



Barriers to effective supply chain management: The case of a metropolitan municipality in the Eastern Cape

**Authors:**

Beauty Zindi¹ 
Modeni M. Sibanda¹ 

Affiliations:

¹Department of Public Administration, Faculty of Management and Commerce, University of Fort Hare, Bisho, South Africa

Corresponding author:

Beauty Zindi,
201105350@ufh.ac.za

Dates:

Received: 30 Dec. 2021

Accepted: 08 June 2022

Published: 12 Dec. 2022

How to cite this article:

Zindi, B. & Sibanda, M.M., 2022, 'Barriers to effective supply chain management: The case of a metropolitan municipality in the Eastern Cape', *Journal of Local Government Research and Innovation* 3(0), a54. <https://doi.org/10.4102/jolgr.v3i0.54>

Copyright:

© 2022. The Authors.
Licensee: AOSIS. This work is licensed under the Creative Commons Attribution License.

Background: Supply chain management (SCM) is presented as a panacea and an invaluable tool for addressing service delivery glitches in institutions. Noncompliance with SCM legislation by municipalities remains high, with fruitless, irregular, unauthorised and wasteful expenditure, resulting in weak financial governance in many municipalities in South Africa.

Aim: The aim of this study is to explore the barriers to effective SCM in a metropolitan municipality in the Eastern Cape and to identify the best practices to improve SCM.

Methods: A qualitative research approach was used to explore the barriers to effective SCM in a metropolitan municipality in the Eastern Cape Province. The sample size consists of 14 sampled participants. Data were collected from in-depth interviews. Thematic analysis was used in cleaning, organising and interpreting the findings. Credibility, transferability, dependability and confirmability measures were used to promote trustworthiness.

Results: This study's findings established that there were systemic and operational challenges which stifled the smooth operation of the SCM system. The SCM was characterised by weak ethical systems, lack of well-experienced personnel and poor implementation and monitoring of SCM systems and policies.

Conclusion: There is need for necessary institutional and systemic transformations and adaptations to SCM practices and processes. This calls for leadership commitment, coupled with concerted efforts to transform and overhaul lethargic institutional systems and practices, so as to decisively stamp out SCM unethical conduct by public officials and address public financial management hurdles, as well as the root causes of poor audit outcomes.

Contribution: This article contributes to a better understanding of new public management and principal-agent public sector accountability. Accountability, with its close affinities to risk compensation theory, resource dependence theory, trust and dimensional publicness theory, is anchored on a results-oriented government culture emphasising better performance, better accountability and better transparency.

Keywords: supply chain management; municipal finance; procurement; metropolitan municipality; Eastern Cape Province.

Introduction

Supply chain management (SCM) is an integral part of financial management that seeks to introduce internationally accepted best practices (Thomas 2018:93). The delivery of good quality, accessible and efficient social and economic services forms the bedrock of good governance in South Africa (Geldenhuys 2021). Supply chain management involves various activities such as procurement, logistics, production and distribution of products to clients in any organisation (Dvorsky et al. 2021). Supply chain management is premised on important pillars of procurement: value for money, open and effective competition, ethics and fair dealing, accountability and prudent financial reporting and equity (Fan & Stevenson 2018:19). Supply chain management is thus a powerful system that aids and remedies irregularities in the public sector (Nkwanyana & Agbenyegah 2020:1). The SCM should follow good governance principles such as fairness, competitiveness, equitable administration, transparency and cost-effectiveness (Beske & Seuring 2014:35). This makes it an invaluable adjunct to effective provision of goods and services in the public sector. However, the public sector often witnesses service delivery protests because of poor service delivery and mismanagement of public funds (Gianakis & McCue 2012:112).

Read online:

Scan this QR code with your smart phone or mobile device to read online.

South Africa's public sector has undergone transformation through the introduction of SCM in the management of finance in procuring goods and services (Ellram & Murfield 2019). The *Municipal Finance Management Act* (MFMA) was meant to improve financial management in local government. It affords accounting officers certain discretionary powers to ensure that the intention of the act is achieved. Sections 63, 77 and 78 of the MFMA allocate joint responsibility to public officials to manage finances effectively and efficiently. The MFMA provides for a policy framework (National Treasury 2005) for procurement and provisioning of goods and services. Supply chain management treasury regulations contain wide-ranging guidelines, demanding compliance when tendering for goods and services (Bizana, Naude & Ambe 2015:668; Van Der Waldt 2016:301).

Problem statement

Notwithstanding the theoretical clarity associated with the notion of SCM in South Africa, there continues to be abounding evidence of operational inefficiency, poor service delivery and noncompliance with policies and legislations in the public sector, particularly in local governments. However, despite concerted efforts towards such reforms, the South African public sector still experiences high levels of noncompliance with SCM procurement laws and regulations (Myeza, Nkhi & Maroun 2021:3). In a 2019–2020 report, the auditor-general of South Africa found no evidence that municipalities had followed a fair, transparent and competitive process for awarding some identified municipal contracts. Awards were made without the necessary declarations of interest (Auditor-General [South Africa] 2021:38). Uncompetitive and unfair procurement processes and inadequate contract management were also a very common occurrence. Poor record management of municipalities exacerbated municipal financial performance constraints by generating a situation in which it was a common to practise inappropriate or illegal conduct (Auditor-General [South Africa] 2021:36). It is of concern that there was high material noncompliance with SCM precincts by municipalities in the 2019–2020 audit report (Auditor-General [South Africa] 2021:38). For instance, in the 2019–2020 financial year, the auditor-general reported findings (of which 70% was material) on uncompetitive and unfair procurement processes at 84% of municipalities and contract management findings (of which 35% was material) at 44% of municipalities (Auditor-General [South Africa] 2021:39).

Unethical conduct in SCM leads to a loss of public trust and confidence in the management of public affairs. The problem is, however, that despite the existence of control and oversight structures and processes for monitoring compliance with ethical standards, norms and regulations in SCM, procurement and contract management processes, the metropolitan still fell short of complying with some SCM regulations. This noncompliance violates precincts of the SCM policy regulations, the MFMA, as well as the *Municipal Systems Act*. Lack of adequate and effective control and oversight measures further exacerbates the problem, leading to poor management of procurement

systems, as well as inconsistencies in the disposal and delivery of services. The result is that this has serious negative implications for public accountability and sound municipal financial management.

Supply chain management lies at the heart of public sector financial management, given that it ensures that the public obtains goods and services effectively and efficiently. This is supported in a study conducted by Geldenhuys (2021:45) in Ethekwini municipality, which showed a great improvement in the procurement of goods and services because of the implementation of SCM principles. The study therefore had significance to the domain of public administration as it sought to enhance probity and prudent use of municipal finances, thus promoting public accountability, which is one of the overarching constitutional principles and values in South African public administration. This inevitably promotes social equity, public well-being and public satisfaction. A study by Mahlala and Netswera (2020:12) indicated that there was an improvement in the management of finances and accountability in the public sector because of the adoption of SCM good governance principles. The purpose of this article is to explore barriers to effective SCM in a metropolitan municipality in the Eastern Cape province and to ascertain related best practices.

