Transforming South African Public-Sector Supply Chain Using Public-Private Partnership Business Acumen

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Abstract

This study focused on the South African public sector supply chain (PSSC), and the role of public-private partnerships (PPP) projects in executing public service delivery. The poor public service delivery caused by perpetual protests and blockades of public facilities by angry communities prompted this research. The study looks at the possibility of applying PPPs business acumen, or commercial initiative to the PSSC to enhance public service delivery. The PSSC and some of the PPP projects established after the country's democratic dispensation in 1994 were explored in pursuit of a solution to the service delivery dilemma. The theory of collaboration and integration formed the basis of the study. A qualitative research methodology was pursued, and senior managers from the South African Treasury and PPPs were interviewed. The study established that the business acumen or commercial initiative applied by PPP projects through supply chain collaboration and integration enhanced public sector delivery, and, thus, PPPs are a more suitable model than the prevailing PSSC processes.

Keyw ords: collaboration, commercial initiative, integration, public sector supply chain, public-private partners hips, service delivery

Introduction

The study examined the business acumen or commercial initiative applied by public-private partnerships (PPPs) through supply chain collaboration and integration in streamlining public service delivery, and if similar applications to public-sector supply chain (PSSC) could yield similar outcomes. The existing PPP projects in various spheres of the government are run strictly as business entities with trained staff and mindful of the returns on investment. These are the parameters that make a PPP model preferable in this study to guide the PSSC. It is important to investigate the potential of using PPPs to improve the South African PSSC, as prior research had identified limitations of PPPs which led to the question of whether PPPs would be able to solve the endemic problems in the South African PSSC. For instance, Bangura and Larbi, (2009) found that despite the significant benefits offered by PPPs, there were some shortcomings especially in relation to contracting out public services in emerging economies. Such limitations included skill deficiency, capability, institutional weaknesses, prevalent corruption, and inefficiencies. These findings may also apply to the South African PSSC (Fourie & Poggenpoel, 2016).

This study aimed to explore how the South African government could improve the level of public service delivery after experiencing years of disruptions by communities. The country has experienced local protests that resemble rebellion of the poor since 2004. However, on the surface, the protests are about service delivery by state institutions such as the municipalities and against leaders in the public service who are uncaring, self-serving and corrupt (Alexander, 2010). Municipalities, for instance, through their employees and elected officials are supposed to represent the interests of all citizens in the designated cities or towns. Local government is the level of government closest to the people, and it becomes disastrous when self-serving individuals divert or reduce the allocated service provisions from the rightful recipients, that is the citizens, triggering violent protests. These self-serving individuals are mean, dishonest, accept bribes or inappropriate gifts and practice favouritism that renders them corrupt (Corruption Watch, 2014). The footprint of service protest activity has become evident across a diverse range of communities in both cities and rural areas in South Africa. There is an average of one service protest daily considering that there were 144 protests in the first half of 2018 (Mokoena, 2018).

The Treasury Department which directs the PSSC and the introduction of the PPP initiatives are explored in this study to try and establish how service delivery could be improved. The PSSC and the PPP projects established in the country after the democratic dispensation in 1994 were investigated. The PSSC entails the government process for the procurement of materials/services to provide services to the public through various government departments, municipalities and institutions (PFMA, 2015). The PSSC is a major focus of all politicians as it is perceived, to produce inadequate results that do not meet the value for money criterion (Ambe & Badenhorst-Weiss, 2012). Politicians tend to complain about funding to ensure that their priority projects are implemented within the desired time frame.

