



SCM policy implementation and compliance in the Ngaka Modiri Molema District, South Africa

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The newly developed Supply Chain Management (SCM) Policy was introduced by the South African government for the public sector. The aim of this study was to research policy compliance by local municipalities in the North West province of South Africa. The mixed method research design was employed to obtain the primary data required in addition to the secondary data incorporated. The findings revealed only partial compliance with the SCM policy by all five of the municipalities included in the study. Municipalities face a set of serious challenges and a set of propositions are made to enable municipalities to improve their SCM policy compliance.

Keywords: South Africa, policy, supply chain management

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Introduction

Global dialogue on good governance is underpinned by a call for governmental vigilance to curb the spread of corruption and fraud and promote integrity-driven administration. In this context, the public sector and municipalities are expected to serve as exemplars of a high standard of professional ethics. Achieving this standard requires infrastructure supported by enabling policies (Duffield 2014). After taking office in 1994, the government of South Africa initiated services of budgetary and financial reforms to modernize the management of the public sector, to make it more user-friendly and sensitive to meeting the needs of communities served. Government decided to introduce the concept of Supply Chain Management (SCM) in the public sector to address inefficiencies in procurement, contract management, inventory/asset control, and also obsolescence planning (Thomas 2012). During December 2003, the SCM policy was introduced for national and provincial public entities with the objective to transform outdated procurement and provisioning practices into an integrated SCM function, to introduce a systematic approach for the appointment of consultants to create a common understanding and interpretation of the preferential procurement policy, and to promote the consistent application of best practices throughout government's supply chain. Although a number of reforms have been introduced within the procurement system in South Africa, the procurement system is still facing a number of serious challenges, such as fraud and corruption (Ambe 2016).

The value of this research lies primarily in the fact that SCM was implemented fifteen years ago on a rollout plan. This study is based on the implementation of the SCM policy process in order to derive recommendations for improving SCM practices comparable to those of international best practices. This will not only benefit government but all communities served by government. Considering the philosophical importance of SCM policy to business success and South African municipalities (Marchese & Paramasivam 2013), it was worth investigating compliance with the SCM policy; and what is clearly a growing threat (challenge) arising from inadequate compliance, and find ways of how management can best deal with the issue. The purpose of this study was to explore the policy compliance and to identify the challenges causing non-compliance. The purpose of this article is defined by the following research question: What is the bearing of SCM policy implementation in the Ngaka Modiri Molema District on successful compliance with the SCM policy? The aim of the study was to report on the impact the policy has on compliance with the policy and to identify the challenges arising from inadequate compliance. The ensuing discussion reports on the literature review undertaken and subsequent sections present the research method followed, the research results and its discussions, and finally the recommendations and conclusion.

Research Problem

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

Literature Review

Subsequently is a synopsis of literature on SCM for understanding what supply chain management policy is, the guiding pillars of SCM policy, as well as the problems associated with the management of SCM policy.

Theories of SCM

Numerous theories have been used by researchers to understand why some supply chains succeed in creating value while others do not. Although perspectives of and prescription to SCM vary, a common idea among researchers is that competitive success for a strategic supply chain is contingent on management's ability to recognize changes in the competitive environment and then direct and coordinate action within and across organizations to utilize resources effectively and meet the demands of the environment (Cheng et al. 2014, Harland 2013). This is attributed to the contingency theory. The contingency model is driven by technological innovation, management skills across departments and

organizational functions, and integration vertically and horizontally across industry (Manyathi & Niyimbanira 2014, Stonebraker & Afifi 2004). A second theory that helps explain how supply chains can create value is force field theory. According to the Force field theory, the ability to scan the environment for the forces driving SCM, to identify the potential barriers (or resisting forces), and to implement bridges enables SCM actors to maintain competitive success in changing environments and markets (Lewin 1951). However, implementation of a successful supply chain may encounter resisting forces that include lack of SCM actor's support, inadequate measurement and information systems, and organizational culture. Thus, the implementation of a successful supply chains by local municipalities in the North West province of South Africa can create value contingent on their ability to overcome resisting forces through various mechanisms.

Overview of Supply Chain Management

Blanchard (2010) advocates that Forester is the true father of the philosophy of Supply Chain Management (SCM), which has changed considerably over the past 30 years (Ross 2013). As noted by Venus (2014), literature often claims that SCM is an extension of logistics and also that it is a development in managing the supply base and purchasing function. Carter and Liane (2011) opine that physical distribution (logistics) has been expanded into the broader concept of SCM. Waters and Rinsler (2014) have another point of view, namely that there is no distinction between SCM and logistics and the former is an evolutionary extension of logistics. SCM has become an exceptional strategic concept not only in the private sector, but also in government institutions (Ross 2015). In recent years, the regulation of government spending has gained significance due to SCM, especially with regard to the procurement of goods and services by means of fair, competitive and cost-effective systems and processes (Ambe 2016, Bent 2014). As indicated by Bent (2014) and Oppelt (2019), in line with regulated systems and processes, governments realized the importance of SCM as a socioeconomic development tool. For example, SCM is one of the key tools and mechanisms enabling the South African government to implement policy for socioeconomic development and transformation.