Defining supply chain management

From a generic viewpoint, LeMay et al. (2017:10) posited that SCM is the flow of goods and services from the source to the end-user. Ellram and Murfield (2019:40) added that SCM encompasses some in-between processes that facilitate the movement of goods and services, such as transportation and storage of both the raw materials and end products. Proponents of SCM underscore that for effective, timely and cost-efficient supply of goods and services, there is need for collaboration between and amongst actors within a supply chain from primary producers to final consumers (Dvorsky et al. 2021:19; Ellram & Murfield 2019:41). Ellram and Murfield (2019:41) further described SCM as a system that enables and facilitates optimum production through integrating the goals and efforts of stakeholders towards ensuring seamless and cost-efficient flow of goods and services. In terms of SCM, organisations need not to compete as autonomous entities but rather as supply chains in order for them to enjoy economies of scale. The South African framework for the SCM system constitutes demand management, acquisition management, logistics management, disposal management and risk and performance management (National Treasury 2005:49).

Theoretical background and contextual setting

Public procurement is a strategic lever of the supply chain to achieve broader government policy objectives. A network-centric public service delivery allows the public sector to respond to 'customer' needs through service capabilities. The service provider and customer are performance- and relationship-interdependent (Bastl, Johnson & Finne 2019:21). Relationships are controlled by

governance systems such as contracts and performance measures. They can be managed through coordination, information sharing, decision making and feedback mechanisms (Gulati, Wohlgezogen & Zhelyazkov 2012:543). A supply chain is coordinated when all decisions are aligned to accomplish strategic planning and service delivery objectives, outputs and outcomes.

External factors within the public sector political environment influencing SCM structure include laws, public policies and regulations. However, supply chain risk management (SCRM) decreases vulnerabilities. Elements of reactive SCRM strategies include risk detection, risk assessment and risk mitigation (Grover & Dresner 2022:50–52). However, despite policies, legislation, regulation and government-driven initiatives, local government is often challenged to leverage supplier resources for the public good. Risk management is a critical concern to SCM (Duhadway, Carnovale & Kannan 2018:3). Supply chain risk is defined as ‘the likelihood of an adverse and unexpected event that can occur and either directly or indirectly result in a supply chain disruption’ (Garvey, Carnovale & Yenyurt 2015:619). Peltman’s (1975) risk compensation theory is a prominent theory used to explore the impact of risk perceptions on individual behaviour, resulting from exogenous factors. The theory assumes that change in behaviour is a response to some changes in perceived risk. Thus, the perception of risk influences the supply chain disruption risk decision-making process (Zwikaël & Sadeh 2007:66). Pfeffer and Salancik’s (1978) resource dependence theory is premised on the assumption that the public sector acquires and maintains resources, creating dependences and thereby safeguarding themselves from the SCM environment.

Within this theorisation, social capital is a key construct. Social capital embodies the ‘assets and resources made available through relationships within the social structure of the collective that can be utilised by the collective’ (Payne et al. 2011:497). Nahapiet and Ghoshal (1998) proposed three dimensions of social capital: structural, relational and cognitive, representing the attributes of relationships that create value in SCM. Trust is a core element of successful SCM relationships and reduces the risk of opportunism (Moshtari & Vanpoucke 2021:108).

Trust has close affinities to dimensional publicness theory. Based on the work of Bozeman (1987, 2013), the theory suggests that organisations have characteristics of both private and public organisations. Under new public management (NPM), the public sector shifts its focus of accountability from outputs to results (Robinson 2015:10–12). A results-oriented government culture emphasises ‘better performance, better accountability and better transparency’ (Ouda 2015:50). Thus, NPM theory refocuses the public sector on management accountability, also known as financial accountability. Financial accountability requires public sector organisations to use public finances economically, efficiently and effectively, with no waste, no money leakage or corruption (Tran, Nguyen & Nguyen 2022:259). The interpretation of accountability is based on

principal–agent theory, ‘the idea that “agents” carry out activities on behalf of “principals” and the latter then hold the former “to account” for their actions’ (Eckersley & Ferry 2020:75).

Barriers to effective supply chain management

There are various barriers to effective SCM in South African municipalities that hinder efficient and effective procurement of goods and services. The SCM review (2015:14) indicated that organisational structures and systems within which SCM takes place are in too many cases not ideal, with attendant inexperienced or underskilled leadership, high staff turnover and lack of motivation.

Noncompliance to supply chain management policy and regulations

The SCM policy requires each government entity to develop and implement a customised SCM policy. The issue of compliance is a major barrier in the implementation of SCM, as it affects other activities. Sibanda (2017:315) reiterated that issues regarding noncompliance with SCM policy and regulations were attributed to lack of requisite SCM skills and competencies, as well as the absence of a stricter regulatory culture. A study conducted by Sharma (2018:7) showed that more than 59% of the workers undervalued the moral implications of their actions at work, and 88% of some workers knew what was right but still did what was wrong. The study further revealed that about 80% of the municipal workers in Zimbabwe accepted rewards for favours, thus often violating the code of conduct for councillors and municipal officials. Rahayu, Yudi and Rahayu (2020:14) explained that noncompliance involves the tendency not to utilise a competitive process for both quotations and bids, incorrect utilisation of the preference points system, lack of appropriate bid committees and utilisation of the incorrect procurement process in respect of the thresholds.

Risk management and supply chain management irregularities

Irregularities in SCM have been attributed to weak internal control environments and risk mitigation procedures (Uddin & Akhter 2019:69). For Rahayu et al. (2020:8), a lack of understanding regarding the concept of SCM and its inextricable link to long-term quality service delivery, human capital development and associated socio-economic growth may be the root cause of problems hounding SCM implementation in the public sector. Uncertainty exists in a system with a sensible extent of complexity, and it can be reduced or amplified. Risk initiates from uncertainty; it can be identified, analysed, controlled and regulated, but nonetheless it can cause a disturbance (Taufik 2019:2169). Disturbances are a result of risks and can be purposeful (noncompliance, conflict of interest, fraud) or nonpurposeful (demand fluctuation, COVID-19). Disturbances may cause deviations in the supply chain. Deviations affect

operations, processes, plans, goals or programme strategies in municipalities and can be eliminated by means of adaption (Ivanov, Tsipoulaidis & Schönberger 2019). Nevertheless, a slow response by municipal leadership to strengthen internal controls, vacancies and instability, a culture of lack of consequences and operating without fully integrated information technology systems aggravates the current state of municipal financial performance (Auditor-General [South Africa] 2021:51–58).

Monitoring and evaluation of supply chain management

Monitoring is essentially an ongoing process to confirm whether SCM practices are still following the proper processes and offer recommendations to improve its operations when procuring goods and services. Weak monitoring and evaluation are interconnected with the absence or poor presence of a control environment. Dysfunctional monitoring and evaluation systems place public sector entities in precarious risk management situations and make it difficult for public sector entities to give effect to or implement SCM as required by the policy (Tönnissen & Teuteberg 2020:111). For instance, in this study, the metropolitan municipality at times fell short of complying with SCM norms and standards and regulations, thus contributing to recurring unclear audit findings. In the case of the metropolitan municipality under study, one major root cause was that documents could not be found or retrieved in time for the audit process. The auditor-general (2020:45) pointed out weak controls and lack of monitoring and support of SCM in the municipality, which led to opportunistic behaviour as mismanagement of funds was not being detected early enough to avoid financial and SCM malpractices.

