DETERMINANTS OF PROCUREMENT PERFORMANCE AT KENYA NATIONAL HIGHWAYS AUTHORITY (KeNHA)

Robert Matindi
Masters Student, Jomo Kenyatta University of Agriculture and Technology

Dr. Gordon Karanja Ngugi
Lecturer, Jomo Kenyatta University of Agriculture and Technology


ABSTRACT
Public Procurement as a function of government includes decisions about the services that will be delivered to local authorities and the communities they serve. Many national and international instruments have been concerned with building an effective procurement system. As a commonwealth country, in Kenya there is a tendering unit in which the permanent secretary or chief accounting officer is the chairperson. The procurement units within ministries and department prepare and submit proposals for procurement in which qualities, quantities and prices are spelt out to the central tendering entities. In developing countries, public procurement is increasingly recognized as essential in service delivery and it accounts for a high proportion of total expenditure. The study focused on reviewing four variables i.e. management styles, organization culture, stakeholder influence, organizational influence and the government policy as the moderating variable. The target population for this study was 180 management staff from three levels of management. Stratified random sampling technique was employed to select the sample of 55 respondents, which is 30% of the target population. The study found out that the role of culture in organizational compliance has gained momentum; that awareness of the nature of public organizational culture is vital in explaining and assessing the appropriateness and outcome of the current reform process; that culture plays a central role in the compliance process and associated outcomes; that conformity and compliance are achieved through enforcement of formerly stated rules and procedures. The study also concludes that VFM is associated with deployment of resources for realization of some expected value in an economic, in efficient and effective manner; that transparent procurement procedures can contribute to a more efficient allocation of resources through increased competition; that procurement regulations are to harmonize public procurement performance in the public sector to ensure judicious, economic and efficient use of public resources.

Key Words: procurement performance, Kenya National Highways Authority (KeNHA)
Introduction

Procurement is the process of acquiring goods, works and services. Public Procurement (PP) as a function of government includes decisions about the services that will be delivered to local authorities and the communities they serve (Hughes, 2005). It is utilized not only to secure goods and services required by public sector organizations for their missions and to support services provided to taxpayers, but it is also used to implement national policies and to achieve social and other objectives (Thai, 2004). Many national and international instruments have been concerned with building an effective procurement system. In this context, particular procurement issues, such as the implementation of secondary policies, the review mechanism to address complaints, provisions on electronic procurement or rules governing privately financed projects, have received an in-depth examination (De Castro, 2006).

Public Procurement regulations of the European Union (EU) play a crucial role in not only spending government money as part of public service (European Commission, 2004b) but they do affect private enterprise as well for at least two reasons. On one hand even private owned entities operating in the water, energy, transport and postal services sectors (or “utilities”) are subject to the related EU Public Procurement (PP) directive, Directive 2004/17/EC (European Commission, 2004a), on the other hand, most EU funding support (i.e. subsidies) received by private firms carries with it the requirement of following EU PP rules when spending the funds received (European Commission, 2004). Hungary, a country with so called "transition economy" is in a state of flux. On top of the still ongoing radical social and economic changes that started after the "fall of the iron curtain" fifteen years ago Hungary has recently joined the European Union which brought on additional pressures. As an important component of harmonizing legal regulations, the national Act on Public Procurement had been amended to line up with EU directives.

As a commonwealth country, in Kenya there is a tendering unit/organ otherwise known as the procurement department directly responsible to the accounting officer. The procurement units within ministries, department and implementing agents (parastatals) prepare and submit their requirements for procurement and disposal in which qualities, quantities and prices are spelt out to the tendering unit. Once the user departments spell out their requirements they are processed for tendering or quotation or proposal based on the threshold which is finally adjudicated by either the tender committee or procurement committee for award.(RoK, 2001).