Objective of SCM

The overall objective of SCM is to maximize value in the supply chain. The value generated by a supply chain is the difference between what the final product is worth to consumers and the costs the supply chain incurs in fulfilling the consumers' requests (Chopra & Meindl 2010, Leong 2014). SCM has increasingly been adopted by organizations as a medium for creating and sustaining competitive advantage (Fawcett et al. 2008, Thatte et al. 2013). Competitive advantage is built upon a well-planned and executed suitable SCM strategy (Seuring 2011). Chopra and Meindl (2010) and De Beer (2015) concur and are of the view that supply chain maximizes overall value in an organization. This is based on the actual value created through supply and demand, whereby a relationship exists between the worth of a final product and its worth to consumers, compared to the actual cost incurred by supply chains in responding to consumers' needs.

However, the success of a supply chain is closely connected to the success of the management of the supply chain flows. This point of view, according to Chopra and Meindl (2010), is indicative of the ability of an organization to respond to the specific needs of consumers by creating a competitive advantage through the quality of products and services provided. Hence, SCM adds value to an organization by improving responsiveness, convenience, availability and the quality of products at an affordable price. SCM sets out an effective, efficient and innovative process for demand planning, procurement (including strategic resourcing), contract management, inventory management, asset control, and also disposal management. These processes are standardized in the form of a policy framework governing SCM (Monczka et al. 2015, RSA National Treasury 2004, SCM Guide to Accounting Officers/Authorities 2004). Policy guidelines apply to the acquisition and disposal of all goods, services, construction and road works,

and all movable property of all government institutions. Essentially, the SCM policy deals with management principles relating to the integrated stages as envisioned by the South African National Treasury.

Supply Chain Management in the Public Sector

The South African Cabinet in 2003 adopted a SCM policy to replace outdated procurement and provisioning practices. The aim was to implement a SCM function across all spheres of government, which would be an integral part of financial management and conform to international best practices (National Treasury 2005). The aim of the SCM policy framework is to do the following: promote uniformity and consistency in the application of SCM processes throughout government; facilitate the standardization and uniform interpretation of government's preferential procurement legislation and policies; and complete the cycle of financial management reforms introduced by the Public Financial Management Act (PFMA) by devolving full responsibility and accountability for SCM related functions, in addition to financial management functions, to accounting officers and authorities (National Treasury 2005). SCM is built upon ensuring value for money, open and effective competition, ethics and fair dealing, accountability and reporting, and equity (Van Greunen, Herselman & Van Niekerk 2010) and this also applies to the public sector. In ensuring that these values will achieve the ultimate goal of uniformity in procurement processes, good governance and economic development as specified by National Treasury (2005) is required. The framework for the SCM system constitutes demand management, acquisition management, logistics management, disposal management, risk and also performance management. This framework is guided by the preference point system to achieve redistribution of wealth (ensuring equal opportunities).

The SCM Policy within Government

All government entities were expected to adopt and implement a SCM policy. According to treasury regulations, the SCM policy of each entity is expected to be fair, equitable, transparent, competitive and cost-effective, and it must cover the full range of SCM processes used for tenders, quotations, auctions, and various other types of competitive bidding. The situation in which municipalities ought to use a particular type of process includes procedures and mechanisms for each type of process, procedure and mechanism for more flexible processes where the value of a contract is below a prescribed amount, and open and transparent pre-qualification processes for tenders or other bids (Local Government Municipal Finance Management Act 56 of 2003, Republic of South Africa 2003). The SCM policy entails five major objectives adopted by cabinet (National Treasury 2014, Rampedi 2010) and these are: (1) Transform government procurement and the provisioning practices into an integrated SCM function. (2) Embark on introducing a systematic approach to the appointment of consultants. (3) Create common understanding and interpretation of the preferential procurement policy. (4) Ensure best value for money while improving service to achieve delivery, thus moving away from the lowest price scenario to the best value for money scenario. (5) Consistently promote the application of best practices throughout government's supply chain. After acquiring an understanding of SCM policy, the focus of the subsequent discussion is on the guiding pillars of SCM policy within municipalities in South Africa.

Guiding pillars of SCM policy

SCM policy is guided by certain value systems, referred to as the five pillars of SCM, which are embedded in the constitution of South Africa (Hlakudi, 2015) and also pronounced as the pillars of procurement. These are briefly discussed below.