The perpetual public service delivery protests, especially in the last decade, are a testimony of poor service delivery (Africa Check, 2016). The PSSC shortfalls are due to poorly performing supply chains that are riddled with contractual problems due to poor supplier relationships, purchasing decisions, delivery delays, and long lead times among others (National Treasury, 2015a). These anomalies can be traced back to the apartheid era before 1994 as there have been limitations in both time and resources for training professional public service in democratic South Africa (Mthanti, 2017). The Human Science Research Council also reported how the apartheid legacy impacted on skills shortage in the country

(Reddy, Bhorat, Powell, Visser & Arends, 2016). The problems experienced by the PSSC was affirmed by the findings of Ambe and Badenhorst-Weiss (2012) in describing the South African public procurement system challenges that includes lack of skills, operational capacity, and failure to adhere to regulatory and legislative requirements. This was further exacerbated by perpetual breaches of supply chain management (SCM)¹ regulations, policy, lack of accountability, fraud, and corruption (Auditor-General SA, 2015). All these SCM anomalies culminate in massive costs and wastage to the PSSC in South Africa which has an annual budget of over of R500 billion (National Treasury, 2017a).

Theory of Collaboration and Integration

Wood and Gray (1991:3-22) described the theory of collaboration as involving "the relationship between individual participants' self-interest, and the collective interests of all involved in the collaborative alliance". The theory explains how the participants from different entities engage with each other based on their contributions. Mangan, Lalwani, Butcher and Javadpour (2012) described supply chain collaboration as a relationship between supply chain partners developed over time. In this study, collaboration entails the relationship developed between the PPPs and the PSSC with their stakeholders that include suppliers, government and the public.

The American Council of Supply Chain Management Professionals (CSCMP) defined collaboration as "sharing of common values and visions between the supply chain partners" (CSCMP, 2017), while Wisner, Tan and Leong (2016) described it as "the collaborative planning, forecasting, and replenishment" (CPFR). CPFR is a concept that enhances supply chain integration by supporting and assisting joint practices of a supplier, and a customer in business transactions. According to Mangan *et al.*, (2012) supply chain integration implements the information sharing process between the enterprises involved. Hence, "CPFR seeks cooperative management of inventory between supplier and customer, through joint visibility, and replenishment of products throughout the supply chain" (Mangan *et al.*, 2012: 49). Essentially, it avoids a customer's out of stock situations and improves operational efficiency. Efficiency is realised from decreased expenditures for merchandising, inventory, logistics, and transportation across all trading partners (APICS, 2013).

Background to the Study

Supply Chain Role in the South African Public Sector

The PSSC aims to achieve internal operational objectives and meet targets of service delivery to the public. The South African PSSC procures goods, and services through the public service procurement programmes under Treasury directives (National Treasury, 2015b). The complexity of the PSSC process and working with massive state procurement budget demand high level of skills in SCM, logistics, operations, finance, and human capital among others to meet the intended objectives. Posner, Ryu and Tkachenko, (2009) described the objectives as the delivery of effective, and efficient services, and ability to realise value for money. Hence, the inclusion of PPPs to the government service delivery aimed at sharing some of the risks of the complex supply chain operation (National Treasury, 2016).

¹ Supply chain management (SCM) is described as "the design, planning, execution, control, and monitoring of supply chain activities with the objective of creating net value" (APICS, 2013: 172).

The Council of Supply Chain Management Professionals (CSCMP) provided a fitting definition of supply chain management that incorporates both supply side and demand side of the supply chain network that states:

"SCM is the integrated managing and control of the flow of information, materials, and services from the suppliers of raw materials, through to the factories, warehouses and retailers, to the end customers. The benefits to the organisations involved in the supply chain management should be to lower inventory costs, higher quality, and higher customer service levels. These benefits are realised when the members of the value-chain conform to the established standards" (APICS Dictionary, 2013:172).

Supply chain management covers the entire value chain from the products/service design to finished stage. This includes cost management, performance, speed and reliability of deliveries, product quality, and operational flexibility that deliver value for money to customers at the lowest cost (IFMATV, 2015).

Since the advent of the supply chain era several decades ago, enterprises do not only focus on profit maximisation, but also pursue their holistic composition that includes operations, people, and the environment (Frost, 2017). To maintain sustainability an enterprise needs to continuously maintain the environment in which it operates and strive for supply chain agility (Jacobson & Choi, 2008). Thus, managing risk, nurturing corporate social responsibility, and ensuring sufficient supply chain visibility has become synonymous with sustainable enterprises (Carter & Roger, 2008).

