply chain management in local government, many opportunities for further investigation exist.

4.6 CONCLUSION

The aim of this dissertation was to study the effectiveness of the current supply chain management in the local government, with the goal to establish a more effective process.

Recommendations were made for strengthening the effectiveness of the enforcement, which should in turn improve the local government's financial management.

4.7 CHAPTER SUMMARY

In this chapter, the findings of the literature review, as used by the survey for the empirical research, were summarised, conclusions were drawn, and recommendations were made. These should be used towards improving the financial management, compliance and enforcement of protocols in the local government, as this intervention could have a positive impact on the service delivery of projects.

It should also be acknowledged that the work that National Treasury is undertaking and dealing with this difficult task of ensuring compliance and performance at the same time, while there is also political presence in the equation which make it very difficult in balancing the two. The limitations and implication for further research were discussed and suggestions were made for further studies.

REFERENCES LIST

Acts see South Africa.

Alacevich, M. 2009. The political economy of the World Bank: the early years. Stanford: Stanford University Press.

Ambe, I.M. 2009. An exploration of supply chains management practices in the central district municipality. *Educational research and review*, 4 (9):427-435.

Ambe, I.M. & Badehorst-Weiss, J.A. 2011a. An exploration of public sector supply chains with specific reference to the South African situation. *Journal of public administration*, 46(3):1100-15.

Ambe, I.M. & Badenhorst-Weiss, J.A. 2011b. An examination of supply chain management in the South African public sector. Paper presented at the 20th Annual IPSERA 2011 Conference, 10-14 April, Maastricht, Netherlands.

Anon. 2011. R30 billion lost to SA govt corruption & incompetence. *South African.Com*, 17 Oct. 2011. <http://www.thesouthafrican.com/r30-billion-lost-to-sa-govt-corruption-incompetence/> Date of access: 18 Jan. 2015.

Arrowsmith, S. & Tillipman, J., eds. 2010. Reform of the UNICITRAL model law on procurement regulation for the 21st century. Eagan: West

Auditor General South Africa. 2014. North West General report on the audit outcomes of local government. <http://www.agsa.co.za/Portals/0/MFMA%202012-13/2013-14%20MFMA%20Media%20release.pdf> Date of access: 08 Jan. 2015.

Chopra, S. & Meindl, P. 2010. Supply Chain Management: Strategy, Planning & Operations. 4th ed. Boston: Prentice Hall.

CIDB (Construction Industry Development Board). 2010. Media Alert: Contractor Registration Fraud Alert. http://www.cidb.org.za/documents/news/news_contractorfraudalert_july2010.pdf Date of access: 26 Apr. 2015.

COGTA (Department of Cooperative Governance & Traditional Affairs). 2009. State of local government in South Africa. <http://www.cogta.gov.za/index.php/2014-04-29-10-00-08/reports-1/general-reports-1/934-state-of-local-government-report-2009-1/file> Date of access: 18 Dec. 2014.

Dlamini, P. 2015. Joburg's rosy finance a lie: A-G uncover corruption, doggy contracts and more. The times, 10 Feb. 2015.

ECSA (Engineering Council of South Africa). 2015. What is the ECSA?.
<https://www.ecsa.co.za/about/SitePages/What%20Is%20ECSA.aspx> Date of access: 29 Apr. 2015.

Ellis, S.M. & Steyn, H.S. 2003. Practical significance (effect sizes) versus or in combination with statistical significance (p-values), *Management Dynamics*, 12(4): 51-53.

Evans, S. 2014. Clean audits for just 9% of SA municipalities. <http://mg.co.za/article/2014-07-30-clean-audits-for-just-9-of-sas-municipalities> Date of access: 23 Apr. 2015.

Gianakis, G & McCue, C. 2012. Supply chain Management concepts in local government: Four case studies. *Journal of Public Procurement* 12(1).

Goedhals-Gerber, LL. 2010. The measurement of Supply Chain Efficiency. Theoretical Considerations and Practical Criteria. Stellenbosch: Stellenbosch University.

Hanks, J., Davies, H, H & Perera, O. 2008. Sustainable Public Procurement in South Africa. Available http://www.iisd.org/pdf/2008/spp_south_africa.pdf Date of access: on 11 Aug. 2014.

Institute of Directors Southern Africa. 2009. King Code of Governance for South Africa. http://c.ymcdn.com/sites/www.iodsa.co.za/resource/collection/94445006-4F184335B7FB7F5A8B23FB3F/King_Code_of_Governance_for_SA_2009_Updated_June_2012.pdf Date of access: 20 Dec. 2014.