Value for Money

This is an essential test against which a department must justify a procurement outcome. Kerzner (2013)

mentions a lower price is not the best indicator, since a lower price does not ensure the awarding of the business. A purchaser is not obliged to accept the lowest price, because it does not guarantee value for money. The best value for money means the best available outcome when all relevant costs and benefits over a procurement cycle are considered. Aitken (2015) indicates that a procurement function must provide value for money and should be carried out in a cost-effective way. In organizations that are centrally located or devolved, individual departments should: avoid any unnecessary costs and delays for themselves or suppliers; monitor the supply arrangements and reconsider them if they cease to provide the expected benefits; and ensure continuous improvement in the efficiency of internal processes and systems.

Open and Effective Competition

Open and effective competition requires a framework of procurement laws, policies, practices and procedures that are transparent. That is, it must be readily accessible to all parties. It encourages effective competition through procurement methods suited to market circumstances (Biramata 2014). Denscombe (2014) explains that government entities need to apply these principles and do research to get the best possible outcome from the market by ensuring that: potential suppliers have reasonable access to procurement opportunities and available opportunities are published at least in the Government Tender Bulletin; where market circumstances limit competition, departments recognize this fact and use procurement methods that take account of it; adequate and timely information is provided to suppliers to enable them to bid; Bias and favoritism are eliminated; and the costs of bidding for opportunities do not deter competent suppliers.

Ethics and Fair Dealing

In procurement, if all parties comply with ethical standards they can deal with one another on a basis of mutual trust and respect and conduct their business in a fair and reasonable manner and with integrity (Ambe & Badenhorst-Weiss 2012). All government staff associated with procurement, particularly those dealing with suppliers or potential suppliers, are required to: recognize and deal with conflict of interest or the potential for it; deal with suppliers even-handedly; ensure they do not compromise the standing of the state through acceptance of gifts or hospitality; be scrupulous in their use of public property; and provide all assistance in the elimination of fraud and corruption.

Equity

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

Accountability and Reporting

Accountability and reporting, as commented on by Munyera (2014), involves ensuring that officials and organizations are answerable for their plans, actions and outcomes. Openness and transparency in administration, by external scrutiny through public reporting, is an essential element of accountability within the procurement framework and Shaoul et al. (2012) stated that: heads of departments are accountable to their ministers for the overall management of procurement activities; heads of

procurement and senior procurement directors are accountable to heads of departments for various high-level management and co-ordination activities; individual procurement officers are accountable to heads of procurement, and to their clients, for the services they provide; and all people exercising procurement functions must follow these guidelines and are accountable to management. However, there still are serious problems experienced in the public sector in South Africa and the subsequent section elaborates on a set of problems faced by supply chain management policy.

Problems Faced by Supply Chain Management Policy Framework

Supply Chain, as mentioned by Chopra and Meindl (2010), consists of stages (direct and indirect) involved in fulfilling consumer requests and the problems specific to SCM are depicted in Figure 1.

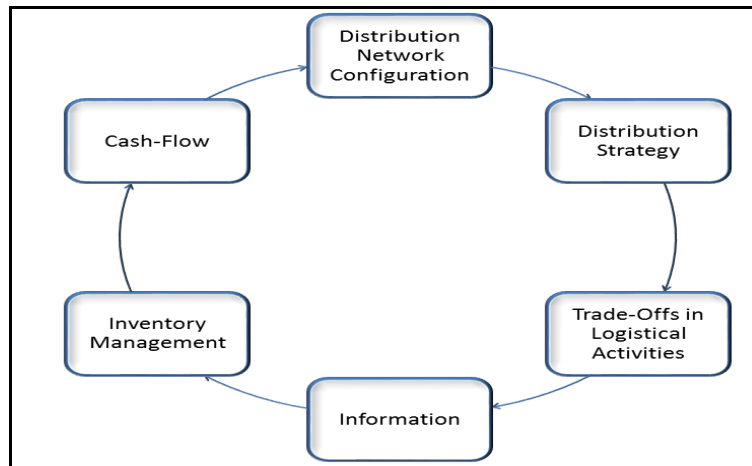


Figure 1 Problems Faced by Supply Chain Management Policy Framework

Source: adapted from Chopra & Meindl (2010)

It is important to note that SCM is regarded as an integral part of procurement in the South African public sector. Therefore, SCM policy is a tool for the management of public procurement practices. However, despite the employment of SCM as a strategic tool, public procurement in South Africa still faces enormous problem and the problems, as illustrated in Figure 1, will now be dealt with.

Distribution Network Configuration

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

Distribution Strategy

Distribution strategy, or marketing channels, act as a system of mutually dependent organizations included in the process of making goods or services available for use or consumption. Moreover, Christopher (2016) allude that a distribution strategy or market channels is the external contractual organization management operates to achieve its distribution objectives. Distribution strategy provides downstream value by bringing finished products to end-users. This flow may involve the physical

movement of a product or simply the transfer of title. This is also known as a distribution channel, a distribution chain, a distribution pipeline, a supply chain, a marketing channel, a market channel, and a trade channel. Rosenbloom (2012) similarly explains that distribution strategy is one or more organizations or individuals who participate in the flow of goods and services from a manufacturer to a final user or consumer.