Public-sector supply chain

The PSSC is also referred to as public-sector procurement (National Treasury, 2015a). The PSSC operates in a sensitive environment, and requires accountability, as it is under public scrutiny all the time. This is mainly due to the public expectation of improved service delivery, greater transparency, and holding political parties responsible for implementing their promises (Cane, 2004). Hence, it is paramount for the government to establish an efficient and effective public-sector procurement system that ensures the promotion of improved service delivery, greater social diversity, and is sensitive to its impact on the planet by adopting an environmentally friendly approach (Cane, 2004).

Public procurement does not operate in isolation as it is also impacted by globalisation. Indeed, some of the pillars that underpin public procurement are fairness, equity, transparency, competitiveness, and cost-effectiveness. These factors ensure probity and stipulate that procurement consider price, and all other aspects of non-monetary dimensions (Migiro & Ambe, 2008). Public procurement requires transparency and is subject to special rules to acquire goods at a competitive price (OECD, 2015). Arlbjørn, Freytag and Haas (2011) argued that public-sector involvement in market competition is through invitation of vendors to participate in a tender process, which is then scaled down as a way of managing risk.

In expressing the South Africa PSSC experience, Smart Procurement, (2011: 243) stated:

"Despite the reform processes in public procurement and the employment of SCM as a strategic tool, there are predicaments in the South African public procurement practices, for example, non-compliance with procurement and SCM-related legislation and policies as well as tender irregularities".

Indeed, even the remedial strategy through the Preferential Procurement Policy Framework Act (PPPFA) of 2000 hasn't been able to alleviate the deficiencies (National Treasury, 2017b).

The problems associated with the PSSC's pursuance of regulation and adherence to it create a gap in the PSSC leaving it open to legal challenges (National Treasury, 2015c). The poor execution of and adherence to the rules of engagement are due to the public sector being starved of skilled human capital with adequate capability to discharge their duties (Migiro & Ambe, 2008). Even where training is available, implementation is low due to inadequate skills that lead to poor governance in the public-sector procurement (Ambe & Badenhorst-Weiss, 2012). These anomalies demand radical transformation that entails strict adherence to business principles as experienced in the PPP projects as they are professionally run as normal business entities.

Public-Private Partnerships (PPPs)

The PPPs operations in South Africa comprise private sector entities engaged to perform public functions, or private sector entities acquiring a state property for commercial purposes. Other types of PPPs involve a state institution paying a private sector entity for the delivery of service, or private sector entities collecting fees, or charges for the use of service, or a combination of the two processes. This is tantamount to the government transferring much of the risk to the private sector (Treasury, 2015). Some of the South African PPP projects are referred to as a loosely coupled relationship where procurement and operation roles are completely assigned to the private partner when the focus is financial viability, risk mitigation, technology, operations, and other value-adding activities (National Treasury, 2015).

A 2010 Organization for Economic Co-operation and Development (OECD) report pointed out that some government institutions provided policy guidance, technical support, capacity building, and direct funding for projects or promotion of PPPs (OECD, 2010). The South African government has elected to have a dedicated PPP unit in the form of the Government Technical Advisory Centre (GTAC) housed within National Treasury. This unit is focused on advising national and provincial departments on PPP engagements and plays an oversight role on all PPPs in the country (National Treasury, 2017). The PPP policy is informed by the Public Finance Management Act of 1999 (PFMA) that highlights different stages of the procurement process leading to the final request for proposal (RFP). The policy stipulates standardised PPP provisions, standardised guidelines and bidding documents for projects (National Treasury, 2004).