In the past decades, the public procurement system in Kenya has undergone significant developments. From being a system with no regulations in the 1960s, and a system regulated by Treasury Circulars in the 1970s, 1980s and 1990s, the introduction of the Public Procurement and Disposal Act (PPDA) of 2005 and the Procurement Regulations of 2006 has introduced new standards for public procurement in Kenya. In Kenya, the Government established the Kenya Anti-Corruption Authority (KACA) now Ethics and Anti-corruption Authority to fight corruption head-on and although this organization has since been outlawed, there exists a police unit to fight against corruption. The gist of public procurement audits is to ensure that public
funds are expended for their intended purpose, and with a view to maximizing value received by the public purchaser, ensuring that proper and accountable systems are in place and adhered to, and identifying any weaknesses in procurement (TISA, 2009) and as such public procurement audits ought to be adequately sensitive to procurement related issues (PPOA, 2007). The elaborate process of public procurement audit includes a bid process audit, contract audit, award audit, contract award audit, performance audit and disposal audit (RoK, 2003).

According to the Kenya National Highways Authority website, The Kenya National Highway Authority (KeNHA) is an autonomous agency for the management, development, rehabilitation and maintenance of truck roads linking centers of international importance and crossing international boundaries or terminating at international ports (class A). National truck roads links internationally important centers (class B), and primary roads linking provincial centers or two higher class roads (class C). Kenya National Highway Authority core functions are to construct, upgrade, rehabilitate and maintain Class A, B, C roads, implement road policies on National roads and ensure adherence to guidelines on axle load control in the traffic Act. Its other roles are to ensure that the quality of roads is in accordance with defined standards and to collect data on use of national roads (KeNHA annual report 2010 – 2011).

The Authority is 100% owned by the Government as a state corporation established under Kenya Roads Act, 2007. The organization operations are also governed by relevant legislations and regulations such as the Finance Act, the Public Procurement Regulations, and Performance Contracting. The main objective of setting up the Kenya National Highway Authority was to ensure adherence to guidelines on axle load control in the traffic Act. Its other roles are to ensure that the quality of roads is in accordance with defined standards and to collect data on use of National roads (KeNHA annual report 2010 – 2011).

According to the National Association of State Procurement Officials( 2003) the environment of public sector has become complex more than ever before. Procurement process management is no longer considered a clerical function performed independently by untrained individuals within a governmental agency. Today, procurement managers and agents confront rapidly emerging technologies, increased product diversity and choice, environmental concern and growing emphasis on quality and best value. Compounding the technical complexities they face, workers are increasingly called upon to balance the dynamic tension between competing socioeconomic objectives, provide a consistency management of procurement and satisfy the main economy and efficiency (McCue, 2000).

**Statement of the Problem**

Inevitably, governments are the biggest "spenders" world-wide (World Bank, 2007). The figure, varies from country to country, but according to various sources (for example Knight et al., 2003a) government spending on public services accounts for anywhere between 15-45% of GDP. Singapore reported 17%, while Canada is over 40% and the UK is in the range of 44%
(Knight et al. 2003a). Most of this amount is "internal" spending (of salaries and alike), but some 25% to 50% is indeed spent "externally" (on sourcing goods and services) and mainly through Public Procurement. The sheer amount of this spending has a huge impact on the economy. Mahmood, (2010) reiterated that public procurement represents 18.42% of the world GDP. In developing countries, public procurement is increasingly recognized as essential in service delivery (Basheka & Bisangabasaija, 2010), and it accounts for a high proportion of total expenditure. For example, public procurement accounts for 60% in Kenya (Akech, 2005), 58% in Angola, 40% in Malawi and 70% of Uganda’s public spending (Wittig, 1999; Government of Uganda, 2006) as cited in Basheka and Bisangabasaija (2010). This is very high when compared with a global average of 12-20 % (Frøystad et al; 2010). Due to the colossal amount of money involved in government procurement and the fact that such money comes from the public, there is need for accountability and transparency (Hui et al; 2011).

Local studies that have been done include Otieno, (2004) who did a study on procurement activities in public institutions; Akech, (2005) did a study on development partners and governance of public procurement in Kenya; Ombaka, (2009) carried a study on management of medicine procurement in Developing countries and Kiawa, (2012) conducted a study on accountability in Public Sector Procurement in the State Law Office. It is against this background that this study sought to fill the existing research gap by assessing the determinants of procurement Performance at Kenya National Highways Authority (KeNHA).