Ethics and conflict of interest

Ethics and conflict of interest greatly affect SCM implementation. Sibanda et al. (2020:34) established that there was enormous power wielded by some chief financial officers (CFOs), as well as lack of proper consultation with other senior officials. In Odeku's (2018:50) study, 25% of the sampled businesspeople in Gauteng province (in terms of contractors who had been awarded tenders) believed that the process was rife with nepotism, bribery and corruption. This finding is an affront to the National Treasury Guide to Accounting Officers (2007), which prescribes a standard approach towards SCM procedure. If left unchecked, conflict of interest compromises the integrity of public sector organisations. Employees often disguise conflict of interest in ways which may be sophisticated and difficult to detect; nonetheless, preventive approaches must be adopted. Public officials should declare conflicts of interest when they join the public sector and annually thereafter, as required by the Code of Ethics.

Improving operations of supply chain management

It is of critical importance that SCM professionals fully comprehend legal prescripts that guide and govern their

functional activities as agents of their employers in the entities in which they operate. These include laws, regulations and trade agreements at the international, national, state, provincial and local levels. It is important that in addition to the regulatory framework, SCM units have to develop and implement standard operating procedures which supply chain managers and units must comply with. Kuupiel et al. (2019:8) suggested that laws and regulations that SCM professionals should be aware of include legal instruments, laws, contract and commercial laws, sector-specific laws and public sector procurement regulations and instructions.

Supply chain management professionals must not use their positions to induce another person to provide inappropriate benefits to themselves or others. They have to guard against potential conflicts arising from (amongst others) family, business, personal or financial relationships. Even though a conflict may not technically exist, SCM professionals must avoid the appearance of such a conflict. As a general guide, Dvorsky et al. (2021:1693) identified guidelines that can be followed to manage and avoid conflict of interest. They advise that potential conflict(s) of interest must be discussed with public officials, and SCM responsibilities can then be reassigned as warranted or necessary. More importantly, municipalities must develop and constantly review conflict of interest statements that encourage employees to disclose any potential conflict of interest upon initial employment and annually thereafter. Furthermore, Dvorsky et al. (2021:1693) emphasised that officials elected and appointed by the municipality should not engage in inappropriate personal business with the municipality, the municipality's competitors or suppliers. It would, for example, be unethical for municipal officials to lend money to or borrow money from any customer or supplier.

To promote public financial prudence, minimise financial risk and curb unethical financial malfeasance, external auditors perform an audit on the financial statements of entities, government, individuals and any organ or legal entity. Auditors audit procurement processes, and in South Africa, the Standing Committee on Public Accounts and the auditor-general are mandated to ensure that there are no irregularities in the way public funds are managed. As convention, the supreme audit institution is protected from political interference by law, and appointments in Chapter 9 institutions (RSA 1996) must uphold and respect the Agency's independence (Uddin & Akhter 2019:70). The constitution establishes the auditor-general as the external auditor of all national and provincial state departments and municipalities and any other institutions or accounting entities required by national or provincial legislation to be audited by the auditor-general. The auditor-general is thus mandated to audit and report on the accounts, financial statements and financial mismanagements and management of national and provincial state departments, municipalities and other institutions.

Methodology

An interpretive philosophical research approach was used to explore barriers to effective SCM in a metropolitan municipality and to identify best practices in SCM. The

interpretivist worldview is premised on the assumption that reality is socially constructed and that reality is subjective in nature. Interpretivism assumes that participants in a study constitute meaning-making agents whose attitudes, perceptions and experiences form the basis of reality (Van Thiel 2022:34). Aligning with the interpretivist paradigm, a qualitative research strategy and case study research design were adopted. Denzin and Lincoln (2017:23) are of the view that a case study design is a popular research strategy used to generate an in-depth, multifaceted understanding of a complex issue in its real-life context. The qualitative research strategy was thus naturalistic, and it sought to solicit an in-depth understanding of barriers to SCM in the metropolitan municipality. Both the adopted research strategy and design were deployed to gain an in-depth understanding of barriers to SCM in the metropolitan municipality (Denzin & Lincoln 2017:23).

The study sample consisted of 14 purposively selected key informants, consisting of three management officials, three Municipal Public Accounts Committee (MPAC) members, three senior officials from the SCM demand section, three participants from the internal control unit and two from the ordering section. Sample size was determined by the saturation point. The data saturation technique involved recruiting participants for interviewing up to a point when addition of new participants' data ceased to bring in any new insights. With purposive sampling, participants did not have an equal chance of being sampled (Gross 2018:39). Participants were selected for an explicit purpose; they were selected based on the seniority of their positions in the SCM directorate of the metropolitan municipality and the researchers' subjective judgements of the sampled participants being information-rich in SCM, making them trustworthy key informants for purposes of this study. The interviews took an average of 18 min. The interviews were recorded using a tape recorder and were later transcribed.

Interview data were analysed using a thematic analysis process, which involved transcribing the data sets from audio clips generated during interviews into Microsoft Office Word format. The transcribed data were then subjected to rigorous processes of data coding, reduction and establishment of themes and subthemes (Akşan & Baki 2017). The participants signed informed consent forms before engaging in interview sessions. In addition, ethical clearance (reference number SIB081SZIN01) was obtained from the University Research Committee. Furthermore, the researchers put in place measures to safeguard the findings, and the researchers used well-established qualitative research methods that can be easily replicated by other researchers to ensure confirmability. To promote dependability, the researchers kept all the transcribed data, recordings, field notes and all documents that they had used in the study. Member checking was used to promote the research's credibility by selecting a few participants who took part in in-depth interviews to evaluate the

TABLE 1: Summary of the study sample.

Participant ID	Gender	Role	Duration of interview
A	Male	Management	15 min
B	Male	Management	17 min
C	Male	Management	18 min
D	Male	MPAC	16 min
E	Male	MPAC	14 min
F	Male	MPAC	17 min
G	Female	Internal control unit	20 min
H	Female	Internal control unit	23 min
I	Female	Internal control unit	20 min
J	Female	SCM-demand section	20 min
K	Female	SCM-demand section	22 min
L	Female	SCM-demand section	19 min
M	Female	Ordering section	20 min
N	Female	Ordering section	15 min
Average interview time			18.3 min

MPAC, Municipal Public Accounts Committee; SCM, supply chain management.

TABLE 2: Schematic representation of themes and subthemes.

Theme	Subtheme
Internal audit controls in supply chain management	<ul style="list-style-type: none"> Inadequate and weak internal audit control mechanisms Noncompliance with policies and procedures Corruption
Risk management strategies and systems	<ul style="list-style-type: none"> Lack of poor risk management systems and strategies Lack of training opportunities on SCM risk management Hesitancy and fear to make and implement decisions
Political interference	<ul style="list-style-type: none"> Manipulation of processes and procedures to suit political affiliations Contestations between municipal administrators and political leaders Delays in the implementation of council resolutions because of bickering and political infighting
Ethics, fair dealing and accountability	<ul style="list-style-type: none"> Disregard of governance structures Lack of transparency and accountability A culture of poor discipline, impunity and nondelivery and weak consequence management Failure to submit timely, adequate and appropriate reports and evidence of irregular expenditure Irregular awarding of tenders to family and friends of municipal officials
Skills and capacity	<ul style="list-style-type: none"> Inadequate or improper record-keeping of financial and performance information Senior management vacancy rates, particularly at municipal manager and chief financial officer levels, compromise the internal control environment Lack of requisite competencies Corruption, nepotism and favouritism during recruitment processes

SCM, supply chain management.

findings and conclusions to determine whether their views, perceptions, options and responses were presented in the study. Lastly, transferability was promoted through suggested recommendations that can be adopted by other public sector organisations to improve SCM operations and processes. Table 1 provides a summary of the study sample.

