



**RHODES UNIVERSITY**

*Where leaders learn*

**Towards identifying how Knowledge Management Concepts  
may be applied to enhance the Tendering Process in South  
African Public Sector Institutions**

A thesis submitted in fulfilment of the requirements for the degree of

MASTERS OF SCIENCE

RHODES UNIVERSITY

By

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“The Tendering Process in South African Government institutions may be regarded as a system that is comprised of people, processes and perceptions”

## Abstract

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The state of the Tendering Process in South African Government Institutions has become an area of concern in recent years with issues related to transparency, governance and rigid retrospective procedures being cited as impediments to efficiency. In turn, Knowledge Management (KM) and its ability to be applied to all types of organisations to increase efficiency has been popularised extensively. An analysis of KM literature suggested that the principles of KM may be used to increase efficiency and create competitive advantage. This study attempted to identify whether the benefits gained by other organisations through the application of Knowledge Management principles, could be applied to the Tendering Process in South African Government Institutions. The study sought to identify how, Knowledge Value Chain by Wang and Ahmed (2005) may be leveraged to create an enhance Tendering Process. The study then reviewed the Tendering Processes conducted in Australia, United States of America, Malaysia and South Africa and sought to identify the common steps in a tendering process in order to construct a standard tendering process. The Knowledge Value Chain was then applied to this process to create a standard tendering process enhanced by Knowledge Management Principles.

The model was compared to the processes currently conducted in two Government institutions and two parastals. The findings indicated that the model is well suited for Government Organisations and would assist in the creation of greater transparency, however the practical implementation of the model is yet unlikely as the model suggest electronic access to information, and the process in South African Government Institutions is predominately paper-based.

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# Chapter 1: Research Proposal

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## 1.1 Field of Research

Knowledge Management

## 1.2 Provisional Title

Towards identifying how Knowledge Management Concepts may be applied to enhance the Tendering Process in South African Public Sector Institutions

## 1.3 Research Context

Rapid changes and the pressure of global competition have made the business environment increasingly complex. To survive, companies must maintain and utilise internal, as well as external knowledge (Tseng, 2009). As a result, firms have leveraged Supply Chain Management (SCM) skills into competitive advantages and excellent performance (Hult, Ketchen, Cavusgil and Calantone, 2006). In recent years, competition has pitted supply chains against each other in the competitive arena. This highlights the value of strategic SCM, viewing supply chains not just as production or distribution mechanisms but, also as important competitive tools (Hult *et al.*, 2006). However, the link between knowledge and supply chain outcomes has received limited attention despite firm and supply chain outcomes being increasingly intertwined (Hult *et al.*, 2006). If knowledge is the backbone of supply chain success, it is then important that organisations build up an extensive knowledge database as well as develop the necessary mechanisms for acquisition, control and publication of the information it contains (Tseng, 2009). This is paramount for organisations spanning multiple continents, such as conglomerates and those servicing entire countries, such as government institutions. The South African (SA) Government is a prime example; public sector procurement is estimated to be worth R180 billion at all levels of government and is one of the areas most vulnerable to corruption (Transparency International, 2005). Given the magnitude of this expenditure and the sheer volume of supply chain transactions, it is imperative that the best procurement decisions informed by the best held knowledge are in

effect. Furthermore, concerns around transparency have been raised as public tenders and administrative procedures are said to operate in an administrative environment that can lack transparency and predictability (Risk Management, 2009). In a Joint Comprehensive Procurement Assessment Report conducted by Transparency International, in 2001, it was found that there were several issues that needed to be addressed, namely consultants not being selected in a systematic and competitive manner, flaws in the awarding of tenders, insufficient planning and linking of entities to budgets, lack of uniform bidding and other procedures across the public sector, and conflicts of interests due to composition of tender bodies (Transparency International, 2005). In an effort to improve previous procurement methods, the South African Government initiated an on-going public reform process in the public sector (Mkhize, 2004). This reform culminated in the introduction of the Medium Term Expenditure Framework (MTEF), a form of project based budgeting, Public Finance Management Act (PFMA), Performance Based Budgeting (PBS), and Preferential Procurement Policy Framework Act (PPPFA) in 2000, as well as various financial systems and accounting reforms (Mkhize, 2004). The final stage of the reform process was the implementation of SCM to gain efficiency at each stage of the procurement cycle.

The tendering process is defined here as a process that begins with an internal assessment of the business needs and by use of informed decision making, selects the best way to meet those needs (Government Communication and Information System, 2010). The tendering process is affected by internal and external factors. Internal factors are found within the organisation and would be those responsible for the selection of bids. To what extent do these individuals use past information to assist in the selection process and are these individuals knowledgeable about the main industry participants? If the information at their disposal, is insufficient, to enable these individuals to make an informed choice, then the question is, what steps can be taken to empower them to make the best decisions? The external factors are industry related, for example who are chief contenders in a particular field? What is their track record? The implementation of SCM was an attempt to depart from the past rigid, rule-bound, inflexible process that was inefficient, which only focused on the lowest quote (Mkhize, 2004). It was intended to facilitate the standardisation and uniform interpretation of government's preferential procurement legislation and policies and promote uniformity and consistency in the application of SCM processes throughout government (Mkhize, 2004). However, the

inefficiency that was intended to be resolved with its implementation has not been completely achieved as the environment, which consists of the aforementioned internal and external factors, still lack transparency and predictability (Risk Management, 2009).

### **1.3.1. KM in the Tendering Process**

The intra-organisational performance implications of information technology have been an enduring research theme in information systems literature (Porter and Millar 1985; Swanson 1994; Tanriverdi 2005). For years researchers were plagued with attempting to answer why some firms outperform others, this led to substantial inquiry into knowledge as a means to achieve superior performance (Hult *et al.*, 2006). This inquiry, however, yielded non-conclusive results as firms were still faced with the problem that no single agent can fully specify in advance what kind of practical knowledge is going to be relevant, when and where. The practical application dilemma is further exacerbated by the theory that firms are distributed knowledge systems, the knowledge they need to draw upon is inherently indeterminate and continually emerging and not self-contained (Tsoukas, 1996). Researchers then began to investigate how this knowledge could be harvested, managed and applied.

Knowledge Management (KM) refers to identifying and leveraging the collective knowledge in an organisation to help the organisation compete (Alavi and Leidner, 2001). Knowledge management has now become an integral business function for many organisations as they realise that competitiveness hinges on the effective management of intellectual resources (Grover and Davenport, 2001). Succinctly, a firm obtains a competitive advantage when it can maximise organisational competencies, which include designing efficient organisational processes (Cockburn, Henderson and Stern, 2000). Organisational processes, even purchasing activities, need to be initiated, monitored, terminated, facilitated and organised. In other words, even purchasing processes need to be managed, which implies leveraging knowledge to make decisions (de Boer, van Dijkhuizen and Telgen, 2000). According to de Boer *et al.*, (2000) operations researchers have traditionally given substantial attention to the field of purchasing and supply management, but only within a very narrow scope. Their attention has almost exclusively been focused on operational purchasing decisions, which refers to the number of items to be ordered from a supplier and the timing and scheduling of these orders. These only constitute one of several areas or levels of purchasing decision making.

Furthermore, new areas of research have focused mainly on the creation of mathematical models for supplier selection namely Ghandforoush and Loo (1992) and de Boer, van Dijkhuizen and Telgen (2000).

Various models have been proposed that detail how KM may be implemented in an organisation. The Knowledge Value Chain Model by Wang and Ahmed (2005) is one such model. The model involves using KM enablers such as organisational memory and KM processes such as knowledge identification with the aid of strategic flexibility to achieve an increase in performance. The ability for KM concepts to increase performance is validated by Gottschalk and Holgersson's (2006) investigation into how KM technology can be used in police investigations. Their study found that there is a strong relationship between the extent of KM technology used and police investigation performance. Their results were achieved by applying the theoretical model of the value shop to police investigations. This study is particularly relevant to this research as the Gottschalk and Holgersson (2006) study is an example of a public institution using KM concepts to increase performance. In addition, Craighead, Hult and Ketchen (2009) found that performance is influenced by how well knowledge development capacity and intellectual capital efforts complement alternative supply chain strategies. Their study showed that supply chain strategy, knowledge and action are key antecedents to firm performance.

## **1.4 Goals and Objectives of the Research**

The purpose of this study is to identify general knowledge management principles that may be applied to the tendering process conducted in South African Public Sector Institutions in order to construct an enhanced tendering process that may be used for wide application in this sphere.

## **1.5 Research Methodology**

The methodology will employ a qualitative interpretivist case study approach (Cohen and Manion, 1994). The qualitative research method is selected because this method of inquiry is used when the researcher uses a small non-representative sample of respondents to help refine concepts (Pugsley, 2010). The interpretivist approach is considered the most appropriate

because to thoroughly understand the tendering process the theory needs to be constructed from multiple realities and therefore the researcher has to look at different factors in order to understand the phenomenon (Voce, 2004). Lastly the case study design will be used because to understand how the tendering process works in government institutions the contextual conditions are necessary as they will contribute to further understanding of the problem.

**The following research steps will be undertaken:**

1.1 Conduct a document analysis in order to:

- a. Identify current endogenous and exogenous factors that affect the tendering process in SA Government Institutions.
- b. Survey the field of KM to identify possible frameworks or models that may be used to increase efficiency.
- c. Investigate the current legislative environment affecting the tendering process within SA Government Institutions.
- d. Compare various tendering processes found in other countries.

1.2 Construct a theoretically enhanced tendering process that is informed by the literature that facilitates the creation of transparency.

1.3 Explore the use of the proposed tendering process within a unit of the South African Government paying attention to, amongst others:

- a. Identifying internal individuals or bodies responsible for the selection of bids.
- b. Assessing the extent to which these individuals use past information to make decisions.
- c. Assessing the extent to which these individuals are knowledgeable about the chief industry participants and if their knowledge is insufficient the steps taken to empower them to make the best decisions.

1.4 Analyse the findings and refine the process and provide recommendations.

## **1.6. Ethical Considerations**

All research will comply with the Rhodes Ethical Standards for research. All responses will be treated with the utmost confidentiality and the data will be protected. All responses will be coded to protect the identity of the respondents.

# Chapter 2: Foundations of Knowledge Management

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## 2.1 Introduction

Knowledge management (KM) has become one of the most widespread tools used to achieve a competitive advantage (Alavi and Leidner, 2001). Its ubiquity stems from the fact that it may be applied in private and public organisations (Gaffoor and Cloete, 2010). Its popularity may be due to the fact that organisational and managerial practice has become more knowledge focused (Alavi and Leidner, 2001). It may also be considered as a holistic solution as it may be used to increase efficiency in Supply Chains (SCs) and has been employed in the discipline of Supply Chain Management (SCM) (Craighead, Hult and Ketchen 2009). Furthermore, it contains tools that help identify how the knowledge possessed by employees may be leveraged by organisations. Lastly, KM may be considered adaptable as it caters for and encourages benchmarking because the process of identifying relevant information is considered a prerequisite for increasing efficiency and productivity (Wang and Ahmed, 2005).

This research seeks to assess the current factors affecting tendering process being used in South African Government Institutions. Secondly, it aims to analyse the areas eliciting concern in the tendering process as identified by auditing authorities and investigate whether these areas could be addressed by infusing KM concepts. Ultimately this research hopes to show that KM may be considered a plausible solution as it provides a holistic approach to the problems identified and that its implementation is justified and feasible by providing KM examples identified in the literature.

Given the importance of knowledge, the objective of this chapter is to provide the reader with a basic understanding of KM. It begins with the clarification of the hierarchy of knowledge. This is followed by existing knowledge perspectives as well as knowledge taxonomy models. Finally it provides an overview of KM discipline and presents the Knowledge Value Chain Model by Wang and Ahmed (2005).

## **2.2 The Hierarchy of Knowledge**

The question of defining knowledge has occupied the minds of philosophers since the classical Greek era and has led to many epistemological debates (Alavi and Leidner, 2001). Nevertheless, the philosophical definition of knowledge is not imperative as only the views from an Information Technology (IT) and Strategic Management (SM) perspective will be explored. IT literature defines knowledge by distinguishing between knowledge, information and data. Alavi and Leidner (2001), who conducted a review and interpretation of KM literature in diverse fields, came to the conclusion that first data must exist, which is then turned into information and finally converted to knowledge. Since the conclusions drawn by Alavi and Leidner (2001) are based on a broad study, this research will refer to their conclusions as the conventional hierarchy of knowledge. Tuomi (1999), however, disagrees with this hierarchy of knowledge. He suggests the most elementary piece of data has already been influenced by the thought and knowledge processes that led to its identification and collection, therefore raw data does not exist. This research will adopt the conventional view and will first define data as a prerequisite for information which is subsequently a prerequisite for knowledge.

### **2.2.1 Data**

Data is unorganised and unprocessed facts (Alavi and Leidner, 2001; Awad and Ghaziri, 2004; Kakabadse, Kakabadse and Kouzim, 2003). It is static. For example, South Africa adopted the SCM Framework in their procurement processes in 2004. This is data and there is insufficient context to consider it knowledge. However, the meaning one brings to the evaluation of this data could be important (Awad and Ghaziri, 2004). This evaluation may indicate that prior to the introduction of SCM the previous procurement processes were viewed as rigid, rule-bound, inflexible and inefficient. This is information.

### **2.2.2 Information**

Information is an aggregation of data that makes decision making easier. It is formatted or processed data that may be shaped to arrive at a meaning in the eyes of the perceiver (Awad and Ghaziri, 2004). Succinctly information has meaning, purpose and relevance. Kakabadse *et al.* (2003) support this view, affirming that information results from placing data within some meaningful context.

### 2.2.3 Knowledge

Knowledge is a difficult concept to define, as its definition can be of epistemological or business-related origin. However, the aim of this chapter is not to debate the philosophical origins of the word but merely to place it in context within the organisation. As a result, the definition of knowledge will be limited to definitions held by Alavi and Leidner (2001) and Awad and Ghaziri (2004). Alavi and Leidner, (2001) define knowledge as a justified belief that increases an entity's capacity for effective action. It may be viewed from several perspectives; a state of mind, an object, a process, a condition of having access to information or a capability (see Table 1). Awad and Ghaziri (2004) view knowledge as actionable, relevant information available in the correct format, at a suitable time and at the appropriate place for decision making. It is a higher level of abstraction that resides in people's minds. It is broader and richer and much more difficult to capture than data or information. This implies that organisations should consider actively implementing a knowledge acquisition strategy since knowledge is not something that is easy to capture. The hierarchy of knowledge that has been presented is considered the most recognised; however, there are additional tiers in the hierarchy that have been identified by Ackoff (1989) and Kakabadse *et.al.* (2003). Ackoff (1989) believed the two additional tiers were understanding and wisdom. The five categories put together form the Data, Information, Knowledge, Understanding and Wisdom (DIKUW) model. In this model, data, information and knowledge are related to the past and understanding and wisdom are related to the future. According to the model, understanding in the DIKUW model can be thought of as a kind of knowledge that can be used to explain, elaborate or gain insight into the nature of things such as relationship, interactions or patterns (Beller, 2006).

Table 1: Perspectives of Knowledge Management in Alavi and Leidner (2001)

Perspectives		Implications for Knowledge Management (KM)	Implications for Knowledge Management Systems (KMS)
Knowledge vis-à-vis data and information	Data is facts, raw numbers. Information is processed/interpreted data. Knowledge is personalized information.	KM focuses on exposing individuals to potentially useful information and facilitating assimilation of information	KMS will not appear radically different from existing IS, but will be extended toward helping in user assimilation of information
State of mind	Knowledge is the state of knowing and understanding.	KM involves enhancing individual's learning and understanding through provision of information	Role of IT is to provide access to sources of knowledge rather than knowledge itself
Object	Knowledge is an object to be stored and manipulated.	Key KM issue is building and managing knowledge stocks	Role of IT involves gathering, storing, and transferring knowledge
Process	Knowledge is a process of applying expertise.	KM focus is on knowledge flows and the process of creation, sharing, and distributing knowledge	Role of IT is to provide link among sources of knowledge to create wider breadth and depth of knowledge flows
Access to information	Knowledge is a condition of access to information.	KM focus is organized access to and retrieval of content	Role of IT is to provide effective search and retrieval mechanisms for locating relevant information
Capability	Knowledge is the potential to influence action.	KM is about building core competencies and understanding strategic know-how	Role of IT is to enhance intellectual capital by supporting development of individual and organizational competencies

It may or may not be reliable depending on the underlying knowledge and is directly related to intelligence, greater intelligence enables better understanding (Beller, 2006). Wisdom, in the DIKUW model refers to the ability to use knowledge and understanding to make decisions. It also refers to the ability to take actions that enable the achievement of goals. The actions taken must aim to minimise the current problems and avoid future problems, while maximising positive gains and their sustainability (Beller, 2006). Bellinger, Castro and Mills (2004) disagree with the DIKUW model and believe it should instead be the DIKW model (Figure 1). It is their conviction that “understanding” should not be a tier. Their argument is, understanding is related

to all the other categories and supports as well as causes the transitions from data to information, information to knowledge, knowledge to wisdom.

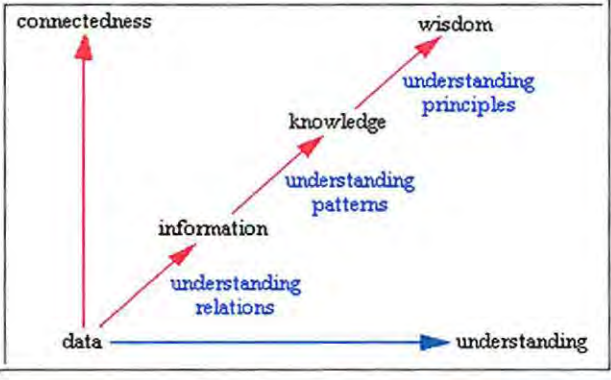


Figure 1: DIKW model

In contrast to the DIKW model Kakabadse *et al.* (2003) have a model, similar to that of Ackoff (1989); however their model is as follows: data -> information -> realisation -> action and reflection and finally wisdom (Figure 2). In their model the realisation tier is comprised of expertise, the action and reflection tier is comprised of commitment to course of action and wisdom is comprised of life experience. It seems the action and reflection component of the Kakabadse *et al.* (2003) model may be similar to understanding, in the DIKW model. This highlights the subjective nature of knowledge and how little nuances in definitions result in vast gaps in the treatment of knowledge.

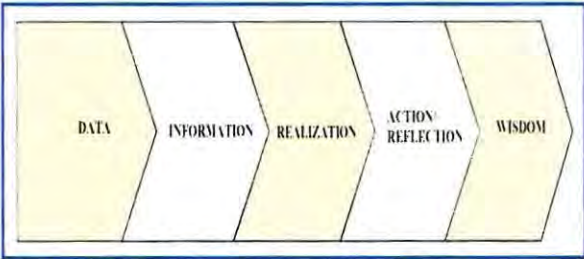


Figure 2: Chain of knowledge flow in Kakabadse *et al.* (2003)

## 2.3 Knowledge Taxonomies

It was stated previously that knowledge may be viewed from several perspectives. The correct term for the differentiation of knowledge types is knowledge taxonomies. Taxonomies of knowledge are a very useful concept and were considered an important aspect to understand in KM from as early as 1962. Of fundamental importance is the disparity between tacit and explicit knowledge. This difference was coined by Polanyi (1962) and applied to business and knowledge management by Japanese management scholar, Nonaka (1991). Tacit knowledge is embedded in the human brain and cannot be expressed easily; however, explicit knowledge can be easily codified (Grover and Davenport, 2001). Both types of knowledge are equally important as tacit knowledge forms the background necessary for assigning and structuring knowledge (Polanyi, 1962). Western firms have focused largely on managing explicit knowledge (Grover and Davenport, 2001). There seems to be two opposing views in the business world with regards to tacit and explicit knowledge. First, there are those who believe the characteristics of tacit knowledge, mainly its inability to be codified easily, give it more credence and hence assume its collection would result in better quality knowledge. Secondly, there are those who believe explicit knowledge should be given more attention and considered more legitimate by virtue of explicit knowledge being recorded knowledge (Alavi and Leidner, 2001). Tsoukas (1996) being aware of these opposing views, states tacit and explicit knowledge are mutually constituted and should not be viewed as two separate types of knowledge. This view is support by Alavi and Leidner (2001). Increasingly the trend is to understand that these types of knowledge work together and cannot exist independently.

Knowledge taxonomies can be divided into four broad categories, procedural knowledge, declarative knowledge, semantic knowledge and episodic knowledge (Awad and Ghaziri, 2004).

- Procedural knowledge is knowledge of how to perform a task that is repetitive in nature (Awad and Ghaziri, 2004).
- Declarative knowledge is surface type knowledge that is available in the short-term memory and easily verbalised (Awad and Ghaziri, 2004).
- Semantic knowledge is hierarchically organised knowledge concepts, facts and relationships among facts (Awad and Ghaziri, 2004).

- Episodic knowledge is organised by temporal spatial means and not by concepts or relation. It is experiential information that is chunked by episodes. This knowledge is highly compiled and autobiographical and not easy to extract or capture (Awad and Ghaziri, 2004).

The above generic description is supported by Alavi and Leidner (2001). They go into deeper detail in explaining the different knowledge taxonomies providing examples as can be seen in Table 2.

Table 2: Taxonomies of knowledge in Alavi and Leidner (2001)

Knowledge Types	Definitions	Examples
Tacit	Knowledge is rooted in actions, experience, and involvement in specific context	Best means of dealing with specific customer
Cognitive tacit:	Mental models	Individual's belief on cause-effect relationships
Technical tacit:	Know-how applicable to specific work	Surgery skills
Explicit	Articulated, generalized knowledge	Knowledge of major customers in a region
Individual	Created by and inherent in the individual	Insights gained from completed project
Social	Created by and inherent in collective actions of a group	Norms for inter-group communication
Declarative	Know-about	What drug is appropriate for an illness
Procedural	Know-how	How to administer a particular drug
Causal	Know-why	Understanding why the drug works
Conditional	Know-when	Understanding when to prescribe the drug
Relational	Know-with	Understanding how the drug interacts with other drugs
Pragmatic	Useful knowledge for an organization	Best practices, business frameworks, project experiences, engineering drawings, market reports

The previous sections were intended to lay a foundation for understanding knowledge management. The following sections will attempt to explain the KM discipline and present the Knowledge Value Chain by Wang and Ahmed (2005).

## 2.4 Knowledge Management

In the past, KM was relegated to the domain of organisations whose primary aim was to sell knowledge-based products. In recent years it has become an integral business function for many organisations as they realise that competitiveness hinges on effective management of intellectual resources (Grover and Davenport, 2001). In the preceding pages knowledge was discussed but its relevance within the organisation has not been sufficiently proven. In order to thoroughly explain its significance, it first needs to be defined. Defining KM will provide a basis for understanding why managing knowledge is important. It also provides credence to the notion that knowledge should be managed by providing a whole discipline devoted to its identification, utilisation and dissemination. KM refers to identifying and leveraging the collective knowledge in an organisation to help the organisation compete (Alavi and Leidner, 2001). Although the above definition is used to define KM in this research, it needs to be stated that the knowledge being leveraged is not only limited to that found inside the organisation but also the knowledge found in the external environment (Wang and Ahmed, 2005). What is of importance is that an organisation identifies pertinent knowledge and then leverages that knowledge to reap some benefit. The goals an organisation desires to achieve will enable its leadership and employees to discern what information is pertinent. If organisation A decides to focus on a cost reduction strategy the question they may need to ask is, how do we reduce our inventory by getting better and faster information (Grover and Davenport, 2001)? Such questions are important because knowledge-rich organisations have a reason for adopting KM into their infrastructure. KM moves a firm to a level of quality, creativity and sustainable competitive advantage (Awad and Ghaziri, 2004). Unlike technology which can disappear as a medium for competition, knowledge advantage is sustainable over time because it generates continuing advantages. The generation of knowledge has already become the key to productivity, competitive strength and economic achievement (Drucker, 1992). An organisation must, however, maintain and enhance its knowledge base on a regular basis (Awad and Ghaziri, 2004). In business, knowledge has the highest value and has the greatest relevance to decisions and actions. According to Landry, Amara, Pablo-Mendes, Shademani and Gold (2006) its advantages are as follow:

- Knowledge may be deployed simultaneously in multiple sites around the world.
- Knowledge increases in value when used by multiple knowledge holders.

- Knowledge brings increasing returns the more it is used.
- Knowledge creates future opportunities because it improves learning which in turn creates opportunities for future action.

Conversely, a disadvantage of knowledge is it is highly dependent on a specific situation or context (Grover and Davenport, 2001). It is the most difficult of content types to manage because it originates and is applied in the minds of human beings (Grover and Davenport, 2001). Its disadvantages also include the following:

- Knowledge assets are more difficult to manage than tangible resources.
- Knowledge assets are difficult to measure.

Once more the idea that knowledge acquisition needs to be actively pursued is shown by the disadvantages identified, nevertheless, the advantages knowledge offers far out-weigh the disadvantages. Knowledge compensates for search time i.e. a human expert who knows a set of solutions can get the job done without a great deal of searching for information (Awad and Ghaziri, 2004). Human beings who are knowledgeable not only have information but have the ability to integrate and frame the information within the context of their experience, expertise and judgement (Grover and Davenport, 2001). In so doing, they create new information that expands the state of possibilities by adapting the knowledge to answer more diverse questions (Grover and Davenport, 2001). Drucker (1992) coined a term for this type of individual, the knowledge worker. Knowledge workers are men and women who apply ideas, concepts and information rather than manual skill or brawn (Drucker, 1992). In other words a knowledge worker is one who relies on knowledge rather than skill to perform their job. The concept of the knowledge worker will be discussed in Chapter 4.

#### **2.4.1 The Knowledge Value Chain**

Various models have been proposed that detail how KM may be implemented in an organisation. The Knowledge Value Chain Model by Wang and Ahmed (2005) is one such model. The Knowledge Value Chain by Wang and Ahmed (2005) creates a knowledge value chain which is based on Porter's value chain, however, instead of capital being the basis of competitive advantage, knowledge is used to developed a more comprehensive and detailed version of knowledge value chain as a chain of KM processes (Najmaei and Sadeghinejad, 2009). Najmaei

and Sadeghinejad (2009) believe the knowledge value chain is a pragmatic tool for enhancing organisational capabilities, strategic flexibility and organisational learning. These fundamentals contribute to superior performance and competitiveness.

The model has four categories; KM processes, KM enablers, organisational capabilities and performance (see fig 3).

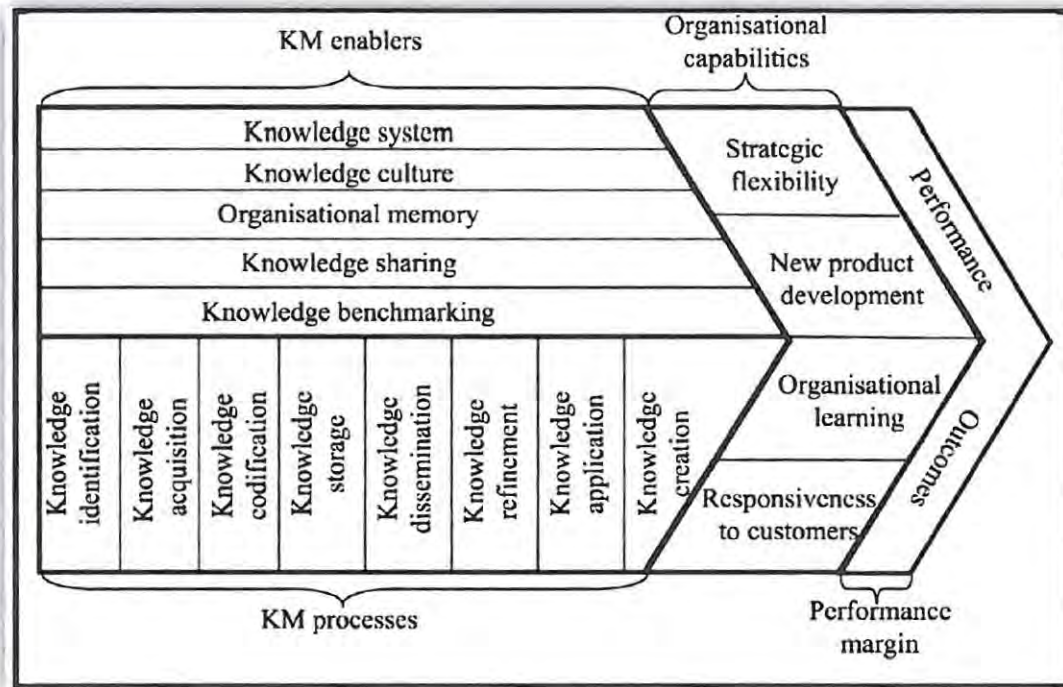


Figure 3: Knowledge Value Chain in Wang and Ahmed (2005)

#### 2.4.1.1 KM processes

According to Wang and Ahmed (2005: 322) KM processes are the primary activities involved in the knowledge value adding process. These processes include:

- Knowledge identification, searching for and locating information that is relevant to the organisation.
- Knowledge acquisition, identifying knowledge that is relevant and applying such knowledge in a specific organisational context.
- Knowledge codification, codifying tacit knowledge.
- Knowledge storage, recording, maintaining and providing easy accessibility.

- Knowledge dissemination, retrieving stored knowledge making it accessible to knowledge seekers and users.
- Knowledge refinement, improving or adapting existing knowledge to changed situations.
- Knowledge application and creation, nurturing and incubating new ideas and generating knowledge that leads to major breakthroughs.

KM processes are dependent on the nature of the firm, strategy it adopts and the industry it operates in Wang and Ahmed (2005).

#### **2.4.1.2 KM enablers**

Wang and Ahmed (2005:323) state that KM enablers include:

- Managing the knowledge system, this means an organisation must utilise information technology to facilitate KM Processes.
- Fostering knowledge culture, organisations need to adopt a knowledge culture that reduces the fear of redundancy in employees.
- Developing organisational memory, organisations need to develop the capability to remember what worked and what failed and ensure that useful lessons were captured.
- Promoting knowledge sharing, for KM to be effective there must be a continual flow of knowledge, it is this continuous flow of knowledge that facilitates communication within the organisation.
- Knowledge benchmarking, organisations should possess the capability of measuring its knowledge assets against other organisations in order to identify the level of comparative knowledge performance and knowledge gaps.

Wang and Ahmed (2005: 322) state that the KM value-adding processes come together to create the capabilities through the infra-structural systems and procedures of the organisations.

#### **2.4.1.3 Summary of model**

The model contains knowledge processes that should be present in an organisation as well as the knowledge enablers which provide an organisation with a recipe for increased performance. The model is based on Porter's value chain and is deemed to be a pragmatic tool for enhancing organisational capabilities, strategic flexibility and organisational learning (Najmaei and

Sadeghinejad, 2009). It provides foundational essentials that this research will need to address when constructing a theoretical model.

## **2.5 Is KM necessary and is it a valid approach?**

In order to see whether or not KM may be applied to the tendering process, this research will attempt to show that:

1. The tendering process conducted in SA Government Institutions may be viewed as inefficient.
2. KM may be a justified approach by showing that it may be considered necessary and its implementation is feasible.

The current processes in place need to be examined in order to assess whether or not a change is necessary. In order to thoroughly understand the environment in which the tendering process operates in South African Government Institutions, several aspects will need to be considered. Once the pertinent aspects have been identified and explored, evidence will be provided to support the notion that KM may indeed be a plausible and feasible solution. The broad categories deemed to be pertinent to this research to gain an in-depth understanding of the tendering process are: Supply Chain Management, Legislative Environment affecting the tendering process, and Organisational Culture. In addition a chapter solely devoted to the understanding of various countries' tendering processes will be undertaken in order to construct a standard tendering process which will ultimately be enhanced using KM concepts.

## **2.6 Conclusion**

The preceding pages have introduced knowledge and KM. The chapter began with an introduction to the hierarchy of knowledge, which presented various models such as the DIKW and the DIKUW models. This was followed by an overview of knowledge taxonomies and an introduction to the discipline of KM. The Knowledge Value chain by Wang and Ahmed was then explained. Lastly, how this research hopes to show KM validity was briefly discussed. From the previous pages the following was gleaned: KM implementation may foster skills development in employees, produce greater efficiency and decrease operation costs because knowledge

compensates for search time. Secondly, human beings who are knowledgeable not only have information but have the ability to integrate and frame the information within the context of their experience, expertise and judgement. Although the implementation of KM has attractive rewards, organisations battle with its practical implementation because knowledge assets are more difficult to manage than tangible resources. In addition, knowledge assets are difficult to measure. The Knowledge Value Chain by Wang and Ahmed (2005) is a model that may be used to address these problems as it provides a holistic approach to target these problems. Knowledge needs to be actively identified and acquired on a continual basis in order to fully reap its benefits. KM may be viewed from a business perspective as one of the factors that contributes to efficiency. The ability to be applied to different types of businesses has contributed to its popularity. KM may be viewed from a SM point of view as an asset because it may be used to increase efficiency in the supply chain. The following chapter focuses on the impact of knowledge from a SM point of view with particular focus on supply chains and Supply Chain Management.

# Chapter 3: Knowledge in Supply Chains

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## 3.1 Introduction

The field of Strategic Management (SM) deals with the major intended and emergent initiatives taken by general managers on behalf of owners, involving utilisation of resources to enhance the performance of firms in their external environments (Nag, Hambrick and Chen, 2007). Succinctly, SM deals with designing strategies that identify how to leverage resources in order to increase performance. The resources being utilised include stock, capability, assets, technology, products and knowledge to name just a few (Nag *et al.*, 2007). The definition presented is an amalgamation of various texts written on the subject, in a study performed by Nag *et al.* (2007). Of the various texts studied, only 9% mentioned knowledge as a valuable resource that ought to be leveraged or utilised. Companies who hold this view may be at a disadvantage because the environment in which organisations operate in may be shifting. Today's organisations face a multitude of issues, companies in this day and age have to deal with shifting demographics of workforces, shortages of skills and knowledgeable workforce (Palma Buttles-Valdez, 2008). In addition today's organisations are largely dependent on high-technology use to develop build and maintain their products or services. Lastly, globalisation and advances in technology have made the environment in which today's companies operate in, increasingly difficult. To cope with these changes companies need to stay ahead of the pack, to do this may be becoming more difficult. This shift is not only applicable to private organisations but also to government agencies. Government institutions are beginning to realise that benchmarking and paying attention to the environment in which they operate in may prove to be advantageous in the long-run. Due to these changes some companies are becoming more aware that knowledge is becoming a valuable commodity. According to Grover and Davenport (2001) knowledge has in recent years become an integral business function for many organisations as they realise that competitiveness hinges on effective management of intellectual resources. The fourth definitional element, "firm performance" is defined as growth, competitive advantage, returns, dominance or decline, an increase in firm performance will result in the assumption that the SM strategy selected is beneficial. According to Craighead *et al.* (2009) supply chain action may be regarded as one of the useful strategies employed by firms to increase performance. The

utilization of Supply Chains (SC's) has resulted in rivalry increasingly being contested at the supply chain level (Ketchen and Hult, 2007). There seems, however, to be a shift towards increasing efficiency within SC's which rely on the appropriation of information, in particular actionable, relevant information available in the correct format, at a suitable time and at the appropriate place for decision making, which is knowledge.

In an effort to further explore the use of knowledge and its applications, this chapter is devoted to the use of knowledge in supply chains and attempts to show that identification, acquisition and management of relevant knowledge may be the solution that equips today's firms to adapt to the shifts in the markets. It first provides a brief background into the field of supply chain management and then attempts to prove that knowledge should be considered necessary in the SC environment. It will attempt to show this by providing examples of how the hierarchy of knowledge is present in all facets of SC lastly it will attempt to prove that the implementation of knowledge management in the SC environment is feasible by providing a case study example.

## **3.2 Supply Chains**

Mentzer, DeWitt, Keebler, Min, Nix, Smith and Zacharia (2001) define a supply chain as a set of three or more entities (organisations or individuals) directly involved in the upstream (supply) and downstream (distribution) flows of products, services, finances or information from a source to a customer. It is important to note that in the above definition the final consumer is considered part of the supply chain. Three degrees of supply chain complexity exist: a direct supply chain, an extended supply chain and an ultimate supply chain (see Figure 4) (Mentzer *et al.*, 2001). A direct supply chain consists of a company, supplier and customer. An extended supply chain includes suppliers of immediate suppliers and customers of immediate customer. An ultimate supply chain includes all the organisations involved in all the upstream and downstream flows i.e. from the ultimate supplier to the ultimate consumer (Mentzer *et al.*, 2001).

### **3.2.1 The Value of Supply Chains**

Forrester (1959) predicted that management was on the verge of a major breakthrough in understanding how industrial company success depends on the interactions between the flows of information, materials, money, man-power and capital equipment. Fifty years ago Forrester (1959) identified that there would be a shift in key management issues and illustrated the

dynamics of factors associated with the phenomenon of supply chain management (Mentzer *et al.*, 2001). Managers of firms, at that time, did not fully support this hypothesis and continued to implement business strategies that hinge on conventional sources of advantage. Traditionally scale, process improvement, and creation of customer loyalty had been considered the conventional strategies to obtain a competitive advantage, however, the advantages accrued from the implementations of these strategies has diminished (Porter, 1998). Scale is now no longer a limitation because of access to capital and the global market space. Process improvement or the use of “best practices” was once considered a first-rate source of advantage; however, they are temporal and can be easily copied and adapted by competitors (Porter, 1998). Lastly, customer loyalty is far less important and difficult to maintain as new brands and products emerge all the time (Porter, 1998). These conditions have resulted in differentiation and cost- leadership being the only ways to obtain market superiority, consequently, companies must own whatever idea or tool that differentiates it from its competitors (Porter, 1998). As a result of these new market conditions firms are now competing more at the SC level because efficient management of a supply chain results in:

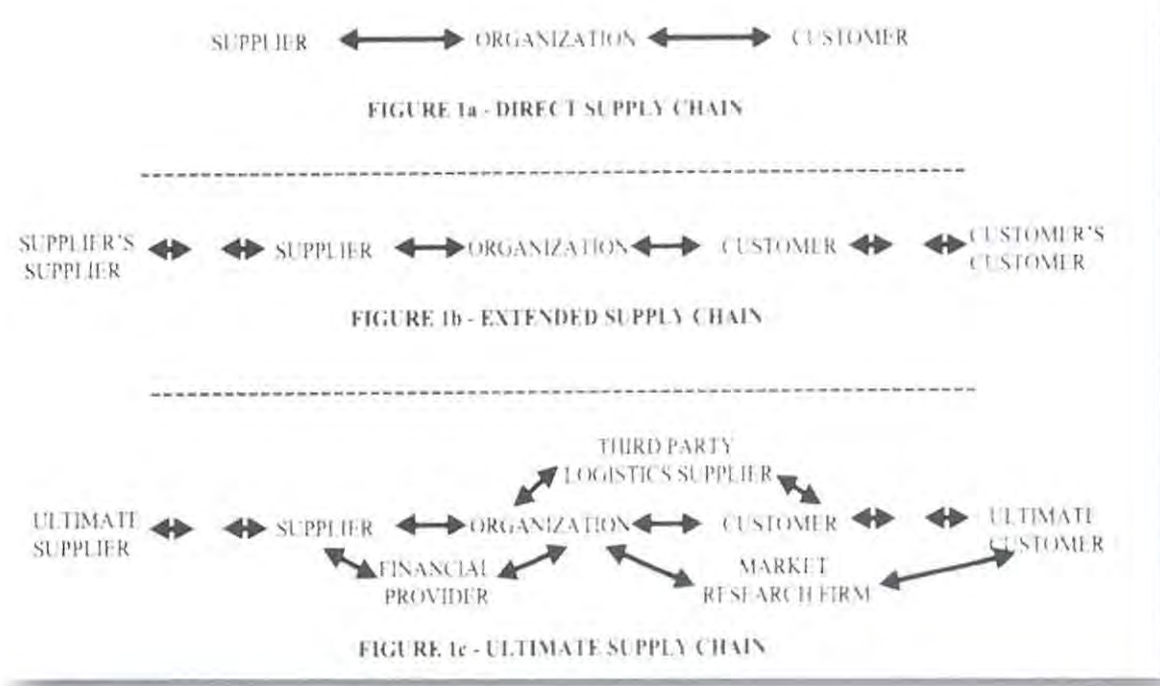


Figure 4: Types of Channel Relationships adapted from Mentzer *et al.* (2001)

lower costs, improved customer value as well as satisfaction and competitive advantage (Ketchen and Hult, 2007). Another reason may be the fact that corporations have turned increasingly to global sources for their supplies and this has forced companies to look for more effective ways to coordinate the flow of materials into and out of the company (Mentzer *et al.*, 2001). The realisation of the potential that effective use of SC's offers is only the beginning, companies or organisations need to consider the perspective from which they will use SC's.

### **3.2.2 Traditional perspectives of supply chains**

According to Ketchen and Hult (2007) there are several perspectives from which supply chains may be viewed. These include: Transaction Cost Economics (the most popular), Agency Theory, Resource Dependency Theory, Institutional Theory, Game Theory, Network Theory, Social Capital Theory, Strategic Choice Theory and the Resource-based View or Knowledge-based View (see Figure 5). Each school of thought affects the focus of the supply chain and how it is managed. If a Transaction cost economics perspective is taken then the focus should be on total cost and if a Knowledge-based view is chosen then the main assumption is that unique resources exist at the supply chain level and that the supply chain may be used as a strategic tool to gain a competitive advantage (Ketchen and Hult, 2007).

The idea that knowledge may only be considered a useful resource in a Knowledge-based view may be fallible because regardless of the perspective chosen or applied, three attributes are necessary for an effective supply chain namely, agility, adaptability and alignment (Lee, 2004). These three attributes may commonly be referred to as the Triple-A.

Agility refers to the ability of a supply chain to react quickly to unexpected or rapid shifts in supply and demand (Lee, 2004). The concept of agility may possibly be enhanced by identifying information that may be collated and used in the preparation of identifying potential risks. Once this information is identified and collated it may be used to create feasible best courses of action to be followed, this would be regarded as actionable relevant information, available at the correct time and place which is by definition regarded as knowledge. Agility may also be attained through the development of cultural competitiveness. Cultural competitiveness is the degree to which supply chains are predisposed to detect and fill gaps between what the customer desires and what is currently being offered (Hult, Ketchen and Nichols, 2003).

Transaction cost economics	Focus on total costs, not just transaction costs, as the basis of “make or buy” decisions Short term costs play a secondary role if the potential for long term, trusting relationships exists
Agency theory	Use reward structures and cultural competitiveness to align members’ interests Potential for opportunism minimized
Resource dependence theory	Supply chain members recognize that dependence can create forbearance and trust
Institutional theory	Use industry recipes and best practices to inform, but not dictate, supply chain management activities
Game theory	Mutual dependence and trust overcome members’ temptation to pursue self-serving behavior
Network theory	A blend of strong and weak ties that matches supply chain needs is created in order to maximize supply chain performance
Social capital theory	Shared goals, values, and experiences create shared sensemaking and improved performance
Strategic choice	Strategic decisions made with concern for the chain as the primary driver. This “strategic supply chain management” opens the door to unique blended strategies that transcend the firm
Resource-based view/knowledge-based view	Assume that unique resources exist at the supply chain level, and that supply chains can be inimitable competitive weapons

Figure 5: Theoretical Perspectives of Supply Chains adapted from Ketchen and Hult (2007)

This may be viewed as similar to wisdom because this process involves extrapolating the ideas and knowledge or information gained or acquired in order to inform future decision-making. One of the prerequisites for achieving cultural competitiveness is to foster a spirit of entrepreneurship, innovation and learning (Mentzer *et al.*, 2001). The KM discipline refers to such an organisation as a knowledge-creating company which requires an organisational culture that promotes sharing of information or knowledge. This implies, for a culture of competitiveness to exist, one of the prerequisites is knowledge because learning and innovation result from knowledge as explained in the previous chapter. Adaptability refers to the willingness to reshape supply chains when necessary, without ties to legacy issues or the way the chain has been operated previously (Lee, 2004). Supply chains that are adaptable rely on information systems to identify shifts in the market and then take appropriate actions such as changing suppliers or outsourcing (Mentzer *et al.*, 2001). Alignment means ensuring that interests of all participants in a supply chain are similar (Lee, 2004). Irrespective of the benefits that may accrue from the efficient management of a supply chain, there have been many setbacks. According to Ketchen and Hult (2007) many firms still consider supply chains to be a method to move products in order to support the company's overall strategy. Secondly most supply chains have limited ability to respond to changes. Thirdly participants will always choose their own interests over the chains interest. One of the ways to move firms towards a stage where they begin to fully maximise the benefits of supply chains is to emphasis Supply Chain Management because in Supply Chain Management each link of a supply chain is given equal prominence (Mkhize, 2004).