Most of the PPP projects in South Africa are in three main categories:

- Design, finance, build, operate and transfer (DFBOT): This is when a project is fully developed by a private institution and handed over to the government to run.
- Design, finance, and operate (DFO): This is when a private firm is mandated to complete a specific project and operate it on behalf of the government.
- Design, build, operate, and transfer (DBOT): This is when a private firm is mandated to complete a project and hand it over to the government to run (National Treasury, 2017c)

The reasons government adopts PPP projects range from accessing private funds to building public infrastructure, increasing the use of public infrastructure, and the need to improve quality while lowering, or managing the costs (National Treasury, 2016b). The commercially driven PPP projects succeed as they establish closer ties with the stakeholders through supply chain collaboration and

integration (Country Report, 2013). The business attitude of the PPPs is crucial; it is the missing link in the PSSC which suffers from corruption, skills deficiencies, and flouting of regulations and legislation.

Research Methodology and Design

The study pursued an interview-based qualitative research methodology coupled with a literature review. The literature was derived from a South African Treasury report on PSSC, legislation, latest books and journals in SCM, and websites among others. The interviews were conducted with representatives from the South African Treasury that is responsible for the PSSC and PPP projects established in the sectors of healthcare, tourism, transport and information technology. The participants were senior managers selected from the two groups of institutions. Hence, a non-probability sampling was used as described by Saunders, Lewis & Thornhill (2009). A total number of 21 respondents were interviewed, comprising 17 respondents from PPP projects² and four respondents from the South African Treasury Department which oversees public service procurement. The PPP projects from which the 17 respondents were drawn were distributed across five sectors nationally: healthcare (six hospitals), transport (five departments), tourism (five departments), IT (one department).

Saunders et al. (2009) expressed the need to describe the purpose of the study to the participants, and in this instance, the respondents were briefed on the need to compare the PSSC and the PPPs supply chains. The value proposition of the study was explained to the gate-keepers to enable them to communicate the purpose of the interview to the respondents. The selected managers were met, interview time scheduled, and the use of a data voice recorder device agreed. The use of a questionnaire with semi-structured questions, interview duration of one hour, and confidentiality undertakings were also explained. An undertaking of confidentiality with the respondents on nondisclosure and anonymity was provided in writing.

Subsequently, the interviews were conducted and recorded using a data voice recorder, and the highlights noted in the field notebook that, combined with the literature review, helped to establish the validity, and reliability of the study. The three data sources: field notebook, interview data, and the literature reviewed were also used in the triangulation of the study. The recorded interviews were transcribed, coded, and thematically interpreted via content analysis.

Open coding provided almost 300 unique codes, and after a densification process, seven major themes and some four key sub-themes emerged. The seven major themes comprised capacity and capability, budgets, costs and economic factors, collaboration and integration, corruption and risk, political interference/legal challenges, stakeholder management, and technological factors. Out of the subthemes, four emerged as key: decision making, social factors, stimulation of industrialisation and improved employment.

The themes that emerged from the study corroborated the literature on PPP's operational efficiency and policy that is geared to realise value for money. The themes identified in the analyses and corroborated with the literature are presented and discussed below.

² The population of active PPP projects were 19

Results

Capacity and Capability

Eighteen of the respondents stated that one of the major challenges of PSSC was low skill levels that inhibited lack of competitive ability of the government to attract the skills in the market. The shortage of supply chain management skills is critical as it inhibits proper coordination of supplies between sources and end users. A successful supply chain can meet the demands of the customers both in speed and quality. Lack of skills and external interference such as politicians interfering with the service supply process by providing favours to particular electorates/groups in anticipation of winning votes, or poor tendering processes can result in delayed service delivery. Good governance and skilled employees in other management disciplines such information technology enhance the capability of the operations. Respondent 7 addressed the issues as:

"Generally, most of the government departments are under-procured, and it has been happening for a long time. The institution such as SANRAL, when they put out the operations for toll road or toll system in the South Coast, they struggled for some few years. Maybe there was a bit of skills gap to develop, or the legislation were too strict, and I suppose the same happens to other departments. I'm not saying they are not the best thing in a competitive market. I think the public sector can also improve as the transformation experienced in a few state institutions such as the Reserve Bank."