Trade-offs in Logistical Activities

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

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

Information

An information system in the distribution network plays an important role in a supply chain in a distribution strategy or marketing channels. Information technology can play various roles within a supply chain and Bowersox *et al.* (2010) and Zott *et al.* (2011) mention the following roles: Facilitating managerial decision making. Helping to monitor and control operations. Enabling the initiation of activities and monitoring of process-related information. Allowing the creation of simulation systems. Allowing data storing and processing. Allowing data analysis needed for creating useful information. Facilitating the communication among individuals, companies and devices. Allowing the development of information systems.

Inventory Management

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

Cash-Flow

Cash flow, as explained by Silva and Carreira (2012), contains information about investment opportunities and potential profitability of existing assets, and companies without financial constraints may decide on capital adjustments as a response to investment opportunities. Therefore, companies without financial constraints would have higher levels of cash flow. Silva and Carreira (2012) advocate boldly that cash flow may contain valuable information about investment opportunities. In other words, they argue that

difficulties associated with Tobin Q ratio can affect sensitivity of cash flow and Chen and Chen (2012) comment that the investment-cash flow sensitivity has declined over time. After taking a closer look at the problems faced by SCM policy, the subsequent discussion deals with the prerequisites needed for the effective implementation of SCM policy

Prerequisites for the Implementation of SCM Policy

In terms of Section 217 of the Constitution of the Republic of South Africa, when government contracts for goods and services it should be done in such a way that it is fair, equitable, transparent, competitive and cost-effective. In addition, the SCM system must provide for the advancement of the categories of persons disadvantaged by unfair discrimination. These are the cornerstones of South Africa's public sector procurement system (National Treasury, 2015). This includes the public sector approach as expounded below. The numerous public sector supply chains play a key strategic role in government's ability to execute its mandate of service delivery to communities in terms of the construction of roads, the supply of water, sanitation and sewerage systems, and the provision of electricity. Johnson (2014) mentions that this can only happen by way of effective SCM frameworks, which are managed by competent officials (Giannakis, 2011). Ambe (2012) mentions that a government sector focus area could, for example, be the health sector where the focus may be more on logistics and the effective movement of goods and services in and out of hospitals; whereas, SCM in the education sector may focus on streamlining the chain through which teaching materials are delivered to students. The shape of the supply chain and the supply chain management processes employed thus will vary considerably, depending on a range of different considerations (Ambe & Badenhorst-Weiss 2011).

Public sector SCM offers a reference framework for the composition of public sector supply and multilevel networks (Ambe & Badenhorst-Weiss 2012). Actors in the public sector supply chain are: (1) private organizations receiving orders from public sector agents and (2) accounting institutions cooperating in goods and services, as well as how these enterprises are involved with enterprises operating at other levels. This statement is supported by the United Nations Institute for Training and Research, reinforcing that the public sector supply chain plays a vital role in government's ability to execute service delivery (United Nations Institute for Training and Research 2014). In support of the above, the Office of Government Commerce (2011) emphasize that procurement is not only limited to complex projects such as construction, but that smaller items such as stationary should also be obtained within this policy.

Research Methodology

In order to comply with the research objectives, the mixed method research design, including both qualitative and quantitative data, have been used. Qualitative data was collected first, followed by collecting the quantitative data. Qualitative researchers make use of individual interviews and document analysis and individual interviews were conducted with senior managers of departments, based on their level of understanding and experience of the SCM policy. A document analysis was used to collect various records in respect of the SCM policies within the public sector. The quantitative component of this study used a questionnaire to collect data. The added advantage is that findings could be interpreted numerically. Also, through closed ended questions, it was possible to collect data on participants' viewpoints concerning their impressions of the level of compliance with the SCM policy. The exploratory design, where qualitative data was collected first before the quantitative phase followed, is typically used in the initial phase with a few individuals first to identify themes, ideas and perspectives and this was then used to design the quantitative component of the study. Quantitative data were collected by means of a self-administered questionnaire comprising of structured and unstructured questions to gather data from

the target population. Questionnaires were distributed to officials involved in SCM, operations, internal auditing, finances, human resources, and also marketing at the five local municipalities.

Population, Sample Size and Data Collection

The participants that were used in this study were SCM managers, Municipal Managers, SCM managers and officials, CFO Managers, human resource managers and officials, marketing managers and officials, operational managers and officials, internal audit managers and officials from all five of the local municipalities: Mahikeng, Ditsobotla, Ramotshere, Tswaing and the Ratlou Municipality.

Municipal workers of the five local municipalities were selected using the convenience sampling method. This enabled selecting respondents based on their availability and proximity, also their knowledge on SCM policy matters in the local municipalities. The sample size of the municipality workers was determined by using Research Advisor's (2006) sample size calculator with a 95% confidence interval and a 0.05 degree of accuracy/margin of error and the sample size for the municipality workers was 430. A proportional stratified sampling method was used to determine the total number of samples to be drawn from each municipality. Table 1 presents the sample size for the municipality populations in the five local municipalities determined by means of proportional stratified sampling fractioning.