### **3.3 Supply Chain Management**

Forrester (1959) predicted that there will come a time when those who were the first to improve their understanding of the interrelationships between separate company functions and between the company and its market, its industry and national economy would obtain a competitive advantage. This time may have arrived because in recent years there has been a rise in the concept of Supply Chain Management (SCM). SCM is defined as a systematic, strategic coordination of traditional business functions and the tactics across these business functions within a particular company and across businesses within a supply chain, for the purposes of improving long-term performance of the individual companies and the supply chain as a whole (Mentzer *et al.*, 2001:18). According to Mkhize (2005) in a South African context with regards

to the tendering process, SCM is regarded as an interconnected process of buying, storing, utilizing and disposal. It is considered to have the ability to close gaps and address the whole cycle of procurement, from demand management, acquisition management, logistics management, disposal management, risk management and regular assessment of performance. Each link in the SCM is given equal prominence and value is added at each stage of the process (Mkhize, 2004). The definition of SCM proposed by Mentzer *et al.* (2001) is based on extensive literature review conducted by Mentzer *et al.* (2001). Their aim was to create a standard definition of SCM. Prior to their investigation, although SCM was a popular concept, there remained considerable confusion as to its meaning (Mentzer *et al.*, 2001). The derived definition is an amalgamation of three supply chain management classifications. The classifications are as follows: SCM as a management philosophy, SCM as an implementation of a management philosophy and SCM as a set of management processes (Mentzer *et al.*, 2001). The rise of SCM implies that companies are now aware that they no longer work in a vacuum and have to be knowledgeable about the environment they operate in, their suppliers as well as their customers.

### **3.3.1 SCM as a management philosophy**

According to Mentzer *et al.* (2001:7) as a management philosophy SCM has the following characteristics:

- A systems approach to viewing the supply chain as a whole, and to managing the total flow of goods and inventory from the supplier to the ultimate consumer.
- A strategic orientation toward cooperative efforts to synchronise and converge intra-firm and inter-firm operational and strategic capabilities into a unified whole.
- A customer-focus approach to create unique sources of customer value.

### **3.3.2 SCM as a set of activities to implement a management philosophy**

The selection of the management philosophy is only the beginning as firms need to then establish practices that foster the ability to act or behave consistently with the chosen philosophy. According to Mentzer *et al.* (2001: 8) there are seven activities thought to be necessary for the successful implementation of a SCM philosophy (see Figure 6).



Figure 6: Supply Chain Activities adapted from Mentzer et al. (2001)

- Integrated behaviour means firms must expand their processes and policies to incorporate customers and suppliers i.e. a form of external integration (Mentzer *et al.*, 2001).
- Mutually sharing information assists in fostering integrated behaviour and also provides guidance in the planning and monitoring processes (Mentzer *et al.*, 2001). The significance of information or knowledge in a supply chain should not be underestimated. According to Ketchen and Hult (2007) alignment of information is vital as it enables participants to effectively fulfil their responsibilities. When information is managed efficiently, managers may minimize transaction costs as they will be more knowledgeable in their buying decisions (Ketchen and Hult, 2007). Secondly mutually sharing information may be said to coincide with cultural competitiveness as described by Lee (2004). Cultural competitiveness provides supply chain participants with a pattern of shared values and beliefs which contributes to the supply chain's ultimate objective, to serve the end user (Lee, 2004).
- Mutually sharing risks and rewards contributes to creating a competitive advantage this compels firms to cooperate in order to reap benefits (Mentzer *et al.*, 2001).
- Cooperation among the supply chain members refers to similar, coordinated activities performed by firms in a business relationship to produce superior mutual outcomes (Mentzer *et al.*, 2001). It is facilitated by mutually sharing information.

- Having the same goal and the same focus on serving customers is a form of policy integration and is one of the steps that contributes to the successful implementation of SCM philosophy (Mentzer *et al.*, 2001).

- The Integration of process involves four stages:

**Stage 1:** represents the baseline case. In this stage the supply chain is a function of fragmented operations.

**Stage 2:** this marks the beginning of focus internal integration. This is characterised by an emphasis on cost reduction rather than performance.

**Stage 3:** reaches toward internal corporate integration. This stage is characterised by emphasis on efficiency and use of electronic support and a continued reactive approach to customers.

**Stage 4:** this is the final stage. This stage is characterised by extending the scope of integration to external companies (Mentzer *et al.*, 2001).

- Identifying partners to build and maintain long-term relationships with is the final activity. The creation of such relationships provides competitive advantage through creating customer value (Mentzer *et al.*, 2001).

It would be interesting to assess whether the integration process as an activity may be used as a gauge to assess the level of maturity of an organisation with respect to supply chain efficiency. The stages of the integration process provide characteristics of a firm at each stage. Could these characteristics be used as a guide to assist organisations in identifying areas that need to be developed in order to make their supply chain more efficient? If this process were to be used, however, it may be missing the crucial attributes that define an efficient SC namely, agility, adaptability and alignment (Lee, 2004). This would imply that there is a missing stage and this stage is the stage that would actively attempt develop ways to enhance these attributes. Some organisations have attuned to this 'missing stage' and as a result in recent years researchers and executives have focused their attention to Strategic supply chains, which is the alignment of IT

with strategic corporate goals. In order to achieve this companies have realised that SC's need to incorporate the Tripple-A characteristics as described by Lee (2004). Lee (2004) states that supply chains need to be possess agility, adaptability and alignment, such SCs are better equipped to handle changes. Adaptability, exposure to new and diverse environmental conditions, forces organisations to consider new information and knowledge (Collins *et al.*, 2010). Evidence suggests that firms facing particularly difficult competitive situations and onerous environmental threats are expected to benefit significantly from an ability to absorb external knowledge (Collins, 2010). A supply chain with Tripple-A characteristics is closer to being a "wise supply chain" (Hart, 2004; Lee, 2004). A wise supply chain engenders a climate of knowledge growth and acquisition as part of its business strategy realising that the decision making capacity of the people within the chain create the value for the client (Hart, 2004). The value being created resides within the flow of thinking processes throughout the chain and this is where the power to drive innovation resides (Hart, 2004).

### **3.3.3 SCM as a Set of Management Processes**

SCM as a process requires companies to overcome their functional silos. It involves managing relationships, information and material flows across enterprise borders to deliver enhanced customer service and economic value (Mentzer *et al.*, 2001). The enhanced customer care service and economic value are achieved through a synchronised management of the flow of physical goods and associated information from sourcing to consumption (Mentzer *et al.*, 2001).

### **3.3.4 Applications of SCM in Public Institutions**

The efficient use of SC's results in: lower costs, improved customer value and satisfaction as well as competitive advantage (Mentzer *et al.*, 2001). Due to these promising benefits the South African (SA) Cabinet adopted a SCM Framework policy to replace outdated procurement or tender practices, in September 2003 (Mkhize, 2004). The previous processes were considered to be rigid and inefficient (Mkhize, 2004). In addition the past processes focused primarily on the acquisition phase of the procurement cycle and did not sufficiently address the planning, budgeting, asset and risk management aspects (Mkhize, 2004). The aim was to implement the Supply Chain Management function across all spheres of government. The policy was intended to promote uniformity and consistency in the application of SCM processes throughout Government. The elements of SCM that were employed are demand management, acquisition

management, logistics management, disposal management and supply chain performance value is added at each stage of the procurement process (see Figure 7) The SCM implemented by the Government may be considered an interconnected process of buying, storing, utilizing and disposal. It is believed to address the whole life-cycle of procurement from demand management, acquisition management, logistics management, disposal management, risk management and regular assessment of performance. Each link in the SCM process is given equal prominence, and value is added at each stage of the procurement cycle (Mkhize, 2004).

**Demand Management** involves determining a needs assessment and deals with issues such as:

- Understanding future needs
- Linking the requirements to the budget
- Identifying critical delivery dates

**Acquisition Management** this stage is where:

- Preferential procurement policy objectives are identified
- The strategy of how the market is to be approached
- Bid evaluation criteria is determined

**Logistics Management** means for every stock or inventory the following functions will be performed:

- Coding of items
- Setting of inventory levels
- Placing of orders

**Disposal Management** involves:

- Obsolescence planning or depreciation rates per item required to be calculated
- A database of all redundant material is kept

- Material is inspected for potential reuse.

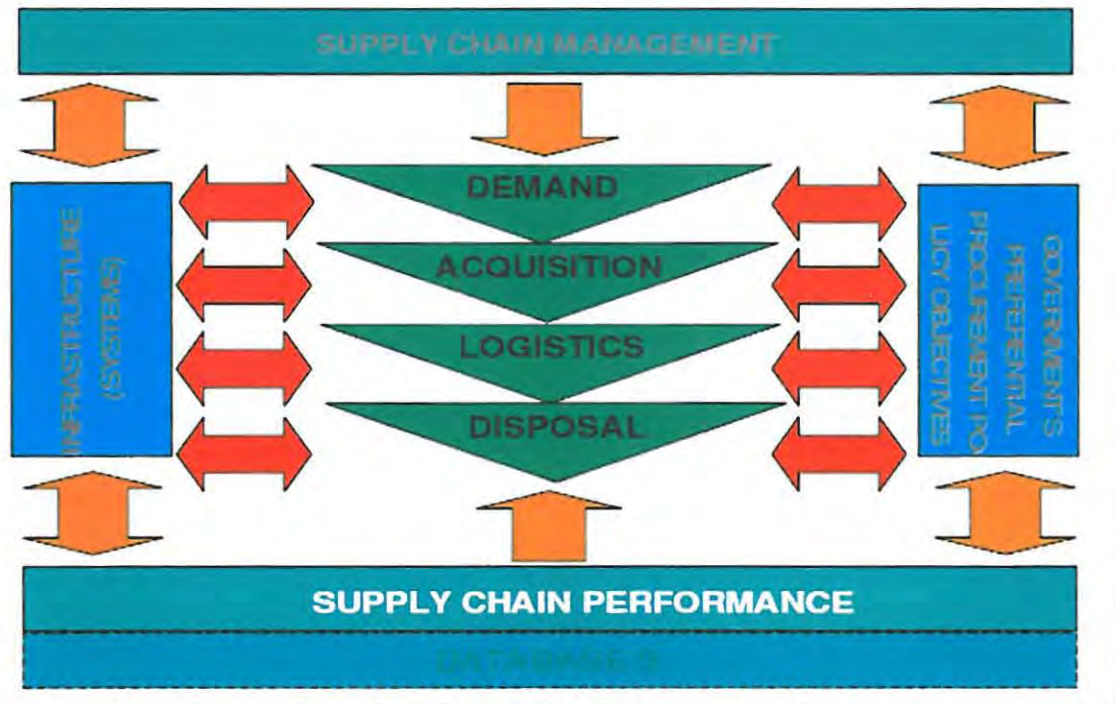


Figure 7: Supply Chain Management Framework adapted from Department of National Treasury (2011)

**Supply Chain Performance** is a monitoring process where a retrospective course is undertaken to determine whether the proper process was followed and whether the desired objectives were achieved.

The information presented thus far provides sufficient background knowledge to understand supply chains and supply chain management. Figure 8 summarises all the information presented in the previous sections by showing what individual firms need to cultivate within the organisation and how this is then used to facilitate the creation of a Supply Chain Orientation.

### 3.4 Supply Chain Orientation

Supply Chain Orientation (SCO) is the recognition by an organisation of the systematic, strategic implications of the tactical activities involved in managing the various flows in a supply chain (Mentzer *et al.*, 2001). This implies that a firm must first have a supply chain orientation and the

actual implementation of this orientation is referred to as supply chain management. The idea that a firm needs to recognise that supply chains need to be managed is because supply chains exist whether they are managed or not (Mentzer *et al.*, 2001). They are a phenomenon that exists in business. There needs to be a distinction drawn between the supply chain as a phenomenon that exists in business and the management of a supply chain. The explanation of SCO is considered the final building block necessary to frame supply chain management as a discipline and a business strategy. The SCO is then used to assist in the development of a SCM strategy. Having implemented all these efficiently will result in benefits for the organisation. The following sections, will now deal with trends in SC and SCM. The most common problems that exist in supply chain management will be investigated to see if knowledge may be used to mitigate some of the problems.

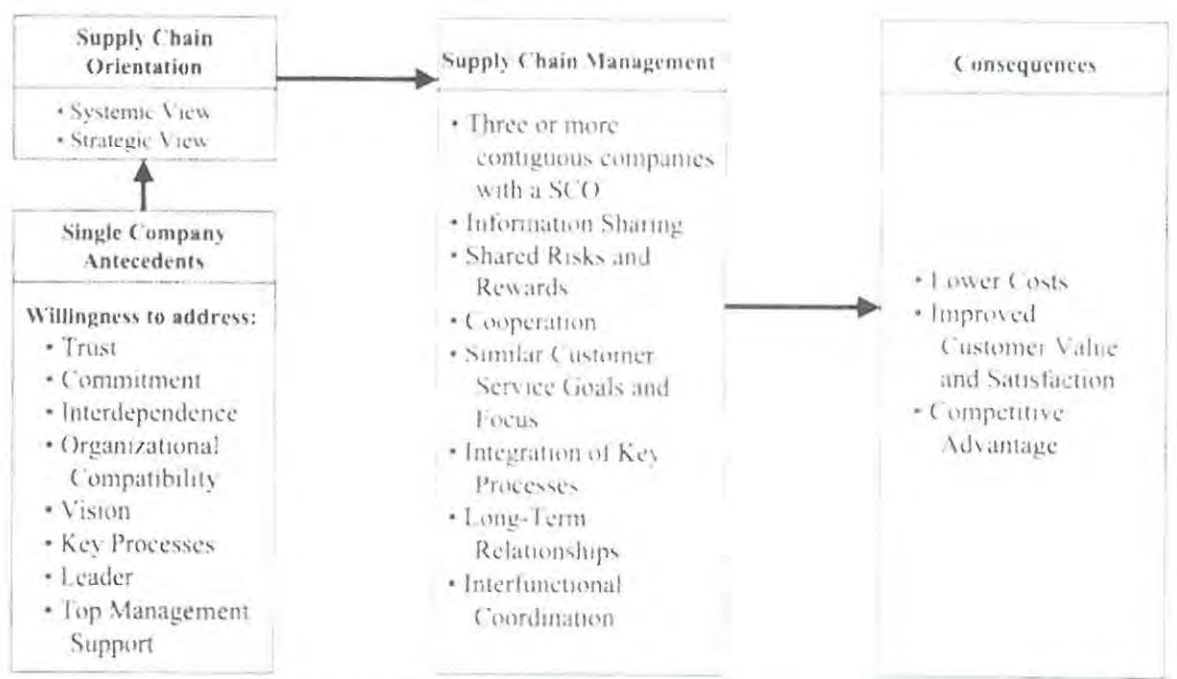


Figure 8: Supply Chain Management Antecedents and Consequences adapted from Mentzer et al. (2001)

### 3.5 History of Technologies adopted in SC's

According to Mentzer *et al.* (2001) one of the components needed in Stage 3 of the Integration Process involves use of electronic support. Over the past 30 years there have been various forms of technologies adopted by supply chain members. Table 3 represents some of the major technological innovations adopted since the 1970's. In the 1970's, supply chain technology was limited to simple information processing. The innovations of this time were typically designed to save labour and capital costs (Collins, Worthington, Reyes and Romero, 2010). In the 1980's the most significant technological advancement was the development of electronic equipment for collecting point-of-sale data. In the 1990's, focus was on improved customer service and inventory cost savings were achieved through greater collaboration between supply chain members (Collins *et al.*, 2010). In the 2000's, collaborative synergy between supply chain members matured with the implementation of Enterprise Resource Planning (ERP), Customer Relationship Management (CRM) and Vendor Relationship Management (VRM). The implementation of these technologies resulted in supply chain reinvention that involved improving consumer-demand, forecast accuracy and improved the way transactions were conducted between supply chain partners (Collins *et al.*, 2010).

Table 3: Technologies adopted by different supply chain channel members adapted from Collins *et al.* (2010)

1970s	1980s	1990s	2000s
Information processing	Scanner systems Bar codes Electronic cash register JIT	EDI E-commerce VMI Continuous replenishment systems Direct store delivery Computer-assisted ordering Cross-docking	<i>Supply chain reinvention</i> WMS TMS CRM VRM <i>Supply chain communication systems</i> RFID GPS

During this decade the adoption of sophisticated communication systems such as radio frequency identification (RFID) also began. Collins *et al.* (2010) argue that RFID holds significant potential

to contribute to improved firm performance when aligned with strategic goals. However, these advances of electronic equipment have not yielded the expected results. SC's are plagued with many problems. The common problems found in a SC can be categorised into problems concerning: supply chain dynamics, those dealing with capacity or sourcing decisions and finally problems concerning information (Kouvelis, Chambers and Wang, 2006). In the supply chain dynamics category, the most notorious problem is the Bullwhip Effect (BWE). The BWE is the phenomenon that order variability increases as orders move upstream along the supply chain (Kouvelis *et al.*, 2006). In other words a small variation at the front end of a supply chain can result in larger variations at the back end and this is known as the BWE (Wadhwa and Saxena, 2005). It is commonly referred to as the first law of supply chain dynamics. The BWE has several important implications. It can lead to excess inventory, unused or overused capacity; it dramatically increases the operating costs of the SC system and often leads to serious demand and supply mismatches and deterioration in customer service levels (Kouvelis *et al.*, 2006). The BWE has a variety of causes mainly:

- Informational inefficiencies
- Order batching effects
- Dynamic pricing
- System gaming behaviour

In particular information inefficiencies lead to excessive inventory investment, poor customer service, lost revenues, misguided capacity plans, inactive transportation and missed production schedules (Chandra *et al.*, 2007). In the mid 1990's Collaborative Planning Forecast and Replenishment (CPFR) was implemented in an effort to minimise informational inefficiencies. The technique emphasised the need to reduce information distortion by sharing single common forecast information among all SC members (Chandra *et al.*, 2007). Regardless of the implementation of this technique, BWE still remains one of the most targeted problems in SC literature. One may assume the problem stems from the fact that the BWE is the result of several problems ranging from those found outside the organisation to those found inside the organisation. This implies an SC is comprised of inter-connected parts that should work together to achieve an ultimate goal. This is best supported by the fact that an SC is meant to perform many functions. According to Chandra *et al.* (2007) a SC needs to:

- Determine the **distribution network configuration** i.e. needs to deal with the selection of warehouses locations and capacities, determine production level for each product at each plant and finalise transportation flows between plants and warehouses so as to maximise production and minimise transportation and inventory costs.
- Perform **inventory control** i.e. deals with stocking levels at various echelons in the supply chain.
- Select **supply contracts** this means establishing relationships between suppliers and buyers in the supply chain through the creation of supply chain contracts that specify mutually agreed to prices, discounts, rebates, delivery times, quality standards and return policies.
- Determine **distribution strategies** this deals with the decisions regarding the movement of goods in the supply chain i.e. direct shipment or cross-docking, etc.
- Determine decisions regarding **supply chain integration and strategic partnering** this is best facilitated by the implementation of CPFR.
- Provide information to assist in determining **outsourcing and procurement strategies**.
- Provide a measure of **customer value** this may be achieved by an analysis of price, quality or perceived customer value.

The above requirements need knowledge to be implemented successfully. Knowledge is vital for any SC. Yes, SC's need information technology and decision support systems but these may not be fully leveraged if knowledge is not used to inform decisions. These tools enable decision making via information sharing throughout the SC (Chandra *et al.*, 2007). Some of the tools used include the Internet and Web-based service portals, integrated information or knowledge within ERP software and decision support systems that utilise proven algorithms for various strategic, tactical and planning problems in specific industry domains (Fiala, 2005). Irrespective of the need for information, challenges exist with regards to sharing it throughout the organisation (Chandra *et al.*, 2007). This is one of the disadvantages of an unfavourable organisational culture.

The second category problems, those dealing with capacity or sourcing decisions, may be mitigated if the problems concerning the third category, information availability and access are addressed. According to Chandra *et al.* (2007) one of the major issues in SCM is the lack of

information for decision-making. However, the best decisions are made with timely and relevant information.

The previous sections have discussed SC's as well as SCM. The previous sections showed that today's companies face a multitude of problems and that the existing methods and processes and technologies used have not been able to fully reap the advantages that efficient use of SC's may have. This first section attempted to show that a change is necessary as well as the fact that knowledge is present in all facets of an SC and that it is applicable irrespective of the perspective chosen because SC's contain inherit knowledge that needs to be used and leverage to reap benefits of any kind. The previous sections attempted to hint at the fact that managing knowledge may prove to be the missing link needed to fully reap the benefits of SC's. The previous sections also showed the need to adapt to the shift, the following sections will attempt to show the value of knowledge and the idea of how identifying the relevant knowledge in SC's is possible and feasible by identifying further areas where inherit knowledge exists and by providing a case study.

### **3.6 Knowledge the key to innovation and performance**

It was stated that KM may be viewed from a strategic management point of view. This idea is supported by the third definitional element, "involving utilization of resources," in the definition provided by Nag *et al.* (2007) This third definitional element pertains to the firm's resources that managers use in their strategic initiatives; words such as "resource," "capability," and "knowledge" represent the resources that are primarily internal to the firm (Nag, Hambrick and Chen, 2007). Some managers of firms may choose supply chain action to target performance as it is one of the strategies depicted as having a direct effect on firm-level performance (Craighead *et al.*, 2009). Despite the importance of supply chains within today's economy, little is known about how the knowledge of supply chains can contribute to superior performance, at the firm level (Craighead *et al.*, 2009). In an effort to provide more clarity in this area, Craighead *et al.*, (2009) using survey and archival data from 489 firms found that performance is influenced by how well knowledge development capacity and intellectual capital efforts compliment alternative supply chain strategies. The results of this study suggest that each strategy type requires different constellations of knowledge development capacity and intellectual capital to enhance action and create firm performance (Craighead *et al.*, 2009). This implies that irrespective of the SC

perspective selected, knowledge is useful and may be used to increase efficiency. The following sub-sections will now explain what knowledge development capacity and intellectual capital entail.

### **3.6.1 Knowledge Development**

Broadly defined, knowledge development is the collection, creation, adoption, dissemination, review and revision of information and research in a particular subject area (Cohen, 2003). It involves more than facts and Figures; knowledge development is critical to accomplishing one's jobs (Cohen, 2003). The knowledge in question is the explicit knowledge given to employees by managers or by those who possess more knowledge of a task. The above supposition is supported by Nonaka (1991). Nonaka (1991) postulated that four basic patterns for imparting knowledge exist: Tacit to Tacit, Explicit to Explicit, Tacit to Explicit and Explicit to Tacit (see Table 4). Nonaka (1991) further states in the knowledge-creating company, all four of these patterns exist in dynamic interaction. The knowledge-creating company is a company that consistently creates knowledge, disseminates it widely throughout the organisation and quickly embodies it in new technologies and products. In today's economy the sure source of lasting competitive advantage is knowledge (Awad and Ghaziri, 2004; Nonaka, 1991). This implies that knowledge has now become a central factor of production and that knowledge development should be encouraged, cultivated and exploited by firms. The need to capitalise on the use of knowledge is supported by Craighead, Hult and Ketchen (2009). They argue that firms can use knowledge development capacity, which is the ability to create new knowledge with particular reference to supply chains to increase performance. The foundations of the Craighead *et al.* (2009) argument are the Resource Based View, Knowledge Based View and Strategic Choice Theory. The resource based view emphasises the internal capabilities of the organisation in formulating strategy to achieve a sustainable competitive advantage in its markets and industries (Grant, 1996). The knowledge based view builds upon the resource based view and postulates that the services rendered by tangible resources depends on how they are combined and applied which is a function of the firms knowledge (Alavi and Leidner, 2001). Lastly, strategic choice theory is the consideration of how relevant forces in the external environment affect business strategy (Childs, 1972). However, as it has been stated knowledge is useful irrespective of the SC perspective chosen because an ideal SC has the Triple-A characteristics, agility, alignment and adaptability (Lee, 2004).

Table 4: Patterns of imparting knowledge- adapted from Nonaka (1991)

Patterns of Imparting Knowledge	Definition
Tacit to Tacit	<i>Individual A shares tacit knowledge directly with individual B. Individual B may learn through observation, imitation and practise. The knowledge imparted then becomes part of individual B's knowledge base.</i>
Explicit to Explicit	<i>The synthesis of discrete pieces of existing knowledge, found inside the organisation into a new whole. For example, a company collects information from throughout the organisation to create a financial report.</i>
Tacit to Explicit	<i>This occurs when an individual is able to articulate the foundations of their tacit knowledge thereby creating knowledge that can be accessed and utilized by others in the future.</i>
Explicit to Tacit	<i>This occurs when explicit knowledge is shared throughout the organisation, other employees begin to internalise it and it becomes part of their own tacit knowledge base.</i>

Craighead *et al.* (2009) propose that the above theories provide justification for their hypothesis, with Strategic Choice Theory supporting the contention that supply chain actions are well suited to knowledge development capacity (Craighead *et al.*, 2009). Craighead *et al.* (2009) make the supposition that supply chain knowledge consists of knowledge development capacity and intellectual capital.

### 3.6.2 Knowledge Development Capacity

Information processing capacity is the volume of data an organisation can utilise, to formulate actions that enable the organisation to prosper (Craighead *et al.*, 2009). Three constructs appear to be essential for the formation of knowledge development capacity, use of existing knowledge, learning progression and organisation memory (Craighead *et al.*, 2009).

- Use of existing knowledge, refers to the extent to which established knowledge processed by the firm guides supply chain activities and decisions (Craighead *et al.*, 2009).
- Learning progression is the extent to which a firm continually increases its stock of supply chain knowledge (Grant, 1996).
- Memory is the achieved level of knowledge, experience and familiarity with supply chain operations; it is the stored representations of supply chain learning on which to base future actions (Craighead *et al.*, 2009).

The concept of memory is supported by Tseng (2009), who reiterates that it is important firms build up extensive knowledge databases as well as develop the necessary mechanisms for acquisition, control and publication of the information it contains. Nonaka (1991) also supports the above observations. The constructs said to be essential for the formation of knowledge development capacity seem to be congruent to the characteristics that describe the knowledge creating company.

### 3.6.3 Intellectual Capital

Intellectual capital is credible information or experience held by individuals or residing in the infrastructure of the firm, which can be converted into valuable knowledge whereas knowledge development capacity focuses on sharing existing stock of knowledge (Craighead *et al.*, 2009). Intellectual capital is affected by tacitness of knowledge, accessibility of knowledge, knowledge intensity and quality of knowledge (Craighead *et al.*, 2009). Knowledge intensity is the extent to which a firm depends on credible relevant information or operation experience as a source of competitive advantage and quality refers to accuracy of information (Craighead *et al.*, 2009). The information deemed to be relevant in the Craighead *et al.* (2009) investigation is knowledge pertinent to supply chains, however, all knowledge which is deemed relevant by the organisation should be identified and assimilated into the organisations ( Wang and Ahmed, 2005).

Craighead *et al.* (2009) state that innovation may serve as the basis for competitive advantage and since innovation is closely linked to knowledge they hypothesize that knowledge could be used a basis for competitive advantage. Studying knowledge development capacity and intellectual capital, the Knowledge-Based View coupled with Strategic Choice Theory suggests that differential knowledge benefits may be reaped by four types of innovation-based strategy

(Craighead *et al.*, 2009). These strategies are as follows: cost-efficient imitators (low on both cost and innovation), costly innovators (high on both cost and innovation), cost-efficient innovators (low cost and high innovation) and costly imitators (high costs and low innovation) see Figure 6 (Craighead *et al.*, 2009). The effect or lack of knowledge development capacity and intellectual capital on product-specific responsiveness, which is the implementation of a firm’s strategy to respond to customers, was studied. Classifying organisations using cost/innovation level enabled Craighead *et al.* (2009) to classify companies into the categories listed in Figure 9. Their results irrespective of the cost/innovation combination found that knowledge was one of the key antecedents for firm performance. This implies that knowledge can be used as a basis for competitive advantage when coupled with a suitable supply chain strategy.

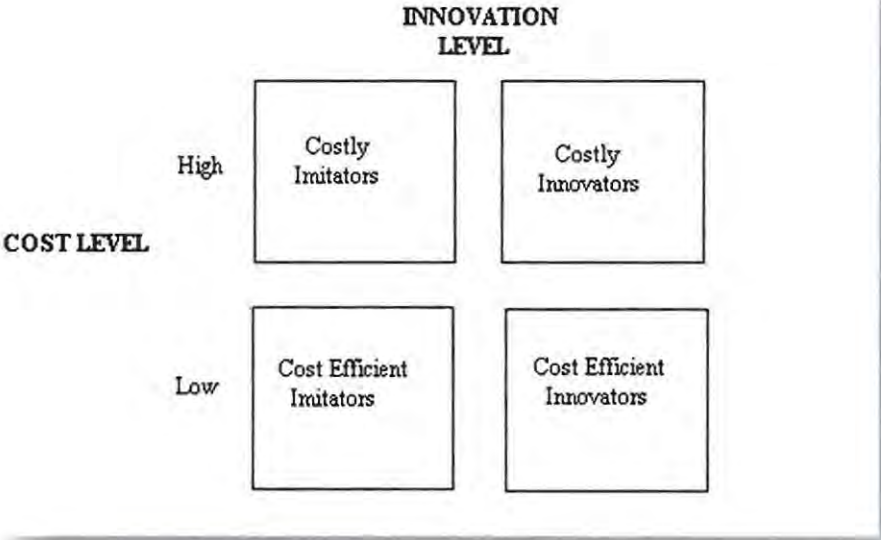


Figure 9: Types of supply chain strategy based on cost and innovation adapted from Craighead *et al.* (2009).

The above investigation has provided an example of how knowledge is not discriminatory. Its applications are unlimited and if properly found, assimilated and applied it could result in significant benefits to organisations. This idea is supported by Porter (1998) who states that differentiation and cost-leadership have now become the only ways to obtain market superiority. Therefore capturing relevant knowledge in the external environment, knowledge about supply

chain constituents, knowledge about the SC itself, the knowledge held by employees as well as the knowledge that resides within the firm and leveraging that knowledge will result in innovation which would ultimately lead to some form of competitive advantage.

#### **3.6.4 Application of Knowledge from a Human Perspective**

In this section more information will be provided to cement the idea that knowledge is indispensable in SCs, however, knowledge management from a human perspective will be considered. The idea that the knowledge necessary to increase efficiency resides with stakeholders, will be explored. Collins and Hitt (2006) are of the view that a firm's ability to effectively adjust to changing conditions will be greater when it has a well-developed knowledge management capability. The reason being, companies are realising that functional silos are no longer optimal and that each functional division relies on another division within the organisation (Hart, 2004). Those responsible for creating financial reports rely on those in sales division to provide them with information. There are many relationships like this, inside an organisation. However, as stated earlier, challenges exist with regards the sharing of information throughout the organisation (Chandra *et al.*, 2007). This is usually caused by a bureaucratic organisational culture. There are many ways to possibly mitigate the reluctance to share information, however, the first step is to identify where the problem originates. If the problem is with access to relevant information, knowledge management may be the solution. The reason being, a firm's competitive advantage can be based on how effectively management capabilities are leveraged throughout the firm's supply chain (see Figure 7) (Collins *et al.*, 2010). Hart (2004) supports the above contention and argues that increased knowledge, skills and experience in core business areas, if fed into the supply chain, may result in competitive advantage because the cultivation of these aspects may become an entry barrier. New entrants would not have developed the same degree of knowledge and skill and would have to either obtain it through head-hunting or takeovers. Secondly how well a firm manages knowledge directly, influences how adeptly it chooses from among its strategic alternatives and how effectively it manages key resources to implement firm strategy (Collins *et al.*, 2010).

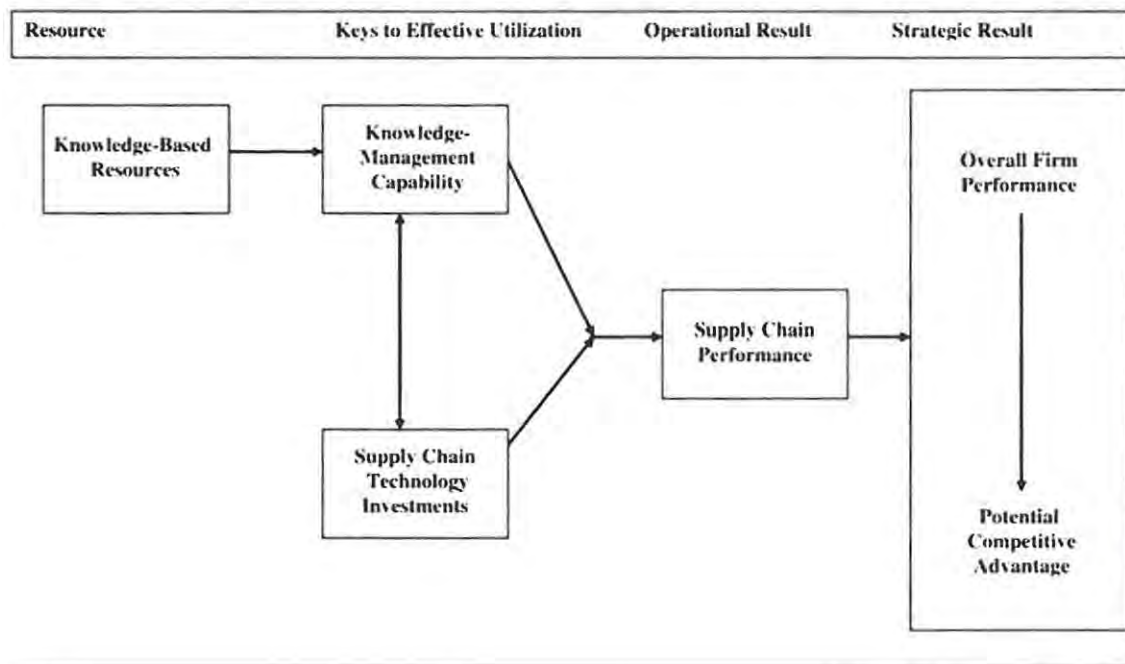


Figure 10: Framework linking Knowledge Management and Supply Chain Technology Investment to increased firm performance adapted from Collins *et al.* (2010)

Knowledge acquisition and application within the supply chain underpin the intellectual capital of the chain and its ability to ensure a competitive product and increased profit margins (Hart, 2004). Each component of a SC contains specialist knowledge that when added to the product results in value for the customer. This implies that the quality and application of knowledge throughout the chain has a direct impact on the quality and competitiveness of the product (Hart, 2004). Similarly effective application of KM within a firm allows it to differentiate its goods and services from those of its competitors.

It is a common misconception that the development of efficient supply chains is the result of highly sophisticated information systems and good corporate strategy, this is partly true. According to Collins *et al.* (2010) strategic decision making is inextricably linked with the search for information about emerging market trends in the environment. Knowledge is arguably the asset most directly linked to overall firm performance. Experience in functional areas of a firm is a rich source of insight (Collins *et al.*, 2010). This insight, which is the result of experience, or continued exposure to certain events, is most likely to be found in people. As

stated earlier, the knowledge that may help increase efficiency resides with stakeholders. This insight gained from experience is more than knowledge and can be classified as wisdom. This implies that wisdom is one of the main resources that contribute to the efficiency of SCs. This wisdom resides with the people and determines the quality of the relationships that are formed across the chain and the application of shared knowledge (Hart, 2004). The chain is an amalgamation of co-operative exchanges of information and knowledge and ensures strategies and knowledge are aligned to the company goals. This means the broader access members such as CEO or CIO can make better informed decisions as they would be presented with relevant information or knowledge (Hart, 2004).

In business the value or competitive advantage lies in the differentiation between information management and knowledge management (Hart, 2004). Information management is just the use of information technology to organise and deliver information whereas knowledge creation uses the tacit and explicit knowledge of other people across the network to develop new ideas, new ways of thinking which ultimately leads to greater innovation and value creation (Collins *et al.*, 2010; Hart, 2004). According to Hart (2004) without a process for developing new knowledge across the chain there is a danger of habit ossification. This can lead to inflexibility which reduces the ability of the chain to respond to changes in the environment. If a chain is unable to respond to such changes this would mean it is not creating maximum value for the consumer. Therefore if SCs develop structures for knowledge management across the chain they are actively seeking to aggregate the total knowledge potential of stakeholders to create value that is greater than the sum of its parts (Hart, 2004). The lack of structured and supported KM throughout the chain results in untapped stakeholder knowledge and its potential value to the organisation is never realised (Hart, 2004). Literature suggests that knowledge is a vital resource for any firm; however, KM is the lever required to transform this resource into capability (Collins *et al.*, 2010). The full benefits of KM, however, cannot be fully realised without the development of the following factors: business strategy, leadership, organisational culture, context, organisational structure, technology or innovation (Hart, 2004). In particular the affects of organisational culture cannot be ignored because the extent to which a firm effectively manages knowledge stocks is influenced by its ability to learn from varied knowledge inputs and experiences. This can only be achieved in an environment or organisation that promotes sharing of ideas (Collins *et al.*, 2010). In addition to the above factors being necessary to reap the full

benefits of KM, quality and relevant initial information that flows into the company has a direct impact on the knowledge development from its use (Hart, 2004). People working together with contextual information develop competence in knowing how and when to use these skills (Drucker, 1998; Hart, 2004).

Knowledge-management capabilities comprise one of the primary avenues through which firms effectively utilise their knowledge-based resources and can prove to be valuable to firms in a wide variety of competitive contexts (Collins *et al.*, 2010). For many years firms have focused on financial performance and short-term accounting performance criteria and have placed less emphasis on enhancing their knowledge management capability (Collins and Hitt, 2006). These traditional performance measurements are inept at capturing operational efficiencies that SC investments may yield (Collins and Hitt, 2006).

### **3.7 Conclusion**

The previous pages have attempted to explain SM and SC. The chapter began with an introduction to SC's as well as the value their proper management adds to both private and public organisations. The chapter then proceeded to present the different SC perspective that may be selected and also attempted to show that irrespective of the perspective chosen three essential attributes for an ideal SC are agility, adaptability and alignment. These three attributes are commonly referred to as the Triple-A characteristics. These three characteristics form what may be described a 'wise supply chain' (Hart, 2004). A 'wise supply chain' is one that leverages knowledge to enable it to adapt to changes. The chapter then proceeded to explain the concept of SCM and how it is an amalgamation of different elements, because it contains definitional elements that stem from a philosophical, set of activities as well as a management process perspective. The value, however, that knowledge may offer was seen as relevant in each perspective. In addition SCM is seen as a holistic approach which contains 5 stages, although each stage is given equal prominence this research emphasises the precepts of Stage 5 which stipulate the idea of supply chain performance, which is an assessment of the decisions chosen and their results and how they may be used to inform future decision-making. The concept of a SCO was also elucidated and what became clear was the concept that SC's exist whether they are management or not because they are a phenomenon that naturally exist in business. This was then followed with the technologies adopted in SC's however the adoption of these various

technologies have not yielded the expected results, in fact SC's are plagued with a plethora of problems. These problems may be categorised into problems pertaining to supply chain dynamics, those dealing with capacity or sourcing decisions and finally problems concerning information (Kouvelis, Chambers and Wang, 2006). The most notorious problem being the BWE, which is a result of problems found internally and externally to organisations. In addition these sections alluded to the idea that the problems experienced in SC's may also stem from an unfavourable knowledge culture. These sections all attempted to communicate the idea that the environment in which organisations are operating in has shifted. This shift has resulted in the processes that were considered to be efficient no longer producing the expected results. These sections also identified that knowledge may be the missing link in all these problems and the efficient management of knowledge may be the solution. The following sections then attempted to show the feasibility of applying KM concepts into SC's but identified that for the benefits of knowledge to be fully reaped knowledge development capacity and intellectual capital would need to be developed, however, the development of these concepts required the developed of a favourable organisational culture. Finally the chapter attempted to show the value of the knowledge that resided in people and how this knowledge may be leveraged and used in an SC to obtain a competitive advantage, however, in order to fully reap the benefits such knowledge may produce would require the development of a good business strategy, leadership and organisational culture. This chapter attempted to show that knowledge is indeed ubiquitous and may be found and applied in any perspective additionally this chapter found that organisational culture was a recurrent factor that determines successful sharing of knowledge. This implies that the first step towards achieving a 'wise supply chain' is to create a knowledge-creating company which requires organisations to focus on organisational culture. The following chapter will now deal with the concept of Organisational Culture what is meant by a favourable or unfavourable knowledge culture.

# Chapter 4: Organisational Culture

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## 4.1 Introduction

Organisational Culture (OC) has become one of the most prevalent words in management literature over the past few decades. This is due to the fact that OC impacts policies, operations, and the day-to-day actions of the work-force, it can be a partner in process improvement efforts or it can be its downfall, it can also be a source of competitive advantage or an obstacle to meeting business objectives (Buttles-Valdez, 2008). It was communicated in the previous chapter that the successful implementation of a firm's strategy is heavily influenced by its OC this implies to a certain level that OC has a large impact on the successful implementation of a management philosophy this even extends to the implementation of a KM philosophy (Gaffoor and Cloete, 2010). The previous chapter also suggested that the idea that change is the only certainty in the current unpredictable business environment and companies that are sources of continuous innovation are more likely to succeed (Nonaka, 1991). Regardless of the fact that senior managers may be aware of these changes and even devise strategies to steer the organisation, the successful implementation of those strategies is largely determined by the OC as the dominant type of culture in the organisation influences the extent to which that organisation is willing to accept change (Nonaka, 1991). According to Fincham and Rhodes (2005), culture is the single most important factor accounting for success or failure in organisations. Yeh, Lai and Ho (2006) support this contention and also believe that organisational culture is one of the enablers that contribute to organisational effectiveness.

Given that OC has an impact on an organisation's efficiency, its bottom line as well as process reforms, this chapter is devoted to providing a brief overview of OC. It first begins with the anthropological definition and then narrows to the business context definition, this is then followed by how culture may be managed, how culture affects innovation and productivity is explained, the relevance of OC to KM is shown and the affects of culture on SCM are briefly stated, lastly an overview of the dominant culture in South African Government institutions is provided.

## 4.2 Understanding Culture

Culture refers to the underlying values, beliefs and codes of practice that make up a community (Fincham and Rhodes, 2005). Borofksy, Barth, Shweder and Stolzenberg (2001), however, believe otherwise and state that culture is a set term, but is what various people conceive it to be. As a result they believe the definition of culture is dependent on the view one takes. They suggest that there are 3 ways in which culture may be viewed, (1) cumulative development – this includes behaviours and artefacts, (2) styles of life that run counter to modernisation and lastly (3) it may be defined in a political sense. As can be seen the definition provided by Fincham and Rhodes (2005) is only applicable if culture is defined in the cumulative development approach. For the purposes of this research, culture will be defined as the way one analyses and solves problems and is implicit in the way people behave and the things they value.

Fincham and Rhodes (2005) believe culture has 3 central aspects:

1. It has an evaluative element invoking social expectations and standards. Often in organisations people have to conform to these social norms and rules or they are considered outcasts or ostracised. This evaluative element invoking social expectations and standards may not necessarily always be positive. Even individuals who do not believe in certain processes or corrupt behaviour may be reluctant to whistle blow because of fear of exclusion.
2. Culture may also be said to be a set of material elements or artefacts because there are signs and symbols that the organisation is recognised by but there are also events, behaviours and people that embody the culture.
3. Lastly the medium of culture is social interaction, the web of communication that constitutes a community. A shared language is particularly important in expressing and signifying a distinctive organisational culture.

Succinctly culture is symbolic, unifying, and holistic and these elements are interlocking, because culture is rooted deep in unconscious sources but is represented in superficial practices and behaviour codes (Fincham and Rhodes, 2005).

## 4.2.1 Classifications of culture

According to Fincham and Rhodes (2005) there are 3 culture types:

1. *Role Cultures*: are highly formalised, bound by regulations and paperwork and authority and hierarchy dominates relations. The structure of the organisation is typically a pyramid structure.
2. *Task Cultures*: are the opposite, they preserve a strong sense of the basic mission of the organisation and teamwork is the basis by which jobs are designed. The structure of the organisation is typically a flexible matrix structure.
3. *Power Cultures*: have a single power source, which may be an individual or a corporate group. Control of rewards is a major source of power. The structure of the organisation has a web like communication structure.

In an organisational context, Tharp believes that there are 4 types of organisational cultures:

1. *Collaborate (Clan) Culture*: Is an open and friendly place to work where people share a lot of themselves. It is like an extended family. Leaders are considered to be mentors or even parental Figures. Group loyalty and sense of tradition are strong.
2. *Create (Adhocracy) Culture*: A dynamic, entrepreneurial, and creative place to work. Innovation and risk-taking are embraced by employees and leaders. A commitment to experimentation and thinking differently are what unify the organisation.
3. *Control (Hierarchy) Culture*: A highly structured and formal place to work. Rules and procedures govern behaviour. Leaders strive to be good coordinators and organizers who are efficiency-minded.
4. *Compete (Market) Culture*: A results-driven organisation focused on job completion. People are competitive and goal-oriented. Leaders are demanding, hard-driving, and productive. The emphasis on winning unifies the organisation.

The previous sections have explored the anthropological meaning of the word culture as well as the different organisational cultures that are found in organisations. The following sections will now explain OC.

## 4.3 Organisational Culture

Organisational culture refers to the unique combination of values, beliefs and models of behaviour in an organisation. It represents the organisation's core values that dictate the behavioural norms of employees (Yeh *et al.*, 2006:797). If the systems approach is used to analyse organisations, it can be seen that a company is not a machine but a living organism. Much like an individual, it can have a collective sense of identity and fundamental purpose. This is the organisational equivalent of self-knowledge – a shared understanding of what the company stands for, where it is going, what kind of world it wants to live in, and, most importantly, how to make that world a reality (Nonaka, 1991). Organisations can be said to have a culture because organisations are a constituent element of a society. People enter them from the surrounding community and bring their culture with them. Even though an organisation may consist of staff from diverse cultural backgrounds, it is still possible for organisations to have cultures of their own as they possess the paradoxical quality of being part of and apart from society (Fincham and Rhodes, 2005).

Corporate culture refers to the kind of image which top management would like to project for a company, the ironic reality is that the image of the organisation differs according to where you view it (Fincham and Rhodes, 2005). This implies that projecting a certain corporate image or culture is something that needs to be inculcated in all levels in an organisation if it is to truly be communicated across the entire organisation. This process of communicating a vision and a way of thinking needs to be managed.