IRM (The Institute of Risk Management). 2015. Risk management.
<https://www.theirm.org/about/risk-management/> Date of access: 08 Feb. 2015.

Levine, D.M., Stephan, D.F., Krehbiel, T.C. & Berenson, M.L. 2008. Statistics for managers: Using Microsoft Excel. 5th ed. Upper Saddle River, NJ: Pearson.

Mhango, M. 2014. Public protector's powers: what law says?.
<http://www.iol.co.za/sundayindependent/public-protector-s-powers-what-law-says-1.1753981#.VLDTfyUf9V> Date of access: 10 Jan. 2015.

Migiro, S. O. & Ambe, I.M. 2008. Evaluation of the implementation of public sector supply chain management and challenges: a case study of the central district municipality, North West province, South Africa. *African journal of business management*, 2(12):230-42.

Naslund, D and Williamson, S. 2010. What is management in supply chain management?- a critical review of definitions, framework and terminology, *International journal of management policy and practice*, 11,(4), 1-13 <http://www.na-businesspress.com/JMPP/NaslundWeb.pdf> Date of access: 28 Apr. 2015.

NT (National Treasury). 2003. Policy strategy to guide uniformity in procurement reform process in government.
<http://www.treasury.gov.za/divisions/ocpo/sc/Guidelines/policy.pdf> Date of access: 29 Apr. 2015.

NT (National Treasury). 2005. Supply chain management: a guide for accounting officers of municipalities and municipalities' entities.
http://mfma.treasury.gov.za/MFMA/Guidelines/Guide%20for%20Municipal%20Accounting%20Officers_1.pdf Date of access: 24 Jan. 2015.

NT (National Treasury). 2015. 2015 Public sector supply chain management review.
<http://www.treasury.gov.za/publications/other/SCMR%20REPORT%202015.pdf>
Date of access: 24 Apr. 2015.

OECD (Organisation of Economic Co-operation and Development). 2008. Compendium of country examples and lessons learned.
<http://www.oecd.org/development/effectiveness/42107830.pdf> Date of access: 17 Jan. 2015.

Office of the Auditor General of Australia. 2013. Our role and responsibility.
<https://audit.wa.gov.au/about-the-oag/our-role-responsibility> Date of access: 08 Jan. 2015.

OGC (Office of Government Commerce). 2011. An introduction to public procurement.
http://webarchive.nationalarchives.gov.uk/20110601212617/http://www.ogc.gov.uk/documents/Introduction_to_Public_Procurement.pdf Date of access: 14 Jan. 2015.

Parliamentary Monitoring Group. 2010. Capacity building at municipalities: National Treasury, DBSA, Department Cooperative Governance & Traditional Affairs & SALGA Briefing. <http://www.pmg.org.za/report/20100817-capacity-building-municipalities-national-treasury-dbsa-department-co> Date of access: 11 Jan. 2015.

PricewaterhouseCoopers. 2015. King III- Chapter 3: Audit committees:
<http://www.pwc.co.za/en/king3/audit-committees/index.jhtml> Date of access: 24 Apr. 2015.

Provincial Gazette for North West no 6739. 2010. Tlokwe Local Authority: Supply Chain Management By-law.
<http://www.potch.co.za/pdf/bylaws/supplychainmanagement.pdf> Date of access: 26 Apr. 2015.

Public Protector South Africa. 2010. Report of the Public Protector in terms of section 182(1) (b) of the Constitution of the Republic of South Africa, 1996 and section 8(1) of the Public Protector Act, 1994.
http://www.pprotect.org/library/investigation_report/2010/docs/investigation%20report%20for%20media%20briefing%2009%20june/Report%2025.pdf Date of access: 07 Jan. 2015.

Rosenthal, R., Rosnow, R.L., & Rubin, D.B. 2000. Contrasts and effect sizes in behavioural research: a correlational approach. Cambridge, Cambridge University Press.

SALGA (South African Local Government Association). 2012. The state of municipal audit committees.
<http://www.salga.org.za/app/webroot/assets/files/Municipal%20Focus/State%20of%20Audit%20Committees.pdf> Date of access: 17 Jan. 2015.

SALGA (South African Local Government Association). 2013. Supply Chain Management Policy. Pretoria.

Seekoei, K. 2015. Matjhabeng's bad audit: The municipality reported an adjustment of R484 million relating to irregular expenditure. The New Age, 06 Apr. 2015.

Sekaran, U. & Bougie, R. 2009. Research methods for business: A skill building approach. 5th ed. Chichester, West Sussex: Wiley.