The data collection methods used for the qualitative component was semi-structured interviews and a document analysis; and, the quantitative component utilized self-administered questionnaires for collecting the data needed.

Table 1. Sample Size for Employees in the Five Local Municipalities

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

Note: the study sampled 430 members from five local municipalities, 30 members made up the qualitative sample and 400 members formed the quantitative sample.

Data Analysis, Results and Discussion

For the qualitative component of this study, data collected through the semi-structured interviews were analyzed through open coding and the process started with transcribing the data from the audio tapes and field notes. The data was rated into themes and categories and major issues related to complying with the SCM policy. The quantitative data obtained was organized and analyzed descriptively using the Statistical Package for Social Sciences (SPSS). The following results are based on the mean and median scores. Following is a presentation of the results obtained on the compliance and implementation of the SCM policy in the public sector in the North West province.

The empirical findings revealed that most of the senior managers are confident about their SCM policy supplier knowledge and it was further discovered that employees with the required supplier knowledge are those who have been through training and they understand and implement the policy correctly. However, those who do not have supplier knowledge as per the SCM policy have not had recurring and intensive training and do not fully understand or implement the policy correctly. Due to a lack of SCM policy supplier knowledge, most managers do not implement the SCM policy effectively and this

undoubtedly causes non-compliance. Therefore, the existence of challenges in municipalities are evidenced by a lack of knowledge and consequent non-compliance. This result was also similar to that of Ambe and Badenhorst-Weiss (2011) and Masete and Mafini (2018) who expressed the need for proper understanding of policy, and if policy is not understood, it will lead to non-compliance with SCM policy due to a lack of skills, capacity and knowledge of the workforce to be able to fully implement SCM policy across various spheres of government. The empirical findings revealed that participants have varying levels of technical know-how. Some senior managers have good technical know-how while others lack technical know-how. Moreover, the results also revealed that the level of technical know-how is firmly linked with performance. Managers with good technical know-how are executing their responsibilities in accordance with the SCM policy while managers who do not have technical know-how in performing their duties are not as effective in executing their mandates. This conforms to the research conducted by Anderson (2010) and Lemon and Palenchar (2018) where work experience is highly recommended for employees seeing that it enables employees not to only gain experience of what it would be like to work in an ideal environment and develop skills; it gives them a chance to put theory into practice. This finding supports the idea that the main reason for work experience is that employees will gain transferrable skills and have a chance to stand out in an organization whilst being acknowledged for their achievements (Collis & Hussey 2013).

The empirical findings revealed that some senior managers confirmed that they are competent about the compliance with and implementation of the SCM policy, while others do not. The findings also indicate that managers who are competent about compliance and implementation are executing their responsibility in accordance to principles of SCM. However, managers who lack competencies in compliance and implementation are not as effective in executing their mandates due to a lack of the above mentioned skills. This result was also similar where the system contains many excellent people, competency assessments show significant gaps in SCM skills and knowledge (National Treasury 2015). Many municipal SCM actors have attended a number of training workshops on SCM, but they still lack the appropriate knowledge needed for proper compliance and implementation (National Treasury 2015).

Table 2 Views on SCM policy compliance (%)

Statement		Strongly Agree	Agree	Unsure	Disagree	Strongly Disagree
1	Staff with supplier knowledge on policy and who are competent about the compliance and implementation of the policy, are executing their responsibility in accordance with principles.	5.6	86.8	3.5	3.8	0.3
2	Staff who lack better knowledge and competence of the policy in compliance and implementation are unable to execute their mandates properly.	33.7	61.1	3.8	1.4	0
4	The negative contribution by internal audit is used to prove fraud and corruption on SCM in this municipality.	27.8	62.8	6.9	1	1.4
5	The SCM sector of this municipality does have and implements effective policies to monitor compliance.	26.6	52.4	18.5	2.4	0

The findings revealed that employees with supplier SCM policy knowledge, and who are competent about compliance with and the implementation of the policy are executing their responsibilities in accordance with prescriptions and is supported by 92.4% of the respondents, while 94.8% of the respondents confirmed that employees who lack knowledge and competence of the policy in terms of compliance with

and implementation are unable to execute their mandates properly. The results of the empirical study show that the majority of SCM officials do not comply with the SCM policy and this is relevant to all five of the local municipalities included in this study. Ambe and Badenhorst-Weiss (2012) stated that the issue of compliance is a major obstacle in the implementation of SCM as it affects other activities. Issues regarding non-compliance to SCM policy and regulations can be attributed to a lack of the requisite SCM official skills and competencies, as well as the absence of a stricter regulatory culture. These may include the tendency not to utilize a competitive process for both quotations and bids, and the incorrect utilization of the preference points system. In addition, it is the responsibility of every manager to ensure that their SCM employees are adequately trained about the SCM policy (National Treasury RSA 2004).