### 4.3.1 Managing Culture

Culture change means changing the corporate ethos, images and values that inform action (Fincham and Rhodes, 2005). Cultures are hardly planned or predictable; they are the natural products of social interaction and evolve and emerge over time. Nonetheless, cultures can be shaped to suit strategic ends (Buttles-Valdez, 2008). In recent times there has been a focus to promote a culture of change in organisations. This sounds almost contradictory because on the surface culture has essentially traditional and stable qualities, therefore how is it possible to have a culture of change? Yet this is what innovative businesses need. Fincham and Rhodes (2005) believe if permanent change is to occur in organisations, it has to happen at the cultural level. The irony is that even though culture is perceived as something stable and constant it can be

changed if one is aware of what it takes to change it (Money Penny, 2003). One of the critical steps is, selecting the right leaders. Leaders construct the social reality of the organisation and shape the values and attend to the drama and vision of the organisation. Hart (2004) supports this statement as he also believes that leadership is essential in creating and supporting a positive learning environment and that the leader is also a learner and a role model, and is crucial in developing a culture that is committed to sharing knowledge and creating new ideas to meet customer demands.

According to Money Penny (2003) there are 5 steps management can employ to develop a healthy organisational culture:

1. *Start small, Act big*: managers should become leaders of change and collaborate with the team around them to understand their organisations existing culture as it stands. By identify the values of the organisation they can assess where they are and compare it to where they would like to be.
2. *Build Trust*: trust begins with managers or leaders and it then trickles down to the team, also its management prerogative to encourage trust across departments.
3. *Engender Collaboration*: a culture of collaboration encourages people to listen to each other, to network within the organisation and to share knowledge. This promotes a knowledge sharing culture.
4. *Inspire Creativity*: management should encourage employees to share ideas that are out of the norm as this helps builds trust and encourages employees to be willing to take calculated risks as they know that they will not be ostracised as a result.
5. *Inspire Action*: encourage an environment of results, irrespective of the outcome. Every plan must be associated with an action plan.

These are some of the steps considered important when developing an organisational culture that is conducive to learning which ultimately has an impact on employee innovation and productivity.

#### **4.4 How culture affects innovation and productivity**

In the previous chapters, the concept of the knowledge-creating company was briefly presented and will now be discussed further. According to Nonaka (1991) successful companies are those

that consistently create new knowledge, disseminate it widely throughout the organisation and quickly embody it in new technologies and products. Nonaka (1991) further states that these activities define the “knowledge creating” company, whose sole business is continuous innovation. In Chapter 3, it was communicated that knowledge may be used as a source to gain competitive advantage, it was communicated that companies may be classified into 4 broad categories: Cost Efficient Imitators, Costly Imitators, Cost-Efficient Innovators and Costly Innovators (Craighead *et al.*, 2009). Ultimately all companies should strive to be Cost-Efficient Innovators which may be said to be synonymous with the “knowledge creating” company. Nonaka (1991) believes that competitive advantage may be achieved through applying a unique approach to the way knowledge is managed. This approach involves tapping into the tacit and often highly subjective insights, intuitions, and hunches of individual employees and making those insights available for testing and use by the company as a whole. The key to the successful implementation of this approach is personal commitment, the employee’s sense of identity with the enterprise and its mission. Nonaka (1991) also believes that companies should be considered living organisms, this idea is also supported by Tsoukas (1996) as presented in Chapter 1. However, Nonaka additionally believes that much like an individual companies can have a collective sense of identity and fundamental purpose. This is the equivalent to self-knowledge a shared understanding of where the company is going, what kind of world it wants to live in and most importantly how to make that world a reality. Nonaka (1991) further states that the “knowledge creating” company is as much about ideals as it is about ideas and this is what fuels innovation. To create new knowledge means quite literally to re-create the company and everyone in it in a non-stop process of personal and organisational self-renewal. In the “knowledge creating” company, inventing new knowledge is a way of behaving, where everyone is a “knowledge worker” (Nonaka, 1991).

The “knowledge worker” is a term coined by Peter Drucker in the late 1950’s (Rosentein, 2006). A “knowledge worker” is a man or woman who applies to productive work ideas, concepts, and information rather than manual skill or brawn (Drucker, 1992). “Knowledge workers” have become more in demand in today’s economies because the output of knowledge has already become the key to productivity, competitive strength and economic achievement (Drucker, 1992). Drucker (1992) further states that “knowledge” and not “science” has become the foundation of the modern economy. “Knowledge workers” are valuable because they have learnt

to learn, this means they can acquire rapidly new and different skills. There is a general misconception that knowledge and work are separate, and that knowledge is just something in a book. However, as long as it is just in a book it is “information” or mere “data”, only when the information is applied to doing something does it become knowledge. Knowledge is like electricity or money it exists only when doing work (Drucker, 1992).

The “knowledge worker” is the ideal employee because he or she is not threatened or easily demotivated, he or she has acquired the skills to learn how to learn (Drucker, 1992). This implies that he or she is not afraid to implement new concepts and is willing to accept change which is necessary for innovation. Succinctly, an organisation filled with “knowledge workers” is easier to change as the strategies implemented by management are more likely to have support and succeed (Nonaka, 1991).

## **4.5 Impact of Organisational Culture**

The applicability of culture is undeniable as it has an impact on many disciplines and on many functional areas within an organisation (Buttles-Valdez, 2008). This implies the full benefits of KM in an organisation can never be fully achieved if the culture of that organisation is one that is not predisposed to change, stifles employee creativity and is not does not inspire trust within its employees (Gaffoor and Cloete, 2010). This section provides a brief overview of the predominate culture in South African (SA) Government institutions and then proceeds to show how this may have an impact on the implementation of KM practices. Through the implementation of KM practices, local governments could be in a position to deliver the best possible services, function effectively and operate in an environment characterised by transparency and accountability (Gaffoor and Cloete, 2010). The process of KM has significant implications for the public sector one of the implications is that organisations should be strategically aligned with their clients to provide better services to their clients by gaining a better understanding of their client’s needs (Gaffoor and Cloete, 2010). This is particularly significant for the public sector which is responsible for service provision to the public (Gaffoor and Cloete, 2010).

#### **4.5.1 Culture in SA Government institutions**

The public sector presents several factors that discourage public sector KM efforts. These include the sheltered nature of most public sector work, the need of employees to preserve and guard their personal knowledge and the continual cut-backs on centrally allocated resources (Edge 2005:42). Therefore it comes as no surprise that initiatives by governments to increase efficiency have produced poor results in many countries as most governments have a predominately bureaucratic type of organisational culture. For example, in many developed and developing countries, Performance Based Budgeting (PBB) failed because of stiff resistance to reform, lack of specialised expertise, administrative complexities, lack of performance information systems to capture performance, lack of investment in managerial, accounting and information systems, the absence of institutional incentives to promote gain in economic efficiency, pervasive corruption and hastily conceived reform with unrealistic expectations (Nkoana, 2007).

In SA the organisational culture in South African Government institutions is characterised by too much emphasis on inputs, strict fiscal rules and historic incrementalism in budgetary decision-making process (Nkoana, 2007). This would imply a predominately bureaucratic type of culture. In addition the South African Government has to deal with a skills shortage and loss of potential skilled employees to the private sector or to other countries (Buttles-Valdez, 2008). Although little information is available on KM Government Institutions, Gaffoor and Cloete (2010), performed a study in local government and section 4.5.2 describes the study and findings in detail.

#### **4.5.2 Implementation of KM from a Public Sector perspective :KM in Local Government: A Case Study of Stellenbosch Municipality**

Should an organisation decide to implement KM as a management philosophy Gaffoor and Cloete (2010) identified that there are five enablers that need to be developed in order for KM practices to fully deliver positive results, organisational culture, human resources, information technology, organisation structure and organisational strategy and leadership. They then conducted a case study to assess each of these enablers and how they affected the implementation of KM efforts. Stellenbosch Municipality was used as a case in point.

#### 4.5.2.1.1 Background of study

Stellenbosch is a local government organisation in the Western Cape province of South Africa. The Stellenbosch municipal area is roughly 900 km<sup>2</sup> and it includes the towns of Stellenbosch, Franschhoek and settlements such as Klapmuts, Koelenhof, Kylemore, Johannesdal and Pniel. It is comprised of nine directorates with various sub-departments (Gaffoor and Cloete, 2010; Stellenbosch Municipality, 2010).

The need for efficient and effective delivery in South Africa has been increasing in line with trends in other developing countries, this has placed pressure on the need to develop efficient and effective local government services (Gaffoor and Cloete, 2010). In order to attain this ideal the South African Government adopted business like reforms that reflect a customer centric-nature (Gaffoor and Cloete, 2010). One of the objectives of the research conducted by Gaffoor and Cloete (2010) was to identify general principles demonstrated by Stellenbosch Municipality that could be used for wider application in the South African Government Sphere.

An extensive volume of literature exists regarding the importance of KM in the organisational context; however, these writings mostly focus on the role of KM in the corporate world (Gaffoor and Cloete, 2010). In the government sphere little research has been conducted, even though implementation of KM could result in the provision of better services (Gaffoor and Cloete, 2010). Nonetheless, KM is receiving increased priority within the context of the SA public sector. The Department of Provincial and Local Government has identified KM as a key managerial skill for senior managers at local government level (Gaffoor and Cloete, 2010). This requirement involves the ability to advance knowledge creation and sharing as a means of developing the combined knowledge of the local government (Gaffoor and Cloete, 2010). According to Cong and Pandya (2003:27) the implementation of KM in the public sector has resulted in the following benefits:

1. KM creates opportunities for employees to develop their skills.
2. KM improves organisational performance by means of better quality, innovation and efficiency.
3. KM results in better decision making, more collaboration, decline in duplication of work resulting in reducing operational costs and improved service delivery.
4. KM increases financial worth of an organisation.

5. Knowledge sharing creates value in the organisation and strategically enables competitive advantage.

Research recommendations:

- Municipalities must devise explicit KM strategies that are tactically aligned with the organisation's overall strategy. The KM strategy must take into account the organisation's resources and needs must be identified. The strategy should also contain an outline of how to attend to these needs and provide suitable solutions. In particular leadership and the strategy must be flexible to change (Gaffoor and Cloete, 2010).
- Build organisational memory or create a knowledge repository. This involves pooling and streamlining the entire organisations reports and documents and extracting further information from these reports, such as lessons learnt and best practices to follow. The documents should be made available electronically and should be easily accessible from a single point of access (Gaffoor and Cloete, 2010).
- Reward employees and create incentives for contributions to knowledge generation, sharing and management. It is important to create an environment and culture to facilitate KM and to establish communities of practice. This type of culture must be driven by dynamic leadership and ultimately produce "knowledge workers" (Gaffoor and Cloete, 2010).
- Actively implement a KM division within the organisation. This division should not only be responsible for the technological aspects of KM and for managing the organisations KM resources, but it should constantly strive to take advantage of opportunities for innovation and to establish communities of practice both within the municipality and with parties outside the municipality's immediate environment. The KM division should be active in developing a KM governance policy that is aligned with the KM strategy (Gaffoor and Cloete, 2010).

## **4.6 Value of Organisational Culture and KM to Supply Chain Management Perspective**

According to Mentzer *et al.* (2001) the importance of corporate culture and its compatibility across supply chain members cannot be underestimated because shared values and beliefs assert

the importance of certain elements and omit others which in turn drives the chain's approach to serving the end user. When supply chain members have similar organisational culture beliefs, this is termed cultural competitiveness. Cultural competitiveness can only be achieved by emphasising a spirit of entrepreneurship, innovativeness and learning among supply chain participants (Ketchen and Hult, 2006)

#### **4.7 Justifications for using the Knowledge Value Chain by Wang and Ahmed (2005)**

The information identified in this chapter as well as the preceding ones, is summarised in Table 5. The information identified thus far has shown that there are persistent problems being experienced with regards to the implementation of KM inside organisations and these problems are found in both private and public institutions. In an effort to cover the areas identified in the literature this research proposes to use the Knowledge Value Chain by Wang and Ahmed (2005), as an example of what should be included in the proposed tendering process. The information learnt thus far is sufficient to enable an analysis of this model. In the previous sections it was discussed that there are problems experienced in government institutions that may hinder the implementation of KM. These could be classified into four broad categories: problems associated with organisational culture, human resources, information technology and organisations strategy and leadership (Gaffoor and Cloete, 2010). This implies that for a model to have potential to solve problems in a business or government environment it must be able to address these four components. The model proposed by Wang and Ahmed (2005) contains components that address some of these areas respectively. Nevertheless this model will only contribute to part of the process and will only address the KM perspective of the process. According to Landry *et al.* (2006) to fully identify how knowledge value chain may be applied to an organisation involves defining what knowledge means for that particular organisation. This implies information that is specific to the organisation on which the audit will be conducted will also be used to refine the process. In particular the tendering process in general will need to be understood as well as the tendering process conducted in SA Government institutions in order to fully understand how KM may be applied to the enhance the process.

Table 5: Information discovered in Literature Review

<b>Information discovered in Literature Review</b>
<b>General</b>
<i>Problems associated with organisational culture i.e. a knowledge-hording culture (Wang &amp; Ahmed, 2005).</i>
<i>Problems associated with human resources i.e. lack of synergy between employees a consequence of a knowledge-hording culture (Gaffoor &amp; Cloete, 2010).</i>
<i>Problems associated with information technology i.e. lack of appropriate IT support (Wang &amp; Ahmed, 2005).</i>
<i>Problems associated with the organisation's strategy and leadership i.e. inconsistency in strategic planning (Wang &amp; Ahmed, 2005).</i>
<b>Particular to Government Institutions</b>
<i>Problems with accessing information - government departments have a deluge of forms and rigorous procedures; however, the information collected is seldom accessible or managed correctly (Gottschalk &amp; Holgersson, 2006; Landry et al., 2006).</i>
<i>Employees are reluctant to share information or personal knowledge as they perceive this would make them dispensable (Gaffoor &amp; Cloete, 2010).</i>
<i>Government sector is prone to continual cut-backs on centrally located resources (Gaffoor &amp; Cloete, 2010).</i>
<i>Knowledge incompleteness, knowledge asymmetry and knowledge incompatibility (Landry et al., 2006).</i>

## 4.8 Conclusion

The preceding pages have provided an anthropological definition as well as the business context definition of culture. It was summated that culture is the way one analyses and solves problems and is implicit in the way people behave and the things they value (Borofksy *et al.*, 2001). Although it is an unconscious act, steps may be taken to change it (Moneypenny, 2003). Organisational culture is now becoming one of the most crucial factors in determining an

organisation's success and organisations that have a knowledge-sharing culture are more likely to succeed (Nonaka, 1991). An ideal knowledge-sharing culture may only exist if the employees are "knowledge workers", men or women who apply to productive work ideas, concepts, and information rather than manual skill or brawn (Drucker, 1992). "Knowledge workers" are assets because they have learnt to learn and are more willing to take risks and accept change (Drucker, 1992). The ability to adapt to change is crucial as the current business environment companies operate in is unpredictable and managers must therefore continuously develop strategies that will allow them to gain a competitive advantage. The successful implementation or adoption of these strategies is largely influenced by the predominate culture (Fincham and Rhodes, 2005). This implies that culture affects SM policies, SCM policies and even extends to KM policies (Gaffoor and Cloete, 2010). Organisational culture is even considered one of the enablers that needs to be managed in order for KM to be implemented successfully. In particular it was identified that the predominate culture currently in South African Government institutions is not considered ideal (Nkoana, 2007). The preceding pages also provided recommendations that municipalities may undertake in order to ensure the successful, implementation of KM. It was also identified that the SA Government is purposefully attempting to initiate KM practices because through the implementation of KM practices, local governments could be in a position to deliver the best possible services, function effectively and operate in an environment characterised by transparency and accountability (Gaffoor and Cloete, 2010). Lastly, the chapter provided a summary of the problems currently being experienced in government institutions and identified that the Knowledge Value Chain by Wang and Ahmed (2005) would be a justifiable solution or model to use as it targets the enablers that need to be developed in particular, OC. The following chapter will focus on understanding the tendering process used in SA as well as three other countries and will attempt to identify universal best practice processes. This is done in order to fully understand what a tendering process involves and create a process that is generic and meets the minimum requirements.

# Chapter 5: The Tendering Process and its relevance to a country

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## 5.1 Introduction

The explosion of digital connectivity has resulted in government agencies all over the world using ICT applications to increase productivity, improve accountability, enhance transparency and facilitate public sector reform (Yuen, 2007). Public sector productivity or government productivity is of crucial importance particularly because of the central role it can play in poverty alleviation and this is achieved through service delivery. In the short term, services can help relieve some of the most severe burdens of destitution, while over the long term the subsidisation of investments in health and education can help provide an exit out of persistent poverty (Burger, 2005). Procurement or the tendering process is often considered the tool by which governments help stimulate economic activity, protect national industry against foreign competition, protect the environment and promote increased utilisation of the disabled in employment (Smith, 2010). Broadly speaking this chapter will attempt to prove that the tendering process may be seen to be a significant part of service delivery. The previous chapters laid the foundation necessary for the understanding of KM, SCM as well as OC. The previous chapters also provided the context in which to understand the problem. This chapter will now provide more contextual information about the problem itself, however, before the tendering process is elucidated, to thoroughly understand the process one needs to understand where it fits into the plans governments have in place in order to achieve their goals. This chapter will therefore begin with an overview of the role of a government. This will be followed by an explanation of public administration and service delivery. The tendering process will be explored and in particular some problematic areas will be mentioned and how KM may be a potential solution going forward.

## 5.2 The role of Government

In the previous two decades, the public sector has reformed itself in order to achieve more efficient government (Singh, 2007). The size and scope of the public sector has become smaller and the role of the private sector has increased (Singh, 2007). Jooste (2008) posits that this

change was brought about by the following drivers, neo-liberalism, public choice theory, principal agent theory, transaction economics and property rights. This change forced governments to redefine their roles. The public sector then had to differentiate between what it does (its role) and how does it (its functioning) (Jooste, 2008). In terms of role, the recent consensus has been that the public sector has an important role to play, but this role is different from the traditional view. The new role calls on the public sector to focus more on service “provision” or service delivery and less on “production” (Jooste, 2008). Jooste (2008) further states that the five main functions the public sector should be aiming to achieve are: reduced cost (or efficiency), improvements in service delivery (or effectiveness), reducing opportunistic behaviour (or honesty), giving users a greater say in what the public sector does (or responsiveness), and ensuring the programs and interventions are sustainable (robustness and manageability). This new understanding of the public sector has been operationalized through broad reform movements such as: New Public Management, which has focused on reforming public sector organisations internally, through aspects such as decentralization, competition, managerialism, and accountability (Jooste, 2008). New Public Management proposes that public bureaucracies lack the capacity to effectively manage services such as electricity supply or water services (Singh, 2007). It is thus the private sector that is regarded as having the capacity to manage these services. This has also resulted in government becoming more decentralised, more specifically what can be termed as “administrative decentralisation” (Singh, 2007). Administrative decentralisation is defined as the transfer of responsibility for planning, management and allocation of resources from the central government and its agencies to field units of government agencies (Singh, 2007). This definition is supported by the World Bank (2010) which further states that there are three types of administrative decentralisation, namely deconcentration, devolution and delegation. In particular delegation is undertaken when government recognises that certain limitations exist that render its ability to deliver services inefficient and thus delegates the task of delivering services to the private sector. The reason being, the private sector is perceived to be better equipped to provide services that meet the needs of the public and would provide the services more efficiently, effectively and would be more accountable (Singh, 2007). Furthermore, private firms are better inclined to provide public services as they are not weighed down by "bureaucratic politics and practices or burdened by complex administrative procedures relating to budgeting, disbursing accounting and auditing"

(Cohen and Peterson, 1999 cited in Singh, 2007, p. 10). This redefinition of the role that governments play has brought attention to the concept of public administration as this is how the policies which governments intend to fulfil are first established.

### **5.3 Public Administration**

Public Administration is the collective creation, maintenance and operation of public institutions' functions or processes (Cloete, 1994 cited in Singh, 2007, p. 45). It is the State, through public administration, that renders services to the public. In order to deliver these services, it is the function of a State's public administration to make policies and implement them (Singh, 2007). In recent years a reformation of the public sector, in terms of service delivery has occurred. The "old" public administration has been replaced by New Public Management (NPM) (Gaffoor and Cloete, 2010; Jooste, 2008). According to the World Bank (2010) the objective of public administration reform is to deliver services in a more efficient and effective manner. This reform has therefore culminated with governments around the world beginning to adopt a more entrepreneurial spirit. Government's role is thus evolving, whereas in the past government's role was to deliver services to its citizens, today its role is that of providing policy guidance, with services being outsourced to the private sector (Singh, 2007). This change has culminated with the Government planning and identifying ways to increase efficiency. The SA Government has thus turned to SCM (see chapter 3) and KM (see chapter 2) to find ways to increase efficiency and help the Government effectively steer the country in the ideal directions as envisaged. This implies that this reformation undertaken by Government is one that values information and knowledge. It involves assessing their own needs and identifying their strengths and weakness. It also involves identifying ways to leverage their strengths and find ways to develop their weakness or even delegate. This ability to decipher what one is capable of involves the concepts of knowledge identification, knowledge acquisition and even knowledge codification. These practices will prove superbly useful when it comes to providing for the people or meeting peoples' needs which is also considered to be service delivery.

## 5.4 Service Delivery

The objective of public administration and public management is to achieve service delivery and improve the well-being of people (Singh, 2007). The demand for more efficient and effective delivery of services in South Africa has increased over recent years. Bertucci and Alberti (2002) attribute this to globalisation they argue that globalisation of technology has not only contributed to the explosive growth of information exchange but also the expansion of education opportunities and exposure to new concepts. This relative ease of accessing information has increased citizens' ability to share views, to become aware of their rights, to make their demands known and to increase their influence (Bertucci and Alberti, 2002). In line with trends in other developing countries, South Africa has also embraced the business-like reforms advocated by the New Public Management (NPM) school of thought (Gaffoor and Cloete, 2010). Gaffoor and Cloete (2010) further state the implementation of this view reflects the customer-centric nature of South Africa's service delivery reforms and contains eight guiding principles for public sector institutions in their efforts to deliver services efficiently and effectively. The following section will now explain the NPM.

### 5.4.1 New Public Management (NPM)

The rationale behind a move towards New Public Management (NPM) and the idea of the State reinventing itself began with the notion of the welfare state and the problems that were associated with it (Singh, 2007). In particular the South African government has displayed the inability to adequately carry out public services and Singh (2007) further posits that in this new constitutional dispensation the South African Government has a multitude of new goals to achieve, but poses a hindrance to itself in that it lacks the capacity to achieve them. This is not a phenomenon only akin to South Africa, according to Drucker (1992) any attempt to combine governing with 'doing' on a large scale, paralyzes the decision-making capacity and any attempt to have decision-making organs actually 'do', also means very poor 'doing'. Succinctly when the state focuses on production it was unable to focus on steering effectively. The whole notion of the state being responsible for both steering and implementation was established during the post war years, in the late nineteenth and the early twentieth century and emanated in the Western half of the world. In order to assist its people the State claimed the position of "central governing authority in society" and made provision for welfare services to be provided (Jooste, 2008). The

social and economic needs of society during these periods and the years that followed were grave and on such a large scale that the private sector's charity could not have sufficed and thus the State was compelled to intervene (Jooste, 2008). Furthermore, local government served the entire population and not just their own constituency (Singh, 2007). Many countries, especially in Europe, moved away from providing just partial or selective services to a comprehensive coverage of the population. However, it was in the late 1970s and in the two decades that followed, that resulted in disillusionment with government performance and, in turn, in a lowering of ambition (Singh, 2007). It was during this period that a wave of administrative reform occurred in the public sector. This change may be attributed to the World Bank and IMF which propagated the principles of the "Washington consensus" which called for economic liberation and the reduction of the role of the state for increased efficiency as a result of the early economic crises of the 1980's (Jooste, 2008). This paradigm shift has replaced the traditional system of administration, with a more entrepreneurial model of government called New Public Management (Gaffoor and Cloete, 2010). Thus the first pressure that pushed governments towards a public management revolution was financial in nature. The second reason was low quality in service delivery (Singh, 2007). An area in which the welfare state failed in its attempt to provide services to its citizens was in the implementation of its policies. A reason why policies could fail during its implementation phase is lack of capacity (Jooste, 2008; Singh, 2007; World Bank 2010). One of government's fundamental objectives is to deliver public services. These public services are carried out by a State's public administration, through government's policy. Implementation of a policy is executing these policies in order to deliver services. In terms of NPM, in order to achieve successful implementation, government had to redefine its parameters of responsibility, operating procedures and resource allocation (Singh, 2007). NPM advocates that government need not provide all public services (encourages delegation). The role of the state should not be that of a producer of services, but rather that of a promoter, facilitator, regulator, observer or even only a participant, depending on the capacity of the state and the peculiar circumstances surrounding the specific case (Cloete and Wissink, 2000 cited in Singh, 2007, p. 54). In terms of service delivery, the state should move from 'rowing' (the direct provision of services) towards 'steering', which combines policy guidance, regulation and contracting for services (Singh, 2007). In other words, policy implementation should be carried out by other public organisations or the private sector.

In the past, entrepreneurship has belonged solely to the private sector. This traditional view of entrepreneurship has changed over the years. The motive behind venturing into any economy by producers or consumers, simply put, is to make a profit (Singh, 2007). Governments are not profit seeking their main objective is towards that which is socially desirable. For a government, profitability becomes meaningful only when it enters into activities maximizing the social welfare of the society it serves (Singh, 2007). Succinctly put, the key to entrepreneurial government is to make government more efficient, effective and responsive in delivery services (Jooste, 2008). One way of achieving this is by treating government as a business and running government like a business (Singh, 2007). This implies the concepts of benchmarking and knowledge would also be beneficial to governments. Governments can therefore apply the concepts that have worked in the private sector to increase efficiency as they would be effectively maximising and using knowledge to make more informed choices. The concepts of knowledge identification, the process of identifying relevant knowledge, knowledge acquisition learning to apply to a specific organisational context and being aware of relevant legislation or standards would enable the government to achieve the goals that they envisage. Should governments adopt this new entrepreneurial style they will have to learn to become results-oriented focusing more on outputs than inputs and additionally they will have to move towards more decentralised form of government as a decentralised government is more efficient, responsive, has a direct interest in fixing the problem and has intimate knowledge of the problem as it operates close to the problem (Singh, 2007).

The previous sections have now provided the platform to understand the relevance of the tendering process as well as how it fits in the grandeur schemes governments have for their countries. The information presented is sufficient to facilitate the understanding of why governments tender.

## **5.5 Reasons why governments invite contractors to tender**

The previous sections have now laid the foundation for understanding the tendering process. It can be gleaned from the information provided that governments tender because they:

- Lack capacity to provide the desired service
- Governments are more efficient when they focus on steering rather than rowing.
- Financial pressures

- Poor quality of end products

These are some of the recent reasons that explain why governments tender but tendering is not a recent concept. The notion of tendering and procurement dates as far back as the 17<sup>th</sup> century (Singh, 2007). In South Africa, it is reputed to have been initiated by the oats farmers in the 19<sup>th</sup> century (Singh, 2007). The SA Government makes many purchases from outside suppliers throughout the year and these contracts may be for a host of goods and services. These contracts are referred to as contracts of procurement or, public sector procurement contracts (Bolton, 2004). The tendering process in a South African context is defined as a “written offer or bid in a prescribed or stipulated form in response to an invitation by an organ of state for the provision of services or goods (Government Gazette, No. 22549, 10 August 2001:6). According to Singh (2007) government procurement injects competition into the market, thus reducing the cost of services delivered. Secondly, the procurement of goods and services aids government in acquiring much-needed skills, which the public sector often lacks. Thirdly, public procurement in South African context has a dual purpose. Government procurement in SA is aimed at reducing government expenditure, but also at readdressing the inequalities of the past by empowering historically disadvantaged individuals (HDI’s). The South African procurement environment is very complex and although tenders are very important and have significant benefits, there are many factors that companies need to take into consideration. The tendering process involves various stages and within these stages certain steps need to be followed and specific documents need to be produced. The tendering process first begins with an understanding of why governments tender and this has been explained. The elementary processes then involve the tendering bid cycle, understanding the relevant laws<sup>1</sup>, preparing the bid specifications, understanding Requests for Proposals (RFP) and many, many other additional details (see Fig 11) (Government Communication and Information Systems, 2010).

This research is not concerned with the documentation and the elementary processes as these will differ from department to department and even from division to division. This research seeks to focus on the stages that these elementary processes fall under and how these various stages may be made more efficient. This research attempts, therefore, to try and simplify the process by identifying the most crucial elementary processes and finding ways to enhance the efficiency of

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<sup>1</sup> This will be covered in Chapter 6

the respective stages. The tendering process, however, may not be isolated and is influenced by a variety of exogenous factors that have raised concerns around efficiency.

### **5.5.1 Tendering process concerns and how KM may be the possible solution**

In South African (SA) public sector procurement is estimated to be worth R180 billion at all levels of government and is one of the areas most vulnerable to corruption (Transparency International, 2005). Furthermore, concerns around transparency have been raised as public tenders and administrative procedures are said to operate in an administrative environment that can lack transparency and predictability (Risk Management, 2009). In a Joint Comprehensive Procurement Assessment Report conducted by Transparency International in 2001, it was found that there were several issues that needed to be addressed, namely consultants not being selected in a systematic and competitive manner, flaws in the awarding of tenders, insufficient planning and linking of entities to budgets, lack of uniform bidding and other procedures across the public sector, and conflicts of interests due to composition of tender bodies (Transparency International, 2005).

- \* Understanding why organisations tender and what they want to achieve
- \* Understanding the tendering bid cycle
- \* Preparing the bid specification
- \* Documenting your requirements clearly
- \* Where and how to advertise tender requests
- \* Communication and transparency in the bidding process
- \* The tender request notice
- \* The PFMA and tendering
- \* Terms and conditions of tendering
- \* Identifying and eliminating fraud in the bidding process
- \* The tender schedule
- \* Closing dates and times
- \* The difference between:
  - Expressions of Interests
  - Request for Proposals (RFP)
  - Requests for Tenders (RFI)
- \* Standard forms of contract
- \* Understanding how the tender evaluation is performed
- \* The tender evaluation criteria
- \* Who should be on the tender evaluation board or committee?
- \* Analysing tender documents
- \* The adjudication process
- \* Compliance assessment
- \* Risk assessment
- \* Comparative assessment and ranking
- \* Tender Approvals
- \* Tender confidentiality
- \* Do's and Don'ts when interacting with bidders
- \* Reasons for disqualification
- \* Negotiation issues
- \* Post tender contracts

Figure 11: Elementary processes of the Tendering Process adapted from Astro Tech (2010).

In addition, the tendering process is affected by endogenous and exogenous factors. The endogenous factors include but are not limited to those that would be responsible for the selection of bids<sup>2</sup>. To what extent do these individuals use past information to assist in the selection process and are these individuals knowledgeable about the main industry participants? If the information at their disposal, is insufficient to enable these individuals to make an informed choice, then the question is, what steps can be taken to empower them to make the best decisions? This research proposes that KM may be applied within the tendering process to help

<sup>2</sup> Organisational Culture plays a significant role on how decisions are made within an organisation see Chapter 4

answer the above questions. The exogenous factors are industry related, for example who are chief contenders in a particular field and what is their track record? Secondly they may include the impacts of legislation? Although the idea of implementing KM to the tendering process may be a fairly new process, the concept of applying KM to the public sector is not new.

## **5.6 Knowledge Management in government organisations**

According to Butler and Murphy (2007) the European Institute of Public Administration recognises explicitly that public administrations are knowledge intensive organisations whose officials are knowledge workers par excellence. In particular the use of knowledge portals and IT-supported networks are required to ensure that knowledge derived from previous action or gained through policy evaluation will be fed back into policy making (Butler and Murphy, 2007). The United Nations' Department of Economic and Social Affairs (2003) Ad Hoc Expert Group Report on Knowledge Systems for Development placed special emphasis on the need for KM in government and non-government institutions. KM as a strategy is encouraged because when coupled with other strategic initiatives to develop organisational capability and customer relations, it results in knowledge-value creation which has an impact on performance (Hackett, 2000). Organisations today are exposed to a number of influences, the most obvious exogenous influence that the institutional environment brings to bear are those exerted by legislative or regulatory agencies that shape the structure, process, products or services of an organisation (Butler and Murphy, 2007). This is especially the case for government organisations, the factors of legislation, the judiciary and the wider institutional influences will have a direct moderating influence (Butler and Murphy, 2007). This implies that governments must be actively aware of the impact the legislation as well as other exogenous influences that may have an impact on the decision-making process. Government organisations may need to actively identify relevant knowledge that may be leveraged in order to make more efficient decisions. According to Yuen (2007), implementation of KM provides governments in developing countries with the opportunity to use it as a key driver towards increasing public sector productivity and building trust in government. KM has many benefits for the government that may help increase Government's efficiency namely: KM implementation helps avoid repeating mistakes that end up being costly and impacting on service delivery (Khoza, 2009). Secondly it assists in avoiding duplication of work by reinventing the wheel and causing a delay in delivery services to the

populace (Khoza, 2009). According to Khoza (2009), for KM to be positioned as a tool for service delivery, in general one of the steps that needs to be conducted is that it be used to improve decision-making. One of the areas that mostly involves significant decision making is the tendering process.

## **5.7 Conclusion**

This chapter has attempted to present the relevance of the tendering process to a country and the reasons why governments tender. It first began with an explanation of the role of government and how the role has changed to a more entrepreneurial view following the precepts of NPM. NPM promotes the concepts of decentralisation and delegation in particular it encourages governments to assess their capabilities, to steer rather than row and to focus on outputs, rather than inputs. The paradigm shift towards NPM was a result of the following factors: lack of Governments capacity to provide the desired service, financial pressures and poor quality of end products. The chapter then explained the concept of public administration and that effective policies were crucial if service delivery was to be achieved. It was pointed out that the tendering process is one of the tools used by governments to help achieve social-economic objectives and its efficiency may result in governments being able to meet more of its citizens' needs. Even though the tendering process may be beneficial, however, it was communicated that SA faces a plethora of problems which may be mitigated by KM concepts. The following chapter will now concentrate on the legislative aspect of the tendering process.

The understanding of these laws will provide more clarity when attempting to understand the tendering process and will assist the creation of a more practical model.

# Chapter 6: South African Tendering process as compared to various countries

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## 6.1. Introduction

One of the advantages of being a developing nation such as South Africa is that developing nations have at their disposal knowledge that may be leveraged in the decision-making process. Unlike their developed counter-parts who learnt through trial and error, developing nations may now learn from first world countries' blunders and either choose to avoid them or prepare in advance on how to deal with the consequences. To merely obtain the knowledge, however, is not sufficient according to Wang and Ahmed (2005) the mere identification of knowledge is not enough to enable success but knowledge acquisition is imperative. It was stated in Chapter 2, that knowledge acquisition is the second step after knowledge identification, which involves the application of relevant knowledge to a specific organisational context. This implies that the concept of benchmarking is not entirely a new concept when it comes to governments. However, governments are more inclined to consider other countries experiences but less inclined to consider the knowledge that may be gained from the private sector. This perception stems from the notion that governments have nothing in common with profit-seeking organisations and therefore are not in a position to learn anything of value (Singh, 2007). With the implementation of NPM the SA Government has, however, changed its stance and is now aware of the advantages that knowledge gained from the private sector may provide for government institutions. According to Khoza (2009) as the public sector continues to work with the private sector and the two learn from each other, the public sector begins to acknowledge the importance of KM and to recognise its value in product development and service delivery. With this in mind this research hopes to identify the areas within the tendering process that the Government may optimise through the implementation of KM. In order for this to be achieved, an understanding of what a standard tendering process involves will be uncovered through an overview of the processes found in other countries in order to construct a process that is robust and incorporates the minimum requirements.

This chapter will therefore provide an overview of the procurement framework of 4 countries, South Africa, the United States of America, Malaysia and Australia. The laws and processes followed in the various countries will be compared to the current prevalent processes found in South Africa. The various countries studied were considered valuable case studies because the countries shared a similar history to SA or simply because their tendering processes are perceived to be very efficient. The chapter first begins with Part (1), which is a brief overview of the current legislative environment affecting the South African tendering process as well as the process itself. The rest of the chapter is divided into four parts. Part (2) is an overview of the current legislative process in the United States, Part (3) is an overview of the current legislative environment in Malaysia, Part (4) is an overview of the current legislative environment in Australia and Part (5), which begins on page 133, is the final analyses and the lessons that South Africa may learn from the various implementations found in these countries.

## ***6.2. Summary of findings***

*An efficient procurement system or process is one that has good governance and authority, promotes fair competition and fairness, encourages transparency and has ethical considerations. These points identified in the literature are in accordance with the World Trade Organisation (2011) whose definition of an effective public procurement system is, a system offering a high level of transparency, accountability and value for money.*

## *Chapter 6 - Part 1: Overview of Legislation governing the South African tendering process*

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### **1.1 Background**

South Africa is a middle-income, emerging market with an abundant supply of natural resources; well-developed financial, legal, communications, energy, and transport sectors; a stock exchange that is the 18th largest in the world; and modern infrastructure supporting a relatively efficient distribution of goods to major urban centres throughout the region (CIA World Fact Book, 2011). Despite having a GDP in 2010 of \$527.5 billion the country has daunting economic problems that remain from the apartheid era, especially poverty, lack of economic empowerment among the disadvantaged groups, and a shortage of public transportation (CIA World Fact Book, 2011). According to the Business Anti-Corruption Portal (2011) the level of corruption in South Africa is not as pervasive as in other African countries; however, there are areas of risk such as:

1. Public services are still characterised by high levels of *red tape*.
2. Corruption is rife in the granting of government contracts. Bribery thrives at the central government level, as exemplified by the high-profile procurement scandals. Many companies also cite the procurement of goods for private companies as an activity likely to involve bribery.
3. The Black Economic Empowerment (BEE) strategy, aimed at increasing the participation of black citizens in the economy, has been criticised for providing too much preferential treatment to wealthy black elites in relation to getting government contracts, and for leading to increased procurement corruption.

According to Smith (2010) the South African Government spend an estimated R565 billion on procurement over the past 10 years, which is roughly equivalent to 15.2% of total government expenditure. This suggests that it is in the Government's best interest to try and fix the cracks that are damaging the countries reputation and hindering the growth of the economy so as to achieve their constitutional objectives. The section first begins with a brief historical overview of the existing legislative environment with regards to public sector procurement. The constitutional

provisions are then presented, this is followed by: financial enabling legislation and legislation enabling for a preferential procurement system. The combination of the vast amount of information available on the government websites and the difficulty of finding an authoritative person to clarify its policy, makes the SA government's procurement policy the hardest one to understand in Southern Africa (Tender Topics, 2011).

## **1.2 Laws affecting Government Procurement**

Prior to 1994, the State Tender Board was the authority on public procurement (Smith, 2010). Procurement was a centralised affair and was executed in accordance with the State Tender Board Act of 1969 (Smith, 2010). Between 1994 and 2002, Independent Provincial Tender Boards were established. This period also culminated with the promulgation of the following:

- *The Constitution of the Republic of South Africa (SAC) ( Act No. 200 of 1993)*
- *10 Point Plan on Procurement (1995)*
- *Green Paper on Public Sector Procurement Reform (1997)*
- *Public Finance Management Act (No. 1 of 1999)*
- *Preferential Procurement Policy Framework Act (No. 5 of 2000)*
- *Municipal Finance Management Act (No. 56 of 2003)(MFMA)*
- *Broad-Based Black Economic Empowerment Act (No. 53 of 2003)(BBBEE)*
- *Prevention Combating of Corrupt Activities Act (No. 12 of 2004)*

The years between 2003 and 2010 ushered in new regulations and saw the National Treasury issue policy shifting procurement power from Tender Boards to Heads of government departments (Smith, 2010). The Provincial Tender Boards were abolished. The BBBEE Act and the Framework for Supply Chain Management were promulgated (Department of National Treasury, 2011).

## **1.3 Constitutional Provisions**

The South African Constitution was approved in 1996 and took effect in 1997. It is regarded internationally as one the most progressive constitutions in the world and has received critical acclaim (South African Government Information, 2011). No other law or government action can

supersede the provisions outlined in the Constitution (South African Government Information, 2011). Section 195 and section 217 are of paramount importance to this research as they dictate the way public administration and government procurement should be conducted.

### **1.3.1. Section 195 of the Constitution (Act No. 200 of 1993): Basic values and principles governing public administration**

According to section 195(1) of the Constitution public administration should be governed by the following principles:

- *A high standard of professional ethics must be promoted and maintained.*
- *Efficient and effective use of resources must be promoted and maintained.*
- *Public administration should be development-oriented.*
- *Services must be provided impartially, fairly, equitably and without bias.*
- *People's needs must be responded to and the public should be encouraged to participate in policy making.*
- *Public Administration must be accountable.*
- *Transparency must be fostered by providing the public with timely, accessible and accurate information.*
- *Good human resource management and career development practices, to maximize human potential, must be cultivated.*
- *Public administration must be broadly representative of the South African People, with employment and personal management practices based on ability, objectivity, fairness and the need to readdress the imbalances of the past to achieve broad representation.*

Section 195 of the Constitution (Act No. 200 of 1993) further goes on to say:

*These principles apply to administration in all spheres of government, organ of state and public enterprises.*

This implies in an ideal world the above principles would be upheld and the tendering processes would have to comply with the principles identified. What is also evident from the information

provided is that transparency has been one of the main objectives since the very beginning of the SA democracy. This highlights the importance of identifying ways to enhance it.

### **1.3.2. Section 217 of the Constitution (Act 200 of 1993): Procurement**

Section 217(1) of the Constitution reads as follows:

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

Section 217(2) further states that

Section 217 (1) *does not prevent the organs of state or institutions referred to in that subsection from implementing a procurement policy providing for:*

- *Categories of preference in the allocation of contracts.*
- *The protection of advancement or persons, or categories of persons, disadvantaged by unfair discrimination.*

Section 217(3) originally stated:

*National legislation must prescribe a framework within which the policy referred to in subsection (2) must be implemented.*

It was substituted by the section 6 of the Constitution of the Republic of South Africa Second Amendment Act (No. 61 of 2001).The substitution changed “must” to “may” and now reads as follows:

*National legislation must prescribe a framework within which the policy referred to in subsection (2) may be implemented.*

## **1.4 10 Point plan on procurement**

In 1995 the South African government was aware that it needed to reform the public procurement process in order rectify injustices of the past as well as to increase participation of Small and Medium Enterprises (SME's). While the formal laws were still being formulated the Government issued the interim strategy, called the 10 Point plan on procurement (Ministries of

Finance and Public Works, Procurement Task Team, 2011). The plan included the following interim goals:

- *Improving access to tendering information.*
- *Developing tender advice centres.*
- *Broadening the participation base for contracts less than R7, 500.*
- *Waiving security/sureties on construction contracts having a value of less than R100 000.*
- *Unbundling of large projects into smaller contracts.*
- *Promoting early payment cycles by government.*
- *Developing a preference system for small and medium enterprises owned by historically disadvantaged individuals.*
- *Simplifying tender submission requirements.*
- *Appointing a procurement ombudsman.*
- *Classifying building and engineering contracts.*

## **1.5 Green Paper on Public Procurement Reform (GPPPR)**

Prior to the introduction of the GPPPR, the tendering system favoured larger, established companies and it was very difficult for newly established businesses to enter the public tendering system (Minister of Finance, 1997). The South African Government then decided to make the tendering system more accessible to small, medium or micro-enterprises by implementing the GPPPR (Minister of Finance, 1997). The GPPPR is a discussion document which contains various proposals aimed at achieving good governance, developing and utilising the country resources and promoting a competitive business sector. The importance of public sector procurement cannot be under-estimated; this is supported by the fact it can make a critical contribution to the transformation and democratisation of the South African economy (Smith 2010). The GPPPR is not a law but presents ideas on how to improve governance in national procurement procedures as well as how social-economic objectives could be achieved by using the procurement system. The document states the issue of governance would be resolved through the creation of a National Procurement Framework that would establish uniformity in

the tender procedures. The framework would be administered by a central Procurement Compliance Office, which would be responsible for establishing control measures on a regular basis. Socio-economic objectives would be achieved through the simplification of tender documents and the development of an affirmative procurement policy. The proposals found inside this document provided the way forward and as a result the South African Government implemented the ideas. In particular the National Procurement Framework is comprised of the financial enabling legislation as well as the legislation enabling for a preferential procurement system.