Budget, Cost, and Economic Factors

The PSSC was synonymous with budget overruns and unpredictable costs due to interrelated factors such as corruption, lack of accountability and inadequate rigour around what the expected deliverables are. The institution has a large annual budget that exceeds R500 billion. The enormity of the budget requires careful handling to avoid interference by politicians. Due to the complex nature of service allocations, low skill levels and dishonest nature of some employees budget overruns and arbitrary costs occur. Such practices disrupted the scheduled plans and led to suppliers' complaints of delayed payments and unfished projects at the end of the financial year. Also, the budget could be disrupted by economic factors such as in times of economic recession or high inflation. The process that culminated in poor accountability and corruption was described by Respondent 17 as:

"Right now, PSSC is in total shambles. As I mentioned to you about Public Works, I get more and more discouraged where government thinks it can do everything through Public Works. It cannot as one police station stated it started experiencing problems with contractors soon after the tender was awarded.

In many cases, contractors come and receive upfront payment to begin work. The guy buys a BMW as number one priority. He might write it off second week, and problem starts. After that, the department might go back to bidder number 2, 3, 4 and they get them to price again, they lose time, the next time around it's more expensive, and they learn a few lessons".

Collaboration and Integration

Collaboration and integration has a crucial role in SCM in aligning entities in transactional relationships as it is expected of the PSSC and the suppliers. The relationship enhances the transactions and renders the operations efficient. The PPP projects employ highly skilled professionals especially in supply chain management and information technology. Their relationship with suppliers is enhanced through supply chain collaboration and integration that enable them to source supplies and deliver in a timely manner to the public as stipulated in their contract. Indeed, 20 of the respondents praised the professional services rendered by various PPPs and suggested that the PSSC should pursue a similar business approach model. Respondent 15 cited the example of the Gautrain PPP project and made the following remarks:

"PPP projects bring private sector resources that include funds, expertise, and risk sharing to build public infrastructures. Where the government is required to make payments, it is drawn from the fiscus or the money collected from the users of the infrastructures involved. In case of the Gautrain PPP project, it is funded from both the fiscus and the passengers using the train service. The poor public service delivery by the South African public-sector supply chain can be resolved by allowing the PPP model in most of the government departments".

Corruption and Risk

The PPP projects are a great relief to the public sector in risk sharing. However, the complexity of PSSC and limited professional training of employees mainly in supply chain management, and IT resulted in under-performance and corrupt practices. Corruption implied dishonest behaviour by employees in executing their duties such as demanding favours or money from potential clients. Usually, corruption is experienced where there is political interference. Corrupt practices result in maladministration that could expose the institution to risk, or danger of losing funds and inability to deliver on their mandates. Fourteen respondents shared this view. Respondent 1 stated:

"In government there is a lot of corruption, in how they procure. It's not streamlined, there are many loopholes. At times you do get that the person that quoted the lowest, meets all the requirements in terms of what they will bring to the table, skills development, job creation, but it turns out that they had no clue of what they have to do".

Respondent 11 expressed the following sentiments on risk:

"The private sector gives security in that they will execute the project effectively and efficiently within cost, on time, and to the specifications. However, the government can open doors, provide legislation, get things passed, but they rarely can execute".

Political Interference

Political intervention in any public project breeds corruption and inefficiency. The intervention comes with a lack of accountability, and cost and budget overruns among others. Political interference results in non-compliance with policy, tender irregularities and other deviations that leave the public-sector supply chain open to legal challenges. This is a risk that could be avoided if public service employees were well-trained professionals who could refuse political interventions. Seventeen of the respondents concurred that political interventions undermined the project success as stated by Respondent 19:

"political arena is scary, and you wonder sometimes where we are all going to end up. Politicians can dictate where a hospital could be built if the location could raise votes. A minister, for instance, can propose projects to be built in areas they think has potential for votes. Such interferences can make PPP projects fail to perform well".