The results further show that 90.6% of the respondents indicated that the internal audit is used to prove fraud and corruption in the supply chain in municipalities. Fighting against fraud and corruption by means of internal auditing indicates that the more transparent and reliable employees are in executing their duties, the greater the possibility that they will be effectively executing their job descriptions. This result is also similar to that of Ambe (2016) who confirmed that SCM plays a greater role in poor audit outcomes such as irregular expenditure, lack of basic controls, as well as a lack of supply chain skills. Finally, 79% of the respondents confirmed that SCM in municipalities do have and implement effective policies to monitor compliance. Thus, a lack of an adequate control system in municipalities is a key challenge for establishing SCM policy compliance. Therefore, it is justified to say that employees with inadequate control system execute their mandates poorly. This study confirms that since the implementation of SCM, many municipalities still do not have appropriate organizational monitoring systems in place, partly owing to a lack of skills, knowledge and capacity. Also, there still is a lack of strategic leadership and shared vision as was also previously reported (SCM Review 2015).

Besides these correlated challenges as per the two sets of results (qualitative and quantitative), a typically new concept arises from this empirical study. This is that municipalities should establish a SCM training center at each one of the five local municipalities and employ training experts who will enable employees to have access to regular and constant training, whilst at the same time perform their duties. As with any research study, some limitations are pertinent and were experienced during this study and are presented below.

Limitations of this Study

This study was delimited to the five local municipalities of the selected district. The participants of this study were the senior managers of departments and department officials at the various local municipalities. This study is confined to matters related to compliance with the SCM policy in the district and may be applied to other municipalities in South Africa, which might be subject to the same situation. All research studies have some limitations caused by either time or budgetary constraints. The following limitations were encountered during this research study: Exposure to the subject matter - the researcher has never worked in a fully-fledged supply chain management unit of a municipality. Therefore, some of the matters referred to in the research have not been explored particularly before. The non-availability of sufficient material on the subject of research was also a limitation.

Recommendations

This paper presents research based on the critical issues raised and the following recommendations are made to assist municipal and departmental managers of the Ngaka Modiri Molema District of the North West province and other municipalities, to achieve excellence in their implementation of the supply chain management policy. The following section presents recommendations for senior managers and department officials with regard to this study, as well as recommended further research. The following three recommendations are applicable to the Senior Managers of Departments: (1) The results from the

empirical study indicate that a large percentage of senior managers of departments are aware of the SCM policy in their various municipalities, but most of their subordinates are not aware and do not have sufficient knowledge of the SCM policy. In this situation, managers should ensure that their subordinates are sufficiently trained on the SCM policy to be able to have a good understanding in order to achieve the objectives of the five local municipalities. (2) There is clear evidence provided by the respondents from the five local municipalities that not all managers comply with the SCM policy. The issue of non-compliance is a major hindrance in the implementation of SCM as it has a direct impact on other activities. Issues regarding non-compliance with SCM policy can be attributed to a lack of skill, competencies and training by managers about the importance of the policy for their municipalities. Managers need to have the required skills, need to be competent, and also need to go through the required training to understand how the policy should be complied with. (3) The five local municipalities in the North West province face a number of challenges. Based on the findings, the following is recommended: (1) better planning in the SCM sector; (2) better clarity of roles and responsibilities; (3) sufficient good human resource capacity; (4) training of municipal employees tasked with the implementation of SCM policy; (5) a good infrastructure system for SCM services in the municipality; and (6), a better internal audit control system and well trained personnel.

Further three recommendations related to Departmental Officials include: (1) Managers should create a better way of making the SCM policy known to its entire staff and for them to have an appropriate understanding of the policy in their various municipalities. (2) Managers should consistently provide training to their staff members on the SCM policy; this will enable achieving the objectives of a municipality. (3) All the challenges faced by the municipality staff that restrict them in conducting their activities should be reported immediately to the professional body of municipalities in charge of complaints for immediate action to be taken.

Recommendations for Further Research

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

Conclusion

This study aimed at obtaining an understanding of compliance with the SCM policy in the Ngaka Modiri Molema District of the North West province. The findings of this study disclosed that senior managers of departments and department officials' compliance with the SCM policy in their various departments is not effective. It is recommended that more studies should be conducted on compliance with the SCM policy in other provinces of South Africa, and also a comparative study between South Africa and other countries, preferably collaboration with other developing counties such as the member-countries of the Southern African Developing Community (SADC) and/or the combine economies of BRICS (Brazil, Russia, India, China, South Africa). In terms of this research conducted, insight was obtained into aspects that have a negative impact on compliance with the SCM policy within municipalities. This has enabled the formulation of recommendations towards resolving the impact of inefficient compliance with the SCM policy. It is acknowledged that knowledge is power and the researcher has benefited through undertaking

this study as it brought about skills and the ability to investigate areas of importance to ultimately contribute towards South Africa and its people.