Ethical considerations

This study was approved by the University of Fort Hare's Research Ethics Committee (UREC) (ref. no. SIB081SZIN01).

Results

The subsequent thematic sections show the results of this research study. The study sought to explore barriers to effective SCM in the metropolitan municipality and to identify the related best practices. Table 2 provides a

schematic representation of the themes and subthemes which emerged from data analysis.

Internal audit controls in supply chain management

The study's findings suggest that one of the barriers negatively impacting effective SCM in the metropolitan municipality was weak internal audit control mechanisms. Findings established that the metropolitan municipality had not reviewed its SCM policy since 2013, in breach of its institutional mandate which requires annual reviews of the policy (BCMM 2019). Interviewed participants attributed this administrative incongruity to corrupt individuals within the municipality who would stand to lose and be exposed in the event that the municipality regularly updated its SCM policy. Notably, more than half of the interviewed MPAC members concurred that lack of internal audit control systems was a major hurdle in the municipality's SCM system. Similar sentiments were also shared by participants in the SCM section, who indicated that because of lack of properly updated SCM, it was difficult for them to investigate cases of fraud, fruitless expenditure, corruption and irregular expenditure. Supply chain management section participants reiterated that in the absence of properly constituted and strong internal audit control measures, it was not only difficult to detect unethical practices but also difficult to sanction such practices. Participant A mentioned that:

'We cannot talk of a SCM system without internal audit control mechanisms, which can provide intrinsic checks and balances for objective assessments. ... Our work as administrators of the SCM system is seriously undermined by lack of updated instruments; we know the gaps, but as long as those gaps are not sealed off through policy amendment and updating, fruitless expenditure can continue to happen and nothing would happen as recourse.' (male, in management)

Participant B reiterated that:

'Officials know gaps in SCM policies, and without regular updating as required by the law, they manipulate such gaps for their personal gain.' (male, in management)

Participant C explained that:

'Instruments are deliberately left un-updated in breach of the law to enable individuals to exploit the institution for personal gain.' (male, in management)

These verbatim excerpts expressly demonstrate that the SCM system was negatively impacted by an environment of weak internal audit control mechanisms. Internal controls are indispensable for early identification and curbing of irregular, fruitless, wasteful and irregular expenditure, as well as material irregularities. Weak institutional control systems potentially generate rent-seeking behaviour amongst municipal officials. The auditor-general consolidated a general report on local government audit outcomes – the MFMA 2019–2020 emphasised the need for 'strong control

environments' with practical, 'automated and routinely executed internal controls'. Internal controls aid the accomplishment of municipal objectives by mitigating risks of human error, incorrect decisions, fraud, abuse and loss. In addition, controls prevent financial malfeasance, reduce financial losses, wastage and transgressions and, importantly, help in strengthening financial performance management and reporting (Auditor-General [South Africa] 2021:51).

Ethics, fair dealing and accountability

Municipal leadership get involved in unethical practices by disregarding good governance, statutory compliance and financial controls. This happens when there is little or no commitment to transparency and accountability, and the downside is that such cultures filter through to the lower municipal levels. Unsurprisingly, a culture of poor discipline, impunity and nondelivery will continue to exist. The study's findings suggest that the metropolitan municipality became embroiled in instances of corrupt and fraudulent activities which largely undermined efficient service delivery. Results indicate that officials in the municipality at times failed to submit timely, adequate and appropriate evidence of irregular expenditure, fraud and corruption. Findings further established that there were reports of awarding of tenders to family and friends of municipal officials, in contravention of the code of conduct for councillors and municipal staff members.

Furthermore, results point to instances of some municipal officials conducting business transactions with the municipality, without disclosure of conflict of interest. Evidence from literature indicate instances of fraud and corruption within the procurement processes, with indications that some municipal officials undermined the integrity of the municipality by procuring low-quality goods and services with impunity (BCMM Oversight Report 2017–2018:9). It is of concern that despite such transgressions, cases were seldom probed. The municipality's consolidated audit report (2017–2018:46) likewise observed that noncompliance with SCM prescripts resulted in corrupt activities, with the metropolitan municipality declaring some irregular expenditure as irretrievable without proper investigations, as required by Section 32(2)(a)(ii) of the MFMA (Republic of South Africa 2003). The following extracts from interview transcripts indicate respondents' concerns regarding the SCM system, operations and practices of the metropolitan municipality:

'Smooth and effective flow of SCM is incumbent on early and appropriate reporting of irregular expenditure to ensure timely interventions, but personnel can collude with [one] another to delay reporting or submit inadequate evidence upon which decisions cannot be made, and this allows malpractices to continue unabated.' (Participant D, Male, MPAC)

Emphasising the need for ethics and fair dealing in SCM, Participant E bemoaned that:

'Personal gain run supreme ... high-ranking officials award tenders to their undeserving and ill-capacitated family members and friends, in clear breach of the code of conduct ... we can effectively say there is [no] regard for laid-down policies and procedures, including the basic code of conduct.'

When asked how well senior management worked with the internal audit unit and the audit committee in strengthening controls and improving oversight, Participant E dejectedly pointed out that:

'It's pointless to have policies and procedures that are on paper but are not enforceable. Reports of improper conduct are often made, but they are seldom investigated because of internal power dynamics.' (male, in MPAC)

Nepotism, favouritism and fraud were observed to be key impediments to effective SCM in the metropolitan municipality. It would seem that these negative social and professional attributes actively diminish compliance with and enforcement of SCM policies and procedures, leaving the municipality battling with a dysfunctional internal control environment. Provincial treasuries and provincial departments of cooperative governance and traditional affairs will thus need to provide support to municipalities with unclear and regressive audit outcomes by supervising their activities and offering technical assistance. Correspondingly, municipal accounting officers and senior municipal management 'should implement proactive approaches to identify risks and ensure that risks are mitigated by implementing preventative controls'. Audit action plans must be developed, as per the recommendations of the auditor-general (Auditor-General [South Africa] 2021:118).

Skills and capacity

Inadequate record-keeping of financial and performance information leads to poor municipal audit outcomes. The potential for credible in-year reporting, which aids municipalities in monitoring performance and making well-informed decisions, is weakened. Resultantly, deficient internal control systems lead to adverse and disclaimed audit opinions. Likewise, senior management vacancy rates, particularly at municipal manager and CFO levels, compromise the internal control environment. As highlighted by the auditor-general (2021:60), vacancies and instability in key positions significantly contribute to municipalities achieving poor audit outcomes.

Findings from this study similarly showed that the lack of requisite competencies was a confounding factor which derailed the municipality's SCM system, undercutting the quality of services rendered to residents. Participants in the study similarly indicated a lack of critical skills and capacity necessary for implementing municipal policy programmes and for effective delivery of services. Participants were further of the view that the skills and experience dearth was driven by, *inter alia*, corruption, nepotism and favouritism during recruitment processes. The following verbatim sentiments exemplify participants' experiences:

'The task of ensuring effective and smooth flow of a huge public entity like this require the best talent. Unfortunately, that seems to lack here. Personnel in some key positions lack experience and others don't even have the requisite qualifications. ...