**General Objective**

To assess the determinants of procurement process at Kenya National Highways Authority (KeNHA)

**Specific Objectives**

1. To establish the effect of the management styles on procurement performance at KeNHA
2. To determine the effect of organization culture on procurement performance at KeNHA
3. To assess the effect of stakeholder influence on procurement performance at KeNHA
4. To establish the effect of organizational resources on procurement performance at KeNHA
5. To determine the moderating effect of government policy on procurement performance at KeNHA

**Scope of the Study**

The study will assess the determinants of procurement process at Kenya National Highways Authority (KeNHA). Data will be specifically collected from the various levels of employment at the Kenya National Highways Authority which include the top, middle and low level management who are believed to be considered as major respondents in the study.
Literature Review

Systems Theory

The systems theory was developed by Ludwig von Bertalanffy in 1968. The theory offered a more comprehensive view of organizations. Ludwig asserted that the theory is not a theory of management but a new way of conceptualizing and studying organizations. It is a theory of emergents - actions and outcomes at the collective level emerge from the actions and interactions of the individuals that make up the collective (Andras & Charlton, 2005). Systems theory provides an analytical framework for viewing an organization in general (description and explanation). Managers who understand systems theory recognize how different systems affect a worker and how a worker affects the systems around them. A system is made up of a variety of parts that work together to achieve a goal. Systems theory is a broad perspective that allows managers to examine patterns and events in the workplace. This helps managers to coordinate programs to work as a collective whole for the overall goal or mission of the organization rather than for isolated departments (Hawthorne, 2013).

Systems theoretic analysis suggests that charismatic leaders may pull an organization out from a troubled period, but they are likely to inject new innovations into the referencing rules even when the organisation found a new good fit with its environment. They cannot stop making big changes, even when big changes are more likely to do harm than good. This means that charismatic leadership is likely to be useful on the short-term as ‘sharp shock therapy’, but it should be followed by unperturbed expansion of the renewed organisation and its management sub-system by a more impersonal, rule following’ and ‘bureaucratic’ style of leadership. This analysis also implies that long-term charismatic leadership might work in organisations in an environment which is constantly radically changing (Goleman, 2004).

Systems theory analysis of management shows that adaptive standardisation of processes may lead to a shrinking of the system in the short-term, but in the long term adaptive standardization leads to further and faster expansion. This implies that standardisation reduces the complexity of some procedural language used within the organisation, locally reducing complexity; but if this simplification is successful, it will increase efficiency, liberate resources, and lead to a general increase of the complexity of the system (Zaleznik, 2004).

Organization Culture Theory

Organizational culture became a business phenomenon in the early 1980s, triggered by four books: Ouchi’s (1981) Theory Z, Pascale and Athos’s (1982) The Art of Japanese Management, Peters and Waterman’s (1982) In Search of Excellence, Deal and Kennedy’s (1982) Corporate Cultures. All four books suggested that corporate culture was key to organizational performance and that corporate culture could be managed to improve a company’s competitive advantage. They provided pragmatic prescriptions to American business leaders desperate for answers to help them remain successful in the face of increasing Japanese competition (Pascale & Athos, 1982). Organizational Culture Theory "has become a major theoretical rallying point" (Mumby, 1988). Pacanowsky and O'Donnell-Trujillo were instrumental in directing researchers' attention...
toward an expansive understanding of organizations. The theoretical principles of the theory emphasize that organizational life is complex and that researchers must take into consideration not only the members of the organization but their behaviors, activities, and stories.

The literature on organizational culture is as relevant to public science management as it is to the management of private sector business organizations. Given a rapidly changing environment and continuing insights into organizational effectiveness, organizations are seriously rethinking what they do and how they can best define and accomplish their goals and objectives (Denison, 1990). Once goals are defined, it is necessary to address the type of culture that is necessary to advance these goals and objectives and ensure the successful implementation of the necessary changes. In addition, the organizational effectiveness literature has been increasingly emphasizing the importance of culture in motivating and maximizing the value of its intellectual assets, particularly its human capital (Deal, Terrence & Kennedy, 1982). Although all organizations have cultures, some appear to have stronger, more deeply rooted cultures than others. Initially, a strong culture was conceptualized as a coherent set of beliefs, values, assumptions, and practices embraced by most members of the organization. The emphasis was on (1) the degree of consistency of beliefs, values, assumptions, and practice across organizational members; and (2) the pervasiveness (number) of consistent beliefs, values, assumptions, and practices. Many early proponents of organizational culture tended to assume that a strong, pervasive culture was beneficial to all organizations because it fostered motivation, commitment, identity, solidarity, and sameness, which, in turn, facilitated internal integration and coordination (Denison, Hooijberg & Quinn, 1995).