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References

- Aitken R 2015. Corporate Procurement Policy, Government Printing Office. South Africa: Pretoria.
- Ambe IM 2012. The perspectives of supply chain management in the public sector. *Journal of Contemporary Management*, 9(1), 132-149.
- Ambe IM & Badenhorst-Weiss JA 2012. Supply chain management challenges in the South African public sector. *African Journal of Business Management*, 6(44), 11003.
- Ambe IM & Badenhorst-Weiss JA 2011. An exploration of public sector supply chains with specific reference to the South African situation. *Journal of Public Administration*, 46(3), 1100-1115.
- Ambe, IM 2016. Insight into supply chain management in a municipal context. *Public and Municipal Finance*, 5(2), 20-29.
- Anderson DL 2010. Organization development: The process of leading organizational change. USA: Sage.
- Auditor General South Africa (AGSA) 2012. North West General Report on the audit outcomes of local government. Retrieved from <http://www.agsa.co.za/Portals/0/MFMA%20201213/201314%20MFMA%20Media%20release.pdf> (Accessed May 8, 2016).
- Bent RA 2014. The significance of supply chain management with regard to the attainment of value and strategic objectives for municipalities within South Africa: A case study (Doctoral dissertation, Stellenbosch: Stellenbosch University).
- Biramata RA 2014. The Challenges of Compliance to Public Procurement Act 2011: A Case Study of Tanzania Ports Authority (Doctoral dissertation, The Open University of Tanzania).
- Blanchard D 2010. Supply chain management best practices. John Wiley & Sons.
- Bowersox DJ, Closs DJ & Cooper MB 2010. Supply chain logistics management. Boston, Mass.: McGraw-Hill/Irwin.
- Business Day report 2011. Irregular state expenditure jumps 62%. Smart procurement. Retrieved from [http://www.smartprocurement.co.za/archives/irregular state expenditure jumps 62. php](http://www.smartprocurement.co.za/archives/irregular%20state%20expenditure%20jumps%2062%20php) (Accessed on February 10, 2017).
- Carter CR & Liane EP 2011. Sustainable supply chain management: Evolution and future directions. *International Journal of Physical Distribution and Logistics Management*, 41(1), 46-62.
- Chen HJ & Chen SJ 2012. Investment-cash flow sensitivity cannot be a good measure of financial constraints: Evidence from the time series. *Journal of Financial Economics*, 103(2), 393-410.
- Cheng JH, Chen MC & Huang CM 2014. Assessing inter-organizational innovation performance through relational governance and dynamic capabilities in supply chains. *Supply Chain Management: An International Journal*, 19(2), 173-186.
- Chopra S & Meindl P 2010. Supply chain management: Strategy, planning, and operation. Upper Saddle River, NJ: Prentice-Hall.
- Christopher M 2016. Logistics and supply chain management. 4th edition. Edinburgh Gate. Pearson UK.
- Collis J & Hussey R 2013. Business research: A practical guide for undergraduate and postgraduate students. Palgrave MacMillan.
- De Beer M 2015. Supply chain integration with corporate strategy for selected companies in the fast moving consumer goods industry in KwaZulu-Natal, South Africa (Doctoral dissertation).
- Denscombe M 2014. The good research guide: For small-scale social research projects. UK: McGraw-Hill.

