EFFECTIVENESS OF SUPPLY CHAIN MANAGEMENT OF SERVICE DELIVERY IN MAHIKENG LOCAL MUNICIPALITY

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Mini-thesis submitted in partial fulfilment of the requirements for the degree Master in Business Administration (MBA) in the Faculty of Commerce and Administration at the Mahikeng Campus of the North-West University

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DECLARATION

I hereby declare that this mini-dissertation entitled effectiveness of supply chain management of service delivery in Mahikeng Local Municipality submitted by me Priscilla Deka for the degree of Masters in Business Administration, majoring in Finance at the Mahikeng Campus of the North West University, is my own work and has not previously been submitted to any other university for any other purposes.

Signature

……………………

Date

……………………

DEDICATION

I dedicate this mini-dissertation to my Heavenly Father who made it possible for me to study this degree under the almost impossible condition that I faced in my professional life due to some stringent company policies. When God says ‘YES’ no one can say ‘No’ and thus this dissertation has come to be. “All things are possible through Christ who strengthens me’

Secondly, I dedicate this work to my biological father and brother who are no more, but I still greatly miss and thank God for the time we spent together.
ACKNOWLEDGEMENTS

I want to acknowledge my beloved mother Cynthia KamhungaDeka who has been a source of inspiration through her words of wisdom, encouragement and unfailing prayers.

My twin sister Primrose Deka and my family; my supervisor Professor W. Musvoto, LilianKisakye for providing valuable supervision and support. Finally, my colleagues at Masengviljoen(MVIGROUP INC) for their endless support and advice. Mahikeng Local Municipality employees for participating by filing of the questionnaires.
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**LIST OF ACRONYMS AND ABBREVIATIONS**

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<th>Acronym</th>
<th>Description</th>
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<tbody>
<tr>
<td>BBBEE</td>
<td>Broad-Based Black Economic Empowerment</td>
</tr>
<tr>
<td>BAC</td>
<td>Bid Adjudication Committee</td>
</tr>
<tr>
<td>BEC</td>
<td>Bid Evaluation Committee</td>
</tr>
<tr>
<td>BSC</td>
<td>Bid Specification Committee</td>
</tr>
<tr>
<td>IMESA</td>
<td>Institute of Municipal Engineering of Southern Africa</td>
</tr>
<tr>
<td>GSCF</td>
<td>Global Supply Chain Forum</td>
</tr>
<tr>
<td>MFMA</td>
<td>Municipal Financial Management Act</td>
</tr>
<tr>
<td>PFMA</td>
<td>Public Financial Management Act</td>
</tr>
<tr>
<td>PPPFA</td>
<td>Preferential Procurement Policy Framework Act</td>
</tr>
<tr>
<td>SALGA</td>
<td>South African Local Government Association</td>
</tr>
<tr>
<td>SCM</td>
<td>Supply Chain Management</td>
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<td>UNISA</td>
<td>University of South Africa</td>
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ABSTRACT

The continuous service delivery protests by residents of the Mahikeng Local Municipality has most often than not occurred as a result of inefficiency in service delivery functions of the supply chain management section. This unresolved situation over the years, prompted the researcher to investigate the effectiveness of the Mahikeng Local Municipality Supply Chain Management section with regard to service delivery. A purely quantitative research approach was adopted for this study. Data was collected by the use of closed-ended self-designed questionnaires that was completed by 100 randomly selected employees from the municipality who are involved or have previously been involved in the Supply Chain Management process.

Findings from the study indicate that although the Supply Chain Management procedures in place are in line with legislation, the employees involved often do not follow those procedures the reason is that at times, they are under political influence and thus fear of losing their jobs. This is further evident by the high amounts of irregular expenditure, unauthorised spending, fruitless and wasteful expenditure. The unfortunate challenge resulting from this predicament is that there is usually lack of accountability and because of that the SCM polices are not effectively implemented which negatively impacts service delivery of the Mahikeng Local Municipality. This seems to be a common if not major problem faced by other municipalities in the North West Region. Moreover, the supply chain management officials are not sure or aware of the exact issues causing the expenditure irregularities, for example there is evidence of a bid without original tax clearance, BBBEE certificate, signed declaration of interest. In spite of the challenges encountered, the Mahikeng Local Municipality must continue to thrive in improving the implementation of the supply chain management principles and ensure that transparency is achieved in the public sector. It is recommended that if the Mahikeng Local Municipality is unable to implement the supply chain management principles correctly, they can engage experts to assist them with the correct implementation and ensure that efficiency and effectiveness is achieved.

KEY WORDS: Supply chain management, municipality, service delivery, compliance, constitution, national treasury and irregular expenditure
CHAPTER ONE
Supply chain management importance

1.1 Introduction
The purpose of this study is to assess effectiveness of supply chain management of service delivery in the Mahikeng Local Municipality. This is because there has been a number of service delivery protests that have occurred in this municipality over the years and the residents are disgruntled by the level of service delivery they are receiving from the municipality. This is also experienced in other municipalities in South Africa, where the government loses millions of rands as a result of protests by the angry residents causing a lot of destruction in terms of the municipality assets (Sangonet, 2010). The North West Province among other provinces, seems to be battling with many challenges arising from not properly implementing the supply chain management principles and hence a lot of problems are emanating from the municipalities inability to use the supply chain management principles to their advantages and having increasing irregular expenditure, overspending of the budgets, and substandard work produced by service providers. The importance of supply chain management principles is that it enhances the revenue, it reduces costs, more effective asset utilisation and improved service delivery. Furthermore, it contributes to the profitable growth of the municipality (Zygiaris 2010). When supply chain management principles are correctly implemented they eliminate procurement problems currently experienced in South Africa. For example, Supply Chain Management has been implemented in developed countries for instance, Canada, the United States and the United Kingdom just to mention a few and it has proved to be effective and efficient (Wei and Xiang, 2013). In light of the above, it seems Supply Chain Management was implemented late in South Africa and there have not been adequate follow ups by the implementers to ensure if it actually works and serves its purpose for initial implementation.

This chapter commences with an outline of the background to the study and the reasons for the study in section 1.2, this is followed by the formulation of the research problems 1.3 and research questions on 1.4. This is followed by the aims and objectives of the
study discussed in section 1.5, delimitation of the study are discussed in section 1.6, importance of study and dissertation outline in sections 1.7 and 1.8 respectively.

1.2 Background to the study
Alexander (2015) states that South Africa as a whole is divided into local municipalities. Every municipality has a council that makes decisions and municipal officials together with the staff implement the work of the municipality. The Council is made up of elected members who approve by-laws and policies for their area. The Council is responsible for declaring the budget of the municipality each year. In addition, they also make decisions on service delivery and developmental plans for their municipal area. A Municipal mayor is elected by the council to coordinate the council’s work, and is assisted by the councillors. The mayor also oversees the work of Municipal Manager and other officials (Alexander 2015). South Africa has three different kinds of municipalities namely; Metropolitan (Category A), Local (Category B) and District municipalities (Category C). Metropolitan municipalities exist in the six biggest cities in South Africa with more than 500000 voters and this is where delivery of services is coordinated for the whole area. Areas that do not fall into the Category A are divided into local municipalities and there are 231 of these local municipalities. District municipalities are made up of a number of local municipalities that fall in one district. There are 47 district municipalities in South Africa. However, the study will concentrate on a category B municipality which is Mahikeng Local Municipality.

The supply chain management (SCM) was introduced in the Republic of South Africa in 1998 as a result of the ideology that came up for municipalities to manage its financial resources to accommodate the needs of the indebted residents. This was clearly indicated in the Constitution of Republic of South Africa, 2005 Act 5, Section 217(1) which states that in the case of any demand of goods and services by the arms of government or institutions, it must be delivered in a fair, equitable, transparent, competitive, effective and efficient manner. Supply chain management was approved by the cabinet on 10th September, 2003 and endorsed on the 5th of December of 2003.
The endorsement of supply chain management principles by the cabinet was supported by some legal precedents in South Africa which include the Municipal Financial Management Act (MFMA), (Act No 56 of 2003), Public Financial Management Act of 1999 and Preferential Procurement Policy Framework (PPPFA) (ACT No 5 of 2000). The Municipal Financial Management Act (MFMA) was introduced to ensure effective mobilisation and management of municipal finance. The Public Financial Management Act (PFMA) (Act No 1 of 1999) was promulgated to encourage good and efficient use of public financial resources by the municipalities while the Preferential Procurement Policy Framework Act (PPPFA) was promulgated to provide a platform for procurement policies and the allocation of contracts to diverse service providers to ensure that there is no discrimination and to maintain the principle of equity, fairness and transparency.

According to Boateng (2010) supply chain management is considered as the strategy which is implemented by the local municipalities that is focused on itemising the needs of the residents, purchasing the goods required by the residents, delivering the goods and services, maintaining the logistics and making sure an effective disposal of wastes after use. According to Moosa (1996) in South Africa, municipalities are faced with the issue of meeting up with the expectation and demand of the local residents in the shortest period of time, hence suggested that the government should use different strategies to ensuring efficient supply of goods and services. Supply chain management is a management tool and an initiative by government to improve procurement of materials in the government sector to meet the needs of the citizens.

(Boateng, 2010) in the quest to establish a standard and functional supply chain management in Mahikeng Local Municipality, the process was sub-divided into four categories. These categories are: demand management; acquisition management; logistics management; and disposal management. The demand management takes the responsibility of anticipating the needs of the section and ensures that they are implemented in the budget, acquisition management procures the materials after they have been identified by the demand management, the logistics management ensures the proper procurement, transportation and storage of assets while disposal
management ensures adequate removal of assets that the organisation deems irrelevant in the administration process.

Supply chain management in Mahikeng Local Municipality has contributed to the provision of services and assets to the residents and other departments to enhance the economic development motive of the municipality. In executing their duties, the municipality has succeeded in providing basic services to most of the residents, also improved the quality of lives to those living in hopeless poverty conditions. According to Ambe and Badenhorst-Weiss (2012:246) ‘supply chain management adds value to every procurement processes’. This assertion means that supply chain management ensures that the quality of lives improves right from the anticipation of the needs of the people to the disposal of the assets. In terms of service provision, there have been strikes by the residents on the nature of the service delivery to try and force the officials to understand the residents’ dissatisfaction in terms of the service delivery

With regards to the provision duty of the supply chain management, there has been demonstrations by the residents against the municipality on the issue of inefficiency in administration and management. This is clearly depicted in the submission of a report in 2010 to the parliament by the Local Government Management of South Africa on service delivery protests. This report suggest and implies that there should be a reform in governance in municipalities especially in awarding contracts to the service providers, hence advocating that tenders should be openly awarded, correct monitoring and evaluation of activities is done in the supply chain management section (Institute for Local Government Management of South Africa, 2010). In relation to the supply chain management principle this is relevant as it eliminates a lot of loopholes that cause too many problems in the transparency and awarding of tenders in the supply chain departments of government entities.

1.3 Research problem
The Government, established after the 1994 elections, realised the value of efficient public procurement for the national economy and started on a major review of the system in place” (National Treasury, 2015). This was to make certain the effectiveness
of public supply chain management and for efficient service delivery. Mahikeng Local Municipality has several stakeholders namely; the municipal workers, residents, institutions, private sector and the government. This municipality is a category B municipality that is located in NgakaModiriMolema District, North West Province. The mission of this municipality is to provide goods and services to the needy residents as stipulated in the constitution of Republic of South Africa, of 2005. In order to achieve this efficiently and effectively, the municipality introduced he supply chain management principles as stipulated in S217 (1) of 2005 the Constitution of South Africa. However, in spite of the introduction of the SCM principles there has been continuous service delivery protest by residents that occur from time to time in Mahikeng Local municipality suggesting that the SCM principles implemented might have not promoted effective and efficient service delivery in Mahikeng Local Municipality. This is also experienced in other municipalities in South Africa, where the government loses Millions of Rands as a result of protests by the angry residents causing a lot of destruction in terms of the municipality assets (Sangonet, 2010). Furthermore, (Sangonet, 2010) these protests are triggered by the envisaged lack of capacity, maladministration, unaccountable officials that lead to the mismanagement of funds. The research problem is that the SCM officials are not correctly implementing the SCM principles hence service delivery is not being delivered to the Mahikeng residents in an effective and efficient manner. The problem being that there is no accountability hence the deterioration of the implementation of the supply chain policies and procedures. The problem emanates from people of in influential positions being politicians and top management hence other officials do not have much say by to execute instructions given to them.

In South Africa public sector supply chain management was introduced in S217 (1) of the Constitution 20005 which states “When an organ of state in the national, provincial or local sphere of government as per Constitution, or any other institution identified in the national legislation, contracts for goods or services, it must do so in line with a system that is transparent, fair, competitive, equitable and cost effective. In light of the discussion above the problem under investigation is the need to assess the effectiveness of the SCM principles on service delivery in Mahikeng Local Municipality. According to O’leary, (2010) ethics refer to rules of behaviour that help to
know what is acceptable within a profession. Ethics in conducting research however, vary across different professional codes or disciplines and/or institutions but there are generally acceptable guidelines.

1.4 Research questions
In this study, the following research questions have been developed to address the issue at hand in Mahikeng Local Municipality

- What is the role and best practice in SCM which needs to be implemented in Mahikeng Local Municipality for effective service delivery?
- What are the causes of ineffectiveness of the supply chain management strategies of the Mahikeng Local Municipality?
- What is the impact of SCM on service delivery in Mahikeng Local Municipality?
- To what extent do supply chain management officials in Mahikeng Local Municipality comply with the legislative frameworks of SCM?
- How does the SCM enhance and inform effectiveness of service delivery in the Mahikeng local municipality?

1.5 Aim and objectives of the study
The aim of the study is to identify the roles and best practice of supply chain management in Mahikeng Local Municipality that contributes to efficient service delivery.

The objectives of this study are:

- To investigate the causes of irregularities in handling contract management and to make recommendations.
- To determine if the supply chain management officials in the Mahikeng Local Municipality perform their role role in ensuring that service providers are appointed correctly for improved service delivery
- To assert the level of compliance by supply chain officials with the legal frameworks of supply chain management.
• To assess the impact of ineffectiveness on service delivery in Mahikeng Local Municipality.
• To establish if SCM enhances the effectiveness of the Mahikeng Local Municipality in service delivery.

1.6 Delimitation of the study
This study on the role of supply chain management was conducted at the Mahikeng Local Municipality. The participants of this study are current employees who are involved in the supply chain management process or those who understand how supply chain functions in the municipality. This study addresses the effect of supply chain management in Mahikeng municipality and the possible strategies to enhance a better performance of the supply chain management within the municipality.

1.7 Importance of the study
The importance of this study is to clearly outline the challenges faced by the Mahikeng Local Municipality in terms of failing to implement the supply chain management principles correctly. Supply chain management is important because when it is correctly implemented it reduces costs and transaction cost Wei and Xiang (2013). The effectiveness of supply chain management is important for an organisation because if it is correctly implemented it results in better revenue recognition for an entity Kam et al (2012). Efficiency in supply chain management is crucial because it ensures that goods and services move quickly to the residents for example, delivering clean and purified water (Zygiaris 2010). Therefore, it is further recommended that Mahikeng Local Municipality understands the benefits that can be derived from the correct implementation of supply chain management principles which leads to effective service delivery of goods and services to the residents of this area.