Novices are taking up key positions, and they fail to deliver.' (Participant F, male in MPAC)

Another respondent opined that:

'There is often unsustainably quick staff turnover; the municipality is losing talented and passionate human resources because of many factors.' (Participant G, male in MPAC)

Participant D was of the view that:

'There is need for internal training of staff to ensure that everyone is able to effectively deliver on their mandate.' (male in MPAC)

Committed leadership steer municipalities to optimal performance, functionality and success. Municipal managers are appointed in terms of Section 55(1)(a-q)(2)(a-c), and managers directly accountable to municipal managers are appointed in terms of Sections 56(a)(b) and 57(1-7) of the *Municipal Systems Act 32 of 2000*. Such senior management are mainly concerned with the 'administration and service delivery of the municipality'. The political leadership oversees the functioning of the municipality and takes key decisions, and the provincial leadership and heads of provincial departments are expected to support local government'. Senior managers have to continuously improve processes and controls and ensure that municipal performance plans, target objectives, outputs and outcomes are achieved. On the contrary, findings suggest that lack of requisite competencies, experience and skills was an albatross militating against effective SCM in the metropolitan municipality.

Risk management strategies and systems

Results indicate that another setback to the efficiency of SCM in the metropolitan municipality was the issue of poor risk management strategies and systems. A significant number of interviewed municipal officials reiterated that the municipality was being impacted by lack of knowledge and experience on SCM risk management. Amongst critical issues raised by the participants were issues regarding lack of strategies for ensuring security of supplies and quality control. There was consensus amongst study participants for the need for internal training on SCRM. Such training would ensure and guarantee security of supply chains, which in turn would enable the municipality to effectively deliver its services. Also topical amongst participants was the issue of creating synergies between policy compliance and procurement of good quality products to guarantee effective and sustainable service delivery. Indications were that without proper training, experience and knowledge on SCM risk management, officials would always be hesitant and fearful to implement decisions. The following expressions give credence to the theme of weak risk management strategies and systems:

'Most people here have not been properly trained on effective and proper risk management requisite for effective public service management, and this affects the smooth flow of operations and service delivery.' (Participant F, male, in MPAC)

Participant G had this to say:

'It's difficult sometimes as officials to make prompt and binding decisions on procurement and asset disposal. I think it's not enough to have a SCM policy without subsequent and in-depth training of officials on such policy.' (female in the internal control)

Participant C pointed out that:

'As a public administrator, [I think] the municipality needs a well-diversified network of service providers and suppliers to ensure that if one fails to deliver, then another immediately covers the gap. This will ensure continuous flow and security of service delivery, but very few people have the knowledge and experience to develop and effectively manage such a system here.' (male, in management)

Participant I indicated that:

'In some instances, low quality goods and services are procured on the basis of the pricetag without consideration of sustainability and durability issues. There is need for proper training of personnel in investment assessment.' (female, Internal Control Unit)

Evidently, participants consistently pointed to gaps in human resource training, qualification and experience in handling issues of SCM risks. This shows that participants were disposed to the conviction that there was a disjuncture between availability of SCM risk management policies and actual competencies by personnel to implement such policies in their decision making, which warranted mitigation through robust training. However, a slow response by municipal leadership to strengthen internal controls, vacancies and instability, a culture of lack of consequences and operating without fully integrated information technology systems aggravates the current state of municipal financial performance (Auditor-General [South Africa] 2021:51–58). This calls for municipalities to adhere to and abide by the standards prescribed by the *MFMA Municipal Regulations on Minimum Competency Levels* (RSA, Government Gazette 29967, 2007 as amended 2018).

Political interference

Findings of this study revealed that the SCM system was hurt by instances of political interference. Interviewees expressly indicated that the tender system in the municipality was affected by political interference. Interviewees reiterated that there were often contestations between municipal administrators and political leaders, in direct contravention of the *Municipal Systems Act* (Act 32 of 2000), which emphatically forbids political players from interfering with administrative processes and functions of municipalities. Results showed that political bickering caused needless delays in the implementation of council resolutions, much to the detriment of service delivery and optimum municipal functionality. Results further point to an uneasy administration–politics interface, often exploited in some instances to benefit individual interests and to advance rent-seeking behaviour. Indications were that some officials used political camouflage

to block certain requisite functions of the municipality, such as regular updating of SCM policies and enforcing policy compliance. Interviewees were of the view that:

'It's difficult to separate the operations of the municipality from politics. Some of the key officials are political appointees, and they have more allegiance to partisan politics, without much regard for their contractual mandates.' (female, SCM-Demand Section)

Participant K pointed out with exasperation that:

'Contracts and tenders are often subject to political connections and that really affect service delivery ... service providers and suppliers who receive tenders as a result of their political connections are often noncompliant with the foundational agreements in their contracts.' (female, SCM-Demand Section)

Similarly, Participant N pointed out that:

'You will notice that in contravention of the *Municipal Systems Act*, councillors and other political outfits unduly influence procurement and general discharge of municipal mandates, much to the detriment of service delivery.' (female, Ordering Section)

These sentiments point to the fact that political interference negatively affects SCM systems in the metropolitan municipality. Political interference delays decision making and causes unprocedural awarding of tenders and contracts to ill-capacitated individuals, who fail to deliver as per expectations of the contracts. Demir and Nyhan (2008:82) explained that in the dichotomy model, politics and administration serve distinct purposes. Politics ends with laws and policies through legislation and provides political guidance to public administration. Public administration translates value choices into concrete results. The administrative sphere applies specialised knowledge and skills, referred to as expertise, and provides neutral competence to the policy process. Whilst political guidance consists of two constructs (policy leadership and legislative oversight) neutral competence consists of three constructs: expertise, neutrality and hierarchy (Demir & Nyhan 2008:82).

Elected officials (political sphere) are responsible for determining the vision and mission of a municipality, defining the scope of services, determining the revenue-generating strategies, passing budgets, allocating revenue, directing policies and guiding intermunicipal relations (Audette-Chapdelaine 2016:457). This expressly requires skills and competencies in strategic management, long-term control of overall performance, a central ethical logic, allocation of financial resources and oversight (Bartoli et al. 2011:637). Municipal administration occupies the administrative sphere, and expertise largely explains their influence on public policy, as well as the elected officials' reliance on them for decision making (Audette-Chapdelaine 2016:457). The political–administrative interface is often a normative debate between dichotomy or complementarity (Demir 2009). Svava (1999a, 1999b, 2001, 2006) explicitly identified the limits of the dichotomous view and recommended a complementarity model, premised on

reciprocal influence and mutual support between politics and administration.