Schein (1992) noted that a strong organizational culture has generally been viewed as a conservative force. However, in contrast to the view that a strong organizational culture may be dysfunctional for contemporary business organizations that need to be change-oriented, he argues that just because a strong organizational culture is fairly stable does not mean that the organization will be resistant to change. It is possible for the content of a strong culture to be change-oriented, even if strong organizational cultures in the past typically were not. He suggests that the culture of modern organizations should be strong but limited, differentiating fundamental assumptions that are pivotal (vital to organizational survival and success) from everything else that is merely relevant (desirable but not mandatory) (Schein, 1992). Today’s organizations, characterized by rapidly changing environments and internal workforce diversity, need a strong organizational culture but one that is less pervasive in terms of prescribing particular norms and behavioral patterns than may have existed in the past. This view was supported by Collins and Porras (1994) in their famous study (Built to Last) of companies that had strong and lasting performance.

**Stakeholder theory**

In the mid-1980s a stakeholder approach to strategy came up. One focal point in this movement was the publication of Richard Edward Freeman. He is generally credited with popularizing the stakeholder concept. The title of the work is – Strategic Management and only the subtitle is A
The purpose of stakeholder management was to create methods to manage the different groups and relationships that resulted in a strategic fashion. Further Freeman (1984) thinks that the idea of stakeholders, or stakeholder management, or a stakeholder approach to strategic management, suggests that managers must formulate and implement processes which satisfy all and only those groups who have a stake in the business. The main task in this process is to manage and integrate the relationships and interests of shareholders, employees, customers, suppliers, communities and other groups in a way that guarantees the long-term success of the firm. A stakeholder approach is very much concerned about active management of the business environment, relationships and the promotion of shared interests in order to develop business strategies (Friedman & Miles, 2001).

Stakeholder interests could encompass a broad range of issues, such as labour conditions, environmental issues or social responsibility, some of which might be contrary to a firm’s interests (Friedman & Miles, 2006). This touches on Froeman’s (1999) suggestion that stakeholder management could be seen as managing potential conflict stemming from diverging interests. In a related debate on corporate responsibility and citizenship, Waddock (2001) argues that becoming a good corporate citizen means “defining, and achieving, responsible operating practices fully integrated into the entire corporate strategy, planning, management, and decision-making processes.” Although such issues are important to achieve a further understanding of stakeholder-oriented management and its applications in business, they do not offer much insight into the relationship between stakeholders and firms. As Froeman (1999) notes, in stakeholder research much attention has already been paid to characterizing stakeholders and considering their aims, leaving influence strategies employed by stakeholders largely unattended. Therefore, he aimed “to build a model of stakeholder influence strategies that will address this missing part of stakeholder theory and ultimately enable managers to better understand and manage stakeholder behavior” (Froeman 1999).

Over the past few decades, an increasing amount of literature has focused on stakeholders (for example, Freeman 1984; Donaldson & Preston 1995; Mitchell et al. 1997; Jawahar & McLaughlin 2001). Freeman (1984) advanced the stakeholder perspective, sketching out the concept in his seminal book Strategic management, a stakeholder approach. In his view “stakeholder in an organization is (by definition) any group or individual who can affect or is affected by the achievement of the organization’s objectives” (Freeman 1984). An organization thus influences its stakeholders, but is also influenced by these stakeholders.

**Resource Dependency Theory**

Resource dependence theory is perhaps the most comprehensive in the scope of its approach to organizations, combining an account of power within organizations with a theory of how organizations seek to manage their environments. The External Control of Organizations (Pfeffer & Salancik, 1978) with that of “Power dependence relations,” Emerson’s (1962) classic statement of power and exchange stated that the resource dependence theory has had an
expansive influence that spread from management and sociology to education, health care, public policy, and other cognate disciplines. When scholars study power in and around organizations, they are highly likely to draw on resource dependence theory.

Resource dependence theory added an elaborate catalog of organizational responses to interdependence that could inform empirical work. The basic theory might be summarized by a piece of advice to top managers: “Choose the least-constraining device to govern relations with your exchange partners that will allow you to minimize uncertainty and dependence and maximize your autonomy.” The array of tactics described by the theory forms a continuum from least- to most-constraining. If dependence comes from relying on a sole-source supplier, then an obvious solution is to find and maintain alternatives.