1.8 Chapters layout
On completion of the study, a final report is to be presented as a mini-dissertation and it will assume this following format:

• Chapter 1: Introduction
This chapter introduces the study by bringing out a background knowledge of the study as well as stating the problem, objective, brief methodology and ethical consideration of the study.

- **Chapter 2: Literature Review**

This chapter makes a review of existing literature by answering the various research questions from a purely literature perspective.

- **Chapter 3: Research Design and Methods**

This chapter provides a detailed research design and methodologies and techniques that were used in the study.

- **Chapter 4: Presentation of results**

This chapter presents the results from findings that was mostly in tables and graphs.

- **Chapter 5: Discussion and Recommendations**

In this chapter a detailed discussion of finding was made including a summary of findings, recommendations and conclusion of the study.
CHAPTER TWO
LITERATURE REVIEW

2.1 Introduction and theoretical framework
This chapter uses the systems theory to ensure that there is consistency with how the supply chain management relates to all the departments in the municipality in ensuring that the departments are interlinked and that the municipality is able to achieve its core mandate of providing the residents of Mahikeng Local Municipality with good service delivery. It also gives an overview of supply chain management, the legal frameworks of supply chain management, the stakeholders of supply chain management, challenges and problems of supply chain management.

(City Press, 2006 & News24.com) this was newspaper article, 'ABC Town's dismissed city manager, Slippery Eel faced both criminal charges and a bill of almost R9m. The Mail and Guardian reported that employee by the name of Eel, who had authority as manager to approve contracts only up to R350,000, was implicated in the irregular awarding of an R8.5m contract to a consultant Shady for work on a proposed Jewellery City Project at the city's waterfront. Auditors estimated that the work carried out by Shady to be worth no more than R1.5m'.

In a related story there was an unnamed city tender official, nicknamed ‘Mr. ten per cent’ (10%), who supposedly received kickbacks for awarding contracts. According to a report by the Cape Argus', the nickname was given to an official who apparently received kickbacks for swinging tender awards to companies doing business with the city. Scorpions arrested the Mayor in July 2005 at that time, his wife, the city manager, his political advisor, chief operating officer and speaker of the municipality. These people appeared in court in 2006 on the 13th of April where a forensic investigation exposed a scam involving an unauthorised transaction that would cost the municipality of Sicilian R79 million for a property independently valued at between R14 million and R25 million. According to the (Mail & Guardian 2006) the land was sold by the municipality for almost to nothing after making a deal to buy it back in developed form. There was no bid or tender. The transaction was approved by Chief Operating officer Al
Capone and city manager Quick Bucks, and it involved friends, this came to be known in a forensic study commissioned by the municipality.” (City Press, 2006 & News24.com, 2006)

2.2 Systems theory

The Systems theory also known as Allgemeine Systemlehre or General Systems Theory was advanced by Ludwig von Bertalanffy in the middle 20th Century in his quest to make a shift from the Aristotle’s assumption that knowledge comes from that of whole and not a part of the organisation but rather that knowledge comes from different parts to the whole organisation (Mele, Pels, & Polese, 2010; Coetzee & Niekerk, 2012). The systems theory was advanced to further understand how the entire system functions to achieve a unified objective. However, this theory was not recognised and accepted by other scholars till after having contact with an economist Kenneth Boulding in 1950, a mathematician Anatol Rapoport in 1954, and a physiologist Ralph Gerard in 1954 (Laslo & Krippner, 1997:6). In relation to supply chain management it means that when the departments in the municipality are interlinked when one section is lacking in providing service delivery it affects negatively on the supply chain management’s ability to provide effective and efficient service delivery to the residents of Mahikeng Local Municipality.

This behavioural school of thought regarded a system as a unit of several interacting parts that functions as an entity in a dynamic state of equilibrium (Hellriegel, Jackson, Slocum, Staude, Amos, Kloper, Louw, & Oosthuizen, 2008; Lussier, 2009). The movement was on how to resolve organizational problems before the inputs are put, transformational stages, outputs and feedback is given. In this regard, the organisation was viewed as a body with several units that work together or interrelate with each other within their internal and external environments to achieve their set objectives (Mele et al., 2010). Furthermore, the organisation was considered as an entity that interacts with the external environment thereby converting inputs to output and receive feedbacks from the external environment; therefore this theory advocates the need to understand the environment, social relationship dynamics, individual lifestyles and perceptions, and
individual conditions before making decisions (Mele et al., 2010 and Hellriegel et al., 2009).

This movement considered the organisation to be sub-divided into different sections or departments to ensure that each department functions differently and effectively through the interrelationship with other departments (Mele et al., 2010). It is assumed that the inability of one section or department to perform effectively will invariably affect the performance of the entire system. Furthermore, the systems theorists emphasised the need for different departments to have extensive knowledge on their visions, developmental programmes including quality development, knowledge of their environment, management of their relationships with the external environment, adapting to the existing conditions and courage in handling difficult times (Mele et al., 2010). In the organisations, the manager needs to plan effectively to ensure that the whole system survives and this will be possible through interpretations of feedback and business circumstances to find a suitable balance in resolving the problem, also through adjustments on implementation of policies, redefining the organisational structure to promote a suitable performance (Mele et al., 2010).

There is the need therefore, for the supply chain management employees of the Mahikeng Local Municipality to adopt the objects of systems theory and its approaches to ensure that the management of supply chain processes will be a success. The adoption of this theory will enable the municipality to interact with the residents thereby sourcing their needs and make adequate arrangements with the supplier of the materials to ensure timely and accurate supply of materials. The systems theory revenue enhancement model, illustrated in Figure 2.1, explains the interrelationship and effective communication between the supply chain management department and the residents that results in efficient service delivery. This model portrays the applicability of interaction and the relevance of corporation between the interacting units in the municipality, as the inability of one interacting part in the municipality will definitely affect the efficiency of the whole system. Also, it would be observed that in the external environment are other external factors which drives or affect the functionality of the system.
2.3 Meaning of supply chain management

SCM is a concept in the business arena that has gained lots of interest lately (Miao et al. 2010; Ghaderi et al. 2010). Miao et al. (2010) asserted that it is a set of practices aimed at coordinating and managing the entire chain from raw material suppliers to the end users the customers. The members of the Global Supply Chain Forum (2009) developed the following definition which neatly captures the aspects of SCM. They define supply chain management as the integration of key business processes from the end-user through to the original suppliers that provide products, services, and information which adds value to customers and other stakeholders.
According to the Gauteng department of Agriculture and rural development (2010), South African residents deserve efficient provision of goods and services by the municipalities as contended in the Constitution of the Republic of South Africa, 1996, Section 217(1). In a conventional meaning, supply chain management may be regarded as all the activities involved in the strategic flow of goods, services and inventories, and all the finished products from the place of origination to the consumption stage. Supporting this view, Ambe and Badenhorst-Weiss (2011) maintain that supply chain management entails the act of management of materials from the manufacturer to the final consumer. Furthermore supply chain is viewed as the itemisation and sourcing of the residents needs thus converting the resources into goods and services and the application of the efficient logistics to create satisfaction to the residents. Also, supply chain management brings the forces of demand and supply together to ensure that the residents are satisfied (Ambe & Badenhorst-Weiss, 2011).

According to Burt, Petcavage and Pinkerton (2010), supply chain management is involved in a compulsory five-stage process before it creates satisfaction. These stages includes, identification of materials needed by the residents to satisfy their needs, identification of the best and most reliable service provider, implementing a reasonable price for the materials, making an agreement from the department for purchase and making sure that there is an adequate delivery from the identified supplier. Furthermore, supply chain management performs a strategic linkage in the organisation by intermediating between the supplier of materials and the final consumers or other stakeholders to fulfil customers’ needs (Chopra & Meindl, 2013).

In the view of Gianakis and Mccue (2012), supply chain management is considered as a coordinator in the aspect of value chain that ensures that effective contract management is prompted in the organisation to create satisfaction by guaranteeing that the right products are supplied. Supporting this opinion, Vanichchinchai and Igel (2009) and Goedhals and Gerber (2010) affirmed that supply chain is a process where the right goods and services are provided to the customers at the right time and possibly the cost effective price.
One of the most significant changes in the paradigm of modern business management is that individual businesses no longer compete as solely autonomous entities, but rather as supply chains. In this emerging competitive environment, the ultimate success of the business will depend on management’s ability to integrate the company’s intricate network of business relationships. Effective supply chain management (SCM) has become a potentially valuable way of securing competitive advantage and improving organisational performance since competition is no longer between organisations, but among supply chains (Salazar, 2012).

2.4 Public sector supply chain management

The public sector supply chain management ensures that the entire stakeholders that are involved in the demand and supply of items are met with the stipulations of the public sector requirements (Ambe, 2011; Larson, 2009). Furthermore, Ambe (2011) avers that the public sector supply chain management comprises of inbound and outbound parts. The inbound part comprises of the operational standard for the customers while the outbound part places preferences to service provision of the residents through the envisaged organisational objective. Also, the Constitution of South Africa, 1996, Section 217(1) provided that there should be an adequate procurement policy that regulates level of choice in the award of contracts and further protects the advancement of the disadvantaged people due to unfair discrimination.

In the public sector supply chain management, the concepts of transparency and accountability are witnessed in the procurement of materials because of the legal precedents that backs public procurements. The public sector supply chain management frameworks stands as a reference and watchword to all procurements and the composition of supply chain management in all compositions (Migro&Ambe, 2008). Also, the Constitution of Republic of South Africa, Section 217 (1), states that the goods and services should be acquired from the public sector in accordance with the principles of equity, fairness, transparency, competitiveness and cost-effectiveness.

The aforementioned frameworks were implemented by the South African government after consulting the World Bank on the effectiveness and degree of alignment of the Country Procurement Assessment (CPAR). The World Bank used the CPAR as a
quality control tool that aligns the country’s laws and judicial precedents with the capability, credibility, capacity and its procurement systems (United Nations Commission on International Trade Law, 2014). SCM promotes South Africa’s public management model by means of improved financial management and is a strategic tool for management to enhance its procurement practices. Since its inception in 2003, training and workshops have been ongoing across different spheres of government around the importance of using supply chain management principles correctly. However, despite the effort of enabling practitioners with appropriate knowledge and skills, SCM execution still remains a challenge (Ambe and Badenhorst-Weisis, 2012).

2.4.1 The legal frameworks of public supply chain management

The legislation that impact or affect the municipality supply chain management are discussed so as to examine their individual role in implementing an efficient supply chain management in the Republic of South Africa. This legislation are represented in a flowchart below.

**Figure 2.1.2: Legal framework of supply chain management**

*Source: Bizana (2013).*

2.4.1.1 The Constitution of South Africa, 2005 (Act No. 5 of 2005)

A Critique of selected sections of the Constitution reveals that local municipalities in South Africa are closely monitored by the Constitution of the Republic of South
Africa. Firstly, Section 160(10d) shows that municipal councils have been granted the authority to determine their own staff requirement and employ sufficient staff to enhance effective performance and service delivery in the sector. Furthermore, Section 162(3) stresses that as part of the requirement of Municipal councils the principles of transparency, accountability and openness as required by by-laws must be reinforced to enable a free and fair system of the supply chain management and service delivery.

Also, Sections 217 Sub-section 1 further states that the contracts for goods and services from organs of the state in the national, provincial or municipal levels of the government should be in conformity with an equitable, fair, transparent, competitive and cost effective system. In addition, the Constitution stipulates this guideline to all entities of the government in developing their personal supply chain management. All these will go a long way to strengthen the municipality and its quest for better service delivery through accountability.

2.4.1.2 The Municipal Systems Act, 2000 (Act No. 32 of 2000)

The Municipal System (Act No.32 of 2000) provides a legislative framework by which the service delivery agreements that involves competitive bidding process are handled by the municipalities. This Act encourages an efficient management of municipalities as regards to managing the available contracts and participations in the municipality. Furthermore, it imposes some rights on a given municipal council and municipal manager and distinguishes the roles of the municipalities and the municipal administrators. Notwithstanding Section 2 defines clearly the role as well as the importance of a proper code of conduct for sustainability of the municipality.

Based on Section 154 of the Municipal System Act, it can be deduced that the new system of government well acknowledges the need for a transparent local and efficient administration that ensures financial and economic viability through the development of strategic plans for the development of the municipality. This financial and economic viability should be accompanied by consultation between all spheres of the government thereby giving effect to the role of cooperate governance as indicated in Section 23 chapter 5 of the Municipal System Act.
2.4.1.3 The Local Government Municipal Financial Management Act, 2003 (Act, No. 56 of 2003)

This Act was promulgated to improve sound financial management in the government and public sectors and to impose some directives to the public accounting officers. This Act (MFMA) stipulates that each existing municipality should establish a supply chain management department which should be capable of implementing the SCM policies under the supervision of the chief financial officer (Republic of South Africa, 2003, 7(1-3).

Section 11 of this Act emphasises the steps in procurement of goods and services, the disposal of goods and the selection of contractors while Sections 63, 77 and 78 emphasises the need for cooperation to ensure sound and effective management, corporate governance and integrity in the supply chain administration. However, the MFMA stipulates that the National Treasury should provide a framework for the procurement of goods and services which was provided in July 2005 as the Municipal Supply Chain Management Policy.

2.4.1.4 Municipal Supply Chain Management Regulations, 2005 (SCM Regulations)

The objective of this Regulation is to clarify the legislative frameworks as highlighted in Sections 11 of the MFMA and the Constitution of the Republic of South Africa 1996, as contained in its Section 217 (1). There is an elucidation on the separation of powers between the municipalities and the municipal administrators with regard to procurement of goods and services that is done in a way that is fair, transparent, equitable, competitive and cost effective manner; also on matters relating to demand management, acquisition management, logistics management disposal management and performance management. Broad-Based Black Economic Empowerment (BBBEE) Act No. 17 of 2003.

The objective of this Regulation is to increase the number of black people participating in various roles of management, ownership and control in country’s economy, to decrease of inequality in income of the residents, increased practice of human resource development, equitable representation of all categories, preferential procurement and
investment in productive enterprises with black ownership (Balshaw & Goldberg, 2008). Initially, this Act focused on the ownership and management of enterprises by blacks and it was later amended to include other factors of empowerment such as employment, equity, indirect procurement and socio-economic development (Balshaw & Goldberg, 2008).