Discussion, implications and recommendations

Results of this study suggest that effective SCM was being hindered by lack of adequate and well-synchronised internal audit control systems and mechanisms. Without a well-established audit control system, the SCM system of the investigated metropolitan municipality was unable to timeously detect wasteful expenditure and fraud and had no remedy for these. This finding confirms establishments by Abdolmohammadi et al. (2017:49), whose study found that lack of internal audit control mechanisms weakens an organisation's ability to effectively, timeously and sustainably respond to erratic and irregular SCM decisions. Previous studies have largely underscored the importance of internal audit control as a requisite financial reporting mechanism. This study has demonstrated that SCM (internal audit control) acts as a critical decision-making tool and an invaluable early warning sign for irregular expenditure. In principle, this study has positioned internal audit control as the gatekeeper in all SCM issues, and it provides an early warning system in all instances of deviation from established organisational goals, objectives, policies, legislations and standards (Vijayakumar & Nagaraja 2012:19). Taufik (2019:32) and Raiborn et al. (2017:67) pertinently wrote that an internal control system enables early detection of financial and operational misconduct and drives an organisation towards good governance and accountability.

The study's findings also established that the metropolitan municipality's SCM system was being negatively impacted by a sequence of nepotism, fraud and corruption by officials. This finding aligns with previous studies by Odeku (2018:21) and Geldenhuys (2021:45), which established that corruption amongst municipal officials had led to procurement of substandard equipment that failed to warrant sustainable service delivery. Similarly, Geldenhuys (2021:46) established that corruption, nepotism and fraud negatively impacted SCM. As a result of corruption, nepotism and fraud, municipalities have become havens of unfair or irregular practices, including irregular awarding of tenders to companies or entities whose directors are in the employment of the municipalities or to incompetent service providers who lack the skills and capacity to deliver (Mahlala & Netswera 2020:17). Perhaps there is need for metropolitan municipalities to design and implement anti-corruption mechanisms as a strategy of protecting and improving service delivery.

Findings showed that the operations of SCM in the metropolitan municipality were being affected by the lack of experienced and well-skilled human resources. Amongst other factors, competency deficiencies in local governments neither undercut the municipality's ability to plan and implement work plans effectively nor identify strategies for solutions to foresee risks, and this often results in poor service

delivery. The problem of lack of well-trained and experienced human resources to run metropolitan municipality services is often attributed to brain drain, lack of internal human resource development programmes and poor employee retention programmes. This in turn is often ascribed to attrition of highly qualified and experienced personnel to greener pastures (Bag et al. 2020:44).

External factors influencing SCM structure are laws, public policies and regulations, which constitute public sector organisations' political environment (Grover & Dresner 2022:50). Elements of reactive SCRM strategies include risk detection, risk assessment and risk mitigation (Grover & Dresner 2022:52). It is thus prudent that to mitigate the weak and poor SCRM, the metropolitan municipality in this case study needs to reactively develop and implement strong SCRM strategies. Without well-developed and robust SCRM strategies, an organisation cannot identify and mitigate disruptions and volatilities in end-to-end supply chains (Fan & Stevenson 2018:124). Of critical implication in the process of SCRM is the need to ensure appropriate and progressive analysis, planning and management of activities, including sourcing, procurement and logistics, so as to guarantee the continuity of supplies and minimise disruption to municipal operations (Rostamzadeh et al. 2018:5).

As recommended by Thornhill (2008:506–509), SCM systems must shun political interference. Ivanov (2018:13) aptly wrote that in many developing countries, politics tend to straddle the administrative space of municipal authorities. Sibanda et al. (2020) established that political and administrative wrangling often paralysed service delivery, resulting in rollover of development budgets because of needless squabbling. For Olatoye et al. (2019:43), political interference could result in the awarding of contracts and tenders to ill-capacitated contractors who fail to deliver and who often sign off unfinished jobs or supply substandard goods and services.

Supply chain management occupies an invaluable space in ensuring effective and sustainable service delivery of goods and services. However, the efficiency of the SCM system in the metropolitan municipality was extensively compromised by a multiplicity of operational, policy, political and human resource hurdles. It is recommended that authorities ought to restructure systems to eliminate duplicity and improve SCM policies and practices in ways that lead to accountable decision-making in the procurement and disposal of goods and services of public interest. Accountability is an integral key principle of public administration and sound public financial management and governance. Agency theory considers the principal-agent correlation as a relationship of accountability. Accountability denotes liability, and those who are responsible are thus accountable. Public servants are accountable for public finance management, including regularity, effective control systems and value for money. Public sector accountability therefore entails transparency, justice, democracy, efficiency and integrity. As such, 'administrative liability' connotes fiscal regularity, process efficiency accountability and programme effectiveness accountability.

Limitations of the study

The qualitative research approach used in this study means that the findings and attendant inferences associated with these are based on the subjective views of study's participants. As such, findings of this article may not be applicable outside of the specific context of the inquiry or generalised to the whole population. The study sample of 14 participants also stands out as a major impediment to the applicability of the findings outside the scope of the beliefs, experiences, attitudes and perceptions of these specific individuals. It is recommended that future researchers investigate the efficacy of local government strategies for mitigating weak and poor SCRM, in local government and recommend reactive and strong SCRM strategies.

Conclusion

Unequivocally, well-synchronised SCM lies at the heart of effective service delivery in municipalities. In its generic form, SCM is a process(es) that integrates activities and considerations, designed to ensure seamless flow of goods and services from the point of sourcing, procurement, processing and logistics to delivery of services and goods to intended end-users. The key function of SCM managers is maintaining and monitoring healthy supply chain relationships with organisational suppliers and contractors, developing evidence-informed and incisive analysis of supply, demand and production fluctuations, in pursuit of efficient, effective, economical service and value for money (Uddin & Akhter 2019:68). If the case study metropolitan municipality is to optimally perform their constitutional mandates and create public value, there is need for necessary institutional and systemic transformations and adaptations to SCM practices and processes. This calls for leadership commitment, coupled with concerted efforts to transform and overhaul lethargic institutional systems and practices, so as to decisively stamp out SCM unethical conduct by public officials and address public financial management hurdles, as well as the root causes of poor audit outcomes. At a systemic level, municipal managers and senior management must proactively implement approaches to SCM which identify risks and must by all means ameliorate those risks, amongst other measures, by applying preventative controls and showing zero tolerance to SCM transgressions. Given that SCRM decreases vulnerabilities and mitigates barriers to effective SCM, public sector organisations must subsume elements of reactive SCRM strategies to include risk detection, risk assessment and risk mitigation in their financial control systems.

Acknowledgements

Competing interests

The authors declare that they have no financial or personal relationships that may have inappropriately influenced them in writing this article.

Authors' contributions

B.Z. conceptualised the study and the methodology, conducted the investigation, analysed the data and wrote the original draft. M.M.S. wrote the manuscript, reviewed and edited the manuscript and supervised B.Z.

Funding information

The authors received no financial support for the research, authorship and publication of this article.

Data availability

Data sharing is not applicable to this article as no new data were created or analysed during this study.

Disclaimer

The views and opinions expressed in this article are those of the authors and do not necessarily reflect the official policy or position of any affiliated agency of the authors.