## **1.6 Financial Enabling Legislation**

### **1.6.1. The Public Finance Management Act (Act No.1 of 1999 amended by Act 29 of 1999) (PFMA)**

The PFMA of 1999 was established to regulate financial management in the national and provincial spheres of government. Its first goal is to ensure that all revenue, expenditure, assets and liabilities of government are managed efficiently and effectively and its second goal is to provide responsibilities for persons entrusted with financial management of government accounts (South African Government Information, 2011). The PFMA is one of the laws that contributes to the creation of transparency in government transactions which is in line with the provisions as outlined in the Constitution as well the goal of obtaining better governance as stated in the GPPPR. The law determines the underlying structure that sets the parameters for the execution of SCM within government and aims to consolidate SCM policies in all organs of government (Department of National Treasury, 2011). The MFMA is an extension of the same principles to municipalities (Department of National Treasury, 2011). It is the responsibility of the Department of National Treasury to foster coherent and financial management in all organs of state, across the three spheres of government (Department of National Treasury, 2011). Accounting officers, accounting authorities and municipal managers are also assigned some autonomy to enable them to manage their financial affairs within the parameters laid down by the prescribed norms and standards (Department of National Treasury, 2011)

## 1.6.2. Supply Chain Management Framework

In 2003 Cabinet approved the adoption of a policy document entitled “Policy to Guide Uniformity in Procurement Reform Processes in Government” (Department of National Treasury, 2011). The document is designed to guide the uniform implementation of Government procurement reform initiatives and the issuing of Regulations in terms of section 76 (4) (c) of the PFMA in respect of the Framework for Supply Chain Management (Department of National Treasury, 2011). The Regulatory Framework for Supply Chain Management which applies to all national and provincial departments and trading entities, constitutional institutions and public entities listed in the Schedules 3A and 3C in the PFMA took effect in 2003 and requires accounting officers and authorities to ensure the implementation of the SCM process as an integral part of their financial systems. The Policy Strategy applies to the acquiring and disposal of all goods, services, construction and road works and immovable property of all constitutional institutions, public entities and as defined in schedule 3A and 3C of the PFMA, national and provincial departments as defined by the MFMA and all school governing bodies whether or not they have been assigned additional responsibilities in terms of section 21 of the South African Schools Act (No. 84 of 1996) (Department of National Treasury, 2011).

### Objectives of SCM policy

1. *To give effect to the provisions of the Constitution, 1996;*
2. *To give effect to the provisions of the PFMA and MFMA.*
3. *To transform the procurement and provisioning functions in Government into an integrated SCM function;*
4. *To introduce a system of appointment of consultants;*
5. *To create common understanding and interpretation of Government’s preferential procurement policy objectives; and*
6. *To promote consistency in respect of supply chain policy and other related policy initiatives in Government.*

## **1.7 Preferential Procurement Legislation**

### **1.7.1. Preferential Procurement Policy Framework Act No. 5 of 2000 (PPPFA)**

The PPPFA was designed to enhance participation of Historically Disadvantaged Individuals (HDIs) and the small, medium and micro enterprises (SMMEs) in the public procurement system (Department of National Treasury, 2011). The act stipulates that preferences are applicable to all tenders, irrespective of amount. An 80/20 point system is applicable for tenders up to R500 000, while a 90/10 point system is applicable for tenders above R500 000 (see Figure 2). For the first system a maximum of 80 points is allocated to the lowest acceptable tender, while tenderers (tenders applicants) who tendered higher in price are allocated a lower number of points. A maximum of 20 points is awarded to tenderers for contracting or subcontracting with HDIs. The tender is awarded to the tenderer who scored the highest number of total points. The goals to be achieved must be clearly specified in the tender documents, must be quantifiable and measurable and monitored for compliance (Department of National Treasury,2011). A similar 90/10 system is followed during the evaluation process for tenders above R500 000. A maximum of 90 points is allocated for the lowest acceptable tender, and a maximum of 10 points can be awarded for contracting or sub-contracting with HDIs (Department of National Treasury, 2011).

## Preference System Example

The Department of Health invites tenders for the provision of computer software.

- > Company A, a 100% empowered company, offers the software for R450 000.
- > Company B, which has no empowerment component, offers the software for 400 000.

The 80/20 principle applies (tender is below R500 000)

Points Calculation:

	Company A	Company B
Price =	67	80
Preference =	20	0
Total Points =	87	80

The tender is awarded to A (scored higher points) even though Company A has an additional cost of R50 000.

Figure 12: Preference system example adapted from Smith (2010)

### 1.7.2. Broad-Based Black Economic Empowerment Act, 53 of 2003

The second law of importance is the Broad-Based Black Economic Empowerment Act, 53. According to this law, the Minister of Trade and Industry is to issue codes of good practice on BEE, and must issue a strategy and a plan for the financing of broad-based black economic empowerment. The Minister must also publish transformation charters for a particular sector of the economy once the major stakeholders of that sector have been consulted. With the publication of a number of codes of good practice by the Department of Trade and Industry in December 2006, a measure of certainty has been achieved with regard to how tenders are to be adjudicated in those sectors. However, this certainty must be tempered with the additional

complexity that the codes have added with the introduction of the new 100 point scorecard system with seven areas of BEE opportunity: equity ownership (20 points), management control (10 points), employment equity (15 points), skills development (15 points), preferential procurement (20 points), enterprise development (15 points), and socio-economic development (5 points). A number of transformation charters have also been published, providing further certainty in some sectors (Tender Topics, 2011).

### **1.7.3. Prevention Combating of Corrupt Activities Act, 12 of 2004**

The third piece of legislation of importance for tendering is the Prevention Combating of Corrupt Activities Act, 12 of 2004. According to this law, both the person who offers a bribe and the official who accepts a bribe, are guilty of the offence of corruption. The bribing of foreign public officials is also a crime under this law, as is the offering of inducements for the awarding of a tender. The maximum sentence that can be imposed by a High Court for the offence of corruption is life imprisonment or a fine. Once a person is found guilty of such an offence, his or her details are to be entered in the Register for Tender Defaulters (which is established by the Minister of Finance within the National Treasury). This registry is open to the public, municipalities and government departments in order to prevent those listed in the register from tendering in the future (Tender Topics, 2011).

## **1.8. Legislation overview**

Legislation that directly affects procurement has been considered the Medium Term Expenditure Framework, which is a component of Performance Based Budgeting has been deliberately excluded as it has a secondary impact on the tendering process. (Secondary meaning they are found outside the circle of influence (see Figure 13). The purpose of this chapter is not to assess whether or not these laws have been implemented correctly but it serves as a building block to assisting in the creation of the theoretical model. What is apparent from the analysis of the various laws is the consistency with which the South African Government has targeted its main problems with regards to the tendering/procurement process.

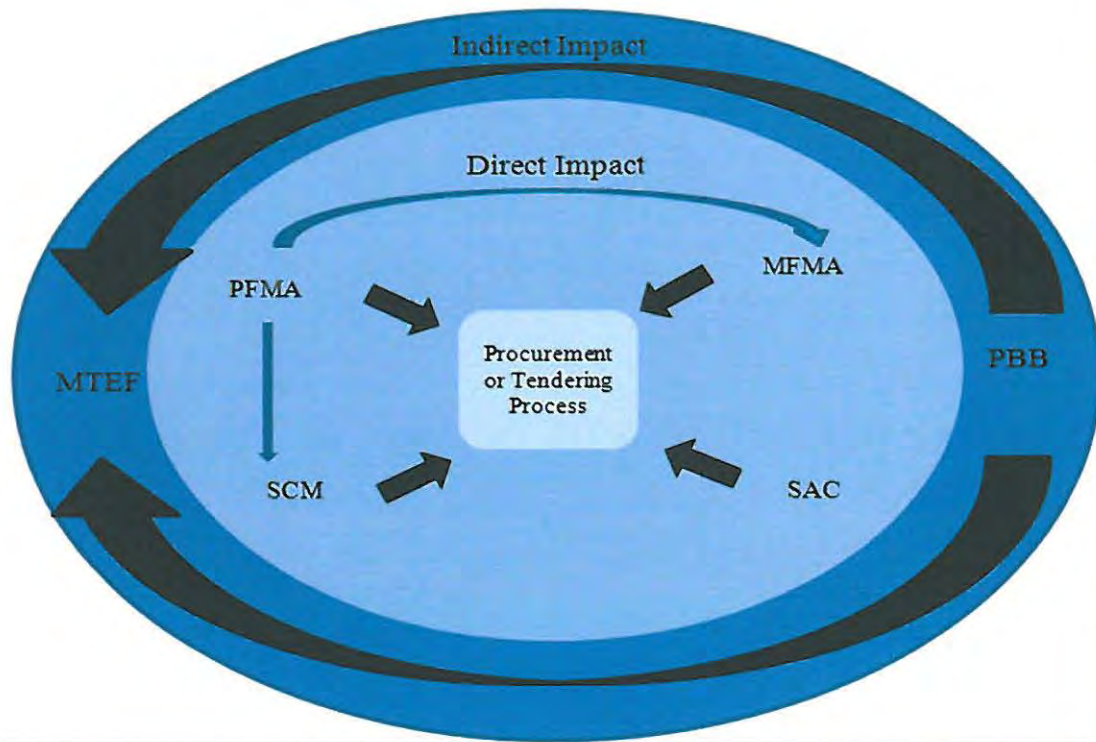


Figure 13: Legislative Environment affecting Public Procurement in South Africa adapted from Literature Review.

What is evident are the goals of governance and providing access to previously marginalised persons has been kept throughout. Figure 14 provides an overview of the existing laws and what they target. If the goals of the various laws are compared to the vision outlined in section 217 of the constitution it can be seen that strides have been made to make these ideals a reality.

Constitutional Goals	Fair	Equitable	Transparent	Competitive	Cost Effective
PFMA	✓	✓	✓	✓	✓
SCM			✓	✓	✓
MFMA	✓	✓	✓	✓	✓
PPPFA	✓	✓	✓	✓	✗

Figure 14: Constitutional Goals as supported by the various act<sup>3</sup>

## 1.9. The Process

The procurement process in SA Government institutions is governed by the SCM Framework<sup>4</sup>. Succinctly this involves Demand Management, Acquisition Management, Logistics Management and Disposal Management. In South Africa, most tender advertisements are published in the media on Fridays. The State Tender Board publishes its weekly tender bulletin (online and hard copy) on Fridays, as are most of the provincial tender bulletins. Simultaneously, many of the tenders are published in the local, provincial or national newspapers on Fridays (Tender Topics, 2011). According to the State Tender Board (2011) there are four types of tenders: open tenders, selective tenders, quotations and waiver of normal tender procedures (see Table 6).

Table 6: Tender types adapted from State Tender Board (2011)

TYPE OF TENDER:	DETAILS
OPEN TENDER	For project/purchase/service valued above R25, 000.
SELECTIVE TENDER	For project/service/purchase valued

<sup>3</sup>“Fair” as defined in the South African Constitution and “Competitive” as defined in South African Constitution.

<sup>4</sup> See chapter 3 for SCM

between R25, 000 and R150, 000, subject to prior approval by the Chairman, Mini Tender Board, and for project/service/purchase valued above R150, 000, subject to prior approval by the Chairman, State Tender Board.

#### QUOTATION

For project/service/purchase with a minimum value of R2, 000, subject to approval by the Head of Department. Quotations from at least three qualified tenderers must be obtained.

#### WAIVER OF NORMAL TENDER PROCEDURE

For project/service/purchase valued between R25, 000 and R150, 000, subject to prior approval by the Chairman, Mini Tender Board, and for project/service/purchase valued above R150, 000, subject to prior approval by the Chairman, State Tender Board.

### 1.9.1. The panel

Although an adjudication panel is set up for each tender in the provinces, the Provincial Treasury's departmental bid committee must approve the awarding of the tender before it is finally awarded in public (Tender Topics, 2011). The Departmental Bid Adjudication Committee comprises of members appointed by the Accounting Officer or his/her delegate through the acquisition policy and delegations (Government Communications Information System, 2010). The composition of the committee is as follows: Department Chairperson, the chief directors of Government and Media Liaison, Communication Service Agency, Provincial and Local Liaison (PLL), Policy and Research and Corporate Services; the Director of SCM (technical adviser) and

the Deputy Director of SCM (Government Communications Information System, 2010). Other officials may be co-opted onto the Bid Adjudication Committee on account of their specialized knowledge. If the committee is divided in the awarding of a bid, the members will vote. In the event of an equal vote, the chairperson's decision will be final (Government Communication and Information System, 2010).

#### **1.9.1.1. The selection process**

According to the Government Communication and Information System (2010), the following points are observed in the selection process:

1. Prices of submitted bids are comparatively rated and awarded pricing points;
2. Preference points are calculated after prices have been brought to a comparative basis;
3. The proposal addressing requirements as specified within the bid document are scored;
4. Points scored are rounded off to 2 decimal places;
5. The bidder obtaining the highest number of points is awarded the contract;
6. In the event of equal points being scored, the bid will be awarded to the bidder scoring the highest number of points for specified goals.

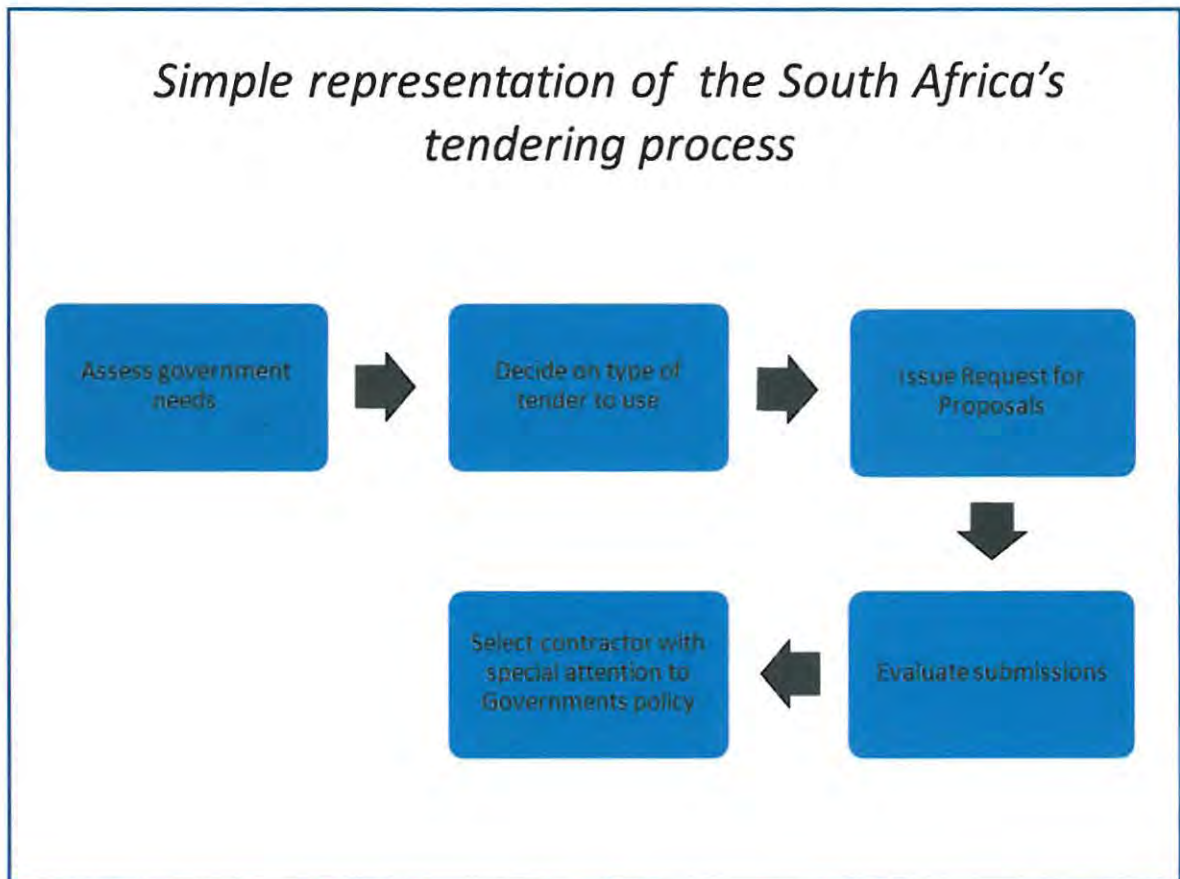


Figure 15: Simple representation of South Africa's tendering process

## 1.10 Transparency and Accountability

### 1.10.1. Accountability

According to Tender Topics (2011) although disputes over the awarding of tenders often end up in court because one bidder appeals against the award, this is not the only way that corruption is exposed. An alternative method of uncovering corruption in the awarding of tenders is by reporting the matter to the National Director of Public Prosecutions (of the National Prosecuting Authority of SA), who then appoints a special investigator to look into the matter. Apart from the

laws governing tendering, the government has published guidelines to assist members of the public service to run the tender process in a fair way. According to these guidelines, the five pillars of procurement are: value for money, open and effective competition, ethics and fair dealing, accountability and reporting, and equity (Government Communication and Information System, 2010). It is only with the fifth pillar (equity) that the issue of BEE preferential procurement points comes into play (Tender Topics, 2011).

### **1.10.2. Transparency**

According to Tender Topics (2011) with regard to openness and transparency in the acceptance of tenders, the following general practice is observed: On the closing date of the tender, the tenders are opened in public, and the names of the bidders are read out. Only in the construction industry are the prices read out. Most municipalities and government departments have drawn up registers of consultants and suppliers who have been pre-qualified to undertake work for the authority concerned (Tender Topics, 2011). In some cases the authority concerned may refuse to accept a bid on the grounds that the bidder is not registered on its supplier database. In order to ensure that their tenders are accepted, it is a good idea for consultants to register on such databases before submitting their tenders. Although municipalities and provincial departments may restrict suppliers in terms of the work they are prepared to award them, such restrictions must be forwarded to the National Treasury, so that they can be recorded on the National Treasury's database (Tender Topics, 2011).

## **1.11 Conclusion**

This section has provided an overview of the current legislative environment affecting the procurement/tendering process. The laws were categorised according to constitutional provisions, financial legislation and preferential procurement legislation. Laws that have a direct impact on how public procurement is conducted were presented. Of fundamental importance is the consistency with which the government has implemented the various laws as each act supports one of the constitutional goals outlined in Section 217 (1) of the Constitution. The

South African Government has given public procurement large credence and from as early as 1993 had outlined steps towards increasing governance and widening the participation HDI's in the economy. The policies implemented thus far are in line with these ideals.

## *Chapter 6 - Part 2: Overview of Legislation governing the United States of America's tendering process*

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### **2.1 Introduction**

The following section will provide an overview of the current legislative environment affecting the procurement process in the United States of America (USA). It is by no means an in depth analysis or critique of the current processes adopted in the United States (US) but the information gleaned from this overview will provide insight into the laws and processes that US uses to enforce efficiency. These processes and laws will then be used to help inform the creation of the theoretical model.

### **2.2 Background**

The US has the largest and most technologically powerful economy in the world and in 2010 had a gross domestic product (GDP) of \$14.72 trillion, with a per capita GDP of \$47,400 (Central Intelligence Agency, 2011). Private individuals and business firms make most of the decisions, and the federal and state governments buy needed goods and services predominantly in the private marketplace (Central Intelligence Agency, 2011). Local governments spend about 40% of their budgets purchasing goods and services (Potoski, 2008). Irrespective of the considerable compensation potential of contracting for the federal government, many firms are reluctant to offer their services as contracting with the federal government is considered a highly regulated process with many traps (Vacketta, 2011). The following sections will present the main laws governing the procurement process in the US as well as how the process is conducted.

### **2.3 Legal and Organisational Framework**

According to the US Judge Advocate General's School Coursework Book (2000), the USA Constitution contains the principles and laws that govern how government procurement or public

procurement should be conducted and it provides the authority given to federal government. Article 1 Section 8 of the USA constitution gives Government specific enumerated power. The power to purchase is not explicitly enumerated; however, it is understood to be implied as part of the specific powers granted.

Legislation affecting procurement may be categorised into two classes:

1. Every acquisition can be traced to legislation that permits the acquisition and provides money for it. This is normally covered in authorisation and appropriation legislation. This legislation does not affect the acquisition process itself, however, the appropriation process has been used to amend procurement laws e.g. Federal Acquisition Reform Act (FARA) and the Federal Acquisition Streamlining Act (FASA).
2. Every acquisition must follow the rules for acquisition contained in the applicable laws.

In the USA the procurement process is subject to legislation separate from the authorisation and appropriation process and there is additional legislation that regulates the acquisition process itself (US Judge Advocate General's School Coursework Book, 2000). Congress is responsible for creating the legislation as well as the legislation providing the funds. Congress then provides funds to the executive branches as well as the agencies at the bottom of the chain (US Judge Advocate General's School Coursework Book 2000).

Executive branch agencies are governed by two primary laws:

1. The Armed Services Procurement Act.
2. Federal Property and Administrative Services Act.

To address all the various rules imposed by Congress a body of administrative law has been developed through the Federal Acquisitions Regulation (FAR). This regulation is comprised of 53 parts and defines the process for government contracts as well as provides guidance, implements special preference programs and includes specific language for many clauses found in government contracts (FARsite, 2011). In the United States most agencies also have

supplemental regulatory coverage contained in what are known as FAR Supplements. These supplements appear within the Code of Federal Regulations (CFR) volumes of the respective agencies (US Judge Advocate General's School Coursework Book 2000).

Government contracts are governed by what is known as federal common law. This body of law is completely separate and distinct from the body of law familiar to most businesses, the Uniform Commercial code (UCC), which is a body of law passed by the legislatures of various states and is generally uniform among the states (Vacketta, 2011). In the United States most government contracts involve subcontractors; the prime contract between the government and its contractors is governed by federal common law while the contracts between the prime contractor and its subcontractors are governed by UCC of the respective states (Vacketta, 2011).

Succinctly the laws that govern the procurement process in US are:

1. Armed Services Procurement Act of 1947 (ASPA)
2. Federal Property and Administrative Services Act of 1949 (FPASA)
3. Anti-Deficiency Act of 1982 (ADA)
4. Competition in Contracting Act of 1984 (CICA)
5. Federal Acquisition Reform Act of 1994 (FARA)
6. Federal Acquisition Streamlining Act of 1996 (FASA)

#### Armed Services Procurement Act (ASPA) of 1947

The ASPA governs the acquisition of all property (except land), construction, and services by defence agencies (Armed Services Procurement Act of 1947).

#### Federal Property and Administrative Services Act (FPASA) of 1949

According to Federal Property and Administrative Services Act of 1949 the aim of the FPASA is to provide the US Government with:

1. *An economical and efficient system for the procurement and supply of personal property and non-personal services. Personal property is defined as any corporation, partnership,*

*firm, association, trust, estate, or other entity and property. Non-personal services refer to contractual services, other than personal and professional services.*

2. *The utilisation of available property.*
3. *The disposal of surplus property.*
4. *Record management.*

Succinctly FPASA governs the acquisition of property and services for civilian agencies (Vacketta, 2011).

#### The Anti-Deficiency Act of 1982

According to the U.S. Government Accountability Office (2011) the Anti-Deficiency Act of 1982 is one of the major laws through which Congress exercises its constitutional control of the public funds. In summary it prohibits:

- *Making or authorizing an expenditure from, or creating or authorizing an obligation under, any appropriation or fund in excess of the amount available in the appropriation or fund unless authorized by law.*
- *Involving the government in any obligation to pay money before funds have been appropriated for that purpose, unless otherwise allowed by law.*
- *Accepting voluntary services for the United States, or employing personal services not authorized by law, except in cases of emergency involving the safety of human life or the protection of property.*

#### Competition in Contracting Act (CICA) of 1984

The CICA is applicable to *both* defence and civilian acquisitions and requires federal agencies to seek and obtain full and open competition wherever possible in the contract award process. Only in seven circumstances may a federal agency award a contract using a sole source contractor or other than full and open competition (Competition in Contracting Act of 1984).

### Federal Acquisition Reform Act of 1994(FASA)

According to the Commercial Practices Commercial Report (2006) the aim of FASA was to make it easier for the Government to acquire goods and services from the commercial marketplace. FASA made a wide range of changes in acquisition policy and procurement law by exempting purchases of commercial products from several statutes, while expanding the definition of a “commercial product.”

### Federal Acquisition Reform Act of 1996 (FARA)

According the FARA (1996) the aim of this regulation is to ensure that the requirement to obtain fair competition is implemented in a manner that is consistent with the need to efficiently fulfil the Government’s requirements (see Figure 16).



Figure 16: Summary of USA Procurement Framework

## **2.4 The US Tendering Process Procedures**

It was previously stated that executive branches allocate the funds to the respective government agencies and they determine what services or products they would like to procure. This would

imply that the USA procurement process is a combination of centralised and decentralised process, this statement is supported by Prier and McCue (2007) who state that 58.7% of local governments in the US had a mixed procurement approach. SA has adopted a similar approach with the adoption of 'administrative decentralisation' which is one of the concepts promoted by NPM. The contracting process itself generally begins with some feasibility assessment to determine the extent to which contracting is practical (Potoski, 2008). The feasibility of the contracting depends on the market context, the legal and political context and whether the contracting government has the staff resources and institutional flexibility to contract (Potoski, 2008). The formal contracting process begins with the government soliciting vendors through requests for proposals (RFP's) and or some other bidding process (Potoski, 2008). The purchasing government reviews the proposals, weighing costs of service delivery, including management and other costs against the expected costs and performance of the vendor, discounted for risk. Once the contract has been accepted then the focus is on managing the principal-agent relations between the government and the vendor (Potoski, 2008).

#### **2.4.1 Methods in acquisition process**

The CISA prescribes that there are two ways of obtaining full and open competition, (1) sealed bidding or (2) competitive negotiation.

##### **2.4.1.1. Sealed bidding**

Sealed bidding is characterized by a rigid adherence to formal procedures. If the following four conditions are met then a sealed bidding process is followed:

1. *Time permits the solicitation, submission and evaluation of sealed bids.*
2. *The award will be made on the basis of price and other price-related factors.*
3. *It is not necessary to conduct discussions with the responding contractors about their bids.*
4. *There is a reasonable expectation of receiving more than one sealed bid.*

The procedure aims to provide all bidders an opportunity to compete for the contract on an equal footing. In a sealed bidding acquisition, the agency must award the bid to the bidder who submits the lowest responsive bid price (Vacketta, 2011). The SA Government may consider using different bidding procedures in future depending on the amount of participants in a particular industry, the level of HDI penetration and their level of experience.

#### **2.4.1.2. Competitive Negotiation**

In contrast, competitive negotiation is a more flexible process that enables the agency to conduct discussions, evaluate offers, and award the contract using price and other factors. Competitive negotiation is usually followed when one of the four conditions of sealed bidding process are not met (Vacketta, 2011) (see Figure 17).

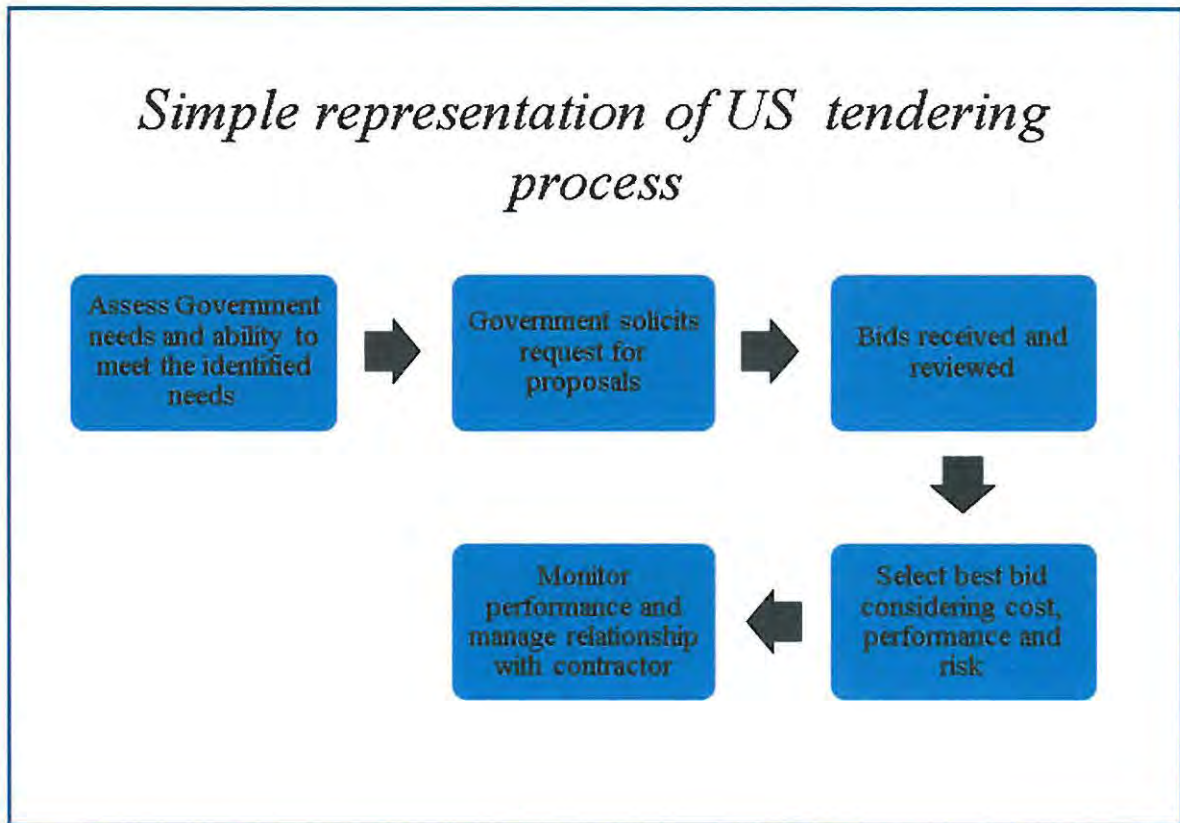


Figure 17: Simple representation of US tendering process

## 2.5 Transparency and Fairness

US Government contracts have unique standard terms and conditions and often contain a host of clauses many of which have no commercial counterparts namely: (1) the Termination of Convenience clause, (2) the Changes clause and (3) the default clause.

1. *Termination clause* permits the Government to terminate the contract at any time without cause when in the “Government’s best interest”. The right to terminate without cause arose from the Governments need to adapt acquisition needs to changes in situations and technologies (Vacketta, 2011). For example a contract for continued productions of

prescribed textbooks maybe rendered unnecessary if the Government changes the education curriculum drastically. The contract is terminated by Government issuance of a written notice of termination. This notice must contain (1) a statement for the contract being terminated, (2) a statement that the contract is being terminated for the convenience of the Government, (3) the extent of termination, (4) any special instructions and (5) the steps the contractor is to take to minimise the impact on personnel (Vacketta, 2011). In return the contractor is entitled to recover certain costs such as (1) its performance costs incurred up to the date of termination, (2) certain costs that continue after the date of termination and (3) so called “termination expenses”( Vacketta, 2011).

2. *Changes Clause* enables the Government to make unilateral changes to the contract during performance, so long as those changes fall within the contract’s scope. The change doesn’t necessarily always work against the contractor and the contractor is entitled to an “equitable adjustment” to the contract if the changes results in increased costs or time (Vacketta, 2011).
  
3. *Default Clause* permits the government to terminate a contract for default where the contractor breaches the contract. A contractor is said to have breached a contractor if a contractor fails to: (1) deliver the supplies or perform the services within the time specified in the contract, (2) make progress thereby endangering the completion of the contract or (3) perform any other material provision in the contract (Vacketta, 2011). If the Government intends to exercise its right to terminate under the second or third stated circumstances, it must first notify the contractor in writing and allow the contractor to rectify deficient performance within ten days. The Default clause excuses the failure to perform where failure arises from causes beyond the control and without the fault of negligence of the contractor e.g. fires, floods etc. (Vacketta, 2011).

In addition to the above clauses US Government contracts mandate compliance with: (1) FAR Cost Principles, (2) FAR Cost Accounting Standards and (c) the Truth in Negotiation Act (Vacketta, 2011).

1. The FAR Cost Principles found in FAR part 31, define when and to what extent costs can be recovered under a government contract. These cost principles establish basic guidelines for the permissibility of some fifty types of contract costs.
2. The FAR Cost Accounting Standards (CAS) found in FAR part 30, dictate the way in which a contractor must maintain its accounting system and instructs contractors how to account for certain types of costs. The CAS is applied to any negotiated contract over \$500 000 and sealed bid contracts are not subject to CAS (Vacketta, 2011). Furthermore there are two types of CAS coverage, (1) Modified Coverage and (2) Full CAS Coverage. The former requires the contractor to comply with only four of the nineteen CAS and the latter requires contractors to comply with all the CAS.
3. The Truth in Negotiation Act(TINA) stipulates that a government contractor or subcontractor is required to submit accurate cost or pricing data if the negotiated contract is expected to exceed \$500 000 (Vacketta, 2011). If it is found after the awarding of the contract that the contractor submitted data which was not accurate, current and complete then the contract price may be reduced accordingly (Vacketta, 2011).

In addition to the above compliance standards, the US Government reserves certain audit rights. For example the Government has the right to audit a contractor's price proposal prior to negotiations this includes books or pertinent records. The Government may also choose to audit the selected contractor at any time after the issue of the contract up to a period of three years after the final contract payment (Vacketta, 2011).

Fairness is considered to be very important and the US Government imposes a wide range of socio-economic obligations on its contractors (Vacketta, 2011). The most prominent obligation is the Equal Opportunity and Affirmative Action. This obligation stipulates that a government contractor or subcontractor with a contract or subcontract over \$10 000 must not discriminate against any employee or applicant because of race, colour, religion, sex or national origin. It further states that such a contractor or subcontractor must also take affirmative action to ensure that applicants and employees are treated without regard to race, colour, religion, sex or national origin (Executive Order 11246, 2011). Executive Order 11246 also stipulates if a contractor or

subcontractor (1) has fifty or more employees and (2) has a contract of \$50 000 or more then it must develop and keep on file at each business establishment a written so-called Affirmative Action Plan (AAP). The AAP details specific measures the contractor must take to guarantee equal employment opportunity by addressing the problems and needs of minority groups and women.

## **2.6 Integrity and Accountability**

The US Congress and Executive Branch multiplied the number and types of ethical considerations governing federal contracts after the defence procurement scandals of the 1980s (Vacketta, 2011). The most notorious defence procurement scandal investigation of that time was “Operation Ill Wind,” which uncovered a major procurement fraud scandal. “Operation Ill Wind” resulted in 70 convictions, including the convictions of major defence contractors, some smaller defence contractors, employees, consultants, and approximately a dozen government officials (McNulty, 2005). This scandal gave rise to ethical considerations that were encouraged to be seen as best practise. The most notable business practices and ethical responsibilities are the: (1) Prevention of Bribery and Illegal Gratuities/Compliance Training, (2) False Claims and False Statements, (3) Conflicts of Interest, (4) Kickbacks, (5) Lobbying Restrictions and (6) Procurement Integrity (Vacketta, 2011).

1. According to FAR subpart 3.502 the Preventions of Bribery and Illegal Gratuities/Compliance Training best practise stipulates that contractors are restricted by criminal statues and contracting regulations from providing goods and services to the personal benefit of federal employees.
2. The False Claims and False Statements best practise stipulates that contractors must ensure that no false, fictitious or fraudulent statements are made to a federal agency violation of this best practise is considered a criminal offense. This best practise is supported by TINA.

3. According to FAR subpart 9.5 the Conflicts of Interest best practise are federal statutes and regulations that prohibit contractors from discussing employment with certain federal officers and employees.
4. FAR Subpart 3.8 stipulates the statutory and contractual provisions that prohibit the giving or receiving of kickbacks for the purpose of improperly obtaining or rewarding favourable treatment in connection with a federal contract or subcontract.
5. Government contractors are prohibited from using appropriated funds to attempt to influence the award or modification of a contract (FAR Subpart 3.8).
6. Procurement Integrity means that government contractors are prohibited from obtaining contractor “bid or proposal” information or “agency source selection information prior to the award of a federal contract (FAR Subpart 3.8)

## 2.7 Conclusion

The above sections have provided an outline of the laws that govern the procurement process in the US as well as the steps conducted in the process itself. The overview shows that the US procurement framework is one that has been around for many centuries. Most importantly this overview shows that the procurement process is ‘post-emptive’, this means that one learns by trial and error. To reach such a comprehensive set of laws has taken many years and the laws are a result of the abuse and flaws that many have identified and exploited. However, for many firms the existence of the sheer number of laws deters them from applying for many Government contracts. This implies that a country needs to strike a balance and not allow regulations to be a deterrent. Compared to SA the US Government has more stringent control on tender applicants and on the private sector in general. This control has made the US Government the central locus of power and focus. This concept is similar to ‘steering’. The US Government has efficiently embodied the concept of steering and knows who is in charge of the system. In addition the US considers maintaining relationships with suppliers even after the job has been completed. This is something the SA Government may consider adopting because it encourages companies to play it safe and operate accordance with the law. The following section will provide an overview of the Malaysian Government procurement laws.

## *Chapter 6 - Part 3: Overview of Legislation governing the Malaysian Government tendering process*

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### **3.1 Introduction**

The following section will provide an overview of the current legislative environment affecting the procurement process in Malaysia. It is by no means an in depth analysis or critique of the current processes adopted in Malaysia but the information gleaned from this overview will provide insight into the laws and processes that Malaysia uses to enforce efficiency. These processes and laws will then be used to help inform the creation of the theoretical model.

### **3.2 Background**

Malaysia is a middle-income country and since the 1970s has transformed itself from a producer of raw materials into an emerging multi-sector economy (CIA World Fact Book, 2011). Malaysia has a GDP of \$416.7 billion and as of July 2011, the population was estimated at approximately 29 million (CIA World Fact Book, 2011). The top three majority ethnic groups are: indigenous Malays (the Bumiputera), Chinese Malay and Indian Malay (CIA World Fact Book, 2011). The Malaysian procurement market is worth almost a quarter of its GDP. In 2003, Malaysia spent approximately US\$26 billion on procurement (McDonald, 2008). The Malaysian currency is called the Malaysian Ringgit (MYR) and MYR 3, 00 is roughly equivalent to USD 1, 00 (Malaysian Currency Converter, 2011). According to Leemk (2007) The Malaysian economy is unusually reliant on the Government for its survival with 40% of publicly listed companies linked to the Government in addition the Government is heavily dependent on state oil producer, Petronas, which supplies more than 40% of Government revenue. The following sections provide an overview the Malaysian procurement legislative environment.

### **3.3 Legal and Organisational Framework**

According to the Asian Development Bank (ADB) and the Organisation for Economic Co-operation and Development (OECD) Anti-Corruption Report for Asia and the Pacific (2006) procurement in Malaysia is largely decentralized. The framework for public procurement consists of the Government Contract Act of 1949, the Financial Procedure Act of 1957, Treasury Instructions, Treasury Circular Letters, the Procurement Guideline Book as well as the Anti-Corruption Act of 1997 (Othman, Zakaria, Nordin, Shahidan and Jusoff, 2010) (see Figure 18). These instruments apply to procurement by all federal and state governments and semi-governmental agencies but not state owned enterprises (ADB and OECD, 2006). The Government Procurement Management Division of the Ministry of Finance sets the procurement policy rules and the Minister of Finance (MOF) of Chief Minister for the state procurement boards appoints a tender board in each procuring agency to administer specific requirements (ADB and OECD, 2006).

#### Government Contract Act 1949

The Government Contract Act of 1949 stipulates the rules governing the making of contracts on behalf of the Government, and the Governments of the various States (Government Contract Act 1949, 2011).

#### Financial Procedure Act of 1957

The Financial Procedure Act of 1957, stipulates the rules governing the control and management of the public finances of Malaysia, and for financial and accounting procedure, including procedure for the collection, custody and payment of the public moneys of the Federation and of the States, and the purchase, custody and disposal of public property, other than land, of the Federation and of the States (Financial Procedures Act 1957, 2011).

## Anti-Corruption Act of 1997

The Anti-Corruption Act was created to establish the Anti-Corruption Agency and to make further and better provisions for the prevention of corruption (Anti-Corruption Act 1997, 2011).

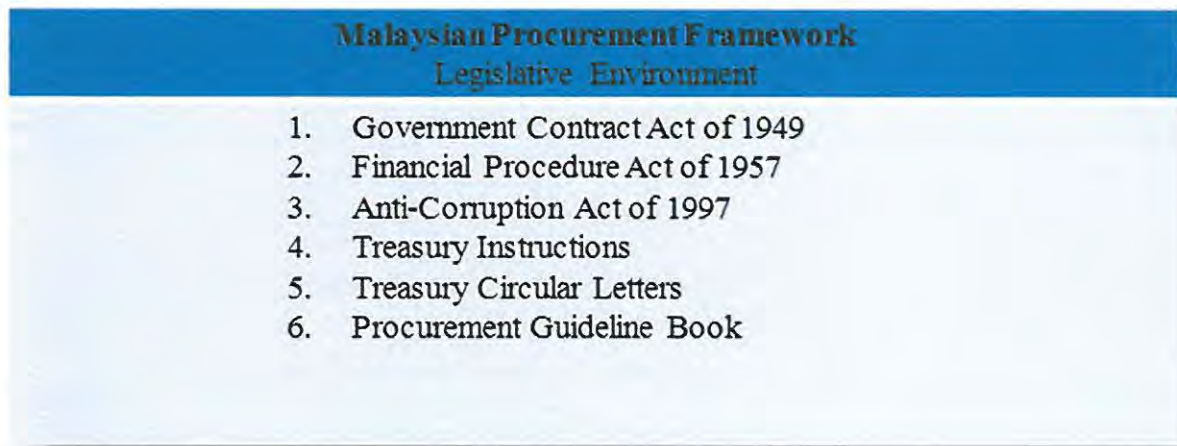


Figure 18: Malaysia's Procurement Framework adapted from Othman *et al.* (2010)

### 3.3.1 Public Procurement Classifications

There are 4 categories in which public procurement falls under in Malaysia namely: (1) Tender, (2) Open tender, (3) Quotations and (4) Direct purchase (Othman *et al.*, 2010).

3.1 **Tender:** is a term specifically for all public procurements which have a value above MYR 200,000 (Othman *et al.*, 2010).

3.2 **Open tender:** According to Othman *et al.* (2010) this category involves all tenders received from contractors who are registered with Minister of Finance, contractors who are listed under the Construction Industry Development Board (CIDB) of Malaysia and Contractor Service Centre. Some of the classes under the open tender category include:

- Limited for Bumiputera contractors only.

- Open tender based on a pre-qualification of contractors who are approved by the Treasury and who have the required experience, technical capability and financial stability to carry out the project.
- Limited tender is for products and services that do not exceed MYR 5 million and have the approval from the Procurement Board of that particular agency. All tenders that exceed MYR5 million must get the approval from the Treasury.
- Direct negotiation refers to the procurement process with potential contractors who are used for exceptional circumstances, such as projects that need specific expertise and they possess extremely high financial stability.

**3.3 Quotations:** According to Othman *et al.* (2010) this category contains quotations such as those outlined below:

- For purchases ranging from MYR 50,000 – MYR 200,000, the department needs to get quotations from at least 5 suppliers who are registered with MOF for the specific code of items being sourced.
- If the amount of the purchase falls between MYR 50,000 - MYR 100,000, then the quotations must be received from at least 5 suppliers with Bumiputera status and also registered with MOF for the specific code of items.
- Quotations are also required for work procurement. This refers to the costs involved for repair work that does not change the original structure of the building. These costs should fall into the range of MYR 20,000 and MYR 100,000. These would be based on the Civil Engineering Standard Method of Measurement (CESMM).

The contractor must be chosen by rotation or voting from the ‘Class F’ contractors in the district or the nearest district for such a project. The project also needs to be registered with the Contractor Service Centre for that specific class.

- Any work on repairs, maintenance or renovation that requires changes to either the original structure, electrical or mechanical settings, must be first referred to the Technical Department of the Treasury for their approval before quotations can be obtained.

**3.4 Direct purchase:** The fourth category of public procurements involves the purchase of goods and services of up to a value of MYR 50,000. Heads of Departments are allowed to source procurement from any company that is known to offer reasonable prices. For products or services procurement between the range of MYR 10,000-50,000 a year for any item or class of item, the respective government agency is allowed to purchase directly from any Bumiputera supplier who is registered for that particular class (Othman *et. al*, 2010).

The classifications stipulated by the Malaysian Government are very similar to the SA tender classifications specified in Part 1.

### **3.3.2 Public Procurement Procedures**

In Malaysia open tendering is used for procurements above MYR 200 000, closed tendering for procurements between MYR 50 000 and MYR 200 000, and direct purchasing for procurements below MYR 50 000 (ADB and OECD, 2006). For tenders that target local suppliers, the bidding period is 21 days. For international tenders, which arise only for goods and services that are not available locally, the bidding period is 56 days (ADB and OECD, 2006). Each procuring agency sets up a technical committee to determine the technical specifications of the tender. Under Malaysian rules, local tenders must be advertised in at least one local newspaper in the Malay language. International tenders must be advertised in at least one Malay-language newspaper and one English-language newspaper. Foreign embassies in Malaysia and High Commissions are also informed. All tenders, whether local or international, are posted on the websites of the procuring agencies and the central procurement website of the Malaysian Government (ADB and OECD, 2006). For each tender in Malaysia, a tender opening committee comprising senior government officials opens and records the bids in a register. Two other committees created by

the tender board evaluate the technical and financial aspects of the bids according to a scoring system. To enhance fairness, the evaluation committees do not know the identities of the tenderers. The evaluation committees report to the tender board or the Ministry of Finance (depending on the value of the procurement), which makes the final selection. In exceptional cases, the Cabinet will choose the winning bid and price and non-price factors are considered (ADB and OECD, 2006). The winning bidder is advised by letter. The relevant procurement board records but does not disclose the reason for selecting the winning bid. After awarding the contract, the procuring agency may send the successful bidder a letter of intent to clarify the specifications stipulated in the bid or to require additional contractual terms (Othman *et al.*, 2010). Failure of tendering occurs when no bidders meet the technical requirements, in which case the tender may be reopened with the approval of the tender board (ADB and OECD, 2006).