PPPFA gives effect to Section 217(3) of the Constitution it provides framework for implementation of procurement policy contemplated in Section 217(2) of the Constitution. Provide for matters connected there with promulgation and implementation of PPPFA and regulations were followed by the publication of a “Broad Based Black Economic Empowerment Bill” and supporting strategy. The basis on which amendments to the Preferential Procurement Regulations were to be undertaken is shown in the diagram below:
The seven pillars of BBBEE provide guidelines from which the public sector should implement their supply chain management functions. The generic BBBEE scorecard below portrays the nature of direct empowerment, employment equity, indirect empowerment and residual empowerment. It should be noted that black ownership amounts to 20%, management 15%, skills development 15%, preferential procurement 20%, enterprise development 15%, socio-economic 5% (see table 2.3).

Source: National Treasury (2014)
Figure 2.1.4: Summary of the generic BBBEE scorecard

<table>
<thead>
<tr>
<th>B-BBEE PILLAR</th>
<th>WEIGHTING</th>
<th>REGULATORY OBJECTIVE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ownership</td>
<td>20%</td>
<td>Encourages the sharing of ownership which will result in voting rights for black people and black women</td>
</tr>
<tr>
<td>Management</td>
<td>15%</td>
<td>Encourages senior black decision making at executive board and senior top management levels</td>
</tr>
<tr>
<td>Employment equity</td>
<td>15%</td>
<td>Encourages companies to identify and recruit black people at professional, middle and lower management positions</td>
</tr>
<tr>
<td>Skills development</td>
<td>15%</td>
<td>Encourages companies to develop black talent through spending on skills development and learnerships</td>
</tr>
<tr>
<td>Preferential procurement</td>
<td>20%</td>
<td>Encourages development or expansion of black small, medium enterprises</td>
</tr>
<tr>
<td>Enterprise development</td>
<td>15%</td>
<td>Measures the extent to which enterprises procure from BEE-compliant companies. Encourages spending on small and micro enterprises as well as on black-owned companies</td>
</tr>
<tr>
<td>Socio-economic</td>
<td>5%</td>
<td>Encourages initiatives intended to directly provide black people with a means of generating income for themselves</td>
</tr>
</tbody>
</table>

Source: Bravura Economic Empowerment Consulting (2006)

2.4.1.5 Contract Management Framework (CMF)

This regulation was promulgated by the National Treasury to ensure that there is a framework on which the public sectors follow to accomplish an efficient and effective practice in the aspect of contract management (National Treasury, 2010). Furthermore, the main functions of contract management include the following:
Increase all forms of contract through improved information and in policy making.
Identifies the non-performing service providers and other stakeholders in the business.
Improve in the aspect of service provision, service delivery with the assumption of reducing cost.
Efficient use of financial resources.

These functions were introduced to ensure that the municipalities and other public sectors will have credible policies and procedures which will effectively guide the in the course of entering into a contractual capacity with second and third party.

2.4.1.6 Preferential Procurement Policy Framework Act (PPPFA) 5 of 2000 (Regulations 2011)

The Preferential Procurement Policy was promulgated to assist in the implementation of procurement policies in the public sectors as stated the Section 217(2) of the Constitution of the Republic of South Africa. Furthermore, this Act helped in the equitable redistribution of income by creating a favourable economy that meets the needs of residents. Hence, the objectives of the Act are simplified below:

- promotion of the success of the women and physically challenged people;
- promotion of local enterprises;
- promotion of development of SMMEs and HDIs and
- promotion of locally manufactured products.

According to Republic of South Africa (2001), the PPPFA achieved the above mentioned objectives and also helped in giving the black South Africans chances for tender. According to the Constitution of South Africa of 1996, it highlighted that the PPPFA was made to protect citizens who are discriminated in the past to be involved in the mainstream economy.

2.4.1.7 National Treasury

The National Treasury ensures that Supply Chain Management is well implemented in all departments in the public sectors. It is also the duty of the National Treasury to regulate and maintain a legal standard on the matters concerning the award of contract
and the specific duties of accounting officers and the Chief Financial Officer (Ambe, 2009). Continuing, the National Treasury also ensure that the Municipal and Financial management Acts, (Act No. 56 of 2003) are well implemented in the management of finance also all relevant document which are relevant to supply chain management are obtained in the National Treasury website.

2.5 Supply chain business model

The Supply chain business model is made up of the five components which ensure equity, fairness, transparency, value for money and competitiveness. Section 16 of the Supply Chain Management regulations of 2005 as contained in the PFMA mandates the public sectors to adopt these components of supply chain management which are:

- Demand management.
- Acquisition management.
- Logistics management.
- Disposal management.
- Performance management.

These models that form the core of an effective supply chain management process, act as a remedial factor to enhance the growth and development of local municipalities in collaboration with other organs of the government or departments. For example, with regard to demand management Keely et al (2001) say that demand management process needs to balance the customer requirement with the firm supply capabilities which include forecasting demand and synchronising it with production; procurement and distribution thereby enhancing quality in service delivery.
The supply chain management model as presented in Figure 2.5 explains the interrelationship between demand management, acquisition management, logistics management, disposal management and performance management to achieve a fruitful supply chain function. Also, these components are guided by the Government Preferential Procurement Policy and the infrastructural systems to ensure that supply chain management in the public sector are well implemented.

**2.5.1 Demand Management**

Demand management can be defined as the process of making decisions by public sectors that involve procurement of items at the right time, at the right place and at the right cost (Ambe, 2011; Ambe&Badenhorst-Weiss, 2011; Municipal Supply Chain Management Regulations, 2005). According to Section 11 (a-c) of the PPPFA 5 of 2000, strategic aims of a given municipality is revealed in a particular year through the formulation of an Integrated Development Plan where cost estimates of the goods, items and services needed are stated.
The demand management ensures that the municipalities’ gains financial stability by conducting feasibility studies on the nature of need by the residents, analysis of the industry and thereby providing the municipalities the strategic information they may need in the necessary procurement. According to Ambe (2009) demand management serves as the first element of supply management as it brings the forces of demand and supply together to achieve the objective of SCM while Burt, Dobler and Starling (2003) and Khalo (2007) admits that demand management remains a critical aspect of supply chain management as it controls and co-ordinates the influence of demand and supply while reducing the total cost of the firm.

According to the National Treasury (2005) the demand management flow chart as presented below portrays the due processes the municipalities should follow before making procurements. According to the insights of the flow chart, it would be observed that the supply chain management should access the viability of a particular need before making a move for procurement. In the demand management process, there are some variables which need to be given a reasonable consideration before the procurement is considered by the management. They include determination of the cost of a particular item, the need for procurement, the account of previous procurement of item and challenges faced, and any other vital information needed to achieve success in the procurement before it is approved by the demand management team.
The demand management process is where at the initial stage the department or section identifies what exactly is needed before purchasing a good or service. The process begins by identifying if there is a need for a good, the next process is to identify if it is outlined in the IDP and if it has been budgeted for if no then is there no alternative. If it is a yes, did this need exist previously then there is need to analyse past experiences in terms of the cost and supplier to determine the best method. Then the procurement process will be determined by the cost value of the products to be

purchased whether the procurement process should be done through quotations or contracts.

2.5.2 Acquisition Management

Acquisition management refers to all activities involved in the purchase or buying of goods and services by the public sectors (Hommen&Rolfstam, 2009; Bizana, Naude&Ambe, 2015). According to the view of the National Treasury (2005), acquisition management involves a process of procuring goods and services by the public sector; procedure of concluding the total cost of acquiring an asset; procedure of ensuring that the necessary documentations are made; process of ensuring that bids are evaluated according to the laid down criteria; and a process of ensuring that contracts are signed by the correct parties involved accordingly.

Acquisition management is a fundamental area of the Preferential Procurement policy which ensures that black South Africans gains active participation in the mainstream economy. According to the municipal supply chain management regulations as noted in Regulation 11 of SCM policy, the public sector are required to establish an effective and efficient system that will enable proper acquisition management. These regulations include:

- Ensuring that goods and services are procured by municipalities according to the official procedure.
- Ensuring that expenses on goods and services conforms to the accepted budget.
- Ensuring that the entrance of the procurement processes are recognized.
- Ensuring that the documentations and the general conditions of a particular contract follow the SCM legislation.
- Ensuring that all National Treasury guidelines that are required to guide acquisition management are considered.

South African Local Government Association Supply Chain Management Policy (2013) and the National Treasury (2005), posit that the supply chain management can only function well by instituting an independent bid specification committee, an evaluation committee, and an adjudication committee which should be approved by the accounting
officer. Therefore an effective system of acquisition management must be provided for by the Supply Chain Management policy to ensure that service delivery within the municipality takes place in accordance with authorise processes.

2.5.2.1 Bid specification committee (BSC)
This comprises at least four officials with the inclusion of the manager requesting the item and other public sector specialists. The bids specification committee compiles specifications, point system and other necessary conditions as stipulated by PPPFA. They assess each bidder’s ability to execute the contract. Generally, the procurement of public service providers in the Republic of South Africa considerably differs from one government department to the other. (Pauwet et al. 2002), notes that national government departments. Notwithstanding, the tendering process is overseen by the tender committees of the particular department. However, there are certain desires that deemed applicable and cut across various departments depending on the type of service procured. This committee is responsible for outlining the specifications in terms of the specific requirements of the particular project that needs to be embarked on.

2.5.2.2 Bid evaluation committee (BEC)
This comprises of one supply chain official from supply chain management department and at least four other members from the public sector including an official from the user department. This committee evaluates the suppliers that meet minimum requirement as required by PPPFA which will be sent to bid adjudication committee as a report for proper endorsement. After the evaluation process, recommendations are made and send to the adjudication committee for appointment.

2.5.2.3 Bid adjudication committee (BAC)
This comprises of four Supply Chain Management senior managers/officials and the shortlisted service providers. It should be noted that the committee should be chaired by the Supply Chain Manager practitioner. This committee applies the comparative price schedule involving indicators as price and BBBEE formula to award contracts. Upon the award of contract, the best interest of the sector is taking into consideration Therefore, it is required that measures be put in place to ensure that national government receive the best possible supply of goods and services at the most reasonable price, at the same
time making sure that the potential service provider is given the prospect of competing for contracts through a fair and unbiased basis.

2.5.3 Logistics Management

Logistics management entails the coding of items; setting of inventory level; placing of numerous orders; receiving and distribution of items; warehouse management and transport management; and vendor performance to ensure effective flow of goods and services (Ambe & Badenhorst-Weiss, 2011). Khalo (2007) avers that logistic management includes contract management and inventory control. This entails that SCM department needs to provide an enabling environment in logistics management to set inventory levels, transport management and contract administration.

Contract management involves the registration of vendors and inclusion of their particulars of registration in the municipality database, also monitoring the contract from its inception, execution and accomplishment. The procedures for this registration may include:

- Company registration certificates.
- VAT registration number.
- Tax reference number.
- Tax clearance certificate from SARS.
- Proof of residence.
- Proof of active service (past twelve months).
- Good standing in terms of levies.
- Proof of registration with a professional body (RSA).

The municipalities are expected to follow some procedures when ordering items or stock from the service providers. These procedures include:

- An order from the municipality should be issued to the supplier whom the contract has been previously awarded.
A delivery note from the supplier should be presented and signed by the municipality on the delivery of the order.

A thorough investigation of the items on delivery to ensure that the ordered items are rightly delivered.

2.5.4 Disposal Management
According to Section 40 of the Municipal Supply Chain Management Regulations of 30th May, 2005, disposal management entails all the functions that involves disposal of assets, which include unserviceable and obsolete assets while Ambe and Badenhorst-Wiess (2011) opined that disposal management encompasses all activities by the supply chain management department to dispose all assets that are no longer needed by the department; creating a database for the obsolete and redundant materials; re-inspection of the materials for possible re-use; determination of possible disposal plan; and effective methods of implementation.

Regulation 40 further notes that SCM Regulation Policy should outline the procedures by which the assets will be disposed. In this regard, companies that specialise in auctions may be appointed to auction the obsolete materials. Also SALGA opines that disposal of assets in the public sector should be fair, just and should be a collective decision from the SCM board to avoid biasness of decision (South African Local Association of Supply Chain Management Policy, 2013)

2.5.5 Performance Management
In supply chain management, performance management entails a retrospective analysis to anticipate whether the due processes are followed, monitoring of progress and to ensuring that the desired objectives are achieved (National Treasury, 2005). Also, Coyle, Gibson & Novace (2009) asserted that performance management is necessary in the supply chain department to enable proper analysis of contractual performance, evaluation of progress efficiency and effectiveness of different service providers.

According to Rendon (2008), the implementation of Balanced Scorecard management system in the performance management process is necessary in the aspect of internal process and contracts management. Also SALGA maintains that the key indicators of
measuring contract performance include predetermined objective and the actual performance; actual financial performance and the budget; and compliance to supply chain management regulations and law (SALGA, 2013). In this regard, the Contract Management Framework (CMF) stipulates that tenders rising above R200 000 has a life cycle that consists of five stages:

2.5.5.1  **Procurement planning**
At this stage, the materials that have been identified in the demand management process are examined and considered with specifications to the content of the budget, also suppliers are considered (National Treasury, 2010)

2.5.5.2  **Solicitation planning**
At this stage, the necessary documents needed for tender processes are prepared. Furthermore, they will be assigned to different management stakeholders for measurement and monitoring.

2.5.5.3  **Calling for tenders**
This stage involves the collection of proposals from the general public which is advertised in an appropriate media over a stipulated period of time not less than six months which will be in line with Section 22(1)(a) of SCM Regulations contained in the MFMA Act 56 of 2003.

2.5.5.4  **Source selection**
This stage involves the collection of bids from different service providers. The best service provider will be selected at this stage using the pre-set evaluation criteria. According to Moeti, Khalo, Mafunisa, Nsingo and Makonda (2007), bids received from the public should be opened and registered publicly while all bidders are invited to witness the award of the contract.

2.5.5.5  **Contract Administration**
In this category, the performance of each service provider is measured as regards to the pre-set standard. The supply chain departments are expected to monitor performance prior to future budgets and risk management.
2.6 Key players in supply chain management

The role players in supply chain management involve all the individuals or intermediaries that foster the effective implementation of supply chain management in the public sector. They include the National Treasury, Provincial treasuries, Accounting officers, and Chief financial officers.

2.6.1 National Treasury

According to Ambe and Badenhorst-Weiss (2011), the National Treasury is responsible to:

- ensure that the supply chain management and its principles are well implemented;
- ensure that treasury regulations are developed and adopted;
- issue guidelines on supply chain management;
- supersede and give general conditions of contracts;
- ensure that the minimum reporting standards are set and,
- ensure that policy outcome are monitored.

The role of National Treasury is to monitor implementation of the supply chain management in all spheres of government. To develop policies, procedures and practice notes/circulars to assist the three spheres of government in achieving the broader policy objectives as set out in the PFMA/MFMA and further legislation. Furthermore, the National Treasury works hand in hand with the provincial treasury to ensure that the spheres of government which assist with the promotion of coordination among different government role players. They assist the National Treasury by monitoring municipalities with regard to compliance with national and provincial treasury standards. They also measure improvements in the performance of supply chain and set complementary standards. In addition, to that, they monitor and publish municipal reports to share information with the public and account to the parliament. They take intervention measures for breach of the act by a municipality (Randall, & Robison, 2014)
2.6.1.1 Legislative framework instituted by the National Treasury

The diagram below reflects the link between the Constitution and the other key acts affecting Local Government and Municipal Supply Chain Management. The relationship between the National Treasury and the municipalities is that National Treasury monitors and evaluates whether the municipalities are procuring goods and services according to the set policies and procedures and ensuring that good service delivery is provided to the residents of different provinces in South Africa.