References

- Abdolmohammadi, M.J., DeSimone, S.M., Hsieh, T.S. & Wang, Z., 2017, 'Factors associated with internal audit function involvement with XBRL implementation in public companies: An international study', *International Journal of Accounting Information Systems* 25(3), 45–56. <https://doi.org/10.1016/j.accinf.2017.03.002>
- Akşan, E. & Baki, A., 2017, 'Thematic analysis of curriculum-related studies in Turkey between 2000 and 2014', *Journal for Educational Sciences, Theory and Practice* 17(12), 877–904.
- Audette-Chapdelaine, M., 2016, 'Sense making and the political – Administrative interface: The challenges of strategically steering and managing a local public service', *International Review of Administrative Sciences* 82(3), 454–471. <https://doi.org/10.1177/0020852315594857>
- Auditor-General (South Africa), 2021, *Consolidated general report on the local government audit outcomes – MFMA 2019–2020*, Auditor-General (South Africa), Pretoria.
- Bag, S., Wood, L.C., Xu, L., Dhamija, P. & Kayikci, Y., 2020, 'Big data analytics as an operational excellence approach to enhance sustainable supply chain performance', *Resources, Conservation and Recycling* 153, 104559. <https://doi.org/10.1016/j.resconrec.2019.104559>
- Bartoli, A., Keramidis, O., Larat, F. & Mazouz, B., 2011, 'Vers un management public éthique et performant', *Revue Française D'administration Publique* 140(4), 629–639. <https://doi.org/10.3917/rfap.140.0629>
- Bastl, M., Johnson, M. & Finne, M., 2019, 'A mid-range theory of control and coordination in service triads', *Journal of Supply Chain Management* 55(1), 21–47. <https://doi.org/10.1111/jscm.12187>
- Beske, P. & Seuring, S., 2014, 'Putting sustainability into supply chain management', *Supply Chain Management: An International Journal* 19(3), 322–331. <https://doi.org/10.1108/SCM-12-2013-0432>
- Bizana, N., Naude, M.J. & Ambe, I.M., 2015, 'Supply chain management as a contributing factor to local government service delivery in South Africa', *Journal of Contemporary Management* 12(1), 664–683.
- Bozeman, B., 1987, *All organisations are public: Bridging public and private organisation theory*, Jossey-Bass, San Francisco, CA.
- Bozeman, B., 2013, 'What organisation theorists and public policy researchers can learn from one another: Publicness theory as case-in-point', *Organizational Studies* 34(2), 169–188. <https://doi.org/10.1177/0170840612473549>
- Buffalo City Metropolitan Municipality [BCMM], 2017/2018, *Oversight report*, Buffalo City Metropolitan Municipality, Eastern Cape Province.
- Buffalo City Metropolitan Municipality, 2021, *2019/2020 Municipal public accounts committee (MPAC) oversight report*, Buffalo City Metropolitan Municipality, East London.
- Demir, T. & Nyhan, R., 2008, 'The politics-administration dichotomy: An empirical search for correspondence between theory and practice', *Public Administration Review* 68(1), 81–96. <https://doi.org/10.1111/j.1540-6210.2007.00839.x>
- Demir, T., 2009, 'The complementarity view: Exploring a continuum in political – Administrative relations', *Public Administration Review* 69(5), 876–888. <https://doi.org/10.1111/j.1540-6210.2009.02037.x>
- Denzin, N.K. & Lincoln, Y.S., 2017, *The SAGE handbook of qualitative research*, 5th edn., Sage, Thousand Oaks, CA.
- Duhadway, S., Carnovale, S. & Kannan, V.R., 2018, 'Organisational communication and individual behaviour: Implications for supply chain risk management', *Journal of Supply Chain Management* 54(4), 3–19. <https://doi.org/10.1111/jscm.12182>