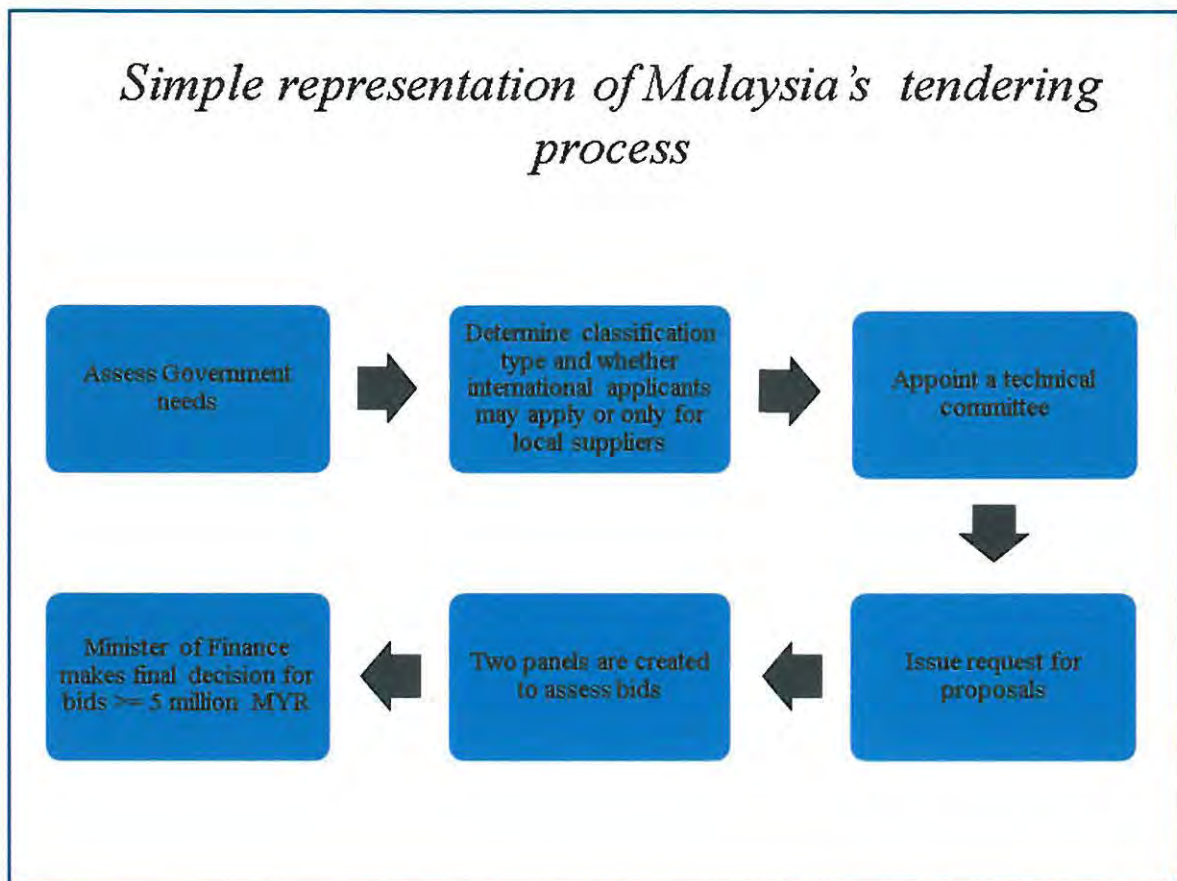


Figure 19: Simple representation of Malaysia's Procurement Framework

## 3.4 Transparency and Fairness

### 3.4.1 Transparency

There is no code of conduct in Malaysia that specifically targets procurement personnel. However, the Public Officers (Conduct and Discipline) (Amendment) Regulations 2002 contain conflict of interest provisions that apply to all civil servants (ADB and OECD, 2006; 2011). Procedures for procurement require procurement personnel with a conflict of interest to declare it and to withdraw from the process. To raise awareness of ethics, the National Institute of Public

Administration provides training that includes integrity issues to procurement personnel (ADB and OECD, 2006; 2011). The detection of corruption is strengthened by a mandatory requirement for public officials to report all attempts of bribery to the police or the Malaysia Anti-Corruption Agency. Giving or receiving a bribe is a criminal offense under the Anti-Corruption Act and the Penal Code. Corrupt officials may also be administratively sanctioned and their assets may be confiscated. Penal action cannot be taken against a legal person, but the Government may debar a company that has engaged in corruption (Othman *et al.*, 2010). The Government determines the length of debarment and advises all government agencies of its decision. Audits are also important review mechanisms. All procuring agencies in Malaysia have internal audit units that regularly examine weaknesses in and possible breaches of procurement rules. The Auditor General conducts external audits of procurement procedures and may order corrective actions. The reports of the Auditor General are published and presented annually to Parliament (ADB and OECD, 2006; 2011). Review mechanisms, however, are effective only if the documentation of procurement proceedings is complete and readily available. In Malaysia, all procurement actions and decisions are recorded and the records are kept between one and 20 years, depending on the nature of the document. The records are generally accessible only to authorized procurement personnel.

### **3.4.2 Fairness**

#### **3.4.2.1 Affirmative Action**

In response to major riots between indigenous Malays (the Bumiputera) and Chinese Malays who dominated the market in the late 1960s, the Malaysian government used public procurement preferences for both Bumiputera businesses and other domestic providers (McDonald, 2008). Procurement preferences in Malaysia have been one aspect of a strategy to generate investment-led economic growth, which together with redistribution secured racial stability. Linking preferences to growth ensured that the Bumiputera businesses could be strengthened without squeezing out those belonging to Indian and Chinese minorities (McDonald, 2008). This strategy has been criticised due to evidence of political corruption by Malaysian officials in the awarding

of contracts. This appears to be due to the lack of accountability, redress or transparency in the system rather than the policy (McDonald, 2008).

#### **3.4.2.2 Complaints and Review Mechanisms**

Complaint and review mechanisms allow bidders to verify that the procurement process conforms to the prescribed procedures (ADB and OECD, 2006; 2011). The possibility of review is also a strong incentive for procurement officials to abide by the rules. Malaysia offers bidders a multitude of channels for complaint. A failed bidder may complain to a procuring agency, which may cancel a tender if it finds any irregularities. An aggrieved bidder may also complain to the Public Complaints Bureau, the Anti-Corruption Agency Malaysia, or the Public Accounts Committee. In addition, the Monitoring and Control Division of the Ministry of Finance monitors adherence to procurement rules, and may also set up special task forces to investigate complaints (ADB and OECD, 2006; 2011). The Minister of Finance, however, has the ultimate decision-making authority regarding complaints (ADB and OECD, 2006).

### **3.5 Conclusion**

The above sections have provided an outline of the laws that govern the procurement process in Malaysia as well as the steps conducted in the process itself. The procurement process in Malaysia is predominately decentralised, whether or not a centralised or decentralised process is more efficient is not the important, what is important is that each country understands its own needs and abilities and assess which option is more efficient. This implies that Governments must be aware that the procurement process should be top down as well as bottom up. What may be gleaned from the above overview is that the creation of a technical committee and the evaluation by separate boards or members may be advantageous. Secondly the abuse of the tendering process is not only akin to SA, especially with regards to Preferential Laws, this implies that the existing laws lend themselves to abuse. The following will section will provide an overview of the Australian Government procurement laws.

## *Chapter 6 - Part 4: Overview of legislation governing the Australian Government tendering process*

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### **4.1 Introduction**

The following section will provide an overview of the current legislative environment affecting the procurement process in Australia. It is by no means an in depth analysis or critique of the current processes adopted in Australia but the information gleaned from this overview will provide insight into the laws and processes that Australia uses to enforce efficiency. These processes and laws will then be used to help inform the creation of the theoretical model.

### **4.2 Background**

Australia possess extensive reserves of coal, iron ore, copper, gold, natural gas, uranium, and renewable energy sources as a result the country attracts a high level of foreign investment (CIA World Fact Book, 2011). In 2010 Australia's GDP was estimated at USD \$889.6 *billion, with per capita GDP of USD \$41, 300 (CIA World Fact Book, 2011)*. The Australian Government is a significant purchaser of goods and services in Australia and Government procurement activities are worth around AUD \$24 billion per annum (Australian Government, 2009). The Australian Government is committed to closing the gap between indigenous and non-indigenous Australians in health, education and other life opportunities and believes that procurement policies can play a role in expanding opportunities for disadvantaged Australians (Australian Government, 2009).

### **4.3 Legal and Organisational Framework**

Legislative and policy environment in which public procurement operates in Australia is governed by the Constitution, the Financial Management and Accountability Act 1997, Commonwealth Authorities Companies Act 1997, the Public Service Act of 1999 and the Crimes Act of 1914 (Department of Finance and Deregulation, 2008). The Australian Government

prohibits agencies from entering into contracts with suppliers who have a judicial decision against them for unpaid employee entitlements (Australian Government, 2009). This means suppliers or tenderers must comply with the Fair Work Act of 2009. The policies enshrined in the Constitution are those of value for money and open competition as well as mandatory reporting (Department of Finance and Deregulation, 2008).

#### Crimes Act of 1914

According to the Commonwealth Director of Public Prosecutions (2011) the Crimes Act of 1914 deals directly with a number of evidentiary and procedural matters. Where it applies, it excludes State and Territory law. The Crimes Act of 1914 also contains some general provisions that apply in all Commonwealth matters.

#### Financial Management and Accountability Act 1997

The main purpose of this Act is to provide a framework for the proper management of public money and public property. Broadly, those terms refer to money or property that is owned or held by the Commonwealth, including money or property held on trust. Many of the rules in this Act apply to officials of Agencies<sup>5</sup> and to Chief Executives of Agencies (Financial Management and Accountability Act, 1997).

#### Commonwealth Authorities Companies Act of 1997 (CAC)

This Act regulates certain aspects of the financial affairs of Commonwealth authorities. In particular, it has detailed rules about reporting and accountability. This Act also deals with other matters relating to Commonwealth authorities, such as banking and investment and the conduct of officers (Common Authorities Companies Act, 1997).

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<sup>5</sup> In the Financial Management and Accountability Act 1997, *Agency* means: (a) a Department of State: (i) including persons who are allocated to the Department (ii) but not including any part of the Department that is a prescribed Agency; (b) a Parliamentary Department, including persons who are allocated to the Department (for the purposes of this Act) and (c) a prescribed Agency.

### Public Service Act of 1999

According to the Public Service Act of 1999, its main objectives are: (a) to establish an apolitical public service that is efficient and effective in serving the Government, the Parliament and the Australian public (b) to provide a legal framework for the effective and fair employment, management and leadership of Australian Public Service (APS) employees; and (c) to define the powers, functions and responsibilities of Agency Heads, the Public Service Commissioner and the Merit Protection Commissioner and (d) to establish rights and obligations of APS employees.

### Fair Work Act of 2009

The Fair Work Act 2009 establishes the new framework for workplace relations in Australia. Commonwealth agencies will be responsible for ensuring that suppliers and their sub-contractors comply with the relevant provisions of the Fair Work Principles. The Principles support the creation of quality jobs and decent work by ensuring that procurement decisions are consistent with the Fair Work Act 2009 (Australian Government, 2009).

The Government's procurement policy framework consists of three types of documents: (1) The Commonwealth Procurement Guidelines (CPG's), issued by the Finance Minister, which establish the procurement policy framework, (2) the Finance Circulars, issued by the Department of Finance and Deregulation, which advise of key changes and developments in the Government's procurement policy framework and (3) a range of web-based and printed guidance documents, developed by Department of Finance to assist agencies to implement the Government's procurement policy (Department of Finance and Deregulation, 2008). The most important of the documents identified, are the CPG's, which represents the policy framework under which agencies govern and undertake their procurement (Department of Finance and Deregulation, 2008). These Guidelines are issued under the Financial Management and Accountability Regulations 1997. The document that outlines the CPG's is divided into two divisions. Division 1 is entitled, Procurement Principles and it contains details of principles such as: (1) value for money, (2) ways to encourage competition, (3) methods of encouraging efficient, effective and ethical use of resources as well as (4) accountability and transparency

(Department of Finance and Deregulation, 2008). Division 2 is entitled, Mandatory Procurement Procedures and it contains, tender selection methods, conditions for participation, awarding of contracts and notification of decisions (Department of Finance and Deregulation, 2008). It is important to note that the procurement policy framework outlined in the CPGs applies to all matters related to the procurement of property or services, irrespective of whether those matters are specifically mentioned in the CPGs (Department of Finance and Deregulation, 2008).

The procurement policy framework is a subset of the financial management framework related to the procurement of property or services (Department of Finance and Deregulation, 2008). Breaches of the financial management framework, in relation to procurement, may attract a range of criminal, civil or administrative remedies (including under the Financial Management and Accountability Act 1997, the Public Service Act 1999 and the Crimes Act 1914) (Department of Finance and Deregulation, 2008)(see Figure 20).



Figure 20: Australia's Procurement Framework

### 4.3.1 The Process

Value for money is the core principle underpinning Australian Government procurement (Department of Finance and Deregulation, 2009). According to the Department of Finance and Deregulation (2008) value for money is achieved through:

1. Encouraging competition
2. Promoting efficient, effective and ethical use of resources
3. Accountability and Transparency.

According to the Department of Finance and Deregulation (2009) in Australia value for money is not just about price. A value for money assessment is based on public conditions for participation and evaluation criteria which includes some of the following factors:

1. The relative risk of the proposal
2. The performance history of the supplier
3. All direct and indirect financial costs and benefits over the life of the procurement (including any on-going maintenance costs)
4. The flexibility of the proposal to adapt to possible change
5. The anticipated price that could be obtained, or cost incurred, at the time of disposal.

Agencies must comply with a range of mandatory obligations and procedures where the value of the goods and services they are buying exceed applicable thresholds set by the Australian Government. By following these strict procedures, agencies offer a process that is transparent, accountable and equitable for all competing suppliers (Department of Finance and Deregulation, 2009). The value thresholds that trigger the mandatory procurement procedures that agencies need to follow vary according to the type of agency and the nature of the procurement. The thresholds for all non-construction procurements are AUD \$80 000 for FMA agencies and AUD \$400 000 for Commonwealth Authorities Companies Act agencies. The threshold for procurements of construction services is \$9 million for all agencies.

Agencies have more flexibility to decide on a procurement process appropriate to the scale, scope and relative risk of the proposed procurement (Department of Finance and Deregulation, 2009). Examples of goods or services that may fall below significant threshold are:

1. An over-the-counter purchase
2. A limited invitation to one or more suppliers for oral or written quotes
3. An approach to the market through limited invitations to tender
4. A public approach to the market through an open tender process.

Regardless of the fact that few procedural rules apply to procurements below the threshold, agencies are still committed to ensuring equitable treatment of competing suppliers and achieving value for money.

Procedural rules apply to all procurements valued above applicable thresholds, unless covered by specific exemption. The procedures are based on underlying assumption that that there will be an open approach to the market, unless certain limited circumstances apply. The procedures allow for the following procurement methods:

1. Open tendering
2. Select tendering, usually following an open process to the market, to short listed suppliers
3. Direct sources (only permitted in limited circumstances) see Table 7.

Table 7: Range of Procurement Methods adapted from Department of Finance and Deregulation of Australia (2009)

Procurement method	Approach to the market	Description
Open tendering	Open approach in the form of a <b>Request for Tender.</b>	Agencies use an open request for tender to publicly invite all potential suppliers to bid for the work: <ul style="list-style-type: none"> <li>• Interested suppliers may respond by providing the required information</li> <li>• All responses are evaluated against the stated selection criteria</li> <li>• The preferred supplier is then selected.</li> </ul>
Select tendering	Agency selects a number of potential Suppliers.	Agencies may conduct a select tender process by: <ul style="list-style-type: none"> <li>• Selecting from suppliers listed on a multi-use list<sup>6</sup></li> </ul>
Direct sourcing	Direct approach to a single supplier or a limited number of suppliers.	Agencies directly approach one or more potential suppliers permitted only in specific circumstances

The actual tendering process followed by the Government agencies includes the following six steps:

1. *Planning the procurement*: this step is where the agency defines its desired outcome and specifications, identifies risk and develops its business case.
2. *Deciding which process to use*: this is where the agency determines whether open tendering, select tendering process or direct source approach will be used.

<sup>6</sup> Multi-use lists are lists of all suppliers who have satisfied certain preconditions to supply particular goods and services.

3. *Approaching the market*: means that the agency approaches the market using whichever process it decides is most appropriate and the general principle is that all suppliers are provided with an equal opportunity to make a submission.
4. *Evaluating submissions*: the agency evaluates submissions in accordance with the procedures and criteria outlined in the request document, then selects a preferred supplier and notifies unsuccessful tenders.
5. *Concluding the process*: this is where the agency awards the contract to a specific tenderer.
6. *Managing the Contract*: the agency will manage the contract to ensure on-going performance and that value for money has been achieved.

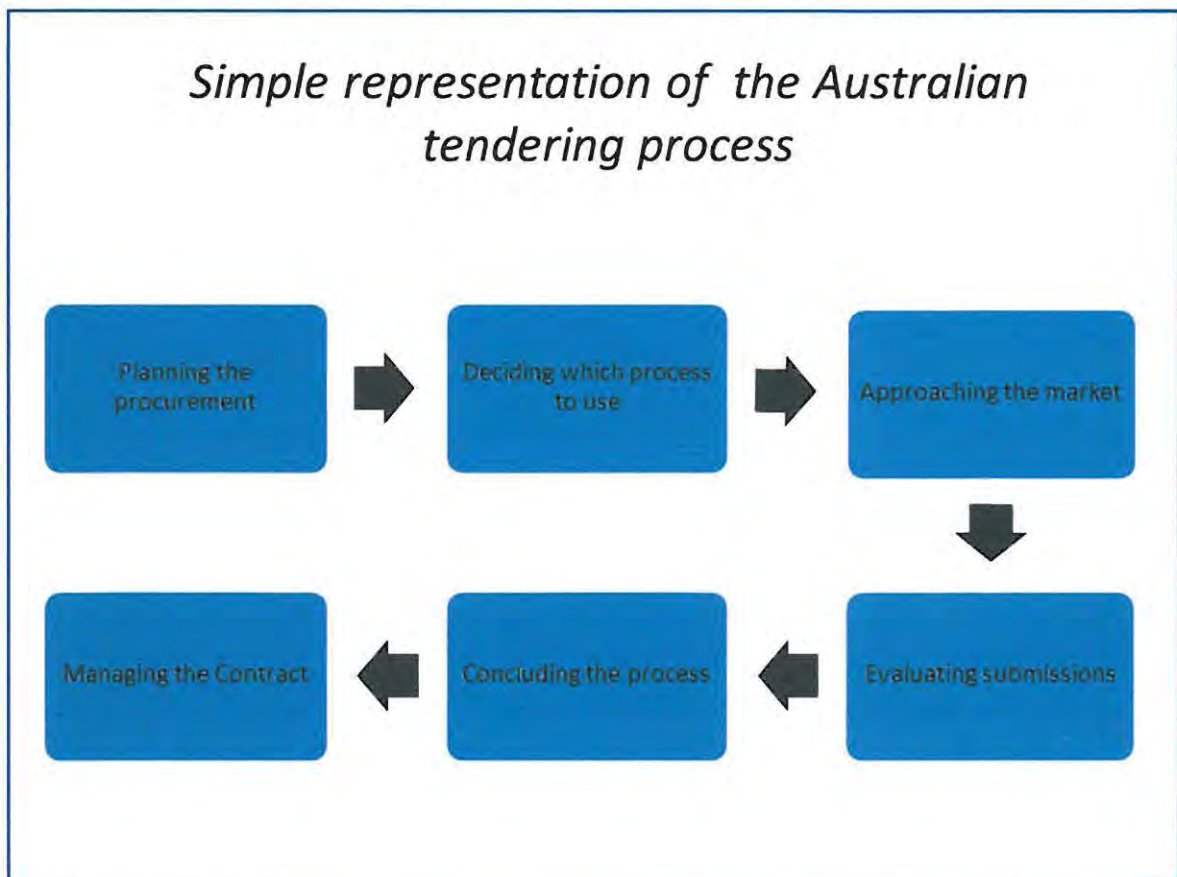


Figure 21: Simple representation of the Australian tendering process

## **4.4 Transparency and Fairness**

### **4.4.1 Transparency**

The main source of information about the Commonwealth Government procurement market is AusTender, a Government website that provides information about contracts across the Commonwealth (Australian Government, 2009). In particular AusTender provides centralised publication of Australian Government business opportunities, annual procurement plans, multi-use lists and contracts awarded (AusTender, 2011). AusTender is a key component of the Government's commitment to transparency and accountability in government procurement. It includes information on:

1. All Commonwealth procurement contracts and agency agreements above AUD \$10,000, including standing offers. Contract information reported on AusTender includes (but is not limited to) agency details; supplier details; contract details; contract value; start and end dates; procurement method; consultancy information; and confidentiality information.
2. Agency Annual Procurement Plans (APPs), which draw suppliers' early attention to potential procurement opportunities. Agency APPs contain a short strategic procurement outlook for the agency supported by details of any planned procurement.
3. All new tendering opportunities – by registering on AusTender suppliers can 'opt-in' to be informed electronically about government tenders and other approaches to the market in areas of interest that they indicate.

### **4.4.2 Fairness**

The Government expects all tenderers to meet their legal obligations under the *Fair Work Act*. This includes obligations regarding legislated minimum standards, rights of freedom of association, and access to dispute resolution processes (Australian Government, 2009).

#### **4.4.2.1 Disability services**

The procurement of property or services from a business that primarily exists to provide the services of persons with a disability is now exempt from the Mandatory Procurement Procedures, which means that those businesses are not required to devote resources to preparing tenders and can now be engaged directly by agencies to deliver the services of persons with a disability (Australian Government, 2009).

#### **4.4.2.2 Indigenous procurement opportunities**

The Government's Indigenous Opportunities policy applies to projects with expenditure over \$5 million (\$6 million for construction and related facilities) undertaken in areas that have significant Indigenous populations with limited employment and training opportunities. This policy requires agencies undertaking such projects to consult the Department of Employment, Education and Workplace Relations with a view to consideration of training and employment opportunities for indigenous people and of the capabilities of local indigenous suppliers (Australian Government, 2009).

### **4.5 Conclusion**

The above sections have provided an outline of the laws that govern the procurement process in Australia as well as the steps conducted in the process. The overview of the relevant legislation as well as the process revealed that the performance history of the tender applicants is one of the factors considered when selectors are making a decision. In addition the process encourages notification of unsuccessful applicants, however, does not disclose why they were unsuccessful.

## *Chapter 6- Part 5: Lessons learnt*

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### **5.1 Introduction**

In South Africa there seems to be a misconception that tender scandals currently occurring are somewhat a problem akin to South Africa. An overview of four countries has shown that South Africa is not special and therefore cannot be exempt from the problems that seem to surround the tendering process. The overview showed that South African procurement is quite susceptible to malpractice as the Defence controversies of 1996 showed; US had a similar scandal with the Defence scandals of 1980's. Similarly corruption with tenders especially with regards to Affirmative action is also prevalent in Malaysia, and in Malaysia the cause is said to be as a result of a lack of transparency and accountability (McDonald, 2008). From the overview it may be gleaned that a procurement process may have levels of maturity and that experiential training is one of the factors that facilitates growth and adaptability. Although experiential training would be ideal, if the problems being experienced in these other countries are also occurring in South Africa. This implies that the solutions that may have worked in those countries may work in South Africa, if it is prepared to learn from these other countries.

The processes of the various countries seem to have similarities and it can be assumed from the information presented that the tendering process has three phases the pre-tender phase the decision making phase and finally the post tender phase. In developing countries it seems that the process is often cut short and it ends at the decision making phase. The post-tender phase is crucial and should not be ignored.

### **5.2 Crucial Aspects of the Procurement Process**

From the overview it became apparent that there are certain aspects of procurement that are crucial for its proper application and success. These points are outlined below:

1. Government power, authority or autonomy
2. Transparency and Accountability
3. Competition and Fairness
4. Ethical considerations

### **5.2.1. Government Power**

Government's power may be enhanced through information or knowledge of the existing market conditions, the legal and political as well as general media. The Australian Government as well as the US Governments seemed to value information tremendously and as a result have more control of potential contractors. Nonetheless Governments need to be weary of excessive laws and control because this may be a disincentive for many firms. According to Potoski (2008) onerous procurement regulations means that the time and effort government managers devote to complying with regulations outweighs the benefits the regulations were intended to produce. Many potential subcontractors are also weary of participating in Government tenders as the process may become drawn out because of the excessive rules and procedures (Potoski, 2008). Again a balance needs to be found and maintained.

Governments need to also project an image that corruption and poor quality will not be tolerated and that there will be punitive measures should the final product or service be considered unsatisfactory. This implies that governments need to draw up quality assessment criteria, which will allow them to assess the performance of the selected contractor. This implies that Governments need to be more hands-on in the process. Governments become more hands-on if they adopt a top-down as well as a bottom-up approach, succinctly this means feedback is required from the bottom levels to inform policy at the top levels. This idea is supported by Thai (2001) who believes the tendering process may be represented as a system. In such a system feedback is crucial as it informs both policy and the people working in the system. Lastly Government departments in other countries have audit units that regularly examine weakness in and breaches of the procurement rules.

### **5.2.2. Competition and Fairness**

In the countries studied, competition and fairness was a principle that seemed to be ubiquitous, ideally all Governments strive for a procurement process that is seen to be fair as this encourages a fair, competitive environment. However, many of the Governments have multiple practices that seem to undermine this objective e.g. Governments do not disclose the criteria by which a contractor is selected or not selected. Unsuccessful applicants need to be notified as to why their

application was unsuccessful. The fact that a black –box exists in this areas implies that the criteria on which the decision is based are not consistent or dubious for many firms, this is a deterrent, this implies that suppliers in the market are not all taking part. Secondly, Government attempts to fight corruption need to be seen as effective, many firms, again do not apply for government tenders as they see the procedure as a waste of time because they deem the selection process to be ‘rigged’ (Business Anti-Corruption Portal, 2011). This implies that Governments need to actively minimise the cracks in the system.

### **5.2.3. Transparency**

This is achieved through the use of an open process that provides feedback to bidders when a final bid is selected as well as through websites where the Government will broadcast any potential upcoming opportunities. Feedback is crucial at all levels for all those involved in the process from those that are designing policy all the way down to the federal employees as well as potential suppliers.

### **5.2.4. Ethical considerations**

What was evident with regards to ethical considerations is that countries have made tremendous strides in creating punitive measures for organisations and companies but the individual is still not held liable or punished for partaking in illegal activity. In the various countries analysed, best practice rules are in place and training courses are available that provide awareness and rules to follow should a federal employee be bribed, however, the onus rests with the employee whether or not to report such behaviour. The procurement process legislation in the various countries is very imbalanced. More pressure lies with the tender applicants, they experience more repercussions and they aren’t provided with feedback. For many these odds are not worth applying for tenders, this implies the objectives of fair competition envisioned by the various Governments are being undermined. Secondly the lack of education of staff is a hindrance to the efficiency as the benefits of knowledge cannot be fully utilised and leveraged in the pre-tender phase as well as the post-tender phase.

### 5.3 South Africa's performance

If we create a score card for the various countries and we judge their procurement process based on the key aspects identified as well as feedback, and we allocate points to each aspect, we will find that America and Australia are tied and receive the highest points, Malaysia is second last and South Africa is ranked last. The rankings were calculated as follows: Each of the components necessary to achieve a particular aspect were added together and the total number of the components, then become the total number allocated to that critical aspect. *Government power*, is informed by the number of laws drawn up by the respective government and whether those laws target both companies and federal employees as well as the perceptions potential tender applicants have of the Governments attempts to fight corruption the final aspect is Government Autonomy. *Competition and Fairness* in terms of this study is said to be directly related to the level of perceived trust potential suppliers have in the fairness of the system. The level of perceived trust is determined by Governments efforts to combat corruption and create fairness in the process. If they believe this is compromised fair competition will not be attainable. *Transparency* is how easy it is to find out information about the various tenders government has on offer, whether or not governments use a website and whether or not feedback is used in the system. Ethical considerations involve guidelines and existing procurement guideline books, level of training for staff, the staff's existing level of education and whether or not federal employees are held liable when they break laws.

**Table 8: Points Table**

		Countries			
Criteria		SA	USA	Malaysia	Australia
<b>Government Power (9)</b>	Number of laws (1)	1	1	1	1
	Laws target company and employees (2)	2	2	1	2
	Perceived Government efforts to fight corruption (3)	1	3	2	3
	Government Autonomy (3)	1	3	2	3
<b>Competition and Fairness (2)</b>	Perceived level of trust (2)	0	2	1	2
<b>Transparency (3)</b>	Ease of access to tender information (1)	1	1	1	1
	Website (1)	1	1	1	1
	Automatic feedback (1)	0	0	0	0
<b>Ethical (5)</b>	Guideline books (1)	1	1	1	1
	Level of training for staff (1)	1	1	1	1
	Staff existing level of education (3)	1	3	1	3
<b>Total: 19</b>		<b>9</b>	<b>17</b>	<b>12</b>	<b>17</b>

South Africa’s total score shows that the procurement process is not only affected by the laws and processes of a country but the perceptions of all the parties involved e.g. suppliers. The laws currently in place are as comprehensive as those found in developed countries. The problem lies in the process itself. The process currently being used does not leverage knowledge and as a result, proper risk assessments are not being used. Secondly, the tendering process in SA government institutions does not have a post-tender phase. The post-tender phase is crucial as it forces companies to always ensure they are meeting the predetermined goals. Lastly the lack of education of federal employees is also a hindrance; a comprehensive list of technical quality assessments criteria is not being created to help in the evaluation of the performance of successful tender applicants. This implies that the SA government needs to pay more attention to the pre-tender and post-tender process. The South African Government score was on par with the various countries studied, in the Transparency category although a considerable amount of work still has to be done in this area with regards to suppliers; South Africa scored well because the country already has a form of feedback system currently being used. The South African

government uses the MTEF; this implies that the individual department needs of each province are fed up to the top of the chain and are used to inform policy.

## **5.4 Conclusion**

In the overview of various countries both developed and developing, there seems to be a general consensus that procurement is vital for the economy and that it may be used as a tool for redistribution of wealth to previously disadvantaged persons irrespective of whether the equality resulted through a formal process of systematic exclusion or was just a result of chance (Smith, 2010). It seems that all countries consider procurement the avenue by which to achieve socio-economic objectives. In addition there seems to be an emphasis on the principles of value for money and fair competition. Lastly the problem of corruption in the tendering process seems not only to be a problem found in South Africa but is experienced in all these countries to varying degrees. These countries show that one of the causes of corruption in the tendering process is lack of transparency, staff level of education and lack of feedback.

This concludes the literature review. The following chapter amalgamates the information presented in the literature review and constructs the theoretical framework.

# Chapter 7: Theoretical Framework

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## 7.1. Introduction

The previous chapters showed that the tendering process is affected by social factors, organisational culture, supply chain relations, corruption and psychological factors. The psychological factors in particular refer to the perception with which companies view government efforts to combat corruption. The previous chapters also showed that in some developing countries the tendering process is viewed as a tool to facilitate redistribution of wealth to previously disadvantaged individuals and areas. Lastly, in the various countries analysed, there seemed to be general consensus as to what an ideal tendering process should aim to achieve. In summary the countries studied indicate that the tendering process should be fair, have good governance and authority, promote fair competition and fairness, encourage transparency and have ethical considerations.

This chapter initially explores the steps and stages of what may be considered an ideal standard tendering process and examines the Wang and Ahmed (2005) framework that has been proven to enhance organisational performance. Finally a theoretical framework is developed that identifies how knowledge management concepts identified in the Wang and Ahmed (2005) framework may be infused into the tendering process to enhance efficiency and ultimately increase performance. It is hoped that the framework serves to inform this research study of how knowledge management concepts may be used to enhance the tendering process.

## 7.2. A Standard Tendering Process

Table 9 summarises the steps followed by various countries when conducting their respective tendering processes. Of the various countries studied, the South African tendering process steps were by far the most difficult to identify and as a result, an inference analyses of the various policies and frameworks was used to extrapolate and create a simple diagram of what the tendering processes in government institutions include in South Africa. From Table 9 a few inferences may be made, the tendering processes in these various countries may either be

centralised or decentralised, and on average a tendering process includes a minimum of 5 stages and a maximum of 6 stages.

Table 9: Summary of various countries' Tendering Process

Countries	Tendering Process Stages					
	Stage 1	Stage 2	Stage 3	Stage 4	Stage 5	Stage 6
<b>Australia</b> (decentralised)	Planning the procurement	Deciding which tender type method to use	Approaching the market	Evaluating submissions	Concluding the process	Managing the process
<b>Malaysia</b> (decentralised)	Assess government needs	Determine classification type and whether aimed at local or international suppliers	Appoint a technical committee	Issue request for proposals	Two panels created to assess bids	Minister of Finance makes final decision for bids greater than 5million MYR
<b>South Africa</b> (decentralised)	Assess government department needs	Determine which tender type to use	Issue request for proposals	Evaluate submissions	Select contractor paying considerable attention to Government policy	
<b>United States (US)</b> (decentralised)	Assess government needs  Assess ability to meet those needs	Government solicits requests for proposals	Bids received and reviewed	Select best bid considering cost performance and risk	Monitor performance and manage relationship with contractor	

### Stage 1

Stage 1 begins with an analysis of the business needs, establishing the goals and objectives of the project. What is interesting is that only the US considers the practicality of actually meeting the identified needs. Given the fact that the South African Government departments are hampered by

a skills shortage it would be an added consideration to factor in whether the department has the manpower to facilitate the overview of a particular project (see Chapter 4, and Chapter 5). Although this is stated in the SCM Framework it needs to be actively implemented (see Chapter 3).

### Stage 2

On average Stage 2 involves determining the scale of the project and deciding on how to approach the market. This is similar to Acquisition Management stages as defined by the SCM Framework (see Chapter 3). However, how the final product will be assessed was not stipulated by all the countries? It is interesting to note that in the SA SCM Framework the Acquisition Stage involves a step where bid evaluation criteria are determined (see Chapter 3). This means in addition to identifying the scope of the project Stage 2 should also include quality assessment criteria.

### Stage 3

Only two countries considered stage 3, the stage to issue a request for proposals, the other countries issued a request for proposals, either in stage 2 or stage 4. The other two countries' have different processes. In particular Malaysia during this stage appoints a technical committee comprising of experts. The tacit knowledge possessed by these individuals is leveraged and used to facilitate the decision-making process. In this context, a technical committee may comprise of people who are considered experts in determining whether a bidder's price is competitive and understand the technical jargon of the industry from which the suppliers will be selected. What is interesting is if one refers back to Chapter 6, we find that in Malaysia the evaluation of bids are done by two separate panels. This would imply that if both panels selected the same bidder, then that it is by far the most competitive applicant. The idea of having two panels is then a good way to certify that the goals of value for money and fair competition are upheld in the process. The tacit knowledge possessed by these experts may be applied in other situations, this implies should governments use the principles of knowledge identification, knowledge acquisition and knowledge codification as well as knowledge storage, they would be enhancing their efficiency

because they would be promoting reuse and possibly decreasing costs (see Chapter 2 and Chapter 6).

#### Stage 4

Upon looking at Table 9 it becomes evident that Stage 4 is the stage where most of the countries evaluate submissions (see Chapter 6). In the analyses of these various countries the concepts of risk, performance and cost were crucial in the selection process. These concepts are paramount in motivating contractors to increase efficiency and lower risk which ultimately drives down costs. These details may be facilitated by knowing which contractors are reliable and which are less so, this may be fostered through the use of knowledge storage where the performance of past contractors is recorded. When governments focus on these elements they are encouraging competition and contributing to an efficient market environment. This means the South African Government needs to strike a balance between helping to achieve policy objectives as well as contributing to an efficient market environment.

#### Stage 5

For two countries, Stage 5 was the last stage of the tendering process. This stage involves selecting the “best bid”, notifying the contractor and drawing up the contracts or service level agreements. This is the stage where most countries leave their tendering process and indeed this would seem to be the case in South Africa (see Chapter 6).

#### Stage 6

In Stage 6, it appears as if only developed countries, as in the USA and Australia have a step that involves monitoring the process which the developed countries do not seem to have. Malaysia has a stage 6 but it consists of selecting the “best bid” which is done by the Minister of finance for bids worth 5million MYR or more. The US process seems to end at Stage 5 but this stage involves monitoring the performance of the contractor. Considering that this country is ranked higher on the Points table it would be advisable that the standard tendering process incorporate steps to manage the contractor’s performance and maintain good rapport with the contractor. This knowledge is facilitated through the implementation of knowledge storage as identified in Chapter 2.

In addition to the observations identified through the literature, Figure 22 is a graphic representation of an efficient and effective procurement system as used in many Australian Government agencies. The concepts of risk, cost, relationship management and scope definition are present. What is also interesting is the fact that Stage 1 has a supporting process, which involves some understanding of policy or existing legislation. This would imply that the standard process should have some form of Legislation component. This is further supported by the legislation section as identified in Chapter 6. In all the countries analysed the tendering process is heavily affected by legislation.

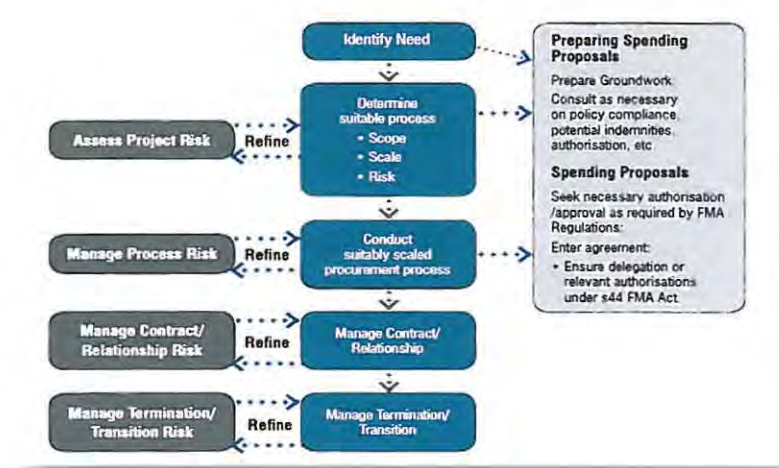


Figure 22: Efficient and Effective Procurement Process adapted from Department of Finance and Deregulation (2008)

### Transparency

An effective public procurement system is a system offering a high level of transparency, accountability and value for money (see Chapter 6). Transparency in the tendering process is considered fundamental and all countries studied considered it a vital element in the tendering process. The question that is never asked however is transparent to whom? The countries studied believed transparency was achieved if the citizens and suppliers or interested contractors could easily find information about available tenders<sup>7</sup> (see Chapter 6). To the various countries transparency meant the reach of their advertisement. Although transparency is achieved for

<sup>7</sup> Information is widely available on government websites, government gazettes (see chapter 6)

citizens, transparency is partially achieved for suppliers and potential contractors. It is partially achieved because bidders are not automatically notified as to why their bid was unsuccessful thereby allowing them in future to ensure that the mistakes made in the past are not repeated. There are channels available for them to issue this request but the timeliness of the data is an area of concern. This would be a perfect instance where KM may be leveraged as if the common mistakes were to be identified and stored this would allow for bid application forms to be easily updated therefore increasing the number of competitive bids. Secondly the lack of feedback and continual rejection of a bidder or potential contractor results in a disincentive to continue to submit applications for bids as they believe their attempts are futile. This implies that the concepts of perfect competition and value for money are not achieved, as those applying for bids do not fully represent the market environment. This indicates that the concept of feedback for suppliers needs to be factored into a standard tendering process if transparency is to be achieved. Finally, Figure 23, represents all the steps identified for an efficient and effective standard tendering process.

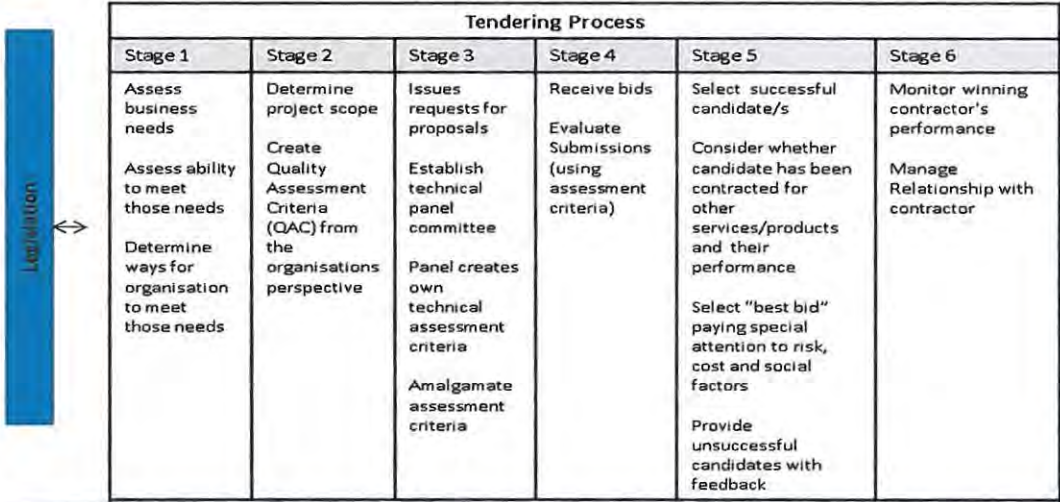


Figure 23: Standard Tendering Process

### 7.3. The Knowledge Value Chain by Wang and Ahmed (2005)

In Chapter 2, the Knowledge Value Chain by Wang and Ahmed (2005) (see fig 24) was introduced and explained. In this section the justifications for its use will be clarified as well as

why KM is seen as a plausible approach to facilitate the creation of an enhanced tendering process. It has been communicated in the previous chapters that Knowledge Management may be used as a tool to increase competitive advantage (Wang and Ahmed, 2005).

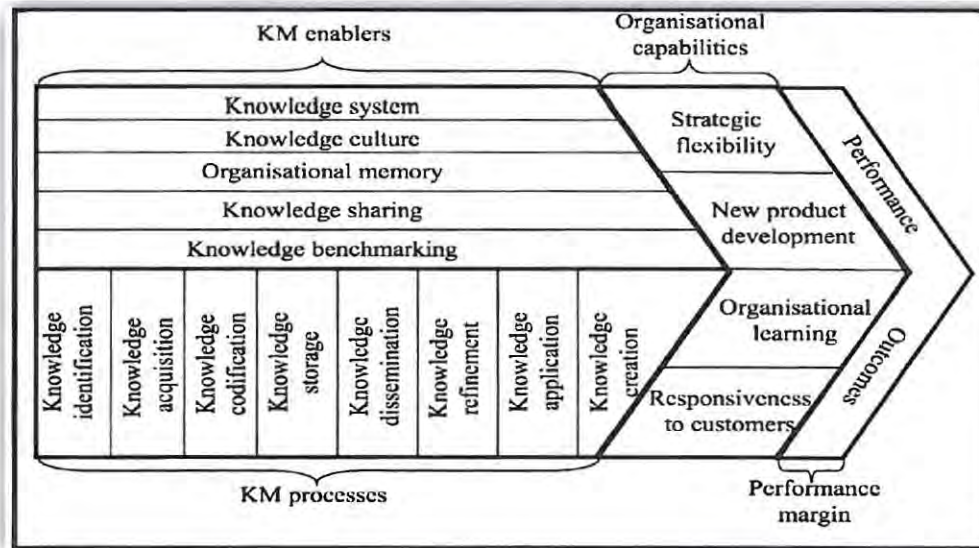


Figure 24: Knowledge Value Chain by Wang and Ahmed (2005)

The topics presented in the preceding chapters may be considered crucial in aiding the implementation of KM. In particular, Chapter 4 on Organisational Culture, is particularly overlooked in the KM implementation process and paradoxically it may be one of the factors that has the most influence. Hart (2004), as stated in Chapter 3, agrees with this sentiment and believes that the power to drive innovation within organisations lies within the people rather than the technology. This implies if one lobbies the people, then the process as a whole may have a higher likelihood of success. The Knowledge Management Framework proposed by Wang and Ahmed (2005) has factored in organisational culture, and in addition, the framework allows for input from external factors which means it encourages the concept of innovation and benchmarking are the reasons for its use as it can be seen as a holistic approach to problem solving in organisations. It is a framework that may be easily overlayed to any organisation and even a process. It encourages organisations to solve problems holistically to consider outside information and see how it may be applied in an organisational context. It promotes the concept of reuse which promotes efficiency and increases performance. Lastly it is considered a

pragmatic tool for enhancing organisational capabilities, strategic flexibility and organisation learning (Najmaei and Sadeghinejad, 2009). Because the framework belongs to the discipline of Knowledge Management and in addition many principles of KM have been proven to increase firm performance, this is why KM concepts were seen as valid tools to assist in the creation of an efficient tendering process.

#### **7.4. The tendering process enhanced by Knowledge Management concepts**

If the Standard Tendering Process and the Knowledge Value Chain are amalgamated it is implied that the application of the framework in an organisation to a particular process should result in some form of improvement. The literature review has identified some of the pertinent factors that are essential for an efficient tendering process. The Knowledge Management discipline has provided a framework that has been proved and tested to be a pragmatic tool in facilitating the creation of efficiency within an organisation now this research seeks to apply it to a specific process that is conducted in organisations. Figure 25 is a graphical representation of a proposed tendering process enhanced by KM concepts. The respective components are numbered 1 to 8 and will be explained in further detail.

Section 1, 2, 3 and 4 are all derived from the Wang and Ahmed (2005) Framework. These are the concepts of KM that have been used to enhance efficiency of the tendering process and these elements were all found in Chapter 2.

Section 5 is related to supplier relations and the concept of feedback as well as maintaining a good relationship with a supplier are all concepts found in Chapter 3.