**Figure 2.1.7: Linkage between the Constitution and the other key acts affecting Local Government**

![Diagram showing the linkage between the Constitution and other acts affecting Local Government](image)

**Source:** National Treasury (2014)

The is the financial management legislation used in conjunction with the legislative framework that reflects the different regulations.
2.6.1.2 Constitution

S217(1) "When an organ of state in the national, provincial or local sphere of government, or any other institution identified in the national legislation, contracts for goods or services, it must do so in accordance with a system which is fair, equitable, transparent, competitive and cost-effective."

S217 (3) issues national legislation with the requirement to prescribe a framework which provides for preferential procurement to address social and economic imbalances of the past.

MFMA S112(1) “The supply chain management policy of a municipality or municipal entity must be fair, equitable, transparent, competitive and cost-effective and must comply with a prescribed regulatory framework for municipal supply chain management”

2.6.2 Provincial Treasuries

The Provincial Treasuries ensures that the public sectors implements the supply chain management principles by:

- Providing special advice.
- Institute training in all the provinces.
- Monitoring of policy outcomes made by the National Treasury.

2.6.3 Accounting Officers

Ambe and Badenhorst-Weiss (2011) maintains that the accounting officers in the public supply chain management are responsible for:

- Establishing SCM unit under the supervision of Chief Financial Officer.
- Compiling and implementing the supply chain management policies.
- Following the guidelines supporting the documentation for implementation as prescribed by the National Treasury.
- Developing adequate internal processes and procedures.
- Maintaining effective training of workers.
- Reporting to the National Treasury.
- Complying with the ethical standard.

### 2.6.4 Chief Financial Officer

The chief financial officer in the public supply chain management is responsible to recruit, select, develop and manage the available human resource to ensure adequate development of supply chain. For the process of recruitment and appointment to occur, the CFO despite the authority vested in his or her office, still works in close collaboration with other committee members.

### 2.7 Roles of supply chain management in the public sector

According to IMESA the systems theory (see par, 2.1), it should be noted that the supply chain management department should interact and cooperate with all the stakeholders to ensure that the set objectives are actualized (IMESA, 2016). Section 217 of the Constitution of South Africa highlighted that the practice of supply chain management should be a collaborative affair and a national project to ensure that the residents and citizens are satisfied. IMESA (2016) highlighted the roles of efficient supply chain management to include the following:

- Provision of good quality goods and services to the right places, appropriate time and reduced cost to the citizens of South Africa.
- Elimination of wasteful expenditures in the aspect of selection of service providers thereby saving millions of Rand in awarding of contracts (Ambe, 2012)
- Supply chain management encourages economic growth, maintenance of infrastructure by ensuring that all the logistics are well positioned for service.
- Improvement of welfare in the life of needy South Africans especially those that depend heavily on government support.
- Ensures that the obsolete and redundant materials are disposed at a comparative advantaged price.
- Improves the quality of governance that helps in the elimination of corruption, bribery and fronting (IMESA, 2016).
• It improves capacity development in delivering strategic objectives.

• It creates an opportunity for better competition by bringing different service providers, organisations with like skills to be involved in public sector market place (Ambe, 2012).

2.8 Challenges faced by municipalities in the implementation of supply chain management
In the implementation of supply chain management, there are various factors that inhibit its effective administration within the public sector (Boshomane, 2016). In view of this, Ambe (2012) alluded that regardless of the use of SCM as a strategic service delivery tool, public procurement in South Africa is still facing severe hindrances. These restraining factors that are both internally and externally motivated are discussed below as well as suggested measures of improvement.

2.8.1 Non-compliance with policies and regulations
In the Republic of South Africa, there are several regulations that are made by the National Treasury which is meant to guide the practice of supply chain management. These regulations are to be implemented by the key players of SCM to ensure that there is compliance to rules, regulations and procedures (Boshomane, 2016). In this regard the National Treasury (2005) requires that before any approval for expenditure is made or incurring spending of any nature, the authorising official must ensure compliance with every condition attached to the authorisation. Failure to abide by these policies will result in severe repercussions like poor service delivery that is often detrimental to the organisation.

Furthermore, some of the non-compliance of policies as noted by Boshomane (2016) includes inappropriate measures in handling bids and quotations by the bids committee, incorrect utilisation of preference point system, appointment of unqualified contractors, utilisation of incorrect procurement process and extension of validity periods. It should be a necessity that all the legal frameworks of SCM and other legislations that guide the practice of SCM be duly observed (see par. 2.3.1). Also the issue of non-compliance is equally mentioned in section 38 of the Public Finance Management Act of the
constitution. According to this Act, it is the responsibility of the accounting officer of an establishment which in this case is the municipal manager to ensure that a proper control systems or assets of the organisation exist as well as make sure that preventive measures are in place to eradicate every form of maladministration.

### 2.8.2 Inadequate Measures for monitoring and evaluation

The basis of sound policy and governance entails adequate measures for monitoring and evaluation. In the public sector, the stakeholders of supply chain management are required to monitor performances to integrate the noted deviations into policies to perfect the system. In South African public sector, there have been evidence of wasteful expenditures at National, Provincial and municipal levels that contravenes SCM regulations and legal frameworks (Boshomane, 2016). The three arms of government is therefore charged to participate in the monitoring and evaluation of supply chain functions as the numerous legislation demands, also purchasing outside legislation should be highly monitored to enhance the full objective of supply chain management.

A detailed literature review across the different sectors of the government for example education and tourism reveals that the progressive lack of monitoring and evaluation is indeed a common problem faced by government sectors including municipalities. With reference to the North West Provincial Tourism Board’s Annual Report (2012/2013) it was evident that the problem of negligence resulting from insufficient monitoring and evaluation is common challenge faced by the sector. According to this report, the accounting authority failed to monitor and report compliance with various laws and regulations because there was a lack of documents to support internal control during the audit which resulted in to management’s failure to respond to curtail audit irregularities. Despite the provision of the PFMA 1 (1999) and the Prevention and Combating of Corrupt Activities Act No 12 (2004) which requires monitoring by officials, Migiro and Ambe (2008) say that it is still not properly implemented as there is still persistent fraud and corruption.

### 2.8.3 Lack of accountability, fraud and corruption

Accountability in the public sector supply chain management requires that all the procurements made by the stakeholders should comply with the regulations of SCM.
Nevertheless, there should be accountability in the system which will drastically reduce fraud and corruption. There have been reports of cases in the public sector where millions of Rand is lost every year due to the inability of the government to monitor fraud and corruption by the VFO and accounting officers (Boshomane, 2016). In this vein, necessary conditions must be put in place to make public procurements and other supply chain process having financial value accountable to eliminate fraud and corruption.

The Public Finance Management Act 1999 Section 76(4b) stipulates that the accounting officer of any organisation must ensure that both internal and internal control procedures are in place and fully monitored from approval of payment to the processing of necessary documentations. These internal controls are destined to provide rational reassurance that any form of expenditure is appropriate, adequately noted and reported by stakeholders involved thereby ensuring a system free of fraud and corruption.

### 2.8.4 Lack of consequence management

Consequence management refers to the tool used to revive a negative behaviour that is against the ethical considerations of management or organisational code of conduct. According to the consolidated report of the local municipalities for the financial year 2012-13, it noted 71% lack of consequence management on poor performance and transgressions, while 2011-12 noted 75% poor performance in consequent management (Auditor General Report, SA 2014:25). Furthermore, it is observed that the consequence management rose from 71% in 2011-12 to 84% in 2012-13 in the North West Province municipalities. An indication that a lot of effort is made by the municipalities but of course remain insufficient as the problem of poor service delivery in the province is still on the rise.

### 2.8.5 Inappropriate political leadership

According to the Gauteng Anti-corruption Framework (2009) serving the interest of the public should be the fundamental mission of stakeholders in both government and public organisations. As such it is a fundamental right of the community or citizens to expect individual officials to execute their responsibilities with honesty, fairness as well as unbiased. Therefore stakeholders who maintain private interests during their
time in office as against the public who democratically put them into office can be a major threat to these fundamental rights such as adequate service delivery.

In supply chain administration in some municipalities in South Africa, some councillors intentionally boycott the rightful legislations in the course of discharging their duties knowing full well that the government will not take any legal action against them (Auditor General South Africa, 2014). There should be an understanding between the legislature and the executive; the law should be adequately enforced on defaults on supply chain sector. This remains a huge challenge for the Mahikeng Local Municipality where political conflicts are placed at the helm of activities instead of the business of the day.

2.8.6 Lack of skill and knowledge
The inability of workers to effect efficient participation in supply chain processes has hindered the success of supply chain management in the public sector. Following the new political dispensation of South African in 1994 which saw the collapse of the Apartheid regime, and in an attempt to balance the inequalities of the past, black South Africans through the BEE Act (2000) were empowered to take over the running of affairs of the state. With over two decade of independence, Migro and Ambe (2008) reveal that the officials of SCM have attained high level capacity building but their output as regards the audit report from the Auditor general remains poor. In confirmation, SALGA, COGTA, and DBSA in their presentations at the standing committee accepted that there is acute shortage of expertise, experienced or skilled workers in the municipalities (Parliamentary Monitoring Group, 2010). Also, the National Treasury conducted an assessment on the level of competency amongst municipality staff and discovered shortage of skills in handling the finances of the organisation correctly and lack of accountability (National Treasury, 2015).

2.8.7 Hiked Prices of materials
The suppliers of materials often take advantage of the public sector by hiking prices of materials due to ignorance of ineffective supply management (IMESA, 2016). As a matter of fact, this results in the high prices paid for goods and services, non-performance of the contract, provision of poor and substandard materials and other unethical behaviours. Badenhorst (1994) stated that purchasing departments are not
fully involved in strategic decision-making in organisations and hence competent people are not appointed to run the function. This more often than not has resulted in hiked prices as well as the increase rate of bribery and corruption in the system. Badenhorst (1994), as a result put the blame on organisational culture for being responsible for non-ethical standards in procurement as less qualified people are awarded tenders leaving the system very helpless. Thus Section 155 of the Constitution which gives a framework to the establishment of the municipality emphasises that councillors may not use their positions and privileges for private gains.

2.8.8 Outdated technology
According to IMESA (2016) the technology that is used in the management of supply chain in the public sector is deemed outdated and unsuitable. It is interesting to note that the use of technology in recent times has added value to the level of accountability in both the public and private sector. Through the provision of adequate technological facilities stakeholders in strategic possessions of accountability will have little or no excuse to table for non-compliance such as missing receipt upon procurement. Therefore there is need for the government to revive the situation and implement adequate information system to ensure that the system will function effectively.

2.9 Method of improving the Supply Chain Management Sector
IMESA (2016) asserted that the practice of supply chain management in the local municipalities in South Africa needs a process of reformation to ensure a better service to the citizens. In this regard, the need to improve some processes, roles and infrastructure were highlighted. In improving the processes involved in SCM, the municipalities are expected to collaborate effectively with all the stakeholders in the system thereby embracing the concepts of system theory as explained in Sections 2.1; improving in the roles entails the observation of the fundamental frameworks as stipulated by the National Treasury thereby ensuring that all stages of participation are guided by the necessary legislation; also improvement in infrastructure involves the introduction of an effective information system technology that would enhance adequate data collection, data processing and data storage.
In support of the view of IMESA, Boshomane (2016) pointed out that there is a need for the supply chain management to have good understanding about their procurement objectives and procurement policies to effect good management and reduce waste of resources. These assertions invariably address the importance of abiding by all the necessary legislations by the Constitution and the National Treasury. Also the SCM management is expected to train and equip the officials with the necessary skills that are needed to ensure that they have qualified staff that would handle administrative tasks successfully. Also, the government should ensure that the system is monitored and evaluated to encourage effective and accurate performance (Boshomane, 2016).

2.10 Summary

These issues raised in this chapter demonstrate the purpose of supply chain management, how it works and the sectors involved. Systems theory and how it relates to supply chain management that it is connected to each and every department of the municipality. The supply chain management which is a concept in the business arena that has gained lots of interest lately. It is the integration of key business processes from the end user through the original suppliers that provide products, services and information which adds value to customers and other stakeholders.

The issues discussed are the public sector supply chain management ensures that the entire stakeholders that are involved in the demand and supply of items are met with the stipulations of public sector requirements. In addition, the legal frameworks of public supply chain management were discussed to explain the role of each of them in implementing an efficient supply chain management in the republic of South Africa. A number of points were discussed in this chapter including the Municipal supply chain management regulation, the BBBEE principles where the seven pillars were discussed and contract management framework functions include increasing all forms of contract through improved information in policy making, identifying the non-performing service providers and other stakeholders.

The preferential procurement policy framework policy framework which assists in the implementation of the procurement policies in the public sector was discussed. Furthermore, National Treasury ensures that supply chain management is well
implemented in all departments in the public sector. The different bid committees were also discussed. The key players of supply chain management which are National Treasury, the government and roles of supply chain management in the public sector were clearly elaborated. However, there were a number of challenges also identified which are noncompliance with policies and regulations, inadequate monitoring and evaluation of the supply chain management, lack of accountability in the municipalities, lack of consequence management for those who do not adhere to the outlined policies and procedures and lack of knowledge by those in positions of decision making.
CHAPTER THREE
RESEARCH DESIGN AND METHODOLOGY

3.1 Introduction
The purpose of this study is to assess effectiveness of supply chain management of service delivery at the Mahikeng Local Municipality in the North West Province. This chapter focuses on the research methodology followed in the study.

3.2 Research design
According to Creswell (2014), research design is regarded as a type of enquiry within any of the three approaches namely: quantitative, qualitative, and mixed –method approach in order to help provide direction for the study. Also Gray (2014) asserts that research design entails a systematic plan the researcher makes to collect, measure, and analyse data collected from the respondents.

Authors such as Creswell refer to it as strategies of a researcher’s inquiry regarding the problem under study. The strategy of enquiry employed in this study is the quantitative design. In this study self-administered structured questionnaires were used to gather the opinions of the respondents thereby enabling the research to obtain comprehensive knowledge on the phenomenon under study (Creswell, 2014). The use of questionnaires is advantageous because it is more cost effective and at most offers the comfort of anonymity. (Kumar 2014) is of the opinion that the researcher saves time, human and financial resources since they do not have to interview every respondent. However, the disadvantage is that there is lack of contact with respondents which denies the researcher an opportunity to clarify issues to the respondent.