- Dvorsky, J., Belas, J., Gavurova, B. & Brabenec, T., 2021, 'Business risk management in the context of small and medium-sized enterprises', *Economic Research-Ekonomska Istraživanja* 34(1), 1690–1708. <https://doi.org/10.1080/10.1080/1331677X.2020.1844588>
- Eckersley, P. & Ferry, L., 2020, 'Public service outsourcing: The implications of "known unknowns" and "unknown unknowns" for accountability and policy-making', *Public Money & Management* 40(1), 72–80. <https://doi.org/10.1080/09540962.2019.1660096>
- Ellram, L.M. & Murfield, M.L.U., 2019, 'Supply chain management in industrial marketing – Relationships matter', *Industrial Marketing Management* 79, 36–45. <https://doi.org/10.1016/j.indmarman.2019.03.007>
- Fan, Y. & Stevenson, M., 2018, 'A review of supply chain risk management: Definition, theory, and research agenda', *International Journal of Physical Distribution & Logistics Management* 48(3), 205–230. <https://doi.org/10.1108/IJPDLM-01-2017-0043>
- Garvey, M.D., Carnovale, S. & Yenyurt, S., 2015, 'An analytical framework for supply network risk propagation: A bayesian network approach', *European Journal of Operational Research* 242, 618–627. <https://doi.org/10.1016/j.ejor.2014.10.034>
- Geldenhuys, K., 2021, 'The link between procurement fraud and corruption during COVID-19', *Servamus Community-Based Safety and Security Magazine* 114(1), 30–33.
- Gianakis, G. & McCue, C., 2012, 'Supply management concepts in local government: Four case studies', *Journal of Public Procurement* 12(1), 109–141. <https://doi.org/10.1108/JOPP-12-01-2012-B004>
- Gross, N., 2018, 'Pragmatism and the study of large-scale phenomena', *Theory and Society* 4(7), 87–111. <https://doi.org/10.1007/s11186-018-9307-9>
- Grover, A.K. & Dresner, M., 2022, 'A theoretical model on how firms can leverage political resources to align with supply chain strategy for competitive advantage', *Journal of Supply Chain Management* 58(2), 48–65. <https://doi.org/10.1111/jscm.12284>
- Gulati, R., Wohlgezogen, F. & Zhelyazkov, P., 2012, 'The two facets of collaboration: Cooperation and coordination in strategic alliances', *Academy of Management Annals* 6(1), 531–583. <https://doi.org/10.5465/19416520.2012.691646>
- Gumede, N., Byamukama, J. & Dakora, E., 2019, 'Contemporary perspectives on fiscal decentralisation and new local government in South Africa', *Ghana Journal of Development Studies* 16(2), 52–69. <https://doi.org/10.4314/gjds.v16i2.3>
- Ivanov, D., 2018, *Structural dynamics and resilience in supply chain risk management* (vol. 265), Springer International Publishing, Berlin.
- Ivanov, D., Tsipoulanis, A. & Schönberger, J., 2019, 'Supply chain risk management and resilience', in *Global supply chain and operations management*, Springer, Cham.
- Kuupiel, D., Bawontuo, V., Drain, P.K., Gwala, N. & Mashamba-Thompson, T.P., 2019, 'Supply chain management and accessibility to point-of-care testing in resource-limited settings: A systematic scoping review', *BMC Health Services Research* 19(1), 1–11. <https://doi.org/10.1186/s12913-019-4351-3>
- LeMay, S., Helms, M.M., Kimball, B. & McMahon, D., 2017, 'Supply chain management: The elusive concept and definition', *The International Journal of Logistics Management* 28(4), 1425–1453. <https://doi.org/10.1108/IJLM-10-2016-0232>
- Mahlala, S. & Netswera, F.G., 2020, 'Steering public service administration in South Africa through COVID-19 and related corruption guided by the triple challenges of governance', *Journal of Public Administration* 55(3–1), 480–489.
- Moshtari, M. & Vanpoucke, E., 2021, 'Building successful NGO-business relationships: A social capital perspective', *Journal of Supply Chain Management* 57(3), 104–129. <https://doi.org/10.1111/jscm.12243>
- Myeza, L., Nkhi, N. & Maroun, W., 2021, 'Risk management factors contributing to transgressions in the procurement practices in South African SOEs', *Journal of Accounting in Emerging Economies* 11(5), 735–751. <https://doi.org/10.1108/JAEE-03-2021-0073>
- Nahapiet, J. & Ghoshal, S., 1998, 'Social capital, intellectual capital, and the organizational advantage', *Academy of Management Review* 23(2), 242–266. <https://doi.org/10.5465/amr.1998.533225>
- National Treasury, 2005, *Supply Chain Management: A Guide for Accounting Officers or Authorities*. National Treasury, Pretoria.
- Nkwanyana, N.S. & Agbenyegah, A.T., 2020, 'The effect of supply chain management in governance: Public sector perspectives', *Journal of Transport and Supply Chain Management* 14(1), 493–515. <https://doi.org/10.4102/jtscm.v14i0.493>
- Nzimakwe, T.I. & Biyela, A.C., 2021, 'Exploring the procurement challenges in the South African public sector', in *Public procurement, corruption and the crisis of governance in Africa*, pp. 73–92, Springer International Publishing.
- Odeku, K.O., 2018, 'Endemic corruption in supply chain and procurement in the local sphere of government in South Africa', *The Journal of Distribution Science* 16(9), 43–52. <https://doi.org/10.15722/jds.16.9.201809.43>
- Olatoye, T.A., Kalumba, A.M., Mazinyo, S.P. & Odeyemi, A.S., 2019, 'Ecosystem functioning, goods, services and economic benefits in Buffalo City Metropolitan Municipality (BCMM) Eastern Cape, South Africa', *Journal of Human Ecology* 67(1/3), 79–90. <https://doi.org/10.31901/24566608.2019/67.1-3.3149>
- Ouda, H.A.G., 2015, 'Results-based systems are the path towards results-oriented', *International Journal on Governmental Financial Management* 15(1), 46–69.
- Payne, G.T., Moore, C.B., Griffiths, S.E. & Autry, C.W., 2011, 'Multilevel challenges and opportunities in social capital research', *Journal of Management* 37(2), 491–520. <https://doi.org/10.1177/0149206310372413>
- Peltman, S., 1975, The effects of automobile safety regulation, *Journal of Political Economy* 83(4), 677–725.
- Pfeffer, J. & Salancik, G.R., 1978, *The external control of organisations: A resource dependence perspective*, Harper and Row, New York, NY.
- Rahayu, S., Yudi & Rahayu, 2020, 'Internal auditors role indicators and their support of good governance', *Cogent Business & Management* 7(1), 1751020. <https://doi.org/10.1080/23311975.2020.1751020>
- Raiborn, C., Butler, J.B., Martin, K. & Pizzini, M., 2017, 'The internal audit function: A prerequisite for good governance', *Journal of Corporate Accounting & Finance* 28(2), 10–21. <https://doi.org/10.1002/jcaf.22246>
- Republic of South Africa, 2003, *Municipal finance management act* (no. 56 of 2003), Government Printers, Pretoria.
- Robinson, M., 2015, *From old public administration to the new public service: Implications for public sector reform in developing countries*, UNDP Global Centre for Public Service Excellence, Queenstown.
- Rostamzadeh, R., Ghorabae, M.K., Govindan, K., Esmaeili, A. & Nobar, H.B.K., 2018, 'Evaluation of sustainable supply chain risk management using an integrated fuzzy TOPSIS-CRITIC approach', *Journal of Cleaner Production* 175, 651–669. <https://doi.org/10.1016/j.jclepro.2017.12.071>
- Sharma, A.K., 2018, 'Governance: The concept and its dimensions', *Indian Journal of Public Administration* 64(1), 1–14. <https://doi.org/10.1177/0019556117735443>
- Sibanda, M.M., 2017, 'Control, ethics, and accountability in the financial management performance of Eastern Cape municipalities', *Journal of Public Administration* 52(2), 313–339.
- Sibanda, M.M., Zindi, B. & Maramura, T.C., 2020, 'Control and accountability in supply chain management: Evidence from a South African metropolitan municipality', *Cogent Business & Management* 7(1), 785105. <https://doi.org/10.1080/23311975.2020.1785105>
- Svara, J.H., 1999a, 'Complementarity of politics and administration as a legitimate alternative to the dichotomy model', *Administration & Society* 30(6), 676–705. <https://doi.org/10.1177/0095399992019049>
- Svara, J.H., 1999b, 'The shifting boundary between elected officials and city managers in large council-manager cities', *Public Administration Review* 59(1), 44–53. <https://doi.org/10.2307/977478>
- Svara, J.H., 2001, 'The myth of the dichotomy: Complementarity of politics and administration in the past and future of public administration', *Public Administration Review* 61(2), 176–183. <https://doi.org/10.1111/0033-3352.00020>
- Svara, J.H., 2006, 'Complexity in political-administrative relations and the limits of the dichotomy concept', *Administrative Theory & Praxis* 28(1), 121–139. <https://doi.org/10.1080/10841806.2006.11029526>
- Swanson, D., Goel, L., Francisco, K. & Stock, J., 2018, 'An analysis of supply chain management research by topic', *Journal of Supply Chain Management* 4(28), 100–116. <https://doi.org/10.1108/SCM-05-2017-0166>
- Taufik, T., 2019, 'The effect of internal control system implementation in realizing good governance and its impact on fraud prevention', *International Journal of Scientific and Technology Research* 8(9), 2159–2165.
- Thomas, O.J.U.Y.E., 2018, 'Management support services and its impact on the service delivery of internal auditors in Nigerian public sector', *International Journal of Innovative Social Sciences and Humanities Research* 6(2), 92–98.
- Thornhill, C., 2008, The transformed local government system: Some lessons. *Journal of Public Administration* 43(32), 492–511.
- Tönissen, S. & Teuteberg, F., 2020, 'Analysing the impact of blockchain-technology for operations and supply chain management: An explanatory model drawn from multiple case studies', *International Journal of Information Management* 52(6), 101–120. <https://doi.org/10.1016/j.ijinfomgt.2019.05.009>
- Tran, Y.T., Nguyen, N.P. & Nguyen, L.D., 2022, 'Results-oriented culture and organisational performance: The mediating role of financial accountability in public sector organisations in Vietnam', *International Journal of Public Administration* 45(3), 257–272. <https://doi.org/10.1080/01900692.2020.1841227>
- Uddin, M.B. & Akhter, B., 2019, 'Antecedents and outcomes of supply chain management in Bangladesh', *Modern Supply Chain Research and Applications* 1(1), 68–87. <https://doi.org/10.1108/MSRA-02-2019-0007>
- Van Der Walde, G., 2016, *Managing for excellence in the public sector*, 3rd edn., Juta & Co., Ltd., Cape Town.
- Van Thiel, S., 2022, *Research Methods in Public Administration and Public Management*, 2nd edn., Routledge, Taylor & Francis, Abingdon, Oxon, New York, NY.
- Vijayakumar, A. & Nagaraja, N., 2012, 'Internal Control Systems: Effectiveness of Internal Audit in Risk Management at Public Sector Enterprises', *BVIMR Management Edge* 5, 1–8.
- Zwikaal, O. & Sadeh, A., 2007, 'Planning effort as an effective risk management tool', *Journal of Operations Management* 25, 755–767. <https://doi.org/10.1016/j.jom.2006.12.001>