Section 6 is the Standard Tendering process which is an amalgamation of all the chapters and all input from the various chapters has been used to construct the enhanced process.

Section 7 is related to legislation because legislation plays a significant role in the tendering process and cannot be divorced from it. It was pointed out earlier that the tendering process is seen by many governments as a tool to help facilitate the redistribution of wealth to previously disadvantaged individuals and its impact affects all the stages in the tendering process.

Finally, section 8, on Knowledge enablers, are concepts found in Chapter 2 and Chapter 4. The organisational culture of an organisation may have a positive or negative effect on the performance of an organisation.

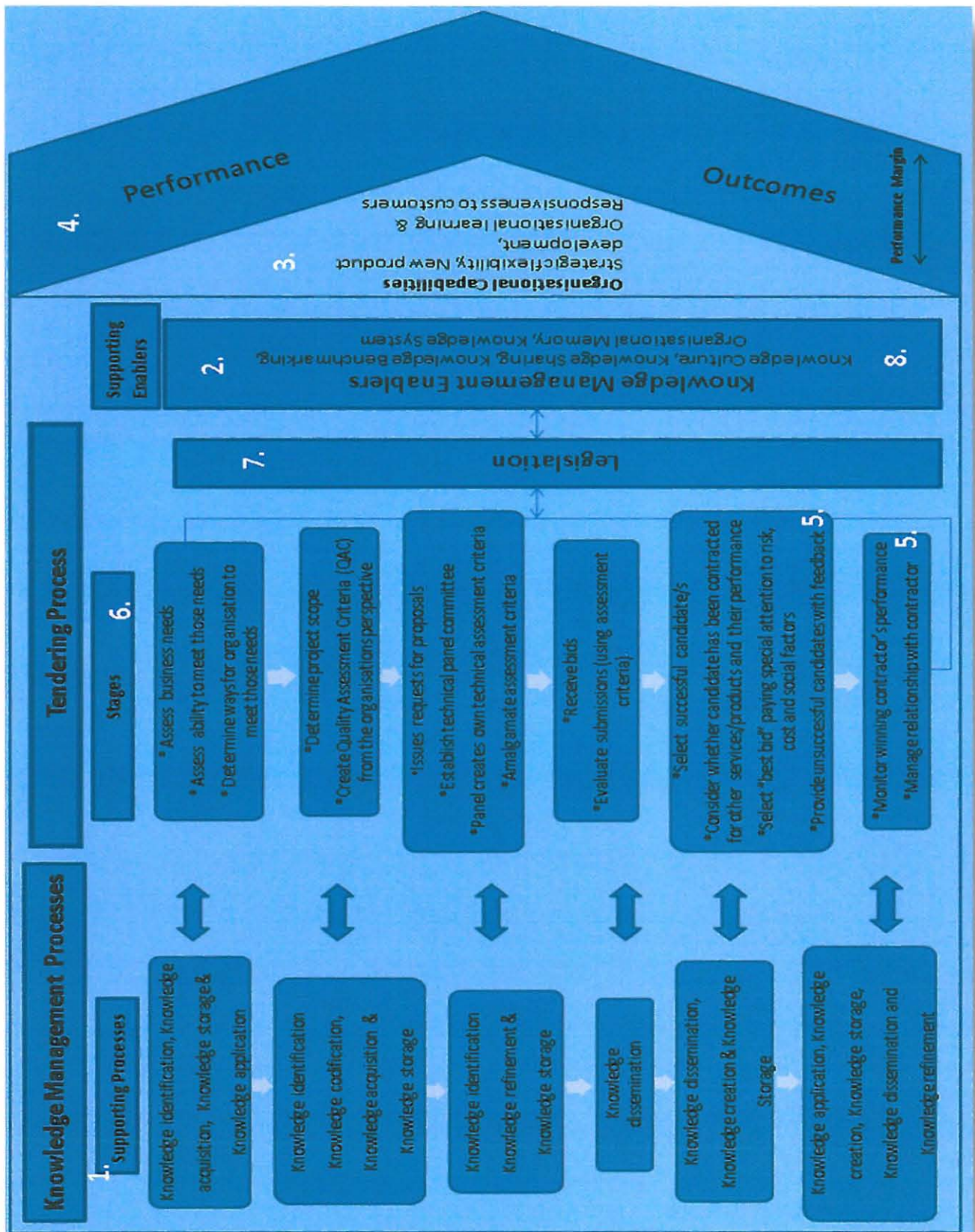


Figure 25: Enhanced Tendering Process

### **Explanation of the framework**

The framework is read from left to right. The knowledge management processes are used to help inform each stage of the tendering process. At each stage certain KM processes believed to help increase efficiency of a particular stage are suggested. The tendering process is shown to be a series of stages and the first and last stages are connected to indicate that this process is cyclical and that the documents and feedback found in the whole process may be used to help inform future processes. The tendering process is connected and affected by legislation but legislation is also affected by the tendering process as feedback is used to help inform policy, therefore a bidirectional line is used to indicate this feedback. In addition to legislation, KM enablers such as awareness of existing trends and market situations like benchmarking and organisational culture are components that should be used throughout the process. In particular efforts to create a knowledge sharing culture should be promoted as such an environment is more likely to produce innovative ideas. Lastly applications of these concepts to the tendering process in addition to the application of organisational capabilities will eventually produce better performance and outcomes.

#### *Supporting Processes*

To thoroughly understand how these supporting processes may be used requires an understanding of the KM Processes as defined by Wang and Ahmed (2005). The details and definitions may be found in Chapter 2. The following section explains how these processes may be used in each stage of the tendering process.

#### Stage 1

Knowledge identification is used because an organisation needs to search for relevant information such as market research, laws they have to comply with etc. Knowledge acquisition is used because the knowledge gathered from these diverse sources needs to be sifted thoroughly in order to find information that may be applied to a specific organisational context. In order to apply this information in an organisational context, ideas need to be generated and this process is Knowledge application. Finally Knowledge storage is used as the ideas created need to be stored or recorded for maintenance and for providing easy accessibility.

### Stage 2

Knowledge identification is used to determine the normal scope of projects similar to the project in question. In addition, Knowledge codification may be used as staff with experience in similar types of projects may have tacit knowledge that they may be able to share. The knowledge gathered from these various sources may be used to inform the Knowledge benchmarking enabler as they will facilitate the creation of acceptable quality assessment criteria. Finally, Knowledge storage will be used to store and record the data.

### Stage 3

Knowledge identification is used at this stage as people with the relevant expertise will be consulted or employed in the final evaluation phase. Knowledge refinement is also used as the quality assessment criteria defined earlier will be refined by the technical experts. Finally, the information will be recorded and stored and this is Knowledge storage.

### Stage 4

Knowledge dissemination as used as the quality assessment criteria will be used to help inform the evaluation process.

### Stage 5

Knowledge dissemination is used again at this stage as the collected knowledge is being used to help in the selection process. Knowledge creation is also used in this phase as unsuccessful suppliers will be given feedback. This feedback may contribute to suppliers generating new ideas. Finally, Knowledge storage is used to record the final decision and its validations.

### Stage 6

In this final stage, Knowledge creation is used as the performance ratings given to the supplier will be used to inform future decision-making processes. In addition, Knowledge refinement is used as certain quality assessment criteria may have not been considered and should be included in the future and these new ideas may be considered Knowledge application. Knowledge dissemination is used in two ways, initially as the stored quality assessment criteria are used and

secondly the refined ideas will be added and stored and disseminated for the entire organisation to use to aid in future decision making.

## **7.5. Conclusion**

This chapter has provided the steps considered essential for the construction of an effective and efficient tendering process. It has also provided justifications for the use of Knowledge Management concepts to improve the decision making process. It has used the literature review to construct a theoretical framework that amalgamates the tendering process with Knowledge Management Framework to create an enhanced tendering process, that incorporates policy knowledge, supplier knowledge, organisational culture and helps create transparency, a factor critical to a successful tendering process. The following chapter will present the research methodology as well as the questionnaire administered.

# Chapter 8: Research Methodology

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## 8.1 Introduction

This research seeks to evaluate the steps followed by South African government institutions when conducting their tendering processes. It also aims to identify problems that may exist in real life with the processes and whether those problems could be mitigated by infusing KM concepts. This chapter describes the research methodology and strategy to identify the steps in the process.

The qualitative and interpretivist case study research methodology is chosen to enable an understanding of the process. This chapter describes the research paradigm used in this study as well as why the qualitative interpretivist approach is considered the most appropriate for this study. The research questions, the research instrument as well as how the data will be analysed are stated. Finally the chapter concludes presenting the research questionnaire.

## 8.2 Research Questions

This research seeks to expand knowledge and contribute to the understanding of the tendering process as well as how it may be made more efficient. The research questions that are to be studied will be used to determine the research methodology most appropriate for this research.

*What steps are followed by a selected South Africa government institution when conducting their tendering process?*

*What may be the most common problems experienced when conducting the tendering process?*

*To what extent is knowledge used to assist in the decision-making process?*

It is important to understand the steps currently followed by government institutions as well as the problems currently experienced in order to assess how far reality diverges with the theoretical framework proposed in chapter 7. In addition understanding of the real life context may provide further insight into the tendering process which will expand on the existing theory or develop new theoretical concepts.

### **8.3 Qualitative research design**

Qualitative research refers to a method of enquiry concerned with meaning and interpretation. Unlike quantitative methods qualitative research techniques are especially suited to small scale studies where the researcher gets to know the social world being studied first hand (Barnes, 1992). According to Pugsley (2010) for a qualitative researcher the importance of their study lies in their ability to address issues of “what, why, where and why?” rather than “how many?”. This method is also used when the researcher uses a small non-representative sample of respondents to help refine concepts, obtain general reactions or explore new areas of opportunity. This research seeks to gain more insight into the tendering processes in South African Government Institutions and the research questions stated are best answered by using the qualitative research method.

### **8.4 Research Paradigm**

According to Guba and Lincoln (1994 cited in Voce, 2004, p.1) the basic beliefs that define a particular research paradigm may be summarized by the responses given to three fundamental questions: the ontological question, the epistemological question and the methodological question. The ontological question refers to what is the form and nature of reality? The epistemological question refers to what is known? Lastly the methodological question refers to how can the researcher go about finding out whatever they believe can be known. The ontological reality that best applies to tendering process is that it operates in a complex and dynamic and constructed world that is interpreted and experienced by people. This means that in reality the steps followed in the tendering process are subjective as people experience reality in different ways (Voce, 2004). The epistemological questions may not be based only on observable phenomena but also on subjective beliefs, values and reasons and understanding possessed by those involved in the process (Voce, 2004). The process may be best understood if the researcher tries to develop an understanding of the whole and a deep understanding of how each part relates and is connected to the whole. Because this is the nature of the problem the best way to analyse it would be to use the interpretivist approach. Additionally the interpretivist approach is considered most appropriate because to thoroughly understand the tendering process

the theory needs to be constructed from multiple realities and therefore the researcher has to look at different factors in order to understand the phenomenon (Voce, 2004).

## 8.5 Case Study Design

According to Yin (2003) a case study design should be considered when: (a) the focus of the study is to answer “how” and “why” questions; (b) the researcher cannot manipulate the behaviour of those involved in the study; (c) the researcher wants to cover contextual conditions because they believe they are relevant to the phenomenon under study; or (d) the boundaries are not clear between the phenomenon and the context. This research seeks to understand how the tendering process works in government institutions and the contextual conditions are necessary as they will contribute to further understanding of the tendering process. Since this is the case, the case study approach is considered the most appropriate as supported by Yin (2003). In particular an instrumental case study will be conducted as an instrumental case study is selected when one wants to gain insight and understanding into a particular phenomenon or situation (Baxter and Jack, 2008).

## 8.6 Unit of Analysis

Two Government Institutions of various sizes, one servicing the entire country and one tendering on its own behalf were chosen as well as two parastatals. These organisations were selected on the basis of access and convenience. The target population is employees in the respective organisations who are involved with the selection of bids in the tendering process.

## 8.7 Research Instruments

The main research instrument in this research is a survey with semi-structured interviews with those responsible for the selection of tender bids at the identified institution.

The interviews used in this case study are designed as follows:

1. *The type of interview:* A semi-structured approach is adopted in which questions in the interview are structured but not restricted. This type of interview approach allows the interviewer to explore and probe for other information that the respondent may deem to be relevant (Cohen and Manion, 1995).

2. *The people to be interviewed:* Members of the selection team responsible for the selection of bids at the various institutions.
3. *How the interview is conducted:* using a one-on-one approach.
4. *Interview equipment:* the interview equipment will include recorders, writing pads and pens and pencils.

## **8.8. Data Collection and Analysis Procedure**

The data sources used in case study research include direct observation, participant observation, interviews, documents reviews, archival records and physical artefacts (Yin, 2003). Three principles recommended by Yin (2003) were adopted, which can be used to maximise the benefits derived from the use of these data sources:

1. Use of multiple sources of evidence, more than one source of data was used. This includes questionnaires, interviews and documents reviews.
2. Creation of a case study database: the questionnaire data is both in hard and soft copy and interview questions and answers have been typed out in case future reference is required.
3. Maintaining a chain of evidence, a reader of the research will be able to follow from the initial research question to the achievement of the research goal and the conclusion of the research.

Data collection for this study was conducted using 3 methods:

1. The questionnaires were administered on site at the organisation in question
2. Interviews concerning specific issues applying to the organisation that were not explicitly covered in the questionnaires or required further details were conducted with the interviewee.
3. Existing documentation concerning tender processes and procedures were also reviewed.

The approach adopted in this study is content analysis. Content analysis is defined as a multipurpose research method developed specifically for investigating a broad spectrum of problems in which the content of communication serves as a basis of inference (Cohen and Manion, 1994: 56). The data collected from the surveys will be analysed using descriptive statistics. The data and the interviews will be used to develop conceptual categories and to illustrate, support or challenge theoretical assumptions held prior to the data gathering process.

## 8.9. Survey Design

This section presents a design of the survey to be used in the research. The survey is divided into three sections. Section A examines policy knowledge and supplier relations. Section B examines the existing tendering process and Section C examines current knowledge use and the predominant culture in the organisation. A 5pt Lickert scale is used with the following scoring system:

Category	Extend Currently
1	“Strongly Disagree”
2	“Disagree”
3	“I don’t know”
4	“Agree”
5	“Strongly Agree”

Figure 26: Lickert Scale

### Section A – Policy knowledge and Supplier relations

This section’s questions are drawn directly from Chapter 3 and Chapter 4.

1. *Does your organisation have a written procurement/tendering policy for goods and services? (Screening question)*
2. *If your organisation does have a procurement policy is it the standard National Government procurement policy?*
3. *If your organisation does use the National Government procurement policy has your organisation tailored it to suit its own specific needs?*
4. *If your organisation does have a procurement policy is it communicated to all staff in the organisation?*
5. *Are those responsible for the selection of bids/ tender applicants clearly identified?*
6. *To what extent are a supplier’s past performance records (if they exist) used in the decision-making process?*

7. *Does your organisation employ certain suppliers more often than others and on what criteria would this be based?*
8. *Do you often feel that tender applicants frequently repeat the same mistakes when evaluating their applications?*
9. *How does your organisation deal with contractors/suppliers that delivery inferior products or perform poorly?*

#### Section B – Tendering Process

These questions are drawn from chapter 5

10. *How many stages would you say the procurement process has in your organisation?  
(space provided)*
11. *please describe the steps conducted at each stage: (space provided)*
12. *Do you feel that the procurement/tendering process used in your organisation could be made more efficient?*
13. *If you feel the process may be made more efficient, what stage(s) do you feel pose the most challenge(s) and why? (space provided)*
14. *Does your organisation have additional criteria other than those stipulated by Government that you use in the selection process?*
15. *If your organisation does have additional criteria, please would you list them below in the space provided:*

#### Section C – Organisational Culture and Knowledge utilization

These questions are drawn from chapter 2 and chapter 6.

16. *Are technical experts regularly invited to assist in the selection process? (industry knowledge)*
17. *Is external bench-marking regularly used to enhance efficiency and adopt good industry practices?*
18. *Do you feel your organisation values those who possess valuable knowledge, experience or are educated?*
19. *Are minutes of each selection meeting recorded and retained in an effective way to facilitate search and retrieval?*

20. *Does your organisation promote the sharing and transfer of knowledge amongst employees?*
21. *Does your organisation have an open no blame approach to reporting incidents and sharing lessons learnt?*
22. *Is sharing knowledge in the organisation recognised and rewarded?*
23. *Do managers encourage trust and collaboration between individuals and teams?*
24. *Does your organisation encourage skills development?*
25. *Does your organisation have a mentoring programme?*
26. *Is competence evaluated on a regular basis?*
27. *Does your organisation encourage the development of new ideas?*

**Additional Questions to be asked during the interview where:**

1. Depending on level of experience: What trends/ observations have you noticed with regard to the procurement process within your organisation?
2. What are the typical problems experienced with the process from your observations?
3. With regards to bid applicants are there many applications that are disqualified due to errors?
4. Have you heard of Knowledge Management?
6. Do you think the observations you have identified could be solved or mitigated if people had suitable knowledge? If yes, how and if no, why not?

Lastly, the questionnaire was designed in such a way that it was:

1. Valid, so that they measure what the research intends to measure.
2. Reliable, in that they can yield consistent results from repeated samples and different researchers over a period of time.
3. Easy enough for the respondent to give the necessary information accurately and completely.
4. Unbiased and not suggestive so that the respondent could provide responses without added pressure from the style of questioning in the questionnaire.

## **8.10. Population and Sample**

The population was selected based on access as well as the unique perspectives they each presented. Ordinarily in any organisation a division is usually allocated or tasked with the delivery of procurement as well as administering the tendering process. Few companies exist that are solely devoted to procurement and the other functions are supporting functions to the procurement or tendering process. Four (4) interviews were conducted at four (4) organisations. Organisation A was an organisation where procurement was considered a supporting function and was not the core of the business. Organisation B was an organisation where procurement and the administering of tenders was considered the core business function and other business activities were only supporting functions. Organisation C and D were SA Government institutions of varying scale one was serving the entire country and the other only itself. The use of these organisations presented many possibilities in terms of truly understanding the tendering process and the types of problems experienced by organisations who gave procurement or tendering different credence. All organisations were given a letter by the researcher, which gave a summary of the study and asked for their assistance in being interviewed. The letters as well as the questionnaire responses are included in the Appendices.

## **8.11. Response Rates, Ethics and Confidentiality**

Obstacles were, however, encountered during the data collection phase as, many of the interviewees that were initially going to be interviewed were either unavailable or only one person had sufficient knowledge to be able to answer the questionnaire. At the end of the process only 5 interviews were conducted and only 5 questionnaires were administered in total for all institutions. The confidentiality of the respondents has been protected. The identity of the organisations or respondents involved will not be revealed in this study. All questionnaires were completed by the appropriate respondents and approved by the organisations.

## **8.12. Reliability, Quality and Validity of the Data Collection**

Data Triangulation was used for validation of the data as different data sources were used. According to Yin (2003:98), the advantage of using multiple sources of evidence which is the process of triangulation is the development of “*converging lines of inquiry*”.

Four tests that are used to establish the quality of an empirical social research design were carried out. These tests include construct validity, internal validity, external validity and reliability. They confirm the concepts of trustworthiness, credibility, conformability, and data dependability (Yin, 2003:33). More emphasis was placed on external validity as it deals with the problems of knowing whether the findings of the study are generalizable beyond the immediate case studies. These tests are described in more detail in Table 10 below:

Table 10: Data Validity Tests

Test	Case Study Tactic	Phase of Research at which Tactic Occurs
<b>Construct validity</b>	Use multiple sources of evidence	Data Collection
	Establish a chain of evidence	Data Collections
	Have a key informant review draft of case study report	Composition
<b>Internal validity</b>	Do pattern matching	Data analysis
	Do explain-nation building	Data analysis
	Address rival explanations	Data analysis
	Use logic models	Data analysis
<b>External validity</b>	Use theory in single-case studies	Research design
	Use replication logic in multiple-case studies	Research design
<b>Reliability</b>	Use case study protocol	Data collection
	Develop case study database	Data collection

### 8.13. Conclusion

The qualitative research methodology was considered to be the most appropriate when attempting to understand the tendering process and the factors that influence efficiency. In addition it was shown that the inquiry most appropriate for this investigation is a case study. Finally the survey design and some of the open ended questions were presented.

# Chapter 9: Data Analysis and Recommendations

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## 9.1 Introduction

The previous chapter identified the four broad categories that the research instrument, was divided into, namely; policy knowledge and supplier relations, tendering process lastly organisational culture and knowledge utilization. The following chapter will present the results of the various questionnaires and interviews conducted at four institutions

## 9.2 Codification Process

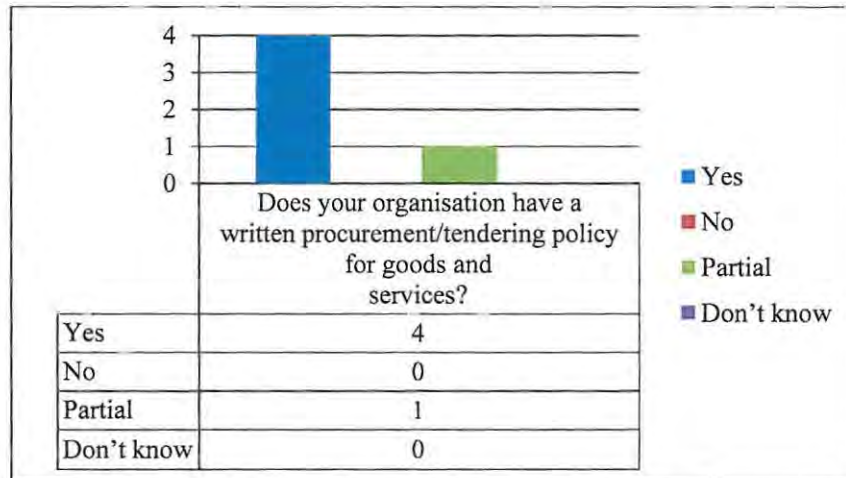
Descriptive statistics have been used to analyse the data. The analysis was conducted on four organisations in which the questionnaires were administered. The instrument used a 5pt Lickert scale and in effort to simply codification the following rules have been applied to the data:

- Questions where the respondent indicated – Agree and Strongly Agree in the analysis have been included as Yes (Y) for codification.
- Responses where the respondent indicated that they did not agree have been categorised as No (N).
- Responses where the respondent indicated that they somewhat disagree have been indicated as Partial (P).
- Responses where the respondent indicated that they did not know have been classified as “Don’t Know” (D).
- In Question 9 to assist in codification, if penalisation occurred immediately a (Y) was allocated. If penalisation occurred immediately after the contract had finished a (P) was allocated and if possibly not at all then an (N) is allocated and don’t know a (D) is allocated.

### 9.3 Questionnaire responses:

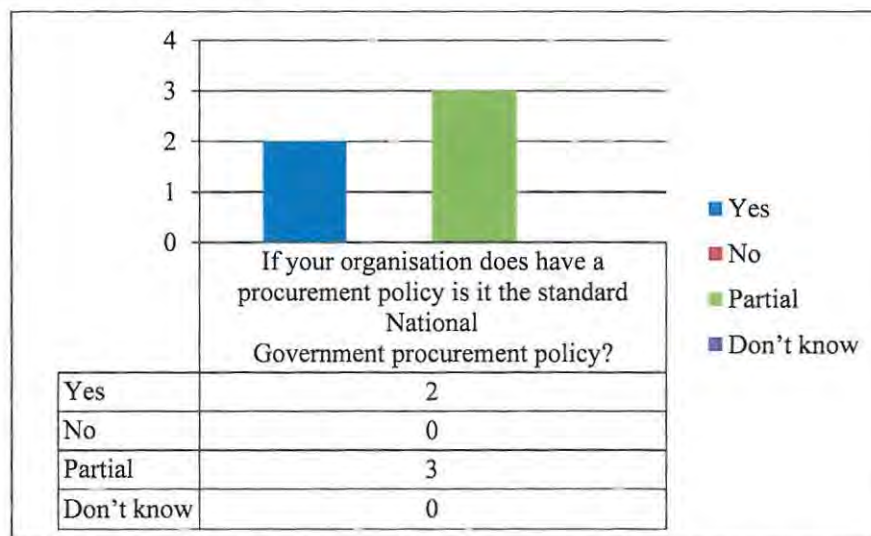
#### Section A: Policy Knowledge and Supplier Relations

1. *Does your organisation have a written procurement/tendering policy for goods and services?*



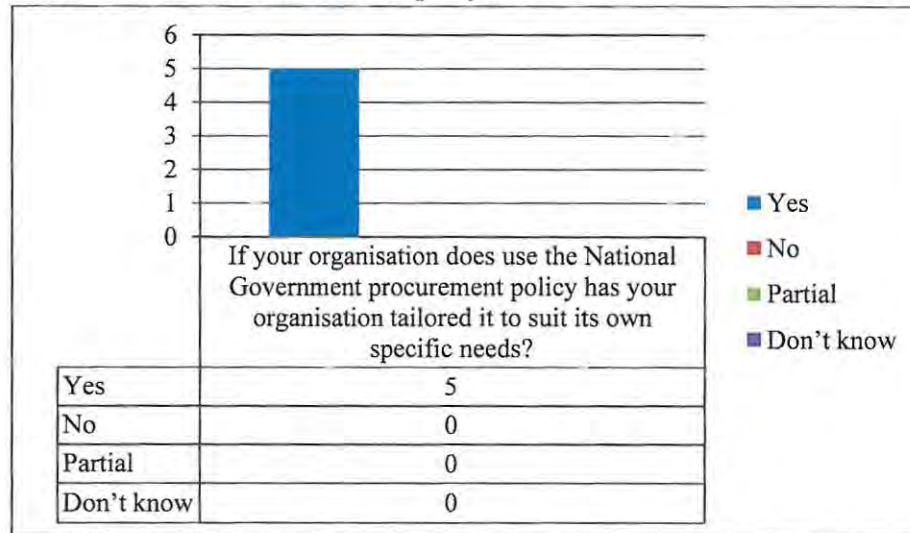
Of the respondents surveyed, 4 respondents (80%) claim that their organisation had a fully documented procurement process, while 1 respondent (20%) indicated that their organisation's process was currently in the process of being documented.

2. *If your organisation does have a procurement policy is it the standard National Government procurement policy?*



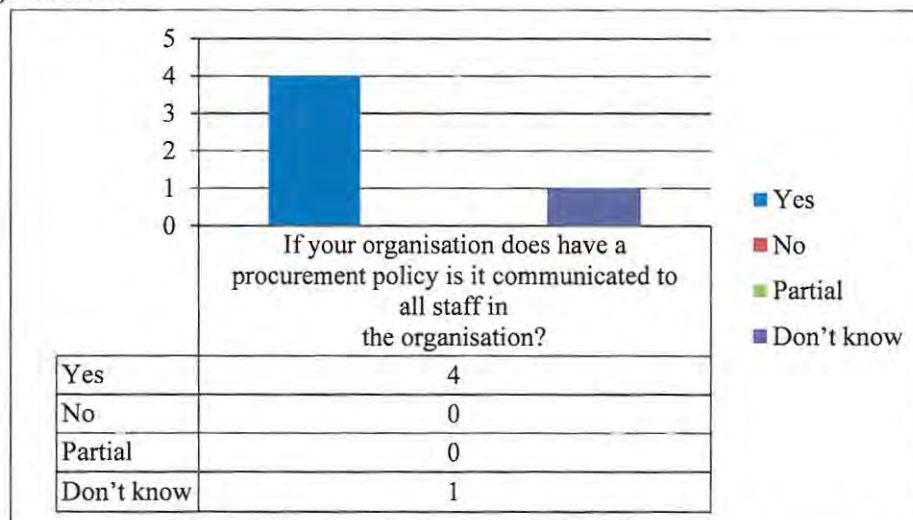
3 Respondents (60%) stated that their policy was partially aligned to the National Policy, while the remaining 2 (40%) indicated that their policy was mainly the National Government Policy.

3. *If your organisation does use the National Government procurement policy has your organisation tailored it to suit its own specific needs?*



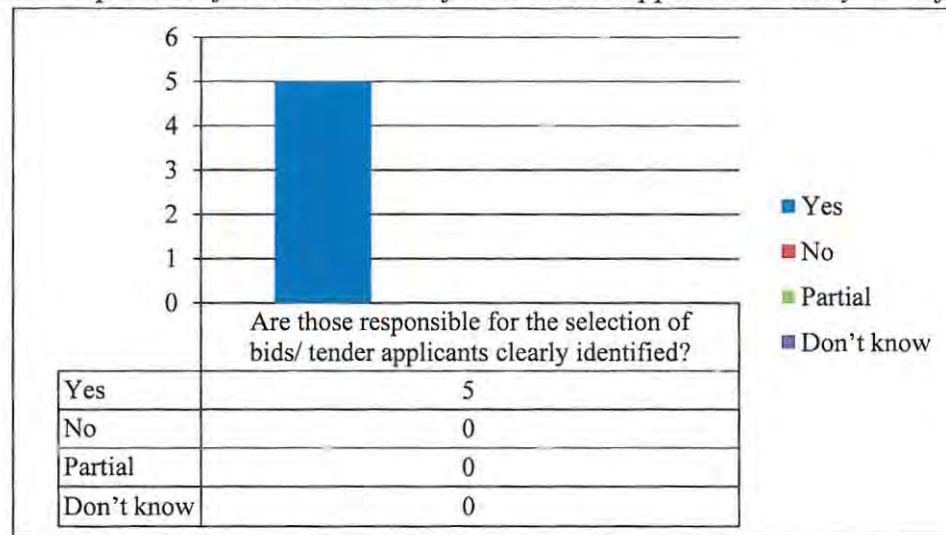
All respondents (100%) have tailored the National Procurement Policy to suit their own needs.

4. *If your organisation does have a procurement policy is it communicated to all staff in the organisation?*



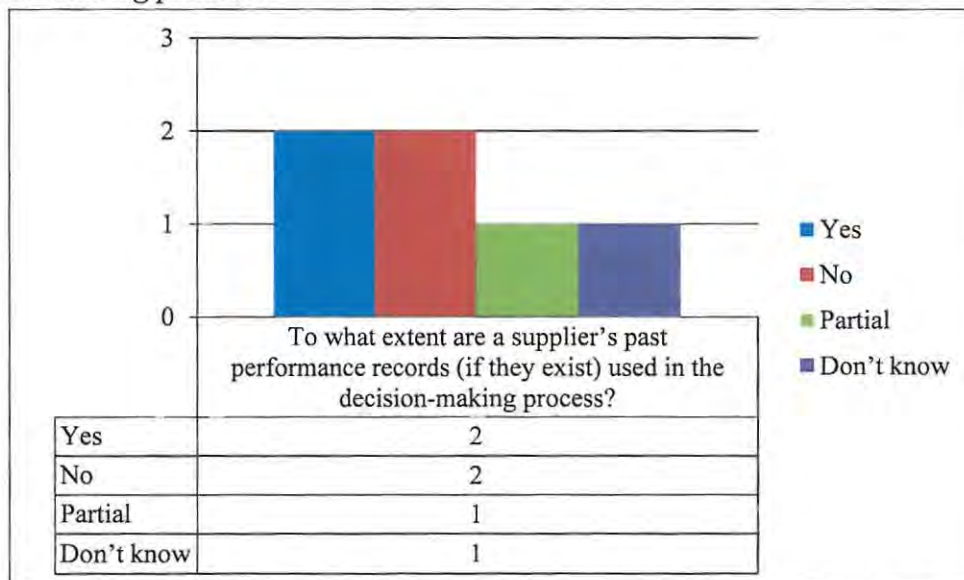
4 (80%) believed the policy was communicated well to all staff, and only 1 (20%) of the respondents indicated that they did know, two respondents from the same organisation had opposing responses.

5. Are those responsible for the selection of bids/ tender applicants clearly identified?



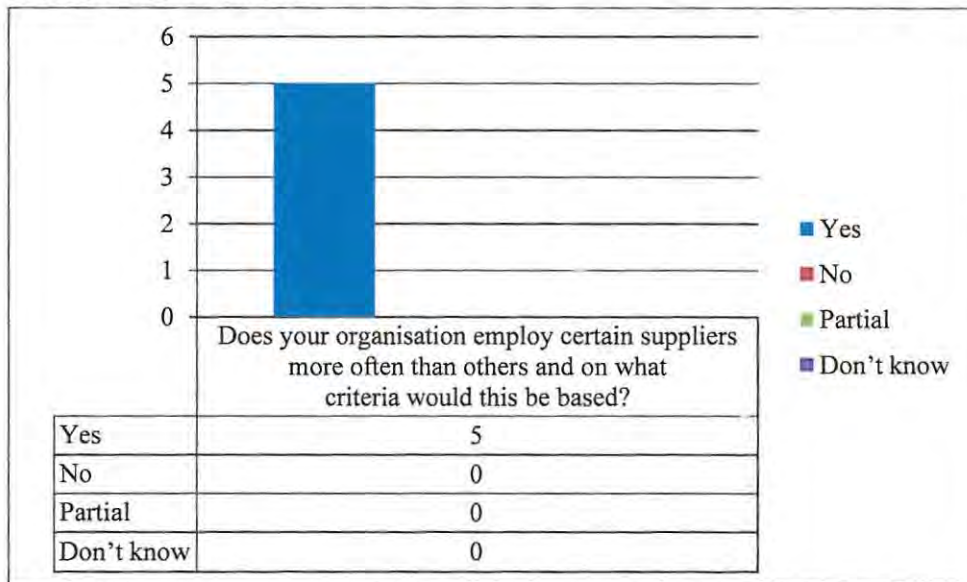
5 respondents (100%) indicated that all those responsible for the selection of bids or tender applications were clearly identified.

6. To what extent are a supplier's past performance records (if they exist) used in the decision-making process?



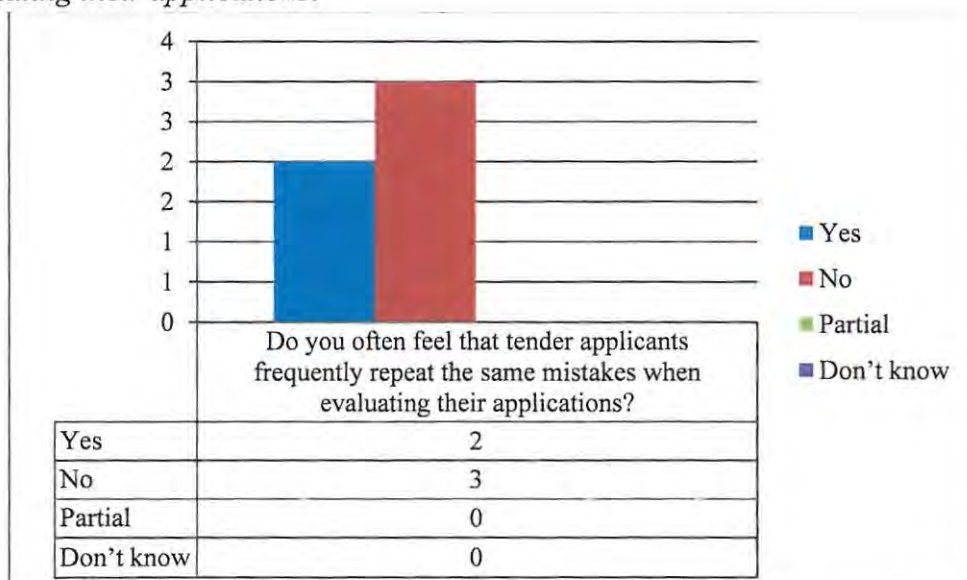
2 respondents (40%) indicated that a suppliers past performance where available is used in the selection process, 1 respondent (20%) indicated that it is partially used only when more information is required between two competing bids. 1 respondent (20%) indicated that only the criteria in the RFT is requested and reviewed and 1 respondent (20%) indicated that they did not know.

7. Does your organisation employ certain suppliers more often than others and on what criteria would this be based?



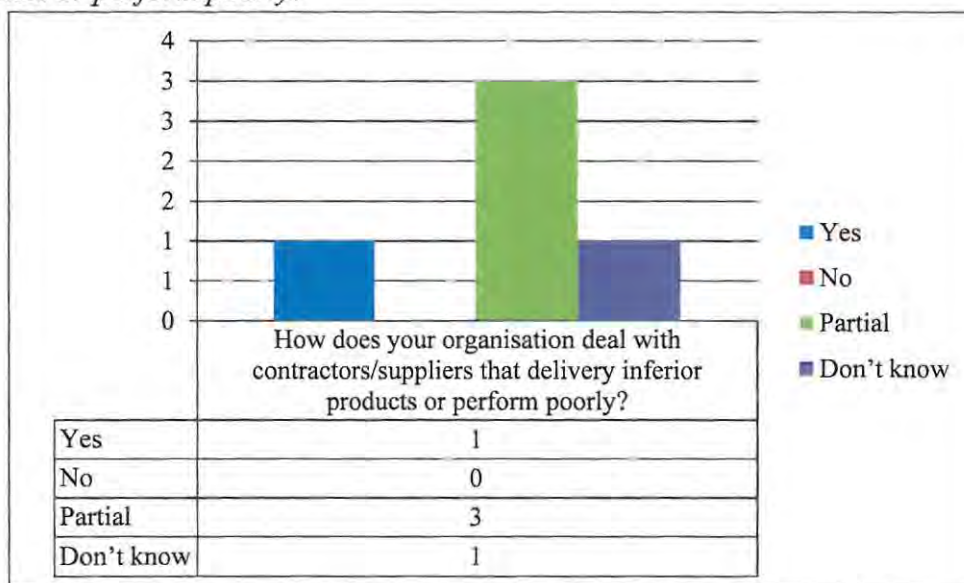
5 respondents (100%) indicated that they employ more suppliers than others. The organisations surveyed have varying degree of specialisation for the tenders. The tender requests range from the provision of stationary to the provision of highly sophisticated machines. While it may seem understandable that government entities working in highly specialised fields may have less access to a pool of specialised suppliers, even government entities working in generalised fields have “preferred suppliers”. This would indicate that at the latter level, the tendering process may also not operate in an open or free market.

8. Do you often feel that tender applicants frequently repeat the same mistakes when evaluating their applications?



3 respondents (60%) indicated that this was not the case, 2 respondents (40%) indicated that this was the case. What is evident is the parastatals do not consider this an area of concern, however, both the Government institutions studied considered this very common with small suppliers. Additionally the market the Government institutions operate in is more dynamic because there is less specialisation. The parastatals may require equipment of certain services that only a select few are able to provide. These few, through practice, self-perfection and minor innovations have increased productivity and are less likely to make mistakes. One of the respondents indicated that such companies even have entire division dedicated to the reviewing and completion of tender documents.

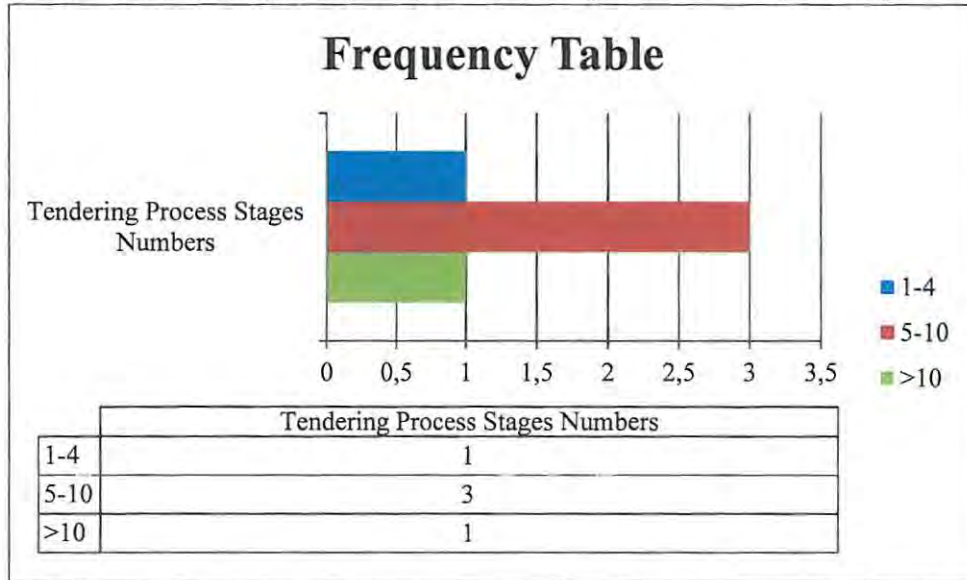
9. *How does your organisation deal with contractors/suppliers that delivery inferior products or perform poorly?*



Only 1 respondent indicated that they penalise the contractor up to 10% of the contract amount because they are constantly reviewing the merchandise or service through quality checks. 1 respondent (20%) indicated that they did not know the policy to follow in such a case and whether it existed. The remaining 3 (60%) indicated that it was partially applied, the moment they discovered poor quality, negotiations would be conducted to try and rectify the problem, after negotiations of performance or quality did not change, additional negotiations would be conducted and only in severe circumstances would the contractor be terminated and included in the defaulter's database.

Section B: Tendering Process

10. *How many stages would you say the procurement process has in your organisation?*



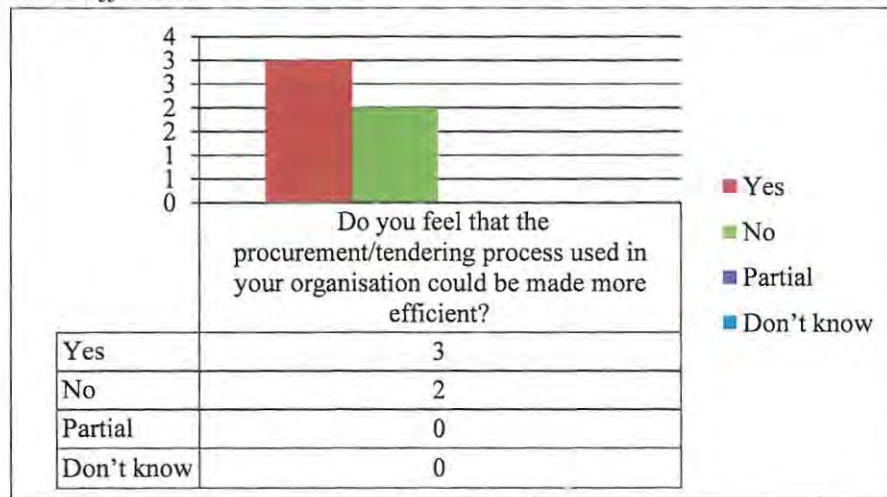
60% of the respondents (3) tendering process stages was in the range of 5-10.

20% of the respondents have tendering process stages between 1 and 4 and the remaining 20% had a tendering process greater than 10. Based on these respondents a tendering process is more likely to have 5-10 stages.

11. *Please describe the steps conducted at each stage:*

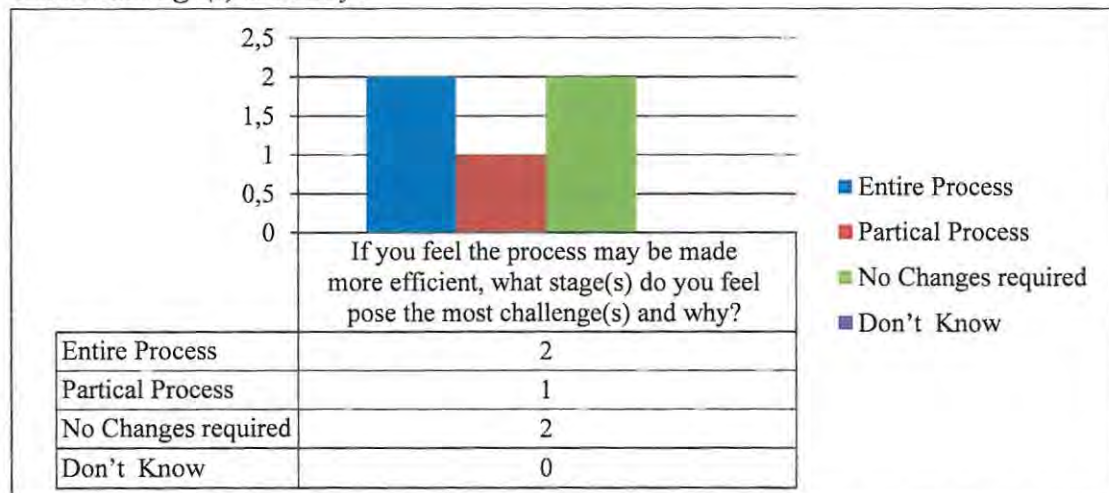
Please Table 10 on page 177

12. Do you feel that the procurement/tendering process used in your organisation could be made more efficient?



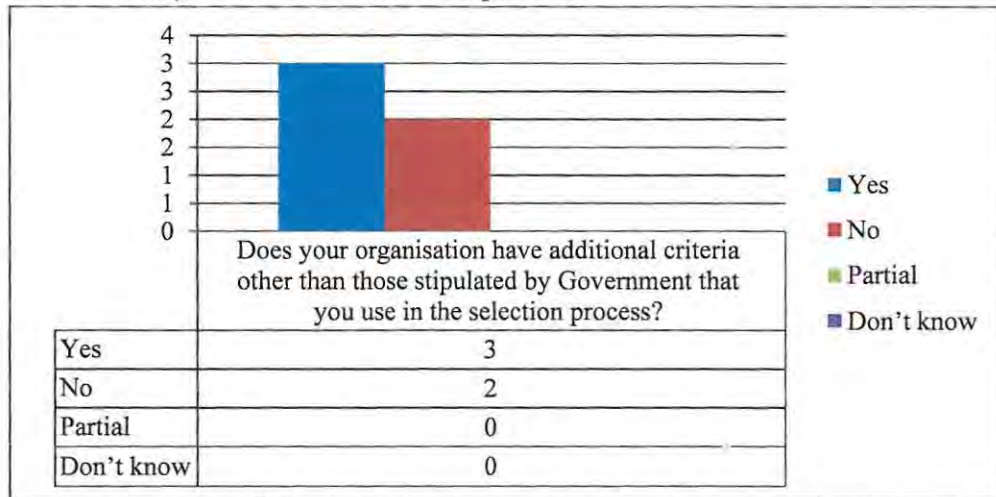
3 respondents (60%) indicated their process could be made more efficient. The remaining (40%) indicated that their process was efficient as it stood.