3.3 Research method
According to Golic et al (2005), it is evident, that a more deductive quantitative and a more inductive qualitative research approach has both its advantages and shortcomings. In every kind of empirical research trade-offs between controls, realism and generalists have to be made. Therefore, they describe a double cycle research process, where the two approaches balanced. A quantitative approach to research was selected for this study. According to Edmonds and Kennedy (2013)
quantitative research is the application of systematic steps of scientific research while utilising quantitative properties. The choice for this quantitative approach gave the researcher an advantage of convenient data gathering of questionnaires from respondents, good statistical significance, little or no observer subjectivity, precise results and for the findings to be interpreted numerically (Creswell, 2014, Sincero, 2012).

3.4 Area of study
Sincero (2012) The area of study focused on the Mahikeng Local Municipality in the North West Province in South Africa. It is located 300km away from Johannesburg. It has various directorates, sub-directorates, divisions, subdivision, sections and sub-sections. The area that the research is going to focus more on the supply chain management section, finance section and infrastructure section which comprises of the provisioning and the procurement of goods and services in the municipality.

3.5 Population and sampling
According to Bhattacherjee (2012) population describes the total quantity of case which is the subject of a study that consists of objects, people, and events. (Relmer & Gregg, and Ryzin 2011) posited that population as a group by which the study will be focused. The population of this study will consist of employees at the municipality. Table 1.1 simplifies the population of this study.

<table>
<thead>
<tr>
<th>Designation</th>
<th>Total Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Employees</td>
<td>254</td>
</tr>
</tbody>
</table>

3.5.1 Sampling Method
Sampling refers to the process of selecting subsets from the population in such a way that the results obtained will be valid (Maree, 2010). According to O’Leary (2010), sampling is the process of selecting elements of a population for inclusion in a research study. Also, Bhattacherjee (2012) and Cohen, Mannion and Marrison (2011) averred that sampling is an intentional selection of subsets from the population to obtain relevant knowledge that is a true representation of the whole. For purpose of this study, purposeful
sampling was used to identify respondents. This was based on the fact that the study itself adopts a case study approach dealing with a particular municipality.

### 3.5.2 Purposive Sampling

Purposive sampling according to Maree (2014:178) is a method of sampling used in special situation where the sampling is done with a specific purpose in mind. This method based on the above views was selected because the researcher desired to investigate the effectiveness of SCM on service delivery for a particular local municipality. As such the target population from the said municipality was personnel responsible for SCM in different sectors of the municipality which include finance, infrastructure and management. According to Relmer et al, (2011), purposive sampling is a method of selection by which the respondents are selected based on exposure, experience, nature of roles and duties. It enhances originality, validity of data collection and ensures that the data collected will be true representation of the population.

Furthermore, Brink (1996) alludes that purposive sampling requires selecting participants who are knowledgeable about the issues in question, because of the pure involvement in and experience of the situation. In this study therefore a sample of 100 respondents was purposively selected from a total population of 254 from the Mafikeng Local Municipality which is my case study, based on my belief that they are the holder of the required information. Existing knowledge of other municipalities in the area through literature study was used to give the researcher a clue of the existing challenges in relation to proper service delivery.

### 3.6 Data collection technique

The data collection technique in this study followed a quantitative approach. The main data collection technique was self-administered questionnaires.

#### 3.6.1 Questionnaires

According to Gray (2011) a questionnaire is an instrument that is used to collect information in empirical research. Also it can be seen as a list of questions that represents the researchers view or perception the study (Bastic&Matalon, 2007). A questionnaire has so many advantages over other means of data collection. Bastic and
Matalon (2007) and Maree (2010) asserted that questionnaires are cheap and easy method of collecting data from the respondents.

A close ended questionnaire was used to collect information from employees. The questionnaire was solely designed for the purpose of obtaining facts and opinions about the phenomenon under study: ‘Effectiveness of supply chain management of service delivery in Mahikeng Local Municipality’. Structured questions were used for different sections. The reason for using this instrument is that it suspends personal prejudices, biases, and ensures objectivity of the researcher.

According to the sample size, the total of 100 questionnaires were distributed to the municipal employees. 100 employees were chosen because those were the relevant people to the study. They could give an informed decision and had the required knowledge for filling in the questionnaires.

**Table 3.1.2: The sample size of the study**

<table>
<thead>
<tr>
<th>Designation</th>
<th>Total Number</th>
<th>Sample</th>
</tr>
</thead>
<tbody>
<tr>
<td>Employees</td>
<td>254</td>
<td>100</td>
</tr>
</tbody>
</table>

The questionnaire is divided into Sections A and B. Section A focuses on biographical and demographical information of respondents thereby helping the researcher identify the independent variables for the study. The remainder sections utilise the ‘a-priori’ method by focusing on the research questions of this study thereby addressing the dependent variables through the control variables identified. The scales for the questionnaire would be a mix of continuous (e.g., strongly agree to strongly disagree) and categorical scale (e.g., yes and no).

This study began with a pilot study. A pilot study can also be referred to field testing and can be defined as the means of administering sets of questionnaires in order to establish the content validity of the instrument in order to improve questions, formats, and scales (Creswell, 2014). Separate sets of questionnaires were handed out to ten respondents to improve validity and reliability of the instrument. After respondents had consented, the researcher distributed the questionnaires in person to respondents at
the Mahikeng Local Municipality to ensure high response rate. The researcher collected the completed questionnaires from the respondents after administering.

The requirements established for the referential analysis axis from the questions that were put together in the questionnaire to build on a structure aimed at facilitating its application and motivate respondents. Considering the complexity and the high number of questions, the data collection instrument was personally distributed by the researcher and answered by the respondents. In this manner, the researcher received more detailed information, explained the questions where necessary, provided detailed instructions, and ensured response reliability by checking evidence.

**3.7 Data analysis and statistical techniques**

Data has no meaning unless interpreted and analysed. Once data was collected from the municipal employees, through the use of questionnaires, they were then captured as numbers in what is known as raw data. During the capturing process each question on the questionnaire and the accompanied data was organise and presented as variables. This was followed by the analysis process the data started with a descriptive statistics through the use of computer packages such as MS Excel and Statistical Package for Social Science (SPSS). According to Maree (2014) the term descriptive statistic is a collective name for a number of statistical methods that are used to organise and summarise data in a meaningful way.

The last phase of process was the presentation of data from the empirical finding. Descriptive and inferential statistics which include frequency, graphs and percentages were used in the presentation of data where applicable. More specifically, data presentation that was descriptive in nature was analysed through the use of a two way frequency table with percentages also known as cross tabulation, bar charts and histograms representing different variables. Effect sizes were also calculated to determine if the responses of respondents differed in practice.
3.8 Reliability and validity of results

In a quantitative study, two basic and standardised instruments can be used to ensure some degree of credibility and dependability in the result. They include validity and Reliability.

3.8.1 Validity

According to Maree (2014) the validity of an instrument refers to the extent to which it measures what it is supposed to measure. Because of the complex nature of the concept validity in studies of humanity and social sciences in the measurement of for instance dislikes and incentives the researcher tested the validity mindful of this problematic situation. This problematic situation includes possible threats to internal validity from instrumentation and statistical regression as well as external validity which was used to generalise the research sample to the larger population (Susanne, 2012). In this study, validity of results was ensured by personally visiting the respondent’s offices to ensure the proper distribution and collection of questionnaires. This was possible because the said municipality is just a few Kilometres away from the institution in which the study was done. The questionnaires were formulated in simple language with clear instructions to make sure that all the questions are answered by respondents. Also after the data analysis process was concluded a random selection of five respondents was given the data to confirm that whatever is documented is exactly what was given by them.

3.8.2 Reliability

Reliability is also known as internal consistency; this was used to examine the consistency of measuring instruments (questionnaires) in this study. It is an important technique used by quantitative researchers as a basis for validity to determine whether or not a study obtains the same results each time (Susanne, 2012). Also reliability in research can be described as the extent to which a particular measuring instrument can be consistent in its findings when administered to different subjects of the same population (Maree, 2014). The researcher in this study ensured reliability by employing a pilot study to test stability (test – retest reliability) by administering one measure to one group of
individuals and after a while re-administered the same instrument to the same group. This was equally made possible because the researcher did not meet with all the respondent on the same date. When this was done the results proved 100% to be reliable as there was high level of consistency in the responses.

3.9 Ethical considerations

This section discusses ethical considerations. Flick (2006) argued that research has been considered an ethical concern on a broader platform to the magnitude that various countries have officially developed Codes of ethics and ethics committees appointed. The main objective of the exercise was to protect the main interests of the participants in the study, in order to eliminate any scandals that may arise from poor data management. The respondents that participated in this study voluntarily, following the principles guided by informed consent.

This study did not intrude on the rights of any person as integrity, objectivity and ethical standards were upheld through this study. The participants of this study gave their consent under oath, the researcher assured them of confidentiality.

According to O'leary (2010) ethics refer to rules of behaviour that help to know what is acceptable within a profession. Ethics in conducting research however, vary across different professional codes or disciplines and/or institutions but there are generally acceptable guidelines. For the purpose of this study, permission was obtained from the ethics committee of the Faculty of Commerce, North-West University to carry out the research on the impact of supply chain in Mahikeng Local Municipality. Afterwards, this letter was used to approach the Municipal Manager of Mahikeng Local Municipality to obtain permission to conduct research at Mahikeng Local Municipality.

Ethical protection was observed according to contemporary social science (Flick 2006). The researcher ensured voluntary participation by making sure that none of the respondents was coerced into participating and that they were granted the right to discontinue at any stage of the study. Similar to voluntary participation is informed consent which was made aware to respondents focusing on the procedures and risk
involved in the research. Confidentiality was also guaranteed by not revealing the identity of informants or their thoughts with anyone except with the supervisor.

3.10 Summary
In this chapter a detailed review of the research design and methodology was presented. This included data collection and analysis techniques, population and sampling as well as the means by which reliability and validity of the study were achieved.

The next chapter presents and analyses the statistical findings that were collected through questionnaires.
CHAPTER FOUR
DATA PRESENTATION, INTERPRETATION AND DISCUSSION

4.1 Introduction
This chapter presents the data from the empirical study. The data was collected through self-designed structured questionnaires. The questionnaires were sent out to the municipal employees at the Mafikeng Local Municipality working in the sections of finance, supply chain and infrastructure who work directly with the procurement of goods and services and the tendering of construction, cleaning and security projects just to mention a few. The data was analysed using the SPSS computer based programme and presented using simple frequency tables in percentages, bar charts and figures. It is followed by discussion of the findings to determine whether the said objectives were attained.

4.2 SECTION A: BIOGRAPHICAL DATA
This section represents the characteristics of the respondents who participated in this study in terms of age, education qualifications, period of employment and period of engaging in supply chain management.

4.2.1 Age of respondents
It was important to examine the age structure of the sampled population so as to identify the respondent's age group.

Figure 4.1.1: Age of respondents
Figure 4.1 above clearly illustrates that, 38% of the respondents were between the ages of 18 to 30 years, 25% between the ages of 41 to 50 years, 22% of the respondents were between the ages of 31 to 40 years, 15% were between 51 to 60 years and there were no employees above 61 years of age working in these sections. The study revealed that majority of the respondents was between the ages 18-30 years. This indicates that there is a high number of new employees that are still learning the SCM culture of Mahikeng Local Municipality. This can be a major disadvantage to the supply chain management sector considering that the majority of the employees are active youths, there might be lack of experience and a need for an effective service delivery process.

**Objective One: To determine the causes of irregularities in the awarding of contracts**

4.2.2 **Education qualification**

Apart from the requirement of experience for a job, the level of qualification also stands out as a very important requirement for the achievement of effectiveness in SCM of service delivery of the municipality. The chart below indicates the level of qualification obtained by the respondents of the study.

**Figure 4.1.2: Highest qualification of respondents**

![Bar chart showing the level of qualification of respondents.](image)

Figure 4.2 above clearly indicates the employees’ educational qualifications. A closer look at the chart indicates that 21% of these employees have only grade twelve, while up to 57% have degrees/diploma, 16% of the employees have BTech /Honours and
only 6% of the respondents have Masters Qualifications. The results reveal that the majority of the employees at the Mahikeng Local Municipality are qualified but however this does not show that being qualified results in executing their duties according to the policies and procedures of the SCM at the local municipality hence the issues highlighted in the figures below. Despite the majority of qualified employees with at least a university degree, some degree of experience is highly needed which explains why most of the top management candidates were less qualified; this is a possible cause for irregularities in services delivery.

This is similar to the findings from literature in paragraph 2.7.6 by Migro and Ambe (2008) which reveal that the officials of SCM though have attained a high level capacity building as well as qualification, their output as regards to the audit report from the Auditor general remains poor. In terms of an assessment that was conducted by the National Treasury on the level of competency amongst municipality staff and discovered shortage of skills (National Treasury, 2015).

### 4.2.3 Period of employment

The question was posed to determine the respondents’ period of employment at the local municipality. This is equally another crucial factor that causes irregularities in the awarding of contracts in the municipality.

**Figure 4.1.3: Length of employment at the Mafikeng Local Municipality**

![Histogram showing employment length distribution](image-url)
Figure 4.3 presents the period that the employees have been in the service of the municipality. According to the chart, 41% of the employees have been employed for less than six years, 21% respondents of the respondents have been employed between six to ten years, 24% of the respondents have been employed between 11 and 15 years, 5% of the respondents have been employed between 16 to 20 years and 6% have been employed for more than 25 years.

Unlike in the previous findings where results show that a majority of employee are qualified, the reverse is true when it comes to experience. The chart depicts that close to 50% of employees have only worked at the municipality for less than six years and hence still getting conversant with the municipality working culture and environment. While a handful of others have worked for more than 6 years which shows that they had ample time to learn about the process and procedures of the SCM. However, there are a number of challenges still encountered by the Mahikeng Local Municipality leading to a shortfall of the municipality in terms of service delivery.

**Objective Two: To establish whether SCM enhances the effectiveness of the Mahikeng local municipality in service delivery.**

**4.2.4 Duration of engagement in implementation**

The respondents were required to indicate for how long they had been engaged in the implementation of SCM at the Mahikeng Local Municipality.

**Figure 4.1.4: Period engaged in implementing SCM regulations at the Mafikeng Local Municipality.**
Figure 4.4 illustrates the period that the respondents have been engaged in the implementation of the supply chain management regulations process. Results show that 36.84% of the respondents have implemented the SCM regulations for less than three years in their period of serving in the municipality which makes them less experience for the job. 14.74% of other employees for three to four years, 21.05% have engaged in the SCM regulation implementation for five to seven years, 17.89% of the for eight to ten years and 9.47% engaged in the SCM regulations for more than 10 years.

The results revealed that majority of the respondents in charge of implementing SCM regulations are fairly new at it since they have only been engaged for less than three years but it also indicates rate of turnover and minimises monopoly of power of the SCM at Mahikeng Local Municipality. However, there still have a number of employees that have stayed longer than 10 years. This implication means that respondents at SCM unit lack the relevant experience to achieve effective service delivery. Notwithstanding considering that there are a few employees with up to five years’ experience and above absolute collaboration with senior employees should be encouraged for effective service delivery in the municipality.