- Duffield M 2014. *Global governance and the new wars: The merging of development and security*. USA: Zed Books Ltd.
- Fawcett SE, Magnan GM & McCarter MW 2008. A three stage implementation model for supply chain collaboration. *Journal of Business Logistics*, 29(1), 93-112.
- Giannakis M 2011. Management of service supply chains with a service-oriented reference model: The case of management consulting. *Supply Chain Management: An International Journal*, 16(5), 346-361.
- Harland CM 2013. Supply chain management research impact: an evidence-based perspective. *Supply Chain Management: An International Journal*, 18(5), 483-496.
- Hlakudi JN 2015. The Implementation of Preferential Procurement Policy in Gauteng Province: Challenges and Solutions. *Africa's Public Service Delivery and Performance Review*, 3(1).
- Hugos MH 2011. *Essentials of supply chain management*. USA: John Wiley & Sons.
- Johnson WC 2014. *Public Administration: Partnerships in public service*. USA: Waveland Press.
- Kerzner H 2013. *Project management: A systems approach to planning, scheduling, and controlling*. USA: John Wiley & Sons.
- Lemon LL & Palenchar MJ 2018. Public relations and zones of engagement: Employees' lived experiences and the fundamental nature of employee engagement. *Public Relations Review*, 44(1), 142-155.
- Leong CE 2014. A research on supply chain security in Malaysia. *International Journal of Supply Chain Management*, 3(2), 85-93.
- Lewin K. 1951. *Field Theory in social science: Selected theoretical papers*. USA: Harper & Row.
- Manyathi S & Niyimbanira F 2014. A descriptive analysis of the possible causes of the inverse audit outcomes: Case of supply chain management of the KwaZulu-Natal Province, South Africa. *Mediterranean Journal of Social Sciences*, 5(16), 82-82.
- Marchese K & Paramasivam S 2013. The Ripple Effect How manufacturing and retail executives view the growing challenge of supply chain risk. Deloitte Development LLC.
- Masete MZ & Mafini C 2018. Internal barriers to supply chain management implementation in a South African traditional university. *Journal of Transport and Supply Chain Management*, 12(1), 1-12.
- Monczka RM, Handfield RB, Giunipero LC & Patterson JL 2015. *Purchasing and supply chain management*. USA: Cengage Learning.
- Mukopi CM & Iravo AM 2015. An analysis of the effects of inventory management on the performance of the procurement function of sugar manufacturing companies in the Western Kenya Sugar Belt. *International Journal of Scientific and Research Publications*, 5(4), 5-15.
- Munyera PS 2014. Investigating causes for non-compliance to Public procurement legal framework in public Institutions Case Study-Tanzania bureau of standards (tbs) (Doctoral dissertation, Mzumbe University).
- National Treasury 2005. *Supply chain management: A guide for accounting officers of municipalities and municipal entities*. Pretoria: Government Printer.
- National Treasury 2014. *Supply Chain Management: A guide for accounting officers/Authorities*. Pretoria: Government Printer.
- National Treasury 2015. *Public sector supply chain management review*. Retrieved from <http://www.treasury.gov.za/publications/other/SCMR%20REPORT%202015.pdf> (Accessed on Apr 24, 2017).
- Office of Government Commerce (OGC) 2011. *An introduction to public procurement*. Retrieved from <http://webarchive.nationalarchives.gov.uk/20110601212617/http> (Accessed on May 14, 2017).
- Oppelt CA 2019. *Developing a monitoring and evaluation system in supply chain management at Overstrand Municipality* (Doctoral dissertation, Stellenbosch University).
- Rampedi DS 2010. *The application of supply chain in the office of the premier/ Mpumalanga province* (Masters Dissertation, University of Limpopo). Retrieved from <http://www.ul.ac.za> (Accessed on Feb 11, 2017).

- Republic of South Africa 2003. Local Government Municipal Finance Management Act 56 of 2003. Pretoria: Government Printer.
- Republic of South Africa 2004. Supply Chain Management: A Guide for Accounting Officers/Authorities. National Treasury: South Africa.
- Research Advisor 2006. Sample size calculator. Retrieved from <http://www.research-advisors.com/tools/sampleSize.htm> (Accessed on Apr 7, 2016).
- Rosenbloom B 2012. Marketing channels. USA: Cengage Learning.
- Ross DF 2013. Competing through supply chain management: Creating market-winning strategies through supply chain partnerships. USA: Springer Science & Business Media.
- Ross DF 2015. Distribution Planning and control: Managing in the era of supply chain management. USA: springer.
- Seuring S 2011. Supply chain management for sustainable products—insights from research applying mixed methodologies. *Business Strategy and the Environment*, 20(7), 471-484.
- Shaoul J, Stafford A & Stapleton P 2012. Accountability and corporate governance of public private partnerships. *Critical Perspectives on Accounting*, 23(3):213-229.
- Silva F & Carreira C 2012. Measuring firms' financial constraints: A rough guide. *Not as Económicas*, 44 (36), 224.
- Smelser NJ 2013. The sociology of economic life. UK: Quid Pro Books.
- Stonebraker PW & Afifi R. 2004. Toward a contingency theory of supply chains. *Management Decisions*, 42(9), 1131-1144.
- Thatte AA, Rao SS & Ragu-Nathan TS 2013. Impact of SCM practices of a firm on supply chain responsiveness and competitive advantage of a firm. *Journal of Applied Business Research*, 29(2), 499-530.
- Thomas JC 2012. Citizen, customer, partner: Engaging the public in public management. ME Sharpe.
- United Nations Institute for Training and Research 2014. Introduction to public procurement (2014). Retrieved from <http://www.unitar.org/event/introduction-public-procurement-2014> (Accessed on Jan 15, 2016).
- Van Greunen D, Herselman ME & Van Niekerk J 2010. Implementation of regulation-based e-procurement in the Eastern Cape provincial administration. *African Journal of Business Management*, 4(17), 3655-3665.
- Venus K 2014. Supply Chain Management: Part of Strategic Management. *Journal of Business and Economics*, 5(7), 1052-1067.
- Waters D & Rinsler S 2014. Global logistics: New directions in supply chain management. USA: Kogan Page.
- Wilson H & Daniel E 2010. The multi-channel challenge: A dynamic capability approach. *Industrial Marketing Management*, 23(36), 10-20.
- Zott C, Amit R & Massa L 2011. The business model: Recent developments and future research. *Journal of Management*, 37(4), 1019-1042.

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