13. If you feel the process may be made more efficient, what stage(s) do you feel pose the most challenge(s) and why?



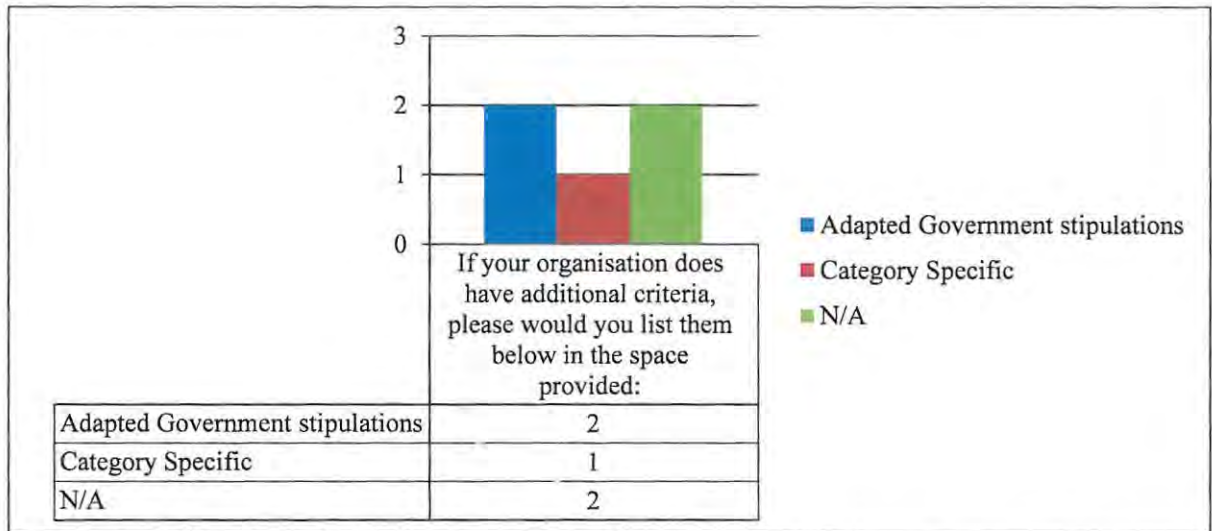
2 (40%) of respondents indicated that their entire processes required some improvement. 1 (20%) of the respondents indicated that the Project Plan Phase needed to be conducted earlier in the process because currently it was conducted later and this severely affected the delivery times and process. In Organisation C the respondent indicated that there was extensive approval bureaucracy, each person is afraid of making a decision so there is constant referral because there is lack of trust within the organisation which affects the process. The respondent also considered the prevention of fraud and corruption a time consuming process but accepted that there were no ways of bypassing these laws.

14. Does your organisation have additional criteria other than those stipulated by Government that you use in the selection process?



3 (60%) of the respondents indicated that yes, they used additional criteria. The remaining 2 (40%) indicated that their criteria was exactly that stipulated by the Government. The respondents who indicated yes, were all from parastals and those that indicated “No” were all from pure Government institutions. The parastals did however, voice their concern as from the 7<sup>th</sup> of December of 2011 they were expected to conform to the new Preferential Procurement Policy Framework Act amendments which advocate that the solutions which meets the minimum requirements must always be selected. The respondents indicated that in their field of expertise, lowest and cheapest option was not necessarily the best option.

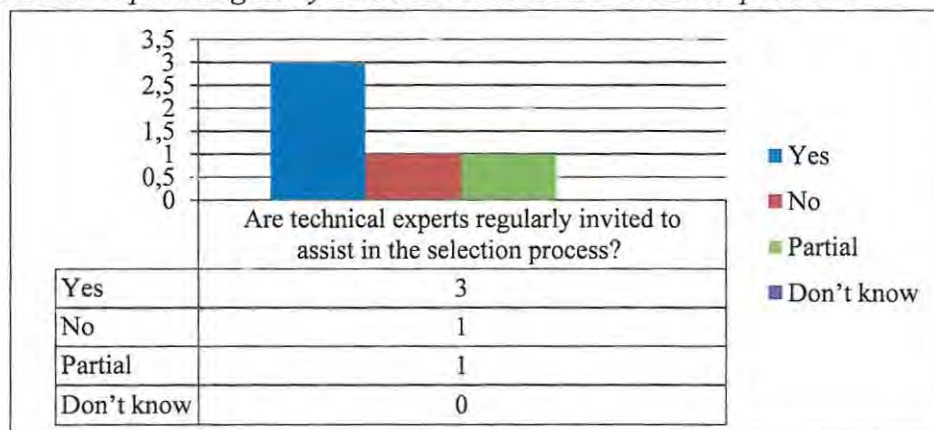
15. *If your organisation does have additional criteria, please would you list them below in the space provided:*



The government institutions have not adapted their processes and this question was therefore not applicable to them (N/A). The Government organisation stick to the criteria stipulated in the Request for Tender and do not diverge from it. The remaining parastals either had adapted Government stipulations (40%) e.g. having a two committees perform 3 functions that the Government stipulated should be performed by 3 committees or were completely different and where category specific as was the case with Organisation C, whose procurement process considered of roughly 400 steps.

Section C- Organisational Culture and Knowledge Utilisation

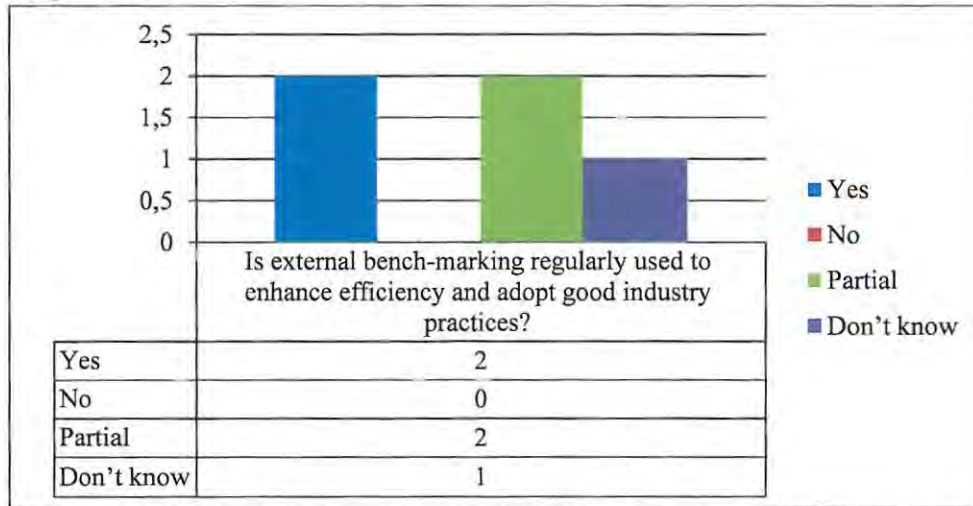
16. *Are technical experts regularly invited to assist in the selection process?*



3 (60%) of respondents indicated that technical experts where regularly invited to assist in the selection process. The remaining 40% indicated that technical experts where only included in certain phases and in certain types of projects, such as

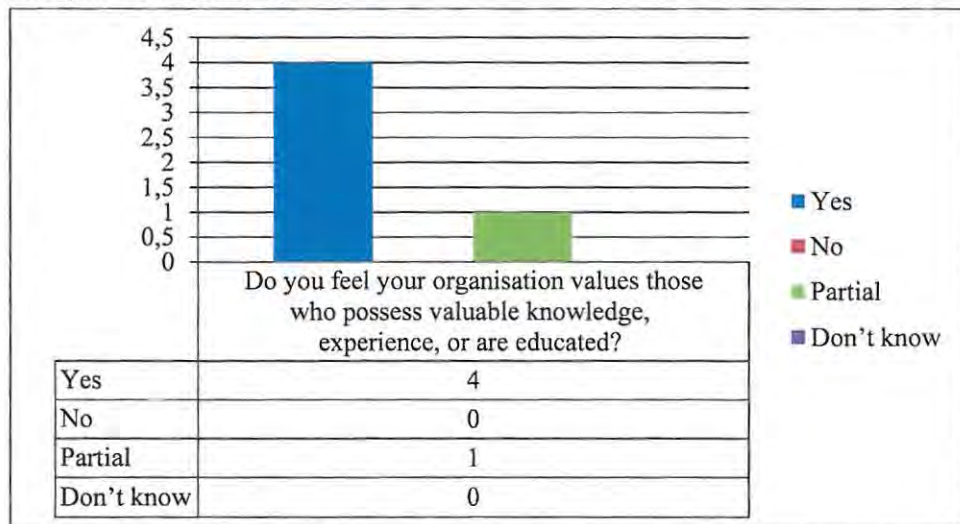
construction related projects. To organisation C this question was considered irrelevant because to be part of their organisation one has to be considered a technical expert.

17. *Is external bench-marking regularly used to enhance efficiency and adopt good industry practices?*



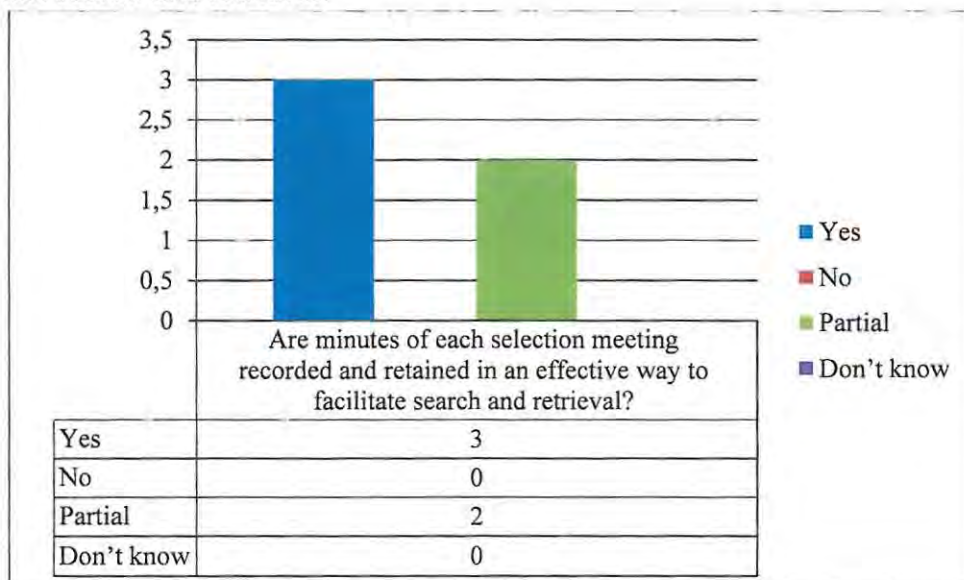
2 (40%) of respondents indicated that external bench-marking was regularly used to enhance efficiency. 20% of respondents indicated that they did not know whether or not external bench marking was used. The remaining 40% indicated that they did pursue some bench-marking through the attendance of industry specific conferences and through networking and socialisation; however, it was not considered or seen as a priority. In particular Organisation C, felt that their employees are considered experts in their respective fields and should be aware of any benchmarks that they consider relevant and should be applied within the organisational context.

18. Do you feel your organisation values those who possess valuable knowledge, experience, or are educated?



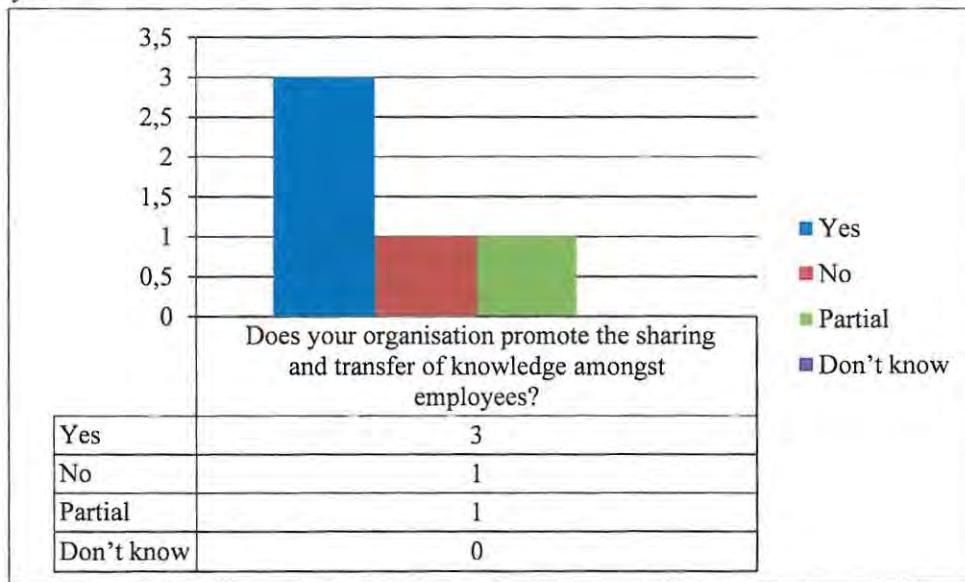
80% of respondents agreed that their organisation valued knowledge and experience. Only 20% of respondents indicated otherwise. 1 respondent indicated that Organisational Politics also had a role to play on how someone was treated within the organisation, however; they did feel that knowledge was valued.

19. Are minutes of each selection meeting recorded and retained in an effective way to facilitate search and retrieval?



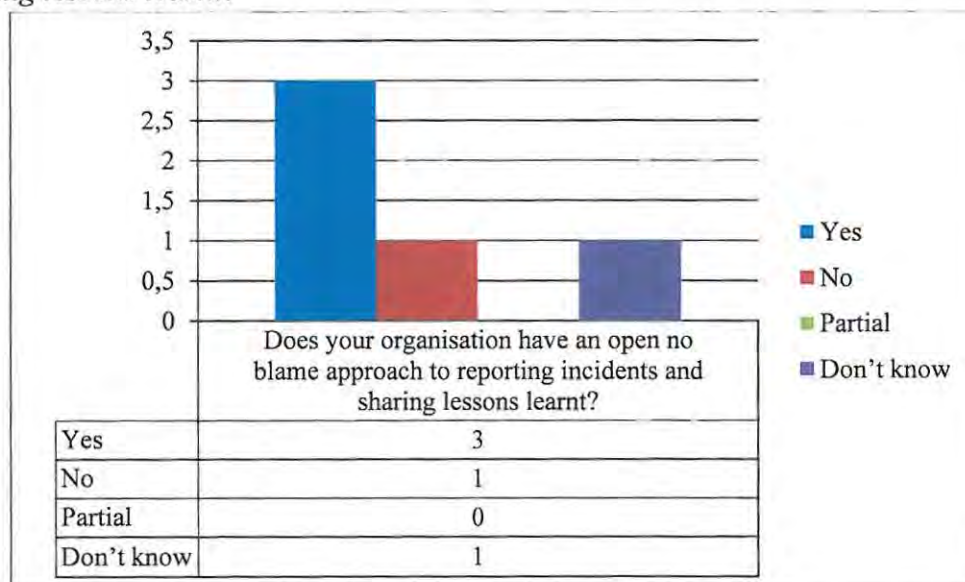
60% of respondents indicated that minutes of each selection meeting were recorded in an effective manner to facilitate search and retrieval; the remaining 40% indicated that although the minutes of each meeting recorded easy retrieval remained and issue.

20. Does your organisation promote the sharing and transfer of knowledge amongst employees?



60 % of respondents (3) indicated that knowledge sharing was promoted within the organisation. 20% of the respondents indicated that the information they deal with is considered confidential and therefore sharing is not promoted within the organisation. Lastly, 1 respondent indicated that knowledge was partially shared, because their organisation was starting to encourage knowledge sharing and was in the process of developing a knowledge centre.

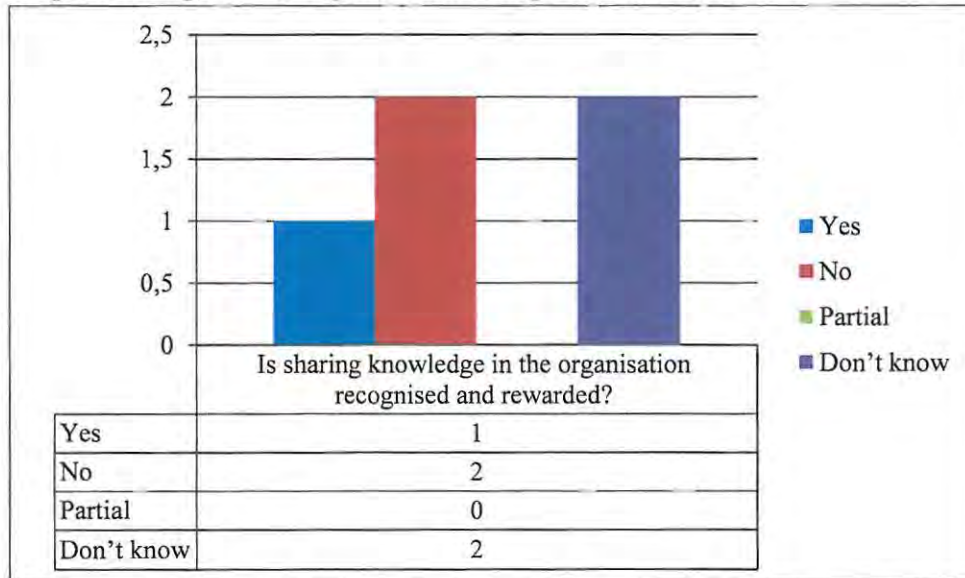
21. Does your organisation have an open no blame approach to reporting incidents and sharing lessons learnt?



3 Respondents (60%) indicated that their organisation had an open no blame approach to reporting incidents. 20% of the respondents surveyed indicated that their

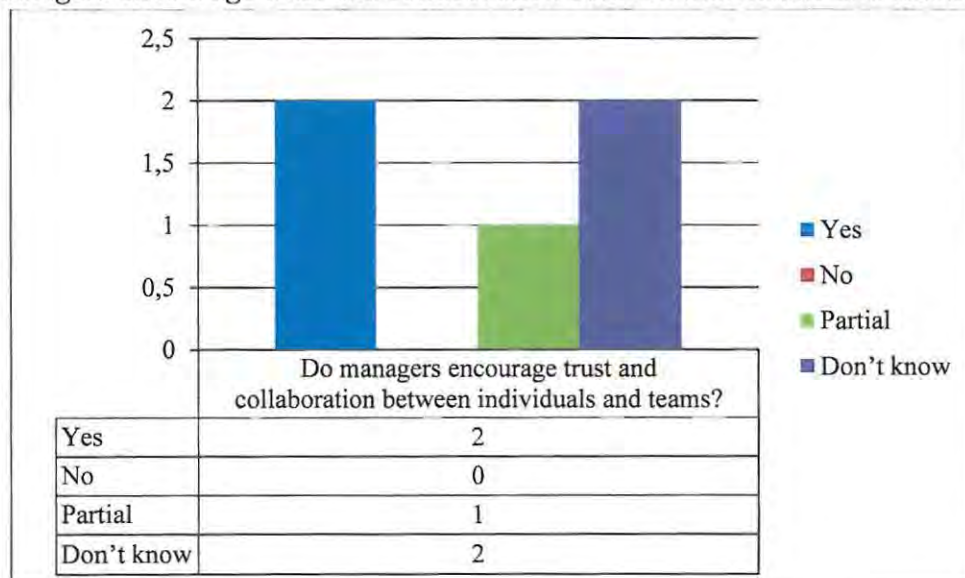
organisation had a tendency to elect scapegoats and sharing is not really encouraged. The remaining 20% indicated that they did not know whether this was done.

22. *Is sharing knowledge in the organisation recognised and rewarded?*



Only 20% (1) of the respondents indicated that sharing knowledge was recognised and rewarded in their organisation. The remaining the remaining 80% or respondents either did not know whether this was done or knew for a fact that it was not done in their organisations.

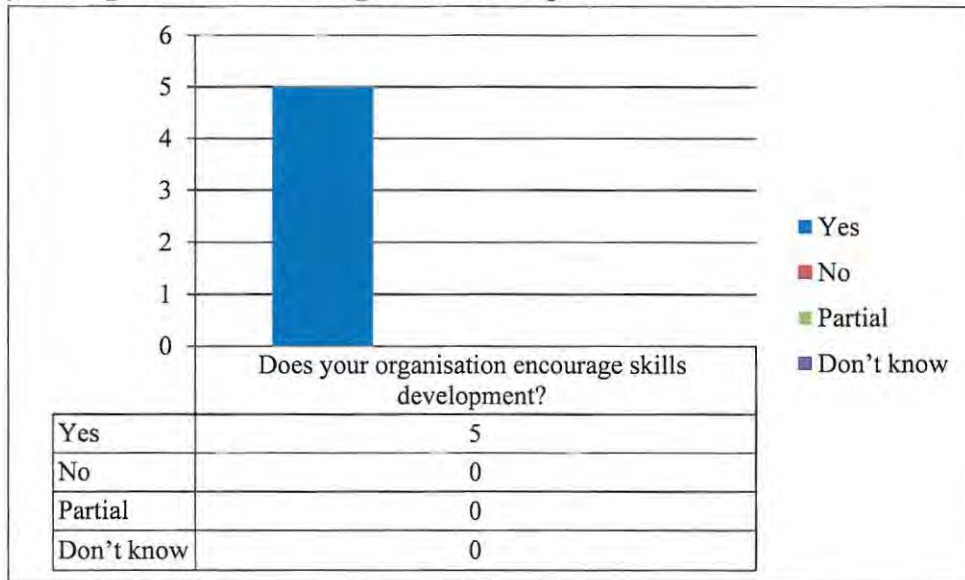
23. *Do managers encourage trust and collaboration between individuals and teams?*



40% of respondents indicated that trust and collaboration was encouraged. 20% (1) respondent indicated that this was partially done depending on the level in the

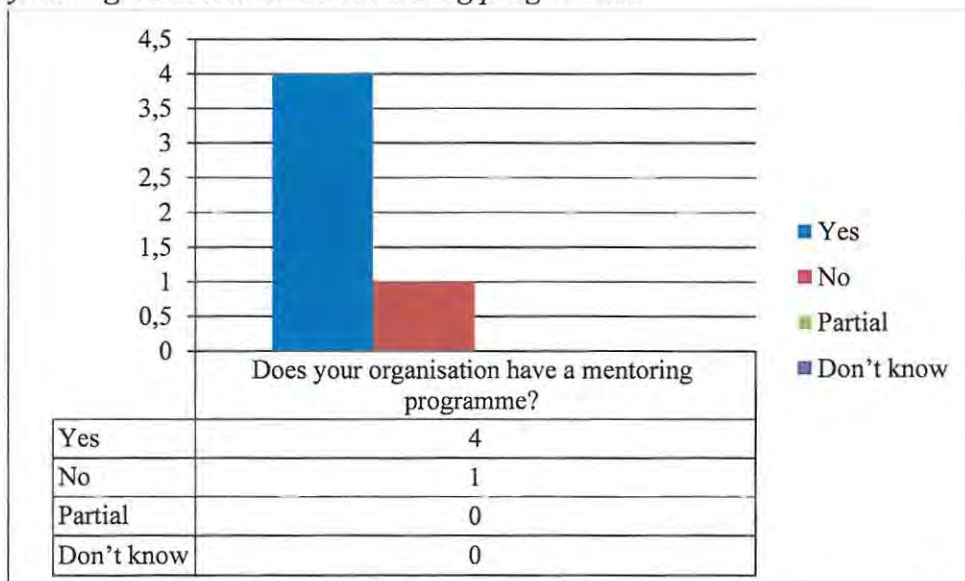
organisation, at the strategic level this was not encouraged and at an operation level it was encouraged. The remaining 40% (2) indicated that they did not know whether trust and collaboration were encouraged.

24. *Does your organisation encourage skills development?*



100% (5) respondents indicated that their organisation encouraged skills development.

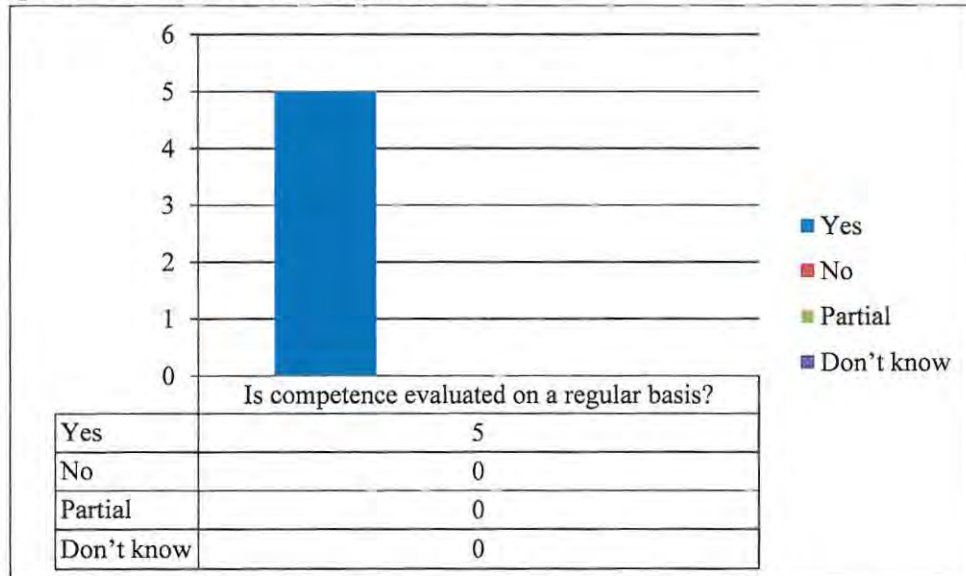
25. *Does your organisation have a mentoring programme?*



80% (4) of respondents indicated that their organisation had a mentoring programme; however, 3 of these organisations also indicated that their programmes were not very successful. Lack of commitment and work overload were cited as some of the reasons

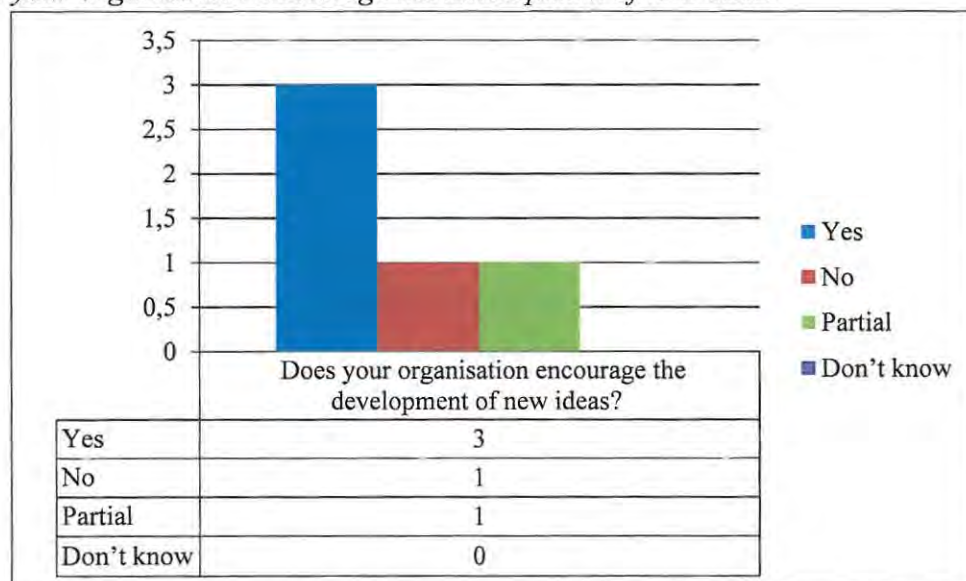
why the programmes had been unsuccessful. Only 1 (20%) of the respondents indicated that their organisation did not have a mentoring programme.

26. *Is competence evaluated on a regular basis?*



100% (5) respondents indicated that competency was evaluated on a regular basis. One organisation even stipulated that they had a Performance System that was used to allocate people into jobs; however, it was not a mature science.

27. *Does your organisation encourage the development of new ideas?*



60% (3) of the respondents indicated that the development of new ideas was encouraged. 1 respondent indicated that it was partially encouraged in that each idea had to be approved by one's line-manager and comply with legislation before it was

communicated to the broader organisation for comments or feedback. Only 1 respondent (20%) indicated that their organisation did not encourage the development of new ideas.

## **9.4 Comparative Analyses**

Organisation A and Organisation B seem to be fairly self-sufficient and as a result were only guided by government legislation and not forced to comply. This means they had a certain level of autonomy over their operations. In addition this meant that any changes they deemed necessary were approved relatively fast. This level of efficiency is traditionally not achieved by pure-government institutions because they have less autonomy.

Organisation C and Organisation D were forced to comply with Government legislation and had limited margin of freedom, if any. These organisations had a limited level of autonomy and had to comply with legislation even if due diligence resulted in delivery lags. There is a focus on governance at the expense of service delivery and the red tape in the process frustrates many individuals. Respondents from these organisations cited poor planning, lack of transparency, lack of effective leadership, excessive governance and outdated technology such as paper-based methods as problems. The problems cited by these respondents were raised in the literature review.

Since the institutions surveyed are not statistically significant to enable generalization, the different institutions will be analysed separately according to the various categories stipulated in the questionnaire. Irrespective of the fact that insufficient numbers were collected a fair analysis may be used to help inform the theoretical model. These four case studies presented three angles that will add credence to the model. The first angle will allow us to evaluate how the model compares in real life to an organisation that considers procurement as a supporting function. The second will allow us to probe at a high-level how it compares to an organisation that considers procurement its core function and the last angle will allow us to probe how the model compares to South African Government institutions.

## **9.5 Category 1: Policy Knowledge and Supplier Relations**

All the institutions studied seemed to have well documented practices in place. Between the parastatals, Organisation A was more structured in their approach than organisation B. Although Organisation B did have a concrete documented process they relied on their

employees' tacit knowledge to implement the correct steps in the process. Secondly, although Organisation B's process was more complex, the endeavour to remember each of the 400 steps may be quite cumbersome. Organisation B runs the risk of having to sacrifice efficiency in efforts to promote governance.

Both the Government institutions had documented practices, however, poor demand planning and vague user's requirements were cited as an issue. One of the inefficiencies cited was the fact that due diligence had to be followed at all costs, at the expense of service delivery. The respondents interviewed seemed to be knowledgeable and well aware of the existing laws. They suggested they were often met with opposition from other parties who expected the requests to be met timeously. They concluded that the laws need to be communicated more effectively by Government, that Government employees need to be more knowledgeable of existing policies and procedures and plan accordingly.

The standard procurement policy promulgated by Government seemed to play more of a general guiding role and was not central to the parastals. Parastals have more control over their own processes and how they are implemented, which means they had a certain level of autonomy not granted to traditional SA Government Institutions. This differed considerably to organisations that were purely controlled by Government as they had to comply with the prescribed laws. Although the parastals were not required to fully comply with the laws stipulated by Government, the changes made to the new PPPFA act would impact them considerably. The effects of this law would result in less autonomy and more bureaucratic processes. In addition the parastals have adapted the procurement or tendering processes to suit their own individual needs and the government institutions have not.

The communication of various policies seemed to be in question in Organisation A as one respondent indicated that it was communicated whereas the other seemed to not be able to say either way. In organisation B the respondent indicated that it was communicated to all relevant staff and this was the case in the government organisations.

In all institutions those that were responsible for the selection of tender applicants were clearly stated.

A supplier's past performance is considered relevant in parastals with organisation B placing greater credence on it due to the high value of their respective purchases. Suppliers who deliver poor performance are provided a negative record for future projects by Organisation A. Organisation B on the other hand is highly stringent with the quality of their products, penalising contractors up to 10% of the contract amount. In Organisation B late delivery is

penalised and there is a whole division dedicated to assessing the quality of the end product. In the Government institutions a supplier's past performance is not important, what is relevant is that the applicant meets the criteria stipulated in the Request for Tender, only in extraneous circumstances is a supplier's record included in deliberations. Government is not as stringent on poor quality deliverables, however, they do hold meetings with the supplier where they issue warnings and only in extreme cases do they cancel the contract and add the supplier to the National Defaulters Database, housed by National Treasury. Unlike the US Government, the SA Government seems to have less autonomy, and seems to be nonchalant or acquiesce to suppliers at their own expense.

Parastals did not feel that tender applicants commonly repeat the same mistakes. In addition Respondent C from Organisation B indicated that this was more common with smaller suppliers as the large suppliers devote more resources to understanding the complex process involved in soliciting a bid. Government institutions voiced that there was a large number of tender applicants who were disqualified for making mistakes and that this was extremely common with new suppliers.

In summary policy knowledge in Government institutions seems to be surface level message, and many in the trenches have not inculcated it, as a result much time is wasted and implementation is an issue. Parastals on the other hand seemed to have a good grasp of what their policy involved although there existed problems with implementation as well. What became increasingly evident is that there is a huge discrepancy between how these organisations look at procurement and the tendering process in general. This is shown in their assessments of the end product in the parastals but within Government the cost of the item does not seem to be a factor, as due process has to be followed in both small and large endeavours and termination of contract is a procedure in itself. In government it seems due process has to be followed at the expense of service delivery and service quality, because it is not easy for the Government bodies to terminate contracts in the tendering process.

### **9.5.1. Impacts on the model**

The answers gleaned from these various respondents indicated that the legislation places more of an informative role in the process as depicted in the model, however, this may be more applicable to parastals and in government the law plays more of a crucial role which means, where legislation is situated within the model will need to be revised.

## 9.6 Category 2: Tendering process

The tendering process in Organisation A, involved 7 Stages. The tendering process at Organisation B is very structured and has 400 steps of which 150 are iterations; furthermore their process is adapted depending on the type of acquisition. Due to the nature of the organisation only very high level steps will be shared; however, the tendering processes of both institutions as well as how they compare to the model is depicted below (see Table 10). They differentiate between, technology acquisitions, capital acquisitions, support of organisation processes and simple procurement. What is evident from the diagram is that the tendering process in Organisation B is more elaborate. One may attribute their level of detail to the fact that they are an organisation that specialise in procurement. In terms of process efficiency, Respondent C from Organisation B believed that the process could benefit from standardisation.

The Government institutions had well documented practices and were very much aligned with the laws stipulated and by the SCM Framework. The tendering processes from these two organisations indicate that their processes are piece-meal. Secondly as implementation of the model suggests post-supplier relationships are not maintained. Quality Management was not mentioned in the interviews. The organisation specialising in procurement seemed to be the organisation with the most elaborate steps. The Government institutions seemed to have more activities aggregated in one phase whereas the other non-government institutions seemed to prefer to perform more precise actions in each stage.

The theoretical model seems to be more comprehensive than the existing processes used. Additionally the theoretical model encompasses the steps identified by these Government institutions. However, the case studies did indicate the implementation of the model suggests that the environment that is required for its effective implementation would require more use of technology as certain precepts of the model such as knowledge identification, know acquisition and storage that facilitates easy retrieval would be an issue in the current environment as the tendering processes and bid evaluations are currently-paper based.

Table 11: Tender Process Case Study Comparisons

Tendering process comparisons						
Stages No	Theoretical Model	Organisation A		Organisation B	Organisation C (3)	Organisation D
	Actions of each stage	Respondent A	Respondent B	Respondent C	Respondent D	Respondent E
1	<ul style="list-style-type: none"> <li>*Assess Business Needs</li> <li>*Assess ability to meet those needs</li> <li>*Determine ways for organisation to meet those needs</li> </ul>	Business case ( Needs Identification);	Needs Identification	Acquire Information	Obtain Produce User Requirements Specification- a high level document that summarises the user's requirements	Requirements Specification
2	<ul style="list-style-type: none"> <li>*Determine Project Scope,</li> <li>*Create Quality assessment</li> <li>*Criteria from the Business perspective</li> </ul>	Completion of tender documents	Foundation of Business Case	Manage Request for Offer	Obtain Produce Business case Document this document contains the purpose, budget, scope and technical specifications. This document also stipulates the Bid Adjudication Committee – the bid Adjudication committee is selected by the client	Sourcing- at this stage a decision is made whether a transversal contract or an open bid process will be followed
3	<ul style="list-style-type: none"> <li>*Issue Request of Proposals,</li> <li>*Establish Technical Panel Committee,</li> <li>*Panel Creates own quality assessment criteria,</li> <li>*Amalgamate assessment criteria.</li> </ul>	Tender Process	Amalgamation of Tender Documents	Manage Source Selection(Preparation)	Publication – Request for Bid stage this stage involves the formal advertisement of the tender- this publication includes the technical specifications, costing and pricing models, the engagement model, general contract or bid terms such as the opening and closing dates as well as the regulatory information from stipulated by National Treasury and with particular reference to the SCM Framework (see Chapter 3 of Literature review)	Logistics this involves acceptance of bids, order processing or purchasing of said goods. During this stage the SLA's are also determined
4	<ul style="list-style-type: none"> <li>*Receive Bids,</li> <li>*Evaluate bids using assessment criteria</li> </ul>	Tender Negotiation	Advertising	Manage Source Selection(evaluation)	Evaluation involves the formal evaluation of the submitted bids	Supply Chain Performance Stage this involves the evaluation of the SLA's and if supplier has performed adequately; they are categorised as "Preferred Suppliers" This stage also includes disposal management.
5	<ul style="list-style-type: none"> <li>*Select successful candidates</li> <li>*Consider candidates previous performance</li> <li>*Select best bid, paying consideration to cost, risk and social factors</li> <li>*Provide unsuccessful candidates with feedback</li> </ul>	Appointment of successful tender	Evaluation	Manage Contract/ Amendment Approval	Award this involves the selection of the bids with the most points and the winning bidder is notified	
6	<ul style="list-style-type: none"> <li>* Monitor winning contractor's performance</li> <li>*Manage relationship with contractor</li> </ul>	Contracting	Award	Manage Contract Execution	Contracting is the stage where the SLA are defined	
7		Contract closure.		Assets and Stock Management		
8				Process End or Contract Closure		

\*Organisation C conducts 3 Tendering Processes and all three have the same steps they only differ in participants

### **9.6.1. Impacts on the model**

The comparisons of the different processes indicate that the theoretical model is more suited to organisations that do not specialise in procurement. This would imply that the model has accomplished the task of exclusion. The theoretical model's process, is more comprehensive as opposed to the process currently adopted by organisation A and the surveyed Government institutions, but, not sufficiently comprehensive to be applied to Organisations of type B. With this said, the model is not completely inappropriate for organisations similar to type B, but may be used as a guideline if need be.

## **9.7 Category 3: Organisational Culture and Knowledge**

### **Utilisation**

The respondents from Organisation A seemed to have conflicting responses to the Knowledge Management questions. What was evident is that little bench-marking is used within this organisation and only prefer to learn from organisations similar to their own. Additionally technical experts are not considered as imperative and are only invited for their expertise on certain projects. What was evident about this organisation is that its Knowledge sharing policies, the concepts of trust and collaboration are communicated to some employees but others are not particularly aware of them, this would indicate that these values are not considered high within their organisation. What was observed is that Organisation A values education and believes in the mentorship of its employees and excellence awards are provided as motivation. Upon entering the Organisation, the atmosphere was relaxed and the participants were forthcoming with the sharing of the information. On the other hand Organisation B values technical experts considerably and the majority of employees are technical experts within a particular field. Bench-marking is not done on a formal basis; however, they do liaise with international bodies, however, on a very informal level. This organisation prefers to find information internally as opposed to externally. This may be due to the fact that they see their employees as experts and should be aware of them and apply them appropriately within the organisation. Knowledge is valued highly, within the organisation. Information discussed and noted in meetings is kept and noted; however, retrieval remains an issue. Sharing is encouraged where appropriate but not fairly common as the organisation deals with a large amount of classified information. Trust and collaboration exist within the operational context, however, in the strategic context this is not the case, and there is a knowledge hoarding culture. Skills development is encouraged and a mentorship

programme exists, however, it is not a high priority. Again this may be due to the fact that this organisation is comprised predominately of experts. Ideas are encouraged where they align with strategy and comply with legislation. The atmosphere in organisation B was more structured and more controlled. Respondent C indicated that the culture is very formal and that there is less trust and that there is a lack of effective leadership which at times my frustrate those in the operational level but not to the point that they become disheartened. Overall the impression presented by Organisation B is more controlled but formal and high focus on delivery and performance. At the time the interview was in progress Organisation B was in the process of documenting the tacit knowledge of some of their employees and attempting to infuse it to the already existing process.

Both organisations place a large emphasis on the delivery of the end product with organisation B highly focused on performance and productivity and quality. There is less unison in terms of an organisational identity; however, there is one common thread of quality and high performance being communicated. Again this may be due to the fact that this organisation deals with highly sensitive information which at times may not allow free communication.

Juxtaposed these organisations seem to be on the opposite sides of the spectrum in how they approach knowledge and their organisational culture. Each organisation values different things. Overall performance is considered important and knowledge to some extent but not particularly so in organisations of type A. Organisation of type B on the other had placed a large emphasis on their peoples expertise and knowledge.

The two Government institutions studied differed considerably with regards to the Organisational Culture and Knowledge Utilisation. One organisation seemed to have a more positive organisational culture where sharing and knowledge was promoted and there was a no blame culture, whilst in the other this was not the case. The differences in these organisations may be attributed to size and level of popularity. The latter organisation is more in the public eye and its services vastly impact the whole country, this would mean higher risk and higher accountability, which may impact the culture in the organisation.

## **9.8 Findings and Recommendations**

This study aimed to identify general knowledge management principles that may be applied to the tendering process conducted in South African Public Sector Institutions, in order to construct an enhanced tendering process that may be used for wide application in this sphere.

During the process of identifying these principles the study also identified additional factors that may impact the tendering process in South African Public Sector institutions, the details of these findings are provided in this chapter.

### **9.8.1. Organisational Culture**

Organisational Culture had a considerable impact on the process. This finding is consistent with the literature review, however, the literature review failed to identify the relevance of the type of commodity and how the Organisational Culture is largely influenced by this factor. The questionnaires and the interviews elicited indicate that the type of commodity had a significant impact on the Organisational Culture and Knowledge Utilisation although this seemed not to be the case in Government institutions. The tendering process is also affected by the costs of the actual product as this will determine the level of detail required to ensure that the correct product is selected in non-government organisations. In Government, the same process is followed and applied to all commodities, different routes or alternatives may be taken, however, they would all fall under the same process.

### **9.8.2. Terminology**

What was interesting to note in the study is the difference in terminology used in real life. Procurement is just the purchasing of goods or services and “tendering” as a process is a more collective term, not just limited to the purchasing of the desired goods or services but also includes analysis of business needs all the way up to disposal management, which are steps found in SMFA as stipulated by government.

### **9.8.3. Political Legacy Issues**

It would appear that prior to 1994, within Government there was a higher level of trust and people relied on their tacit knowledge to make decisions because they knew who had experience in performing a certain contract or job and would continually provide them with the bid. This implies that these companies were given an advantage because they were provided with opportunities for growth, as a result they grew in size and now dominate most of the market place. The government has introduced legislation to try and decrease this gap, however, these previous companies have already acquired economies of scale and have more resources and will offer more competitive prices than their smaller counter-parts. As stated when it comes to tendering, the bidder with more resources and has better understanding of

the process is the one that will benefit the most. Even though access has been increased to a wider market, the respondent indicated that with 99% accuracy they were always able to determine which company would receive the bid in advance.

#### **9.8.4. Market Observations**

The organisations studied provide an interesting insight into the market environment and operation of the tendering processes. All of these organisations have what they deem “preferred suppliers” which means that entrance into this market is very limited and difficult. Small businesses will find it difficult to penetrate this market; which may almost be considered an oligopoly. If procurement is seen as a tool for effective redistribution of wealth, it is quite interesting to note that in the tendering processes investigated, it seems not the case. In highly specialised markets, it would appear that due to the technical demands placed on suppliers, there is less likelihood of an open tendering process, resulting in a reasonably closed environment for tenders.

#### **9.8.5. Bid Applicants Mistakes**

It was identified in the literature review that the inclusion of KM concepts may minimize mistakes; however, this point was moot in the non-government organisations. Both of these organisations did not feel that tender applicants commonly repeat the same mistakes. In addition Respondent C from Organisation B indicated that this was more common with smaller suppliers as the large suppliers devote more resources to understanding the complex process involved in soliciting a bid. This may be due to the type of market the tendering process operates in since they have “preferred suppliers”, they have learnt by doing and are more familiar with the process and are less likely to make mistakes. Bidding mistakes were a common problem with Government institutions according to participants. They pointed out that a number of applications had been disqualified due to errors and that this was common with small suppliers or new entrants.

#### **9.8.6. Strategy and Prioritisation**

Analysis of the study seemed to indicate that the focus of Government organisations is more about following the process than on the content and they risk not implementing or providing high priority services because due diligence has not been followed. As a result they end up following low priority tasks because they have been through the proper channels. The laws

the Government has put in place, and how they are currently executed, are not aligned with good strategic objectives. Until a consistent message is communicated and those in the system responsible for the provision of services are more knowledgeable about the policies, the problems cited in the tendering process will continue.