**Objective Three:** To determine if the supply chain management officials in the Mahikeng local municipality perform their role.
4.3 SECTION B: SCM IN MAHIKENG LOCAL MUNICIPALITY

This section describes the supply chain management of the Mahikeng Local Municipality in terms of role, compliance with legislative frameworks and best practice of SCM hence addressing objective two. Responses were presented on a Likert scale where SD = Strongly Disagree, D = Disagree, N = Neutral, A = Agree and SA = Strongly Agree.

4.3.1 Role of SCM in Mahikeng Local Municipality

The researcher investigated the role of SCM in Mahikeng Local Municipality to determine whether the objectives of SCM are met at the various levels of the supply chain management process.

| Table 4.1.1: The role of supply chain management in Mahikeng Local Municipality |
|---------------------------------|-----------|-----------|-----------|-----------|-----------|
| Item                            | SD (%)    | D (%)     | N (%)     | A (%)     | SA (%)    |
| There is the provision of good quality goods and services to the right places to the citizens of South Africa N=100 (V5) | 9         | 20        | 27        | 40        | 4         |
| There is the provision of good quality goods and services at appropriate time to the citizens of South Africa N=100 (V6) | 8         | 22        | 36        | 31        | 3         |
| There is the provision of good quality goods and services at reduced cost to the citizens of South Africa N=100 (V7) | 4         | 33        | 26        | 34        | 3         |
| There is elimination of wasteful expenditure in the aspect of selection of service providers thereby saving millions of rands in awarding of contracts N=100 (V8) | 24        | 37        | 27        | 8         | 4         |
| The supply chain management encourages growth by ensuring that all the logistics are well positioned for service N=100 (V9) | 5         | 30        | 25        | 36        | 4         |
| The supply chain management encourages maintenance of infrastructure by ensuring that all the logistics are well positioned for service N=99 (V10) | 5.05      | 26.27     | 26.26     | 38.38     | 4.04      |
| To improve the welfare in the life of the needy South Africa especially those that depend heavily on government support N=99 (V11) | 11.11     | 13.13     | 32.32     | 38.38     | 5.05      |
| It ensures that the obsolete and redundant materials are disposed at a competitive advantaged price N=100 (V12) | 13        | 30        | 21        | 34        | 2         |
| The supply chain management improves capacity development in delivering strategic objectives N=100 (V13) | 9         | 24        | 18        | 47        | 2         |
The supply chain management department creates an opportunity for a better competition by bringing different services providers, organisations with like skills to be involved in public market place N=99 (V14)

| Average Response (%) | 10.43 | 24.75 | 26.38 | 34.62 | 3.82 |

The Table 4.1 above illustrates the views relating to the role of supply chain management in Mahikeng Local Municipality. The results show that there was a disjuncture in the response to the role of the SCM at the Mahikeng Local Municipality as an average of 38.44% of the respondents agreed that SCM performs its roles and hence achieves the desired objectives. However, 35.17% of the responders disagreed and 26.38% of the respondents were neutral to effectiveness of the SCM role in the Mahikeng Local Municipality. Generally, most of the responses were fairly positive but there was a strong disagreement regarding the elimination of wasteful expenditure in relation to the selection of service providers. This is still a challenging factor in North West Municipalities including Mahikeng Local Municipality, as this results in fruitless and wasteful expenditure and in some instances it causes irregular expenditure.

IMESA (2016) noted that the supply chain management department should interact and cooperate with all the stakeholders to ensure that the set objectives are actualized. IMESA further listed a number of roles that ensure effective SCM. According to the results in Table 4.1. this signifies a huge gap as far as the performance of responsibility is concern for the effectiveness of supply chain management on service delivery.

**Objective Four:** To asserting the level of compliance by supply chain officials with the legal frameworks of SCM.

**4.3.2 Compliance with legislative frameworks**

The researcher investigated the level of compliance with legislative frameworks of SCM at the Mahikeng Local Municipality and the responses are shown in Table 4.2 below.

| Table 4.1.2: Compliance with the legislative frameworks of supply chain management |
|---|---|---|---|---|---|
| Item | SD | D | N | A | SA |
The municipality exercises its constitutional right of governing the local area without undue interference by other spheres of government N=100 (V15)  

Preferential Procurement policy which ensures that black South Africans gain active participation in the mainstream economy ensuring that goods and services are procured by municipalities according to the official procedure N=100 (V16)  

Ensuring that expenses on goods and services conforms to the accepted budget N=100 (V17)  

Ensuring that the documentations and the general conditions of a particular contract follow the SCM legislation N=100 (V18)  

Ensuring that all National Treasury guidelines that are required to guide acquisition management are considered N= 100(V19)  

<table>
<thead>
<tr>
<th>Description</th>
<th>(%)</th>
<th>(%)</th>
<th>(%)</th>
<th>(%)</th>
<th>(%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>The municipality exercises its constitutional right of governing the local area without undue interference by other spheres of government N=100</td>
<td>18</td>
<td>34</td>
<td>22</td>
<td>23</td>
<td>3</td>
</tr>
<tr>
<td>Preferential Procurement policy which ensures that black South Africans gain active participation in the mainstream economy ensuring that goods and services are procured by municipalities according to the official procedure N=100</td>
<td>5</td>
<td>33</td>
<td>19</td>
<td>39</td>
<td>4</td>
</tr>
<tr>
<td>Ensuring that expenses on goods and services conforms to the accepted budget N=100</td>
<td>5</td>
<td>14</td>
<td>32</td>
<td>47</td>
<td>2</td>
</tr>
<tr>
<td>Ensuring that the documentations and the general conditions of a particular contract follow the SCM legislation N=100</td>
<td>6</td>
<td>17</td>
<td>18</td>
<td>54</td>
<td>5</td>
</tr>
<tr>
<td>Ensuring that all National Treasury guidelines that are required to guide acquisition management are considered N= 100</td>
<td>2</td>
<td>16</td>
<td>33</td>
<td>43</td>
<td>6</td>
</tr>
<tr>
<td>Average Response (%)</td>
<td>7.2</td>
<td>22.8</td>
<td>24.8</td>
<td>41.2</td>
<td>4</td>
</tr>
</tbody>
</table>

Table 4.2 above indicates that majority of the responses relating to compliance with legislative frameworks were positive as an average 45.2% of the respondents agreed that the SCM at the Mahikeng Local Municipality complies with the relevant supply chain legislative frameworks. 30% of the respondents disagreed to the compliance of legislative frameworks, while 24.8 of the respondents were neutral. The results revealed that the SCM at the Mahikeng Local Municipality was to a certain extent in compliance with legislative frameworks in various ways like conforming all expenses to the accepted budget, following SCM legislation on all contract conditions and documentation and, the consideration of all National Treasury guidelines in acquisition management.

However, the respondents believe that there is interference from other spheres of the government that prevent the Municipality from its constitutional right to govern the local area. This is very similar with findings from literature in para 2.7.1 where Boshomane (2015) indicated that some of the non-compliance of policies are the inappropriate measures in handling bids and quotations by the bids committee, incorrect utilisation of preference point system, appointment of unqualified contractors, utilisation of incorrect procurement process and extension of validity periods. It should be a necessity that all the legal frameworks of SCM and other legislations that guide the practice of SCM be duly observed by the municipality.
Objective Five: To assess the impact of ineffectiveness on service delivery in Mahikeng local municipality.

4.3.3 Ineffectiveness of SCM strategies

The respondents were asked to indicate what causes the ineffectiveness of SCM strategies at the Mahikeng Local Municipality. Their responses were captured in the table below.

Table 4.1.3: Causes of ineffectiveness of supply chain management strategies

<table>
<thead>
<tr>
<th>Item</th>
<th>SD (%)</th>
<th>D (%)</th>
<th>N (%)</th>
<th>A (%)</th>
<th>SA (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>The municipality exercises its constitutional right of governing the local area without undue interference by other spheres of government N=100 (V20)</td>
<td>13</td>
<td>36</td>
<td>29</td>
<td>18</td>
<td>4</td>
</tr>
<tr>
<td>The municipality has inadequate measures for monitoring and evaluation of SCM performance N=100 (V21)</td>
<td>11</td>
<td>24</td>
<td>14</td>
<td>43</td>
<td>8</td>
</tr>
<tr>
<td>There is lack of accountability/ consequence management with the SCM officials N=96 (V22)</td>
<td>6.25</td>
<td>17.71</td>
<td>19.79</td>
<td>40.63</td>
<td>15.63</td>
</tr>
<tr>
<td>There is lack of monitoring fraud and corruption within the municipality N=99 (V23)</td>
<td>9.09</td>
<td>18.18</td>
<td>11.11</td>
<td>41.41</td>
<td>20.20</td>
</tr>
<tr>
<td>Sufficient role clarification exists and these roles are adhered to by political office bearers as well as officials. N=98 (V24)</td>
<td>8.16</td>
<td>33.67</td>
<td>30.61</td>
<td>23.47</td>
<td>4.08</td>
</tr>
<tr>
<td>There is lack of skills and knowledge to strengthen the capacity of the municipality officials to execute its functions. N=98 (V25)</td>
<td>9.18</td>
<td>16.33</td>
<td>16.33</td>
<td>45.92</td>
<td>12.24</td>
</tr>
<tr>
<td>The supply chain officials ensures that hiked prices of materials are not paid to service providers N=99 (V26)</td>
<td>10.10</td>
<td>24.24</td>
<td>38.38</td>
<td>24.24</td>
<td>3.03</td>
</tr>
<tr>
<td>The municipality uses outdated technology in the supply chain department which is a challenge when executing SCM functions N=99 (V27)</td>
<td>12.12</td>
<td>18.18</td>
<td>19.19</td>
<td>34.34</td>
<td>16.16</td>
</tr>
<tr>
<td><strong>Average Response (%)</strong></td>
<td><strong>9.86</strong></td>
<td><strong>23.54</strong></td>
<td><strong>22.30</strong></td>
<td><strong>33.88</strong></td>
<td><strong>10.42</strong></td>
</tr>
</tbody>
</table>

The responses from Table 4.3 above clearly indicate in terms of the causes of ineffectiveness of supply chain management strategies. Variable 20 shows that 49% of the respondents disagree with the Municipality exercising its constitutional right of governing the local area and 29% is neutral to this which in itself is a challenge for the supply chain management. Variable 21 to variable 23 most of the respondents agree that there is lack of accountability, consequence management, monitoring of fraud,
corruption and that there is inadequate measuring, monitoring and evaluating of SCM performance. 56.26%, 61.61% and 49% respectively. 41.83% of the respondents on variable 24 disagree that sufficient role clarification exists and the roles are adhered to by political office bearers which shows that not all political bearers follow and observe the supply chain management strategies. In supply chain administration in some municipalities in South Africa, some councillors intentionally boycott the rightful legislations in the course of discharging their duties knowing full well that the government will not take any legal action on them (Auditor General South Africa, 2014). The respondents also agree with V25 and V27 that there is lack of skills and knowledge 58.16% and 50.5% respectively. 38.38% of the respondents are neutral to V26. This shows that there are number of challenges being faced in the supply chain management strategies. The suppliers of materials often take advantage of the public sector by hiking prices of materials due to ignorance of ineffective supply management (IMESA, 2016)

Best practice of Supply Chain Management

The researcher investigated whether the SCM at the Mahikeng Local Municipality followed best practice in SCM.

**Table 4.1.4: Best practice in supply chain management at the Mahikeng Local Municipality**

<table>
<thead>
<tr>
<th>Item</th>
<th>SD(%)</th>
<th>D (%)</th>
<th>N (%)</th>
<th>A (%)</th>
<th>SA(%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>The inefficiency of one section or department to perform effectively will affect the performance of the entire municipality N=100 (V28)</td>
<td>3</td>
<td>11</td>
<td>11</td>
<td>49</td>
<td>26</td>
</tr>
<tr>
<td>The performance appraisals being conducted in the organisation are assisting performance of the municipality N=97 (V29)</td>
<td>6.19</td>
<td>35.05</td>
<td>14.43</td>
<td>37.11</td>
<td>7.22</td>
</tr>
<tr>
<td>It is necessary to increase all forms of contract management framework through improved information and in policy making N=100 (V30)</td>
<td>1</td>
<td>2</td>
<td>11</td>
<td>60</td>
<td>26</td>
</tr>
<tr>
<td>It is important to identify the non performing service providers and other stakeholders in the assumption of reducing cost N=100 (V31)</td>
<td>1</td>
<td>5</td>
<td>6</td>
<td>59</td>
<td>29</td>
</tr>
<tr>
<td>To have the best practices is vital for SCM officials to be efficient in using financial resources of the municipalities N= 100(V32)</td>
<td>0</td>
<td>2</td>
<td>8</td>
<td>61</td>
<td>29</td>
</tr>
</tbody>
</table>
It is necessary for the promotion of the success of the women and physically challenged people by SCM officials that ensures the BBBEE is being used effectively N=100 (V33)

<table>
<thead>
<tr>
<th></th>
<th>1</th>
<th>2</th>
<th>14</th>
<th>59</th>
<th>24</th>
</tr>
</thead>
<tbody>
<tr>
<td>The promotion of procuring locally manufactured products by the SCM officials improves the lives of the residents serving the purpose why it was introduced N=98 (V34)</td>
<td>3.06</td>
<td>2.04</td>
<td>18.37</td>
<td>57.14</td>
<td>19.39</td>
</tr>
<tr>
<td><strong>Average Response (%)</strong></td>
<td>2.18</td>
<td>8.44</td>
<td>11.83</td>
<td>54.61</td>
<td>22.94</td>
</tr>
</tbody>
</table>

From the responses in Table 4.75% of the respondents on Variable 28 shows that they agree that the inefficiency of one section or department will affect the performance of the entire municipality which shows that the SCM at the Mahikeng Local Municipality does not have best practice in SCM. The respondents agree with Variable 30 to 34 which have these percentages, Variable 30 is 86%, V31 is 88%, V32 is 90%, V33 is 85% and V34 is 76%. This shows that the respondents are in agreement that it is necessary to increase all forms of contract management framework through improved information and in policy making, it is vital to identify non performing service providers, and to have the best practices is important for SCM officials to be efficient. Furthermore, it is important to promote the success of woman empowerment and procuring locally manufactured products. The points raised above will enhance best practices in supply chain management and will eliminate unethical practices that are resulting in high irregular expenditure being experienced and poor service delivery. This improves the quality of governance that helps in the elimination of corruption, bribery and fronting (IMESA, 2016).

Empirical findings therefore, clearly show that the best practice in supply chain management is not implemented at the Mahikeng Local Municipality. Hence, the increase in irregular expenditure reported by Auditor General in different municipalities, Mahikeng Local Municipality is equally included. This was equally the case in paragraph 2.7.2, talking about the basis of sound policy and governance entails adequate measures for monitoring and evaluation. In the public sector, the stakeholders of supply chain management are required to monitor performances to integrate the noted deviations into policies to perfect the system. In the South African public sector, however, there has been evidence of wasteful expenditures at national, provincial and
municipal levels that contravenes SCM regulations and legal frameworks (Boshomane, 2015).