South Africa North West Province. 2010. Tlokwe Local Authority –supply chain management By-Law (Notice No 56). *North West Provincial Gazette*, 6739, 11 Mar.
<http://www.potch.co.za/pdf/bylaws/supplychainmanagement.pdf> Date of access: 28 Apr. 2015.

South Africa. 1994. Public Protector Act. 23 of 1994.

South Africa. 1996. Constitution of the Republic of South Africa Act No. 108 of 1996.

South Africa. 1999. Public Finance Management Act 1 of 1999.

South Africa. 2000. Competition Amendment Act No. 15 of 2000.

South Africa. 2000. Construction of Independent Development Board Act 38 of 2000.

South Africa. 2000. Promotion of Administrative Justice Act No.3 of 2000.

South Africa. 2000. Promotion of Information Act No. 2 of 2000.

South Africa. 2000a. Local Government Municipal System Act 32 of 2000.

South Africa. 2000b. Preferential Procurement Policy Framework Act 5 of 2000.

South Africa. 2003. Municipal Finance Management Act 56 of 2003.

South Africa. 2004. Prevention of Combatting of Corrupt Activities Act No. 12 of 2004.

South Africa. 2004. Public Audit Act. No 25 of 2004.

South Africa. 2005. Local Government: Municipal Finance Management Act, 2003
Municipal Supply Chain Management Regulations.
http://www.l2b.co.za/Public/TenderForms/The_Municipal_Supply_Chain_Management_Regulation_of_2005.pdf Date of access: 21 Jan. 2015.

South African Broadcasting Corporation. 2015. North West to get rid of shoddily built RDP houses:
<http://www.sabc.co.za/news/a/1b071600477b710f970ef742d945d4b0/N-West-to-get-rid-of-shoddily-built-RDP-houses-20150301> Date of access: 24 Apr. 2015.

South African Press Association. 2014. Public Works lost R35 billion in five years:
<http://www.sowetanlive.co.za/news/2014/09/29/public-works-lost-r35-billion-in-five-years-report> Date of access: 23 Apr. 2015.

SPSS Inc. (2015). IBM SPSS Statistics Version 22, Release 22.0.0, Copyright© IBM Corporation and its licensors. <http://www-01.ibm.com/software/analytics/spss/> Date of access: 12 Apr. 2015.

UNCITRAL (United Nations Commission on International Trade Law). 2011.
UNCITRAL Model Law on Public Procurement.
<http://www.uncitral.org/pdf/english/texts/procurem/ml-procurement-2011/2011-Model-Law-on-Public-Procurement-e.pdf> Date of access: 16 Jan. 2015.

Unitar (United Nations Institute for Training and Research). 2014. Introduction to public procurement (2014). <http://www.unitar.org/event/introduction-public-procurement-2014> Date of access: on 15 Jan. 2015.

University of Pretoria and South African Legal Information Institute. 2011. Local Government: Municipal System Act 32 of 2000. http://www.saflii.org/za/legis/consol_act/lgmsa2000384.pdf Date of access: 24 Apr. 2015.

Uyarra, E. & Flanagan, K. 2009. Understanding the innovation impacts of public procurement. Manchester: Manchester Business School. (Working Paper: 574). http://www.econstor.eu/bitstream/10419/50706/1/631914269.pdf?origin=publication_detail Date of access: 11 Aug. 2014.

Vanichchinchai, A. & Igel, B. 2009. Total quality management and supply chain management: Similarities and differences. The TQM Magazine, 21(3), 249-260.

Victorian Auditor General. 2014. Role of the Auditor-General. http://www.audit.vic.gov.au/about_us/role_of_the_auditor-general.aspx Date of access: 23 Apr. 2015.

Welman, C., Kruger, F. & Mitchell, B. 2010. Research methodology. 3rd ed. Cape Town: Oxford University.

World Bank. 2011a. Annual report, 2011. <http://go.worldbank.org/QDCRDYTRE0> Date of access: 15 Jan. 2015.

World Bank. 2011b. Strengthening procurement capacity in developing countries: Use of Country Systems for Procurement. <http://web.worldbank.org/WBSITE/EXTERNAL/PROJECTS/PROCUREMENT/0,,contentMDK:21036562~menuPK:2926825~pagePK:84269~piPK:84286~theSitePK:84266,00.html> Date of access: 10 Feb. 2015.

World Bank. 2015. What we do. <http://www.worldbank.org/en/about/what-we-do> Date of access: 18 Jan. 2015.