### **9.8.7. Paper-based Processes**

The Government institutions interviewed indicated that their whole processes or at least a significant portion of them were still paper based. This means that for these organisations to implement KM principles, technology or processes that facilitate more effective means of storing information, to facilitate decision making is the first step. More efficient documentation systems and their effective management and inclusion into the tendering process may need to be introduced. The way the processes are currently being done, would indicate that the less information available, the easier the decision because it saves time. Time becomes a large factor, productivity is hampered and quick change and adaptability cannot be easily manifested in such conditions.

### **9.8.8. Tendering process as tool for re-distribution of wealth**

Throughout the literature review the idea that the tendering process and procurement may be seen as a tool for re-distribution of wealth was a recurring theme. During the data collection phase this supposition became tentative. It cannot be denied that there is some truth to this statement but the extent of its applicability in South Africa needs to be investigated since the organisations studied have preferred suppliers and tend to select from these pre-selected suppliers, it is more likely that the benefits are localised to these individuals and the individuals they serve. This means that the extent of re-distribution of wealth needs to be re-defined because the way the current processes are conducted would seem to indicate that those who are considered part of the “preferred supplier group” would be granted more opportunities to accumulate wealth. In specialised markets this cannot be avoided; however, Government seems to have preferred suppliers even in markets that are not specialised.

### **9.8.9. Relevance of Model**

The information elicited from the respondents indicates that the theoretical model is more suited to organisations that consider procurement a supporting function and not a core

function. Again this is a high level observation and considerable in-depth research will need to be conducted.

The objective of this study was to investigate the use of KM concepts in the tendering process in order to construct an enhanced tendering process.

In order to achieve this objective it was stipulated that this study would:

1. Investigate current tendering processes within South African government institutions, this objective has been achieved and four organisations were investigated.
2. Compare various tendering process found in other countries this objective has also been achieved the four countries studies were from both developing and developed nations.
3. Construct a theoretical enhanced tendering process. An enhanced model has been created.
4. Analyse problematic areas in the tendering process as identified by auditing authorities and investigate whether these problems could be mitigated by infusing KM concepts. In Chapter 1 it was identified that auditing authorities had identified problematic areas with the existing tendering process currently conducted in SA Government institutions. The problems identified are summarised below.

Tendering Process areas of concern	
*Concerns around transparency	*Namely consultants not being selected in a systematic manner
*Flaws in the awarding of tenders	*Insufficient planning and linking of entities to budgets,
*Lack of uniform bidding and other procedures across the public sector,	*Conflicts of interests due to composition of tender bodies

The enhanced tendering process would create greater transparency in the process and this may result in less flaws in the awarding of tenders as those involved would have to follow due diligence to prove that the decision that was made was based on facts and the suppliers previous performance. Tender bodies would be comprised of those with relevant knowledge and would be alternated. The enhanced tendering process caters for thorough needs assessment before the initiation of any project. Upon comparison of the existing process used by all the organisations interviewed, the enhanced tendering process has fully met their requirements.

5. Explore the use of the proposed tendering process within a unit of the South African Government for a particular item of inventory, paying attention to, amongst others:
  - a. Identifying internal individuals or bodies responsible for the selection of bids.
  - b. Assessing the extent to which these individuals use past information to make decisions.
  - c. Assessing the extent to which these individuals are knowledgeable about the chief industry participants and if their knowledge is insufficient the steps taken to empower them to make the best decisions.

The exploration of the proposed model provided enough information to meet the above objectives. As it currently stands, Organisations A and the Government institutions pay limited attention to the use of knowledge in helping them make decisions, they may include it but it is not considered a priority. All organisations were well aware of the chief industry participants because of the type of market the tendering process operates in. The current processes lend themselves to easy malpractice because preferred suppliers are used. The proposed model would work best in an environment where fair competition is encouraged.

The literature review identified challenges as well as best practices for implementing tendering processes as indicated by International Government practice. It is believed these challenges could be mitigated by appropriate knowledge. The revised model is depicted on the following page.

#### **9.8.10. Recommendations**

The proposed model would work best in an environment where the market is closer to a fair market. Despite Government recommendations regarding opportunities for all, it would appear that there are only specialized suppliers that can provide these services in certain markets. The Government also makes use of “preferred suppliers” for generalized fields as well; this further limits opportunities for new entrants. As it currently stands Organisations of type A, and SA Government organisations, employ minimal use of technology in their processes and the implementation of the proposed model would require the use of information systems or document management systems.

Future research questions would be:

*Have the new laws that have been promulgated by government actually increased opportunity for smaller suppliers?*

*The tendering industry is an oligopoly in government departments and parastatals?*

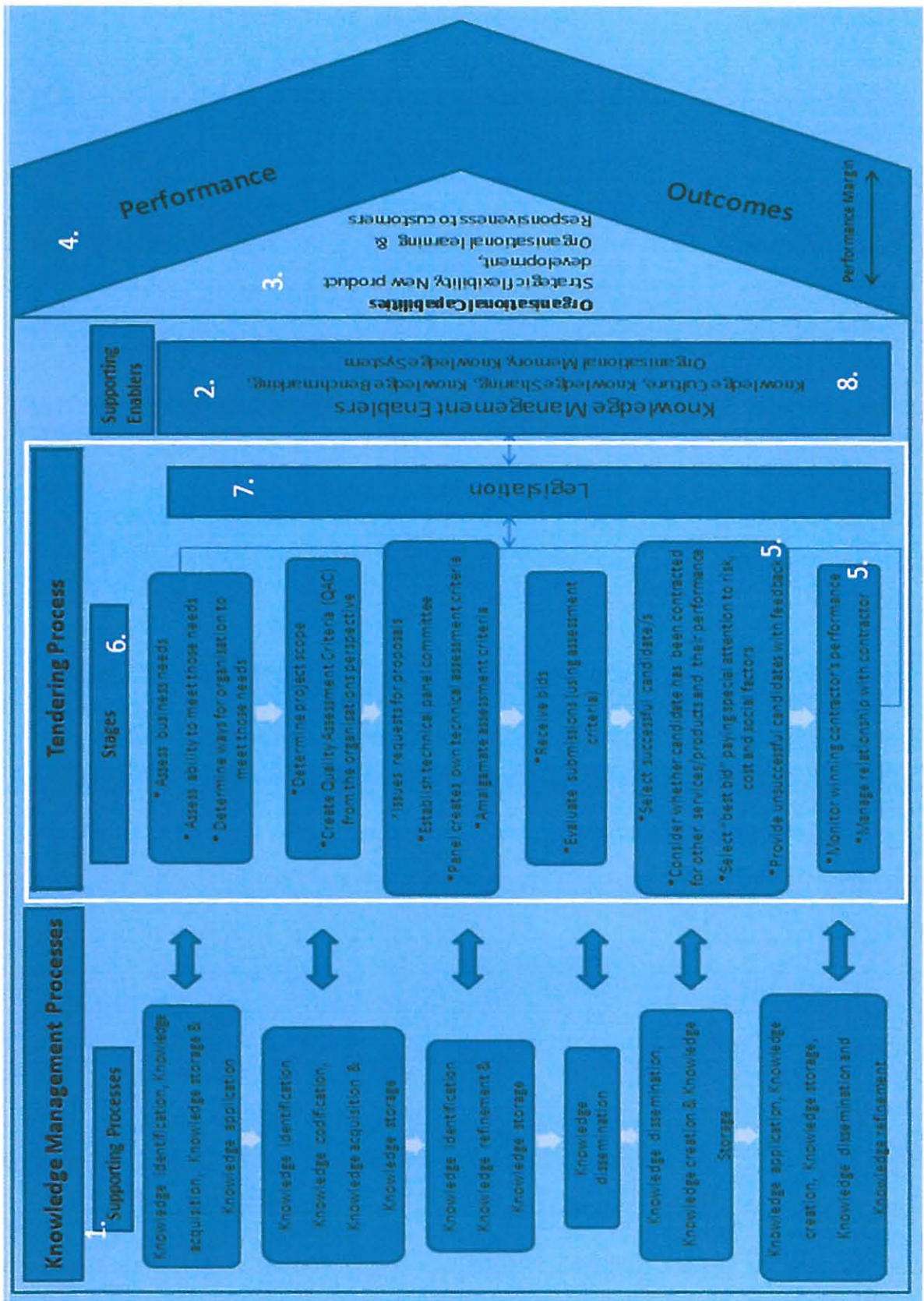


Figure 27: Updated Model and Contribution

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Anti-Corruption Act of 1997

Australia

Crimes Act of 1914

Financial Management and Accountability Act 1997

Commonwealth Authorities Companies Act of 1997

Public Service Act of 1999

Fair Work Act of 2009

# Appendices

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To Whom It May Concern

**Re: Permission to conduct research at your institution**

Ms. Sizukisa Bridget Kasi under the supervision of Mr. Chris Upfold is an Information Systems Masters student at Rhodes University carrying out research on “Towards identifying how Knowledge Management concepts may be applied to enhance the tendering process in South African Government Institutions”. The aim of this research is to determine:

1. What steps are followed by a selected South Africa government institution when conducting their tendering process?
2. What may be the most common problems experienced when conducting the tendering process?
3. To what extent is knowledge used to assist in the decision-making process?

References & Appendices

The participation and cooperation of your institution is important so that the results of the research are accurately portrayed.

The research will be undertaken in an interview with Mr. Rob Calitz and those appointed with the responsibility of selecting tender applicants. The questions in the interview cover Policy knowledge and Supplier Relations, the Tendering Process, Organisational Culture and Knowledge Utilisation. The identity of your institution will be treated with complete confidentiality. The interview should take about an hour to complete.

We look to you for guidance in identifying the relevant people at your institute that would be suitable to interview at a time and date that suites them.

Thank you for your time and I hope that you will find our request favourable. If you have questions or wish to verify the research, please feel free to contact me.

Yours sincerely,

Sizukisa Bridget Kasi and Mr. Chris Upfold

References & Appendices

# Tendering Process Questionnaire

**Prepared by:** Sizukisa Bridget Kasi **Date:** 29 June 2011

## Purpose

The purpose of this questionnaire is to learn contextual knowledge about the tendering process and to identify further factors that may impact efficiency that were previously not identified in the literature. In addition this questionnaire aims to shed some light on the research questions.

This questionnaire is divided into the following question sections:

### THIS QUESTIONNAIRE IS DIVIDED INTO THE FOLLOWING QUESTION SECTIONS:

SECTION A – Policy Knowledge and Supplier Relations.....	206
SECTION B - Tendering Process.....	207
SECTION C – Organisational Culture and Knowledge Utilization .....	210

Please tick the relevant columns

SECTION A – Policy Knowledge and Supplier Relations						
No.	Questions	Strongly disagree	Disagree	Do not know	Agree	Strongly agree
1.	<i>Does your organisation have a written procurement/tendering policy for goods and services?</i>					
2.	<i>If your organisation does have a procurement policy is it the standard National Government procurement policy?</i>					
3.	<i>If your organisation does use the National Government procurement policy has your organisation tailored it to suit its own specific needs?</i>					
4.	<i>If your organisation does have a procurement policy is it communicated to all staff in the organisation?</i>					
5.	<i>Are those responsible for the selection of bids/ tender applicants clearly identified?</i>					
6.	<i>To what extent is a supplier's past performance records (if they exist) used in the decision-making process?</i>					
7.	<i>Does your organisation employ certain suppliers more often than others and on what criteria would this be based?</i> <hr/> <hr/> <hr/> <hr/>					





13. *If you feel the process may be made more efficient, what stage(s) do you feel pose the most challenge(s) and why?*

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No.	Questions	Strongly disagree	Disagree	Do not know	Agree	Strongly agree
14.	<i>Does your organisation have additional criteria other than those stipulated by Government that you use in the selection process?</i>					

15. *If your organisation does have additional criteria, please would you list them below in the space provided:*

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20.	<i>Does your organisation promote the sharing and transfer of knowledge amongst employees?</i>					
No.	Questions	Strongly disagree	Disagree	Do not know	Agree	Strongly agree
21.	<i>Does your organisation have an open no blame approach to reporting incidents and sharing lessons learnt?</i>					
22.	<i>Is sharing knowledge in the organisation recognised and rewarded?</i>					
23.	<i>Do managers encourage trust and collaboration between individuals and teams?</i>					
24.	<i>Does your organisation encourage skills development?</i>					
25.	<i>Does your organisation have a mentoring programme?</i>					
26.	<i>Is competence evaluated on a regular basis?</i>					
27.	<i>Does your organisation</i>					

	<i>encourage the development of new ideas?</i>					
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**Additional comments and suggestions are encouraged.**

**Please use the space provided for any additional comments.**

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Thank you for your time

## **Organisation A: Respondent A:**

### Section A: Policy Knowledge and Supplier Relations

1. *Does your organisation have a written procurement/tendering policy for goods and services?*

According to the respondent, their organisation has a well documented tendering policy for goods and services.

2. *If your organisation does have a procurement policy is it the standard National Government procurement policy?*

The respondent indicated that it is not the standard National Government procurement policy but it is “close enough”.

3. *If your organisation does use the National Government procurement policy has your organisation tailored it to suit its own specific needs?*

The respondent indicated that since they are not considered a bona fide government institution they are not confined to or expected to comply with all the statutes stipulated by government, however, as from the 7<sup>th</sup> of December 2011 they will be expected to conform to the rules stipulated in the new PPPFA amendments.

4. *If your organisation does have a procurement policy is it communicated to all staff in the organisation?*

The respondent did not know the answer to this question.

5. *Are those responsible for the selection of bids/ tender applicants clearly identified?* The respondent agreed and specified that in addition those responsible for bids were context dependent.

6. *To what extent are a supplier's past performance records (if they exist) used in the decision-making process?*

According to respondent past performance is considered very important.

7. *Does your organisation employ certain suppliers more often than others and on what criteria would this be based?* The respondent indicated, yes, this indeed is the case and the criteria used is past performance, experience in the industry as well as recommendations by funders.

8. *Do you often feel that tender applicants frequently repeat the same mistakes when evaluating their applications?*

The respondent disagreed and felt that this was not a common mistake.

9. *How does your organisation deal with contractors/suppliers that delivery inferior products or perform poorly?* The respondent indicated that supplier's performance is constantly evaluated throughout the duration of the project, and requests for remedy are

issued should they be unsatisfied, if the final product is unsatisfactory, the supplier is given a negative record for future reference.

### Section B: Tendering Process

10. *How many stages would you say the procurement process has in your organisation?* The respondent indicated that the process in their organisation comprised of 7 stages.
11. *Please describe the steps conducted at each stage:*
  - a. Business case ( Needs Identification)
  - b. Completion of tender documents
  - c. Tender Process
  - d. Tender Negotiation
  - e. Appointment of successful tender
  - f. Contracting
  - g. Contract closure.
12. *Do you feel that the procurement/tendering process used in your organisation could be made more efficient?* The respondent indicated that they viewed the current process very efficient.
13. *If you feel the process may be made more efficient, what stage(s) do you feel pose the most challenge(s) and why?* The respondent indicated that they found no areas currently that required improvement.
14. *Does your organisation have additional criteria other than those stipulated by Government that you use in the selection process?* The respondent indicated that they have an electronic tool that uses a predetermined formula to calculate who the bid should be allocated to. –upon further inquiry as to how this formula is constructed the respondent was unaware and did not know who would have access to the relevant information.
15. *If your organisation does have additional criteria, please would you list them below in the space provided:* The respondent indicated that they use the criteria stipulated by Government and their electronic tool.

### Section C- Organisational Culture and Knowledge Utilisation

16. *Are technical experts regularly invited to assist in the selection process?* No (strong disagree)
17. *Is external bench-marking regularly used to enhance efficiency and adopt good industry practices?* The respondent indicated that they did, however, from only a select few of sources such as other State Owned Enterprises, Procurement Forums and the Purchasing Consortium.
18. *Do you feel your organisation values those who possess valuable knowledge, experience, or are educated?* The respondent agreed with this statement.

19. *Are minutes of each selection meeting recorded and retained in an effective way to facilitate search and retrieval?* The respondent indicated that yes, this is done and it is the put into action by the Project Steering Committees.
20. *Does your organisation promote the sharing and transfer of knowledge amongst employees?* Respondent agreed.
21. *Does your organisation have an open no blame approach to reporting incidents and sharing lessons learnt?* The respondent agreed.
22. *Is sharing knowledge in the organisation recognised and rewarded?* The respondent indicated that they did not know.
23. *Do managers encourage trust and collaboration between individuals and teams?* The respondent indicated that they did not know.
24. *Does your organisation encourage skills development?* The respondent stated that their organisation did encourage skills developments.
25. *Does your organisation have a mentoring programme?* The responded agreed.
26. *Is competence evaluated on a regular basis?* The respondent indicated that this is indeed the case.
27. *Does your organisation encourage the development of new ideas?* The respondent agreed with this statement.

Comments:

Respondent A indicated that current procurement and tendering process where guided by Government requirements, however, they were not forced to comply as they are not classified as a government department. They did however, say, that from the 7<sup>th</sup> of December 2011 they would be forced to comply because of the new amendments to the PPPFA. The new amendments change the way government tenders are adjudicated, the new changes only use Broad-Based BEE certificate to evaluate tenders not just ownership. These changes apply to all government departments and parastals.

**Organisation A: Respondent B:**

Section A: Policy Knowledge and Supplier Relations

1. *Does your organisation have a written procurement/tendering policy for goods and services?*  
According to the respondent, their organisation has a well documented tendering policy for goods and services.
2. *If your organisation does have a procurement policy is it the standard National Government procurement policy?*

The respondent indicated that it is not the standard National Government procurement policy but it is “informed by it and aligned to it”

3. *If your organisation does use the National Government procurement policy has your organisation tailored it to suit its own specific needs?*

The respondent indicated that their organisation has tailored it to suit their own needs.

4. *If your organisation does have a procurement policy is it communicated to all staff in the organisation?*

The respondent strongly agreed that it was.

5. *Are those responsible for the selection of bids/ tender applicants clearly identified?* The respondent strongly agreed that they were.

6. *To what extent are a supplier's past performance records (if they exist) used in the decision-making process?*

According to respondent past performance is considered important. \*\*

7. *Does your organisation employ certain suppliers more often than others and on what criteria would this be based?* The respondent indicated, yes, that they have Preferred Suppliers databases, which they rotate.

8. *Do you often feel that tender applicants frequently repeat the same mistakes when evaluating their applications?*

The respondent disagreed and felt that this was not a common mistake and that mistakes depend on the commodity on generic items (office supplies etc) frequent mistakes were found. They also pointed out that it would be difficult to really identify frequent mistakes as they deal with different tenders most of the time.

9. *How does your organisation deal with contractors/suppliers that delivery inferior products or perform poorly?* The respondent indicated that they did not know what would happen and in addition have not been exposed to such a case as yet. \*\*\*

#### Section B: Tendering Process

10. *How many stages would you say the procurement process has in your organisation?* The respondent indicated that the process in their organisation comprised of 6 stages.

11. *Please describe the steps conducted at each stage:*

- a. Needs Identification
- b. Foundation of Business Case
- c. Amalgamation of Tender Documents
- d. Advertising
- e. Evaluation
- f. Award

12. *Do you feel that the procurement/tendering process used in your organisation could be made more efficient?* The respondent indicated that they viewed the current process as “quite good”.
13. *If you feel the process may be made more efficient, what stage(s) do you feel pose the most challenge(s) and why?* The respondent indicated that they found no areas currently that required improvement and provided information about reports conducted by Accenture on the high level of efficacy governing their processes.
14. *Does your organisation have additional criteria other than those stipulated by Government that you use in the selection process?* The respondent indicated that they do.
15. *If your organisation does have additional criteria, please would you list them below in the space provided:* The respondent indicated that the government requires 3 steering committees, they on the other have 2; however, these two collectively perform the same functions that would be performed by the 3 stipulated by government. Evaluation stage involves predefined evaluation criteria, technical evaluation (functionality) and the BEE evaluation.

#### Section C- Organisational Culture and Knowledge Utilisation

16. *Are technical experts regularly invited to assist in the selection process?* Agreed that they were and made particular reference to construction projects.
17. *Is external bench-marking regularly used to enhance efficiency and adopt good industry practices?* The respondent indicated that they did not know whether this was done or not.
18. *Do you feel your organisation values those who possess valuable knowledge, experience, or are educated?* The respondent strongly agreed with this statement.
19. *Are minutes of each selection meeting recorded and retained in an effective way to facilitate search and retrieval?* The respondent indicated that yes, there is a secretary at every meeting and the minutes are then stored in a system.
20. *Does your organisation promote the sharing and transfer of knowledge amongst employees?* Respondent agreed.
21. *Does your organisation have an open no blame approach to reporting incidents and sharing lessons learnt?* The respondent indicated they did not know.
22. *Is sharing knowledge in the organisation recognised and rewarded?* The respondent indicated that there are excellence awards and mentors are selected on a regular basis.
23. *Do managers encourage trust and collaboration between individuals and teams?* The respondent agreed that this was done.
24. *Does your organisation encourage skills development?* The respondent stated that their organisation did encourage skills developments.
25. *Does your organisation have a mentoring programme?* The respondent agreed.
26. *Is competence evaluated on a regular basis?* The respondent indicated that this is indeed the case i.e. strongly agreed.

27. *Does your organisation encourage the development of new ideas?* The respondent agreed with this statement.

**Organisation B: Respondent C:**

Section A: Policy Knowledge and Supplier Relations

1. *Does your organisation have a written procurement/tendering policy for goods and services?*

According to the respondent their process is in the process of being documented. They rely on employees' tacit knowledge. They do have a simple documented process and they are currently in the process of adding the detail.

2. *If your organisation does have a procurement policy is it the standard National Government procurement policy?*

The respondent indicated that their organisation is guided by Government legislation and complies with it but does not restrict itself to Government requirements in fact it goes a lot further but this will change from the 7<sup>th</sup> December 2011. Commonly government legislation is very high level and does not include details.

3. *If your organisation does use the National Government procurement policy has your organisation tailored it to suit its own specific needs?*

The respondent strongly agreed that it was considerably tailored.

4. *If your organisation does have a procurement policy is it communicated to all staff in the organisation?*

The respondent strongly agreed that it was to all relevant staff.

5. *Are those responsible for the selection of bids/ tender applicants clearly identified?* The respondent strongly agreed.

6. *To what extent are a supplier's past performance records (if they exist) used in the decision-making process?*

According to respondent past performance is only considered if it is applicable.

7. *Does your organisation employ certain suppliers more often than others and on what criteria would this be based?* The respondent indicated, yes, this indeed is the case, in fact 7 major suppliers contributed for 85% of their business. The criteria used is; delivery, track record, competency and competitiveness and capacity. \*\*\*

8. *Do you often feel that tender applicants frequently repeat the same mistakes when evaluating their applications?*

The respondent disagreed and indicated that this was more common with inexperienced or smaller suppliers. The reason being the larger contractors have more resources to fully understand their complex process.

9. *How does your organisation deal with contractors/suppliers that deliver inferior products or perform poorly?* The respondent indicated that penalties of up to 10% of contract value are applied. Late delivery is penalised and there is also a quality division that is responsible for any rectifications which are also penalized. We will never accept inferior product.

### Section B: Tendering Process

10. *How many stages would you say the procurement process has in your organisation?* They presented an A1 size chart filled with complex diagram and stated that this was the high level process. There are 4 types of acquisition processes, technology, capital acquisition, and support of Organisation B processes and simple procurement. The contracting has about 400 steps of which 150 are re-iterations.
11. *Please describe the steps conducted at each stage:* The respondent indicated that their process had several reiterations and is very complex. They provided me with a diagram of their process and requested that I not show their process. I am, however, allowed to mention the overarching steps of the process. Please see Appendix D.
12. *Do you feel that the procurement/tendering process used in your organisation could be made more efficient?* The respondent indicated that standardisation and simplification was needed. They pointed out that the minute steps for a R billion contract are also followed for only a R100 000 contract. They pointed out that the cheaper items did not need such an extensive process and that it was a waste of time as the time invested and costs in verifying the bid usually outweigh the bid itself.
13. *If you feel the process may be made more efficient, what stage(s) do you feel pose the most challenge(s) and why?* The respondent indicated that there was extensive approval bureaucracy, each person is afraid of making a decision so there is constant referral ( as people are covering their backs), there is lack of trust within the organisation which affects the process. The prevention of fraud and corruption is also a time consuming process but it is not possible to get around that.
14. *Does your organisation have additional criteria other than those stipulated by Government that you use in the selection process?* The respondent indicated that they did have other criteria; however, as from the 7<sup>th</sup> of December 2011 because of the new changes to the PPPFA, the cheapest solution that meets the minimum requirements must always be selected. The respondent indicated that previously yes cost was factored in but also solutions that would be long term investments were also considered and they were willing to pay an additional premium because of the longevity of the product. The respondent indicated that minimum specifications were just not enough in the real world.

15. *If your organisation does have additional criteria, please would you list them below in the space provided:* The respondent indicated that their process is documented in 400 pages and page 45 has replaced 100 pages that were there previously in the 400 page document. I asked if they could be more specific, the then told me they had 14 types of criteria categories of which may comprise of up to 100 detailed specifications.

#### Section C- Organisational Culture and Knowledge Utilisation

16. *Are technical experts regularly invited to assist in the selection process?* Strongly agreed and stated that the whole process was conducted by technical experts.
17. *Is external bench-marking regularly used to enhance efficiency and adopt good industry practices?* The respondent indicated that this was not the case, strongly disagreed. It is done but rarely, since they are unique to South Africa, however, they do interact with international organisations in the same field, but it is not official. They further went on to say that their organisation was unique, has a sense of arrogance and believed in internal discussions.
18. *Do you feel your organisation values those who possess valuable knowledge, experience, or are educated?* The respondent agreed with this statement aside of organisational politics
19. *Are minutes of each selection meeting recorded and retained in an effective way to facilitate search and retrieval?* The respondent indicated that minutes were recorded but retrieval was an issue and that if you wanted something you had to chase people to get it.
20. *Does your organisation promote the sharing and transfer of knowledge amongst employees?* The respondent disagreed because they deal often with limited or classified subjects.
21. *Does your organisation have an open no blame approach to reporting incidents and sharing lessons learnt?* The respondent agreed.
22. *Is sharing knowledge in the organisation recognised and rewarded?* The respondent strongly disagreed.
23. *Do managers encourage trust and collaboration between individuals and teams?* The respondent indicated that at the strategic level no, but at the operational level yes.
24. *Does your organisation encourage skills development?* The respondent strongly agreed and stated that their organisation did encourage skills developments.
25. *Does your organisation have a mentoring programme?* The responded agreed but that it was limited by workload, limited by freewill, lack of time and was not very successful.
26. *Is competence evaluated on a regular basis?* The respondent indicated that this is indeed the case Performance system which is competency based and also a performance system to allocate people to jobs but that the performance system was not a mature science.
27. *Does your organisation encourage the development of new ideas?* The respondent agreed but that some ideas had to be approved or be in-line with legislation and this was limiting.

## **Organisation C: Respondent D: 12/09/2012**

### **Section A: Policy Knowledge and Supplier Relations**

1. *Does your organisation have a written procurement/tendering policy for goods and services?*  
The respondent indicated yes.
2. *If your organisation does have a procurement policy is it the standard National Government procurement policy?*  
The respondent indicated that it was informed by National Treasury Guidelines on SCM.
3. *If your organisation does use the National Government procurement policy has your organisation tailored it to suit its own specific needs?*  
The respondent agreed that it was tailored.
4. *If your organisation does have a procurement policy is it communicated to all staff in the organisation?*  
The respondent indicated that it was communicated to relevant stakeholders both externally and internally.
5. *Are those responsible for the selection of bids/ tender applicants clearly identified?* The respondent agreed. The Bid Adjudication Committee is pre-selected and the Bid Evaluation Committee changes, all these parties vary per tender.
6. *To what extent are a supplier's past performance records (if they exist) used in the decision-making process?*  
At present the only critical criteria is the selection criteria, however, should circumstances require additional information, the organisation does attempt to source it from the applicants. It is not standard practice.
7. *Does your organisation employ certain suppliers more often than others and on what criteria would this be based?* The respondent indicated yes and stated that before their tendering process officially begins they first, send out information related to a general tender requirements and the company's that reply are then added to their supplier list. The official and actual tender is then sent to this supplier's only.
8. *Do you often feel that tender applicants frequently repeat the same mistakes when evaluating their applications?*  
The respondent agreed particularly the new suppliers.
9. *How does your organisation deal with contractors/suppliers that delivery inferior products or perform poorly?* The respondent indicated they give suppliers a chance to remedy any issues that they may have raised additionally within the contract they will outline the terms and conditions. Suppliers who still do not meet the requirements are removed from the contract also added to the Defaulters Database. However, at all time due process has to be followed.

## Section B: Tendering Process

10. *How many stages would you say the procurement process has in your organisation?*

Organisation C is a special type of organisation because it operates 3 types of tendering processes. The first type is procurement on its own behalf, the second is procurement on behalf of other Government institutions and lastly there is procurement from it by other Government institutions. This may be summarised into, procurement for Organisation C, procurement through Organisation C and procurement from Organisation C. There are 6 stages in total.

11. *Please describe the steps conducted at each stage:*

The steps in Organisation C's various tendering processes are the same they only differ in ownership and accountability.

- Stage 1: User Requirements Specification- a high level document that summarises the user's requirements.
- Stage 2: Business case Document this document contains the purpose, budget, scope and technical specifications. This document also stipulates the Bid Adjudication Committee – the bid Adjudication committee is selected by the client.
- Stage 3: Publication – Request for Bid stage this stage involves the formal advertisement of the tender- this publication includes the technical specifications, costing and pricing models, the engagement model, general contract or bid terms such as the opening and closing dates as well as the regulatory information from stipulated by National Treasury and with particular reference to the SCM Framework (see Chapter 3 of Literature review).
- Stage 4: Evaluation involves the formal evaluation of the submitted bids
- Stage 5: Award this involves the selection of the bids with the most points and the winning bidder is notified
- Stage 6: Contracting is the stage where the SLA are defined

The above process is followed for procurement for Organisation C and procurement from Organisation C. For procurement through Organisation C, Organisation C does conduct Stage 5 and Stage 6 instead they submit a recommendation to the client or to the Accounting Officer. The client may request Organisation C to facilitate Stage 6, and Organisation C caters for such requests.

12. *Do you feel that the procurement/tendering process used in your organisation could be made more efficient?* The respondent strongly agreed with this statement, currently the process used in Organisation C is paper based. The respondent indicated that they were running out of space, because they had to keep all papers and contracts for a minimum of 5 years. An electronic process would be a huge advantage. Secondly the respondent

indicated that the time frames for taking action were long and that some times clients would may wait from 6 months even up to a year to receive items or services that were requested. The respondent also indicated that corruption was an issues and top management retention rate in the organisation was very low.

13. *If you feel the process may be made more efficient, what stage(s) do you feel pose the most challenge(s) and why?* The respondent indicated that all the stages needed attention but some of the problems could be stream-lined if they we transferred and were managed electronically. Additionally the respondent pointed out that they were currently involved in improving the contracting stage by issuing a draft contract with the bid. According to the respondent a lot of time is wasted and when the contract is being designed as bidders who have been awarded the contract heckle with certain criteria and stipulate that should they have known the information earlier they would not have applied for the bid. Demand management needs to officially practised by Government Institutions contracting from Organisation C because then bulk purchases could be conducted by Organisation C instead of the piecemeal process they are currently doing, which does not allow them to save costs.
14. *Does your organisation have additional criteria other than those stipulated by Government that you use in the selection process?* The respondent indicated, no they did not have additional criteria.
15. *If your organisation does have additional criteria, please would you list them below in the space provided – N/A*

#### Section C- Organisational Culture and Knowledge Utilisation

16. *Are technical experts regularly invited to assist in the selection process?*  
The respondent agreed.
17. *Is external bench-marking regularly used to enhance efficiency and adopt good industry practices?* The respondent indicated yes.
18. *Do you feel your organisation values those who possess valuable knowledge, experience, or are educated?* The respondent agreed with this statement
19. *Are minutes of each selection meeting recorded and retained in an effective way to facilitate search and retrieval?* The respondent indicated yes the minutes of each meeting were recorded, albeit on paper. The documents are stored in a structured manner.
20. *Does your organisation promote the sharing and transfer of knowledge amongst employees?* The respondent agreed although they stated that it is in the budding stage and the they were currently involved in the establishment of a Knowledge Management Centre.

21. *Does your organisation have an open no blame approach to reporting incidents and sharing lessons learnt?* The respondent disagreed and stated they there was a tendency to blame others and elect scapegoats.
22. *Is sharing knowledge in the organisation recognised and rewarded?* The respondent strongly disagreed.
23. *Do managers encourage trust and collaboration between individuals and teams?* The respondent disagreed.
24. *Does your organisation encourage skills development?* The respondent agreed and stated that their organisation did encourage skills developments, bursaries and funding for their employees.
25. *Does your organisation have a mentoring programme?* The responded indicated no there is no formal mentoring programme additionally, but for certain types of departments within the organisation they did have Learnships and skills transfer.
26. *Is competence evaluated on a regular basis?* The respondent indicated yes.
27. *Does your organisation encourage the development of new ideas?* The respondent indicated no, but they were about to embark on the creation of an Innovation Centre.

## **Organisation D: Respondent E: DST**

### Section A: Policy Knowledge and Supplier Relations

1. *Does your organisation have a written procurement/tendering policy for goods and services?*  
The respondent indicated yes.
2. *If your organisation does have a procurement policy is it the standard National Government procurement policy?*  
The respondent indicated yes.
3. *If your organisation does use the National Government procurement policy has your organisation tailored it to suit its own specific needs?*  
The respondent agreed that it was tailored.
4. *If your organisation does have a procurement policy is it communicated to all staff in the organisation?*  
The respondent indicated that it was communicated to relevant stakeholders both externally and internally.
5. *Are those responsible for the selection of bids/ tender applicants clearly identified?*  
The respondent agreed

6. *To what extent are a supplier's past performance records (if they exist) used in the decision-making process?*

The respondent indicated that they did not know.

7. *Does your organisation employ certain suppliers more often than others and on what criteria would this be based?* The respondent indicated yes and that these suppliers were selected based on past experience, quality of serviced and sometimes it is long-term contract.

8. *Do you often feel that tender applicants frequently repeat the same mistakes when evaluating their applications?*

The respondent agreed particularly upcoming businesses, made repetitive mistakes some of them petty such as missing documents.

9. *How does your organisation deal with contractors/suppliers that delivery inferior products or perform poorly?* The respondent indicated that they would have discussion at the Bid Committee meetings with the supplier and try to resolve the issues amicably, if this did not work, the contract would either be just terminated or in extreme cases terminated they would be registered with the National Treasurer on the defaulters database.

#### Section B: Tendering Process

10. *How many stages would you say the procurement process has in your organisation?*

The tendering process used has 4 stages.

11. *Please describe the steps conducted at each stage:*

- Stage 1: Requirements Specification
- Stage 2: Sourcing- at this stage a decision is made whether a transversal contract or an open bid process will be followed.
- Stage 3: Logistics this involves acceptance of bids, order processing or purchasing of said goods. During this stage the SLA's are also determined.
- Stage 4: Supply Chain Performance Stage this involves the evaluation of the SLA's and if supplier has performed adequately they are categorised as "Preferred Suppliers". This stage also includes disposal management.

12. *Do you feel that the procurement/tendering process used in your organisation could be made more efficient?* The respondent agreed, they believed the laws were confining and that the turn-around times needed to be revised, they had to advertise for 21 days and in most cases the project plan was done after the awarding of the contract.

13. *If you feel the process may be made more efficient, what stage(s) do you feel pose the most challenge(s) and why?* The respondent indicated that the Project Plan phase needed to be done earlier and that effect management of this stage would make the process slightly more efficient.

14. *Does your organisation have additional criteria other than those stipulated by Government that you use in the selection process?* The respondent indicated, no they did not have additional criteria.

15. *If your organisation does have additional criteria, please would you list them below in the space provided – N/A*

### Section C- Organisational Culture and Knowledge Utilisation

16. *Are technical experts regularly invited to assist in the selection process?*

The respondent indicated that specialists were only included in the planning phase.

17. *Is external bench-marking regularly used to enhance efficiency and adopt good industry practices?* The respondent indicated yes and that they looked at International and National Standards. (private really not considered)

18. *Do you feel your organisation values those who possess valuable knowledge, experience, or are educated?* The respondent strongly agreed.

19. *Are minutes of each selection meeting recorded and retained in an effective way to facilitate search and retrieval?* The respondent indicated yes the minutes of each meeting were recorded but easy search and retrieval was questioned.

20. *Does your organisation promote the sharing and transfer of knowledge amongst employees?* The respondent agreed and in their organisations there are forums and newsletters that share information.

21. *Does your organisation have an open no blame approach to reporting incidents and sharing lessons learnt?* The respondent indicated yes, and issues are addressed in the forums.

22. *Is sharing knowledge in the organisation recognised and rewarded?* The respondent indicated they didn't know and stated that they assume it was done but probably behind closed doors.

23. *Do managers encourage trust and collaboration between individuals and teams?* The respondent agreed.

24. *Does your organisation encourage skills development?* The respondent agreed.

25. *Does your organisation have a mentoring programme?* The respondent indicated that it did exist but was not fully implemented.

26. *Is competence evaluated on a regular basis?* The respondent indicated yes.

27. *Does your organisation encourage the development of new ideas?* The respondent agreed.

### **Interviews**

### References & Appendices

### Interview with Respondent B at Organisation A:

Respondent B was a high level manager with almost 3 years experience in the role. The questions placed considerable emphasis on the level of experience of the respondent.

1. *What trends/observations have you noticed with regard to the procurement process within your organisation? With particular reference to pre and post 1994.* The respondent indicated that they were not there pre-1994, however, during their time as manager they had found that there is continuous improvement. One of the pending changes was the re-evaluation of their procurement process so as to make sure they comply with the amendments to the PPPFA.
2. *Based on your experience what would you deem to be the most important factors affecting the efficiency of the tendering process?* The respondent indicated that Planning, having clear objectives and why something is necessary are some of the factors they considered important. In particular clear feasibility studies and cost estimates as well as the people involved in the process should be knowledgeable about the tender, currently some of the people were “clueless” and this made decisions difficult.
3. *What are the typical problems experienced with the process from your observations?* They pointed out that they had not been sued yet, and that the losers are told that they have lost and if they want more information they can request it. They also pointed out that they had not experienced any drastic problems so far.
4. *With regard to bid applications that are not processed due to incompleteness or not being filled in properly?* The respondent indicated that this was not a frequent problem for them.
5. *Have you heard of Knowledge Management?* The respondent indicated that they had a basic idea of what it was and that they understood it to be managing knowledge, saving it in an easily accessible location.
6. *Do you think the observations you have identified if they exist could be solved or mitigated if people had proper knowledge?* The respondent indicated yes, because knowledge is power and if people were more knowledgeable of the whole process it may be more efficient.
7. *How would you describe the culture in your organisation?* The respondent indicated that there is a high level of trust and that people know what is expected of them.
8. *What checks and balances are used to guard against corruption?* The respondent indicated that there are several committees that a supplier has to be approved by; examples of committees include steering committee and supplier selection committee.
9. *What is the composition of the steering committee?* The respondent indicated that it is a rotation of technical experts. Dependent on the division the end user comes from. If the same division requires the same type of project in most likelihood the same technical expert will be selected. \*

10. *What is the level of end user involvement?* They are present throughout the whole process.
11. *What is the level of political involvement in the process?* The respondent indicated as far as they know there is none.

#### Interview with Respondent C at Organisation B:

Respondent be was a high level manager with almost 26 years experience in the role. The questions placed considerable emphasis on the level of experience of the respondent.

1. *What trends/observations have you noticed with regard to the procurement process within your organisation with particular reference to pre and post 1994?*  
The respondent indicated that pre-1994 there was significant reliance on professional judgement and trust. Post-1994 it is characterised by bureaucracy, lack of trust, heavily regulated, less freedom, it is more clearly documented and there is a lack of effective leadership. Also habitual processes have become more formalised, which they pointed out to be good. Pre-1994 it was based on a person knowing people that could do the job. That is people used their tacit knowledge experience to make decisions. Now it is more fair and open even though the same people will still end up receiving the bid, they have opened it to more suppliers.
2. *Based on your experience what would you deem to be the most important factors affecting the efficiency of the tendering process?* The respondent indicted that lack of effective leadership, complicated documentation, lack of trust by managers; disorganised information systems and the high level of bureaucracy were some of the problems that they believed to be significant.
3. *What are the typical problems experienced with the process from your observations?* The respondent indicated that everything is questioned, there is lack of trust i.e. people are constantly looking over their shoulder.
4. *With regard to bid applicants are there many applications that are not processed due to incompleteness or not being filled in properly?*  
The respondent indicated that this is only the case with inexperienced suppliers and that they lack resources.
5. *Have you heard of Knowledge Management?* Yes
6. *Do you think the observations you have identified if they exist could be solved or mitigated if people had proper knowledge?*

Yes, provided that we had the same definition of what knowledge is and this will be affected amendments to the PPPFA which take effect from the 7<sup>th</sup> of December.

7. *How to you maintain autonomy from political influences if they exist?*

The respondent indicated that there is none because everyone is highly professional, driven and passionate about their job. (Organisational politics is more problematic but national politics non-existent pressure.

8. *Please describe the system used in your organisation.*

We don't have a system per se

Comments

People think procurement or tendering is similar to buying a car but they are influenced by brand affiliation. If you buy a house it gets more complex. And they said their job is similar to buying a house.

That process is largely dependent on the scale of the product

People over-simplify it.

People don't understand that there is risk involved, accuracy Affirmative action Poor leadership frustrating but professionalism is there.

In appropriate people are elected to make decisions

Committee of between 4 and 12 people and each would make a personal judgement and we would take the average of the people. Two levels of inappropriate level selection the people in the committee, not much of a big deal but management is the most culpable and at fault. The reason being pre-1994 previously white organisation and now there is an attempt to transform. The reason being those in position of power do not have the same level of experience or the required knowledge, however, due to pressure from the position they hold they push themselves to make decisions, which are not always the best because they are reluctant to ask for advice or feel threatened by those who possess more knowledge or experience but are not in the same position.

Interview with Respondent D at Organisation C:

Respondent D was a high level manager with 3 years experience at Organisation C but one year in the Supply Chain Management Division.

1. *Based on your experience what would you deem to be the most important factors affecting the efficiency of the tendering process?* The respondent indicated that Leadership was an issue because of certain political and business people leaders who had vested interests. Effective procurement planning was necessary so as to minimise costs by conducting bulk purchases. Currently according to the responded the procurement planning area alone in Government accounts for roughly 16 billion to 32 billion of the Government expenditure, and of that pie Organisation C is responsible for roughly 4 billion and it is possible to decrease the value and through efficiency.
2. *With regard to bid applications that are not processed due to incompleteness or not being filled in properly?* The respondent indicated that this was a common problem especially with small suppliers. These bids are automatically disqualified and the respondent indicated that they are notified of their disqualification.
3. *Have you heard of Knowledge Management?* The respondent indicated yes.
4. *Do you think the observations you have identified if they exist could be solved or mitigated if people had proper knowledge?* The respondent indicated yes, knowledge about policies, technical knowledge and client knowledge of the SCM process would be of great benefit they believed
5. *Does the Bid Adjudication Committee change per bid?*  
The respondent indicated yes.
6. *Do you believe the laws created by the government have made the process better?*  
The respondent indicated that they did not know.

#### Comments and Observations

The organisational culture seemed to be an area of concern in the organisation and the lack of effective leadership. Formal processes did exist and due diligence seemed to be followed, albeit it was a very paper based society. Knowledge and creation and sharing of knowledge was not considered a priority. The laws stipulated by Government were adhered to stringently.

#### Interview with Respondent E at Organisation D

1. *What trends/observations have you noticed with regard to the procurement process within your organisation? With particular reference to pre and post 1994.*  
The respondent had worked 15 years in the Demand management environment. They had been a senior manager for 6 years. The respondent indicated although they had not been in the current position pre-1994 they noticed that Government was very regulatory and compliance focussed and not Service Delivery Focused. They also pointed about that

because of the extensive red-tape many perceive them to be show-stoppers. They pointed out that people or the masses need to be educated on compliance.

2. *Based on your experience what would you deem to be the most important factors affecting the efficiency of the tendering process?* The respondent that the existing control measures and red tape was a waste of time in their opinion and the believed it lowered productivity. Additionally they indicated that corruption and fraud were still a problem and that it was difficult to detect exactly where corruption took place but it was evident in cases that it did occur.
3. *What are the typical problems experienced with the process from your observations?* The lack of transparency in the process and the fact that certain stakeholders in the process have ulterior motives
4. *With regard to bid applications that are not processed due to incompleteness or not being filled in properly?* The respondent indicated that this was a frequent problem among upcoming entrepreneurs. The reason being that tenders are opened and not limited to just old industry participants, but these suppliers often lack Tendering Knowledge and are unfamiliar with the process. The respondent did indicate the State Tender Information Sessions were held, how frequently and how often they were communicated the respondent did not know.
5. *Have you heard of Knowledge Management?* The respondent agreed and indicated that they were currently responsible for the knowledge economy propagate within their organisation.
6. *Do you think the observations you have identified if they exist could be solved or mitigated if people had proper knowledge?* The respondent agreed and stated that the sharing of tacit knowledge would make life easier in terms of administration.