4.4 SECTION C: AWARENESS OF SCM AT THE MAHIKENG LOCAL MUNICIPALITY

This section sought to establish the level of awareness of the employees regarding SCM at the Mahikeng Local Municipality. The responses obtained were tabulated below as follows.

Table 4.1.5: Awareness of the SCM at the Mahikeng Local Municipality

<table>
<thead>
<tr>
<th>Questions</th>
<th>Yes (%)</th>
<th>No (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Did they take you for induction or orientation according to your opinion? N=99, (V36)</td>
<td>23.33</td>
<td>76.77</td>
</tr>
<tr>
<td>Do the SCM officials comply with the legal frameworks of the Supply Chain Management department? N=100, (V37)</td>
<td>69</td>
<td>31</td>
</tr>
<tr>
<td>Is the SCM policy of the Municipality easy to understand? N=99, (V38)</td>
<td>87.88</td>
<td>12.12</td>
</tr>
<tr>
<td>Can you report any fraud, corruption, nepotism, maladministration and other acts constituting an offence or which is prejudicial to the public interest to the appropriate authorities? N=97, (V39)</td>
<td>63.92</td>
<td>36.08</td>
</tr>
<tr>
<td>Have you ever been involved in any transaction or action which is in conflict with or infringes on the execution of official duties? N=99, (V40)</td>
<td>5.05</td>
<td>94.95</td>
</tr>
<tr>
<td>Do the personnel in the finance section understand the Treasury regulations? N=99, (V41)</td>
<td>71.72</td>
<td>28.28</td>
</tr>
<tr>
<td>Does the municipality have a bid specifications committee and its processes outlined? N=98, (V42)</td>
<td>88.78</td>
<td>11.22</td>
</tr>
<tr>
<td>Does the municipality have the bid evaluations committee? N=91, (V43)</td>
<td>92.31</td>
<td>7.69</td>
</tr>
<tr>
<td>Does the municipality have the adjudication committee? N=95, (V44)</td>
<td>93.68</td>
<td>6.32</td>
</tr>
<tr>
<td>Is the performance of each service provider being measured as regards to the pre-set standard of SCM policies? N=97, (V45)</td>
<td>26.80</td>
<td>73.20</td>
</tr>
</tbody>
</table>

From Table 4.5 above, the respondents (69%) are of the opinion that the SCM officials comply with legal frameworks, 87.88% say the SCM policy of the municipality is easy to understand, 63.92% can report any fraud, corrupt, nepotism, mal-administration and other acts constituting an offence and 94.95% have never been involved in a conflict with the execution of official duties. 71.72% of the respondents indicated that personnel in finance understand treasury regulations, 88.78% know that the municipality has a bid specification committee with outlined processes, 92.31% know about the bid evaluations committee and 93.68 % know about the adjudication committee. However, majority of the employees (76.77%) indicated that they did not have any induction or
orientation to SCM and 73.20% of the respondents are of the opinion that the performance of each service provider is not measured as regards to the pre-set standard of SCM policies. The results reveal that although the majority of the respondents did not take part in any SCM induction, they are aware of the SCM policy at Mahikeng Local Municipality since they believe that the policy is easy to understand though there are still a number of challenges encountered with the Municipality at the time of the study the SCM Manager is on suspension due to a misconduct in executing the SCM duties at the Mahikeng Local Municipality. In terms of the supply chain management this may impact negatively on service delivery as supply chain management officials may not understand fully what is expected of them and the purpose of why supply chain management policies and procedures were introduced by National Treasury. In the implementation of supply chain management, there are various factors like lack of knowledge, skills, vision, understanding of the principles that inhibit its effective administration within the public sector (Boshomane, 2015).

**4.5 SECTION D: Reliability analysis**

Cronbach’s Alpha (α) reliability coefficient, whose numerical value varies between 0 to 1, measures the internal consistence (reliability) of the items on a Likert scale. A high value (close to 1) for Cronbach’s Alpha reliability coefficient indicates good internal consistency of the items on the scale. The Table 4.6 below shows the variables that were used to determine the reliability of the questionnaire as a data collection instrument.

<table>
<thead>
<tr>
<th>Dimension</th>
<th>Cronbach’s Alpha (α)</th>
<th>No. of Items</th>
<th>Variables</th>
</tr>
</thead>
<tbody>
<tr>
<td>Role of supply chain management</td>
<td>0.883</td>
<td>10</td>
<td>V5–V14</td>
</tr>
<tr>
<td>Compliance with the legislative frameworks of supply chain management</td>
<td>0.742</td>
<td>5</td>
<td>V15–V19</td>
</tr>
<tr>
<td>Causes of ineffectiveness of supply chain management strategies</td>
<td>0.695</td>
<td>8</td>
<td>V20–V27</td>
</tr>
<tr>
<td>Best practice in supply chain management</td>
<td>0.559</td>
<td>7</td>
<td>V2 –V34</td>
</tr>
</tbody>
</table>

The Cronbach’s alpha coefficients in Table 4.6 above are closer to 1, suggesting that the items in the scale have a relatively high internal consistency. Thus an indication that
the empirical findings from the study is indeed valid and reliable in interpreting the
effectiveness of SCM of service delivery in the Mahikeng Local Municipality. In terms of
the research questions the role of supply chain management, compliance with the
legislative frameworks of supply chain management and causes of ineffectiveness of
supply chain managements is very reliable as the Cronbach’s alpha coefficient is above
0.6 and the best practice in supply chain management is fairly reliable as it is also
above 0.0559. Hence, the results deduced from the research are very much reliable and
accurate clearly depicting the issues identified above.

4.6 SECTION E: Correlation analysis
This section describes the relationship between age, period of service and the views of
employees on SCM issues as shown in Table 4.7 and Table 4.8 using the test of
significance (Spearman’s rank correlation).

4.6.1 Spearman’s rank correlation
This test also known as the test of significance is to determine the relationship between
two ranked variables (X and Y). The relationship is statistically significant if the p-value
is less than the 0.05 level of significance.
The spearman’s rank correlation coefficient is given by

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

Where

\[ D = \text{differences of ranks of corresponding values of } X \text{ and } Y \]
\[ N = \text{number of paired values in the data} \]

\[-1 \leq r \leq 1\]

Table 4.1.7: Spearman’s rank correlation coefficient between age group (V1) and
views of respondents on the supply chain management

<table>
<thead>
<tr>
<th>Views</th>
<th>Correlation coefficient(r)</th>
<th>p - value</th>
</tr>
</thead>
<tbody>
<tr>
<td>The inefficiency of one section or department to perform effectively will affect the performance of the entire municipality N=100, (V28)</td>
<td>0.227</td>
<td>0.023</td>
</tr>
</tbody>
</table>
SPSS 23 software package was used for the correlation analysis and the results are shown in Table 4.7. Since the p-value (0.023) is less than the 0.05 level of significance, this means the correlation between age category and views of respondents about the item listed in Table 4.7 is significant. The correlation coefficient \((r = 0.227)\) in Table 4.7 is positive. This also is a positive indication that the selected group of respondents did not act under any form of pressure as they are considered mature enough to act on their free will. In relation to the supply chain management it means that the young are of the view that inefficiency of one section to perform effectively will affect the performance of the municipality negatively, which in turn impacts service delivery negatively as the officials would not be able to deliver according to the supply chain management policies and procedures. In the implementation of supply chain management, there are various factors like lack of skills, knowledge, understanding of the supply chain management principles that inhibit its effective administration within the public sector (Boshomane, 2015).

**Figure 4.1.5: Views versus age \((r > 0)\)**

<table>
<thead>
<tr>
<th>Agree</th>
<th>Disagree</th>
</tr>
</thead>
<tbody>
<tr>
<td>Views</td>
<td></td>
</tr>
<tr>
<td>Young</td>
<td>Old</td>
</tr>
</tbody>
</table>

**Age category**

According to Figure 4.5 above, the young respondents tend to disagree with the item listed in Table 4.7, whereas older respondents agree. Expressing their different views in this regard raised questions of uncertainty in the effectiveness of SCM on service delivery in the Mahikeng Local municipality in the implementation of supply chain management, there are various factors like inefficiencies in the supply chain management processes that inhibit its effective administration within the public sector (Boshomane, 2015).
Table 4.18: Spearman’s rank correlation between period of service (V35) and views of respondents on the supply chain management

<table>
<thead>
<tr>
<th>Views</th>
<th>Correlation coefficient(r )</th>
<th>p - value</th>
</tr>
</thead>
<tbody>
<tr>
<td>The municipality exercises its constitutional right of governing the local area without undue interference by other spheres of government N=100, (V15)</td>
<td>-0.241</td>
<td>0.016</td>
</tr>
<tr>
<td>The municipality uses outdated technology in the supply chain department which is a challenge when executing SCM functions N=99 (V27)</td>
<td>0.198</td>
<td>0.049</td>
</tr>
<tr>
<td>The inefficiency of one section or department to perform effectively will affect the performance of the entire municipality N=100 (V28)</td>
<td>0.241</td>
<td>0.016</td>
</tr>
</tbody>
</table>

Since the p-values (0.016 and 0.049) are less than 0.05 level of significance, then the correlation between job experience and views of respondents about the items listed in Table 4.12 is significant in this current study of effectiveness of SCM on service delivery. According to the supply chain management spearman’s correlation in this instance means that job experience and views of the respondents are of great importance in ensuring great service delivery to the residents of Mahikeng Local Municipality as the officials would be more experienced and understand the processes of how supply chain management can eliminate wasteful processes within the procurement process to achieve great performance and limit undue interference by spheres of government. Elimination of wasteful expenditures in the aspect of selection of service providers thereby saving millions of rand in awarding of contract (Ambe, 2012)

Figure 4.1.6: Views versus job experience (r < 0)

```
<table>
<thead>
<tr>
<th>Agree</th>
<th>r &lt; 0</th>
</tr>
</thead>
<tbody>
<tr>
<td>Views</td>
<td></td>
</tr>
<tr>
<td>Less</td>
<td></td>
</tr>
<tr>
<td>More</td>
<td></td>
</tr>
<tr>
<td>Disagree</td>
<td></td>
</tr>
</tbody>
</table>
```

65
The correlation coefficient \( r = -0.241 \) in Table 4.8 is negative, implying that less experienced respondents tend to agree with the item \((V15)\) listed in Table 4.8, whereas more experienced respondents tend to disagree as shown in Figure 4.6 above. This indicates an existence of contrasting views which can be very detrimental for service delivery in the municipality. In relation to the supply chain management, it means that there is greater influence from the government spheres on how supply chain management processes occur, which is a barrier because at times the supply chain management officials do not follow the required policies and procedures in the execution of their duties.

**Figure 4.1.7: Views versus job experience \((r > 0)\).**

![Graph](image)

**Job Experience**

The correlation coefficients \( r = 0.198 \) and \( 0.241 \) in Table 4.8 are positive, implying that less experienced respondents tend disagree with the variables \((V27 \text{ and } V28)\) listed in Table 4.8, whereas more experienced respondents tend to agree as shown in Figure 4.7 above. Similarly this is another indication of a huge barrier that is detrimental to the municipality.

**4.7 Summary**

This chapter offered the data analysis and presentation. The main findings of the investigation were summarised and interpreted in different sections through variables answering the different research objectives.
In relation to the supply chain management, the study noted that unskilled staff present in the management of the SCM sector contributes to inhibit the expected success, non-compliance to legal precedents, inadequate measures for monitoring and evaluation, lack of knowledge and inappropriate political leadership. The Public Finance Management Act is one of the most powerful financial instruments used by the government to regulate its businesses across the nation. Like other organisations, the Mahikeng Local Municipality also usually faces problems that are motivated either internally or externally with regards to compliance with the PFMA. However, considerable effort is made on a regular basis to achieve this objective. Though, regardless of the amount of effort put in place by the municipality and the government, there will always be minor shortcomings that require emergent reaction. It can therefore be concluded that all the objectives of the study, and findings gathered from the empirical study reveal that all objectives were attained.
CHAPTER FIVE
RECOMMENDATIONS AND CONCLUSION

5.1 Introduction

This chapter presents all the discussions of the study linking the literature review to the results from data analysis in order to make a final conclusion and give recommendations where necessary. The study was specifically conducted to evaluate the effectiveness of Supply Chain Management of service delivery in Mahikeng Local Municipality.

In addition, to the discussion was the report on whether the research questions have been addressed. Some of the questions that needed to be addressed are whether the role of supply chain officials is understood by the supply chain officials and if they are compliant with the legislative frameworks of supply chain management. It also assessed the causes of ineffectiveness of the supply chain strategies and determined what the best practices in the supply chain management are in ensuring that better service delivery is given to the residents of the Mahikeng Local Municipality. The supply chain management was introduced in order for government entities in this case, Mahikeng Local Municipality to provide effective and efficient service delivery to the residents in a manner that endorses the mandate of Treasury in ensuring that compliance to the supply chain management policies and procedures is adhered to.

5.2 Supply chain management

Supply chain management is considered one of the key financial management focus areas by the National Treasury. According to Boateng (2010) supply chain management is considered as the strategy which is implemented by the local municipalities that is focused on itemizing the needs of the residents, purchasing the goods required by the residents, delivering the goods and services, maintaining the logistics and making sure an effective disposal of wastes after use.

The objective of this study was to investigate the causes of irregularities in handling of contract management, to assess the impact of ineffectiveness on service delivery in
Mahikeng Local Municipality. There is need for transparency in the procurement process and effective service delivery is achieved by complying with the supply chain management policies and ensuring adherence to the legislative frameworks.

According to reflects of the systems theory (see par, 2.1), it should be noted that the supply chain management department should interact and cooperate with all the stakeholders to ensure that the set objectives are actualized (IMESA, 2016). Section 217 of the Constitution of South Africa highlighted that the practice of supply chain management should be a collaborative affair and a national project to ensure that the residents and citizens are satisfied.

The use of the supply chain management is however, also influenced by many factors such as political influence, ignorance of what is expected of the supply chain management officials, the officials not understanding fully the purpose of why supply chain management was introduced, employing unqualified officials whose attitude does not serve the goals set in supply chain management, officials who choose to ignore the supply chain management policies.

5.3 Research design and methodology
A quantitative method of research was followed as it was considered the most relevant to use in extracting perceptions from a large population. Furthermore, with the quantitative method, it is easy to establish a relationship between the different variables and how they impact the effectiveness of supply chain management of service delivery in the Mahikeng Local Municipality. The data collection instrument most relevant to a quantitative study is a questionnaire, this was used for their study, and this was made up of closed-ended questions. The 100 questionnaires that were handed out were filled in with the Mahikeng Local Municipality officials who have worked with the supply chain management and those that are currently involved with the supply chain management.

The questionnaires were distributed randomly amongst supply chain management officials of all genders and age groups, with varying supply chain management know-how within the municipality.
5.4 Summary of findings

The objective of the study was to establish whether there was effectiveness of supply chain management of service delivery in the Mahikeng Local Municipality. This was achieved through asking the relevant research questions to the relevant people, by the use of questionnaire.