Stakeholder Management

Stakeholder management was a key theme in this study as it dealt with issues related to lack of information, communication, trust issues causing apprehension, interpersonal relationships, and change management between the public and private partners. Relationship building with the

stakeholders who comprised government, suppliers and the public was crucial in meeting the mandates for efficient service delivery to the public. This relationship ensured timely procurement from a network of well-selected suppliers that offered reasonable costing of products/services to provide value for money. Fifteen respondents concurred as expressed by Respondent 16:

"As it happens in life, whenever there is a communication vacuum, someone will feel it. It is even worse if the vacuum is filled with incorrect information or incorrect perceptions, as it will lead to bad decisions. Sometimes planning a project with poor and wrong information, may end up being expensive because we are not comparing the right things".

Technological Factors

Technological factors were some of the critical factors that have influenced PPPs adoption in the country. The use of technology, especially by skilled workers, is a recipe for success. The South African PPP projects strive to use the cutting edge technology and to ensure to continuously train their workers in supply chain management among other business disciplines. Technology enhances communication among internal and external stakeholders. It drives supply chain integration and collaboration and enables efficient operations, timely and improved capacity. The remarks from Respondent 10 were quite insightful on technological factors:

"The moment you marry technology and skills, productivity improves. High technology and skills can enhance economic development. People of South Africa can benefit because service delivery can improve".

"There is a lot of movement on the technology side, and an advancement from the economic side. Now we make sure we get the skills to move on, and not get impacted by inflation or anything like that".

Conclusion and Recommendations

This study conducted an in-depth review of the South African PSSC and the public-private partnership PPP projects. The strengths and weaknesses of both institutions were reviewed as they have a common goal of public service delivery.

The study was motivated by the dilemma facing the PSSC to meet its goals amidst political interference which has manifested in perpetual service delivery failure evidenced nationally in the last decade. The ability to achieve professionalism in supply chain management in the PSSC is hindered by rampant corruption and gross failure to adhere to government rules and legislation, including the failure to adhere to the Public Preferential Procurement Financial Act (PPPFA) Act of 2000.

The interviews with representatives of PPP projects revealed that their success in SCM can be attributed to the emphasis on skilling employees through the provision of training in the fields of supply chain collaboration and integration, technology and general management, professional approach to operations, rigorous risk management, building ties with the stakeholders through supply chain collaboration and integration and between public and private sectors to enhance performance, and streamlining internal and external coordination. Ultimately, the PPPs lower their risk profile, reduce political interferences and eradicate corruption by engendering professionalism and commercial initiative or business acumen. Thus, PPPs appeared as an efficient public service delivery system, and arguably by pursuing this model the PSSC could yield similar results.

The findings of this study suggest that the complexity of the public-service supply chain with its massive national budget can be better managed through risk sharing, and providing skills in the crucial areas of supply chain management, technology, and other operational areas. Collaborations between the government and the private sector in the form of PPP projects that are presently undertaken in health care, tourism, IT, and transport are found to be an ideal model to be adopted in the PSSC.

Supply chain collaboration and integration enhance relationships between entities in the value chain as demonstrated by the PPPs' supply chain and can be emulated by the PSSC. The process would entail intensifying of workers training in supply chain management, technology, and other business disciplines; adhering to government legislation and regulations, and limiting political interference to curb corruption. The risk sharing between the two institutions is a win-win situation and good management practice. The PPP phenomenon should be encouraged in emerging markets as it advances free market economy.

This study has demonstrated that PPPs possess capacity to improve the PSSC through collaboration and integration of their supply chain. Hence, the recommendation is that the South African government should engage in more PPP projects, to incorporate the private sector business complement, ushering in more collaboration and integration, transparency, accountability, and profitability. The PPP could become the future vehicle for economic stimulation, and job creation in South Africa.

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