Results from the study reveal that the majority of the employees at the Mahikeng Local Municipality are qualified however, this does not show that being qualified results in executing their duties according to the policies and procedures of the SCM at the local municipality. Despite the majority of qualified employees with at least a university degree, some degree of experience is highly needed which explains why most of those in top positions were less qualified which is also a possible cause for irregularities in services delivery. Unlike in the previous findings where results show that a majority of employees are qualified, the reverse is true when it comes to experience. Close to 50% of employees have only worked at the municipality for less than six years and hence still getting conversant with the municipality working culture and environment. While, 21% of others have worked for more than 6 years which shows that they had ample time to learn about the process and procedures of the SCM. However, there are a number of challenges still encountered by the Mahikeng Local Municipality leading to a shortfall of the municipality in terms of service delivery.

Views relating to the role of supply chain management in Mahikeng Local Municipality, generally, most of the responses were fairly positive but there was a strong disagreement regarding the elimination of wasteful expenditure in relation to the selection of service providers. This is still a challenging factor in North West Municipalities including Mahikeng Local Municipality as this results in fruitless and wasteful expenditure and in some instances it causes irregular expenditure.

The results revealed that majority of the respondents in charge of implementing SCM regulations are fairly new at it since they have only been engaged for less than three years but it also indicates rate of turnover and minimises monopoly of power of the SCM at Mahikeng Local Municipality. However, there still are a number of employees that have stayed longer than 10 years. This means that respondents at SCM unit lack the
relevant experience to achieve effective service delivery. Notwithstanding considering that there are a few employees with up to five years' experience and above, absolute collaboration with senior employees should encourage effective service delivery in the municipality.

In asserting the level of compliance by supply chain officials with the legal frameworks of SCM the results revealed that the supply chain management at the Mahikeng Local Municipality was to a certain extent in compliance with legislative frameworks in various ways like conforming all expenses to the accepted budget, following SCM legislation on all contract conditions and documentation and, the consideration of all National treasury guidelines in acquisition management.

However, the respondents believe that there is interference from other spheres of the government that prevent the municipality from its constitutional right to govern the local area. This is very similar with findings from literature in para 2.7.1 where Boshomane (2015) indicated that some of the non-compliance of policies are the inappropriate measures in handling bids and quotations by the bids committee, incorrect utilisation of preference point system, appointment of unqualified contractors, utilisation of incorrect procurement process and extension of validity periods. It should be a necessity that all the legal frameworks of SCM and other legislations that guide the practice of SCM be duly observed by the municipality.

This is also experienced in other municipalities in South Africa, where the government loses millions of Rands as a result of protests by the angry residents causing a lot of destruction in terms of the municipality assets (Sangonet, 2010).

The best practice in supply chain management is not implemented at the Mahikeng Local Municipality hence, the increase in irregular expenditure reported by Auditor general in different municipalities, Mahikeng Local Municipality is equally included. This was equally the case in para 2.7.2, talking about the basis of sound policy and governance entails adequate measures for monitoring and evaluation. In the public sector, the stakeholders of supply chain management are required to monitor performances to integrate the noted deviations into policies to perfect the system in
South African public sector. However, there has been evidence of wasteful expenditures at National, Provincial and municipal levels that contravenes SCM regulations and legal frameworks (Boshomane, 2016).

In terms of the awareness of the supply chain management by the officials at Mahikeng Local Municipality it could be deduced that there a number of challenges that were revealed by the study. For instance, 77% of the employees were not inducted and only 23% received induction which means that people donot really understand how supply chain management works and because of this, it impacts negatively on service delivery. In terms of variable 37 (Do the SCM officials comply with the legislative frameworks of the SCM department), variable 39 to variable 44 the results clearly shows that the majority of employees understand the process of supply chain management however, the biggest challenge is the political influence where other people were reluctant to get involved in answering the questionnaire for fear of being victimised, however, it was reassured that the questionnaire was anonymous and they need not put their names.

Overall, it is believed that there is room for improvement by the supply chain management officials in executing their duties and ensuring that they provide effective service delivery to the residents of Mahikeng Local Municipality. The attitude and mindset of the supply chain management officials needs to be redirected and focus on the reasons why supply chain management was introduced in the first place and to enable them to comply and achieve the goals of providing good quality services to the residents of Mahikeng Local municipality as well as complying with the legislative frameworks in eliminating high irregular expenditure reported on by the Auditor General.

5.5 Conclusion
In conclusion, a quantitative study was performed to determine the effectiveness of supply chain management of service delivery in Mahikeng Local Municipality. Outcomes from the study revealed that majority of the supply chain management officials knew the reason why it was implemented, however, most of them chose to ignore and not implement the policies and procedures that have been outlined by the National Treasury mandate hence more challenges have emanated in the implementation of the supply
chain management policies impacting negatively on service delivery. Based on the research question on whether the introduction of supply chain management assisted in improving service delivery. The inefficiency of one section or department to perform effectively affects the performance of the entire municipality, in comparison to the older generation, the younger generation is of the view that this would negatively affect the supply chain department whilst the older employees are not in agreement with the statement, which may affect the supply chain management negatively if not monitored. In short, Mahikeng Local Municipality needs to take all the above mentioned shortfalls and begin to change the way they have been implementing the supply chain policies and ensure that those officials are trained and understand what exactly is expected of them in the execution of their duties and ensuring that they provide effective and efficient service delivery to their residents. Furthermore, there is need for the supply chain management department to comply with the set objectives, goals and the positive outcomes need to be cultivated but only if the attitude and perceptions of those in charge change for the better.

5.6 Recommendations
There is a problem that the municipality employs unqualified employees. It is important that the Municipality appoints more qualified people and trains them on the functions and purpose of supply chain management. This will assist in ensuring that Mahikeng municipality officials are qualified for the positions that they are in, are well skilled, knowledgeable about the functions they have to perform in executing their duties.

There is a number of problems that are encountered in the implementation of supply chain management policies and this has resulted in the problems that have been mentioned in the above chapters, for example, variable 30 where the issue is about whether is it necessary to increase all forms of contract management framework through improved information and policy making. Most of the respondents agreed that there is need for the implementation of the contract management. In relation to the supply chain management it is crucial that contracts are awarded to the most deserving companies through the preferential procurement process and ensure that the companies given the contracts have the capacity, qualifications and experience to
execute the job properly. The bid committee together with the Municipal Manager and CFO appoints the winning service provider who has the highest points according the price and functionality. This will also eliminate substandard jobs that are experienced with the municipalities in South Africa which will reduce the sky rocketing irregular expenditure. Furthermore, there is need for consequence management to seriously be implemented so that officials that are responsible for corruption and ignoring the supply chain management policies and procedures are brought to book and are held accountable.

In addition, it is important to identify non performing service providers and other stakeholders in the assumption of reducing costs. It is necessary to monitor the performance of service providers so that non performing service providers should be eliminated as they will not be able to contribute in providing good service delivery for the residents of Mahikeng Local Municipality. As a recommending measure the government as well as individual municipalities must continue tirelessly in the training of employees in the sector to ensure adequate service delivery.

Moreover, for the Mahikeng Local Municipality in particular to have an effective supply chain management on service delivery, the attitude and mind set of the municipality officials needs to change positively for them to have a positive outcome on the quality of service delivery and to ensure that the supply chain policies are fully adhered to hence reduce the large amount of irregular expenditure, fruitless and wasteful expenditure.
REFERENCES


Municipal Supply Chain Management Regulations.


National Treasury. 2014. The principles of Broad-Based Black Economic Empowerment Strategy.


Randall, B & Robinson, C. 2014 National Treasury Presentation


South African Local Government Association Supply Chain Management Policy 2013


Wei. Z and Xiang. W 2013. The importance of Supply Chain Management: *International Journal of Business and Social Science, Volume 4 No.16*

Zygiaris S. 2010. Supply Chain Management: *Dissemination of innovation and knowledge management techniques*
Annexures

Mahikeng Local Municipality

Municipal Manager and other Departments

Ref. No. : 160402016
Covered : 018 389 0911 excl 2046
Year Ref. : Mr S Molongoe

Mr. I Hofmeister
North West University
Private Bag x 2946
Mmabatho
2735

19 April 2016

Permission to conduct research –Ms P Daka MBA Student

Your letter dated 08th April 2016 with regard to the matter bears reference.

We have the pleasure to inform you that your application to conduct research Ms P Daka –MBA Student has been approved. The research is on the impact and effectiveness of SCM on service delivery in Mahikeng Local Municipality.

Thank you.

Kind Regards

[Signature]

Mr T Molweni
Acting Municipal Manager

Please address all correspondence to the Municipal Manager.
Impact and Effectiveness of SCM in Mafikeng Local Municipality

QUESTIONNAIRE

The researcher is a Masters candidate at North-West University. The purpose of the questionnaire is merely academic – to fulfil the requirements for a Master’s degree; aspects will also assist the Municipality in improving systems of Supply Chain Management.

The responses to this questionnaire and all information obtained from the Municipality will be held in strict confidence. Please do not write your name on this questionnaire.

SECTION A: Biographical Data

Please complete the following by indicating with an (X) the statement applicable to you.

1. Age group
   - Between 18 and 30 years
   - Between 31 and 40 years
   - Between 41 and 50 years
   - Between 51 and 60 years
   - 61 years and above

2. Highest qualifications
   - Grade 12
   - Grade 12 plus 3 years degree/national diploma
   - BTech/Honours degree
   - Master’s degree
   - Doctorate (PhD)

3. Period of service at the Municipality
   - Between 1 and 4 years
   - Between 5 and 10 years
   - Between 11 and 20 years
   - Between 12 and 30 years
   - 31 years and above

4. Period engaged in implementing the SCM regulations
Section B:

1. The role of supply chain management in Mafikeng Local Municipality

<table>
<thead>
<tr>
<th>Statement</th>
<th>Strongly disagree</th>
<th>Disagree</th>
<th>Neutral</th>
<th>Agree</th>
<th>Strongly agree</th>
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<tbody>
<tr>
<td>There is the provision of good quality goods and services to the right places to the citizens of South Africa</td>
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<td>There is the provision of good quality goods and services at appropriate time to the citizens of South Africa</td>
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<td>There is the provision of good quality goods and services at reduced cost to the citizens of South Africa</td>
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<td>There is elimination of wasteful expenditure in the aspect of selection of service providers thereby saving millions of rands in awarding of contracts</td>
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<td>The supply chain management encourages growth by ensuring that all the logistics are well positioned for service</td>
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<td>The supply chain management encourages maintenance of</td>
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</table>
infrastructure by ensuring that all the logistics are well positioned for service.

To improve the welfare in the life of the needy South Africa especially those that depend heavily on government support.

It ensures that the obsolete and redundant materials are disposed at a competitive advantaged price.

The supply chain management improves capacity development in delivering strategic objectives.

The supply chain management department creates an opportunity for a better competition by bringing different services providers, organisations with like skills to be involved in public market place.

2. The supply chain officials in compliance with the legislative frameworks of supply chain management

<table>
<thead>
<tr>
<th>Statement</th>
<th>Strongly disagree</th>
<th>Disagree</th>
<th>Neutral</th>
<th>Agree</th>
<th>Strongly agree</th>
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<tbody>
<tr>
<td>The municipality exercises its constitutional right of governing the local area without undue interference by other spheres of government</td>
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<td>Preferential Procurement policy which ensures that black South Africans gains active participation in the mainstream economy ensuring that goods and services are procured by municipalities according to the official procedure</td>
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<td>Ensuring that expenses on goods and services conforms</td>
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</table>
 Ensuring that the documentations and the general conditions of a particular contract follow the SCM legislation

Ensuring that all National Treasury guidelines that are required to guide acquisition management are considered

3. The causes of ineffectiveness of supply chain management strategies

<table>
<thead>
<tr>
<th>Strongly disagree</th>
<th>Disagree</th>
<th>Neutral</th>
<th>Agree</th>
<th>Strongly agree</th>
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<tbody>
<tr>
<td>The municipality exercises its constitutional right of governing the local area without undue interference by other spheres of government</td>
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<td>The municipality has inadequate measures for monitoring and evaluation of SCM performance</td>
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<td>There is lack of accountability/consequence management with the SCM officials</td>
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<td>There is lack of monitoring fraud and corruption within the municipality</td>
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<td>Sufficient role clarification exists and these roles are adhered to by political office bearers as well as officials.</td>
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<td>There is lack of skills and knowledge to strengthen the capacity of the municipality officials to execute its functions.</td>
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<td>The supply chain officials ensures that hiked prices of materials are not paid to service providers</td>
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<td>The municipality uses outdated technology in the supply chain department which is a</td>
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Challenge when executing SCM functions

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<th>4. Best practice in supply chain management</th>
<th>Strongly disagree</th>
<th>Disagree</th>
<th>Neutral</th>
<th>Agree</th>
<th>Strongly agree</th>
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<td>The inefficiency of one section or department to perform effectively will affect the performance of the entire municipality</td>
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<td>The performance appraisals being conducted in the organisation are assisting performance of the municipality</td>
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<td>It is necessary to increase all forms of contract management framework through improved information and in policy making</td>
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<td>It is important to identify the non performing service providers and other stakeholders in the assumption of reducing cost</td>
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<td>To have the best practices is vital for SCM officials to be efficient in using financial resources of the municipalities</td>
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<td>It is necessary for the promotion of the success of the women and physically challenged people by SCM officials that ensures the BBBEE is being used effectively</td>
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<td>The promotion of procuring locally manufactured products by the SCM officials improves the lives of the residents serving the purpose why it was introduced</td>
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Section C

Self administered questions

1) For how long have you been in the employment of the Mafikeng Local Municipality?

2) When you were first employed by the Mafikeng Local Municipality did they take you for induction or orientation according to your opinion?

3) Do the SCM officials comply with the legal frameworks of the Supply Chain Management department?

4) What causes irregularities in handing contract management?

5) How best can we develop best practices in SCM to be implemented by SCM of Mafikeng Local Municipality?

6) What do you think causes unethical behavior in the workplace?

7) Is the SCM policy of the Municipality easy to understand?
8) How effective are you in the execution of duties? ..........................................................
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9) Can you report any fraud, corruption, nepotism, maladministration and other act which constitutes an offence or which is prejudicial to the public interest to the appropriate authorities? ..........................................................
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10) Have you ever been involved in any transaction or action which is in conflict with or infringes on the execution of official duties? ..........................................................
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11) What, in your opinion is the biggest practical obstacle institutional efficiency in the municipality? ..........................................................
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12) Do the personnel in the finance section understand the Treasury regulations? ..........................................................
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13) Does the municipality have a bid specifications committee and its processes outlined? ..........................................................
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14) Does the municipality have the bid evaluations committee and how many members are they? ..........................................................
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15) Does the municipality have the adjudication committee and how many members are they? ..........................................................
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16) Is the performance of each service provider being measured as regards to the pre-set standard of scm policies? …………………………………………………………………………
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