**Conceptual Framework**

<table>
<thead>
<tr>
<th>Independent Variable</th>
<th>Moderating Variable</th>
<th>Dependent Variable</th>
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<td>Management styles</td>
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<td>- Efficiency</td>
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<td>- Effective</td>
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<td>- Democratic</td>
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<td>Organization culture</td>
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<td>- Structure of behaviors</td>
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<td>- Ideas</td>
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<td>- Habits</td>
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<td>Stakeholder influence</td>
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<td>- Interests and preferences</td>
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<td>- Transparent</td>
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<td>- Non discriminatory</td>
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<td>Organizational resources</td>
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<tr>
<td>- Efficiency allocation of resources</td>
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<td>- Competition</td>
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<td>- Availability</td>
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<tr>
<td>Government Policy</td>
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<tr>
<td>Procurement Performance</td>
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Figure 2.1: Conceptual Framework
Empirical Review

Management styles

Hui et al (2011) stipulates that efficient management is one of the most effective preventive mechanisms for it promotes transparency and accountability, facilitates oversight and provides a good basis to prevent corruption. Rossi (2010) opines that formal controls must first be defined, agreed, and applied top-down internally within an organization if they are to be effective. An organization with a genuine commitment to legal compliance is evidenced by top management’s dedication to ethical corporate behavior (Krawiec, 2003). As cited in Heneghan and O’Donnell, (2007), a compliance culture in an organization must start in the boardroom and should be reflected and evidenced in directors’ own behaviors and attitudes. In a related argument, Obanda, (2010) stipulated that strong institutional support at top levels of government is needed by procurement personnel in order to promote integrity, monitor the public procurement process and apply procurement law appropriately.

Organization Culture

Due to regulatory reforms and changing community expectations, the role of culture in organizational compliance has gained momentum (Lisa, 2010). Basing on the competing values model (hierarchical culture), which involves enforcement of rules, conformity and attention to technical matters, individual conformity and compliance are achieved through enforcement of formerly stated rules and procedures(Zammuto&Krakower, 1991) as cited in Parker and Bradley (2000). Although there is no single definition of culture, one can define it as ‘the structure of behaviors, ideas, attitudes, values, habits, beliefs, customs, language, rituals, ceremonies, and practices of a particular group of people that provides them with a general design for living and patterns for interpreting behavior’ (Rice, 2007). According to Lisa, (2010), culture plays a central role in the compliance process and associated outcomes. Basheka & Mugabira (2008) conducted a study on culture in Uganda’s public sector and depicted culture as a hindrance to reforms. It is also contended that in a specific type of culture, characterized by specific values such as openness, trust and honesty (Arjoon, 2006) as cited in Lisa, (2010), employees are more likely to engage in compliance behaviors, which collectively will contribute to organizational compliance. Parker and Bradley (2000) further indicated that awareness of the nature of public organizational culture is vital in explaining and assessing the appropriateness and outcome of the current reform process. This applies to developing countries where waves of procurement reforms have resulted into enactment of procurement rules and regulations.

Stakeholder influence

A study by Waddock (2001) revealed that procurement procedures are usually group decision processes in two senses: on one hand, various organizational leaders (managers, officials etc.) meet and their interests and preferences clash during the process, and on the other hand, making the proper decision usually calls for a wide range of expertise to be harnessed in order to make the decision. In more complex cases, such as procurement of large development and construction projects resolving negotiations and other issues among the stakeholders as well as among the
experts is not a straightforward exercise and may require professional help (Waddock 2001). In 2005, a study by the Africa Development Bank and the OECD (2005) concluded that the power vested in observers, although these are not intended to have influence on the procurement process, the ability to disclose or hide irregularities immediately bestows observers with a significant responsibility and this potentially opens up new avenues for corruption. It is not in the interest of civil society to be perceived as having a stake in public procurement as this will compromise their status as independent. From the government side, it is also a key question how much power it should vest in stakeholders with no political or financial responsibility.

Organizational resources
The PPB Training Module (2007) postulates that procurement regulations are to harmonize public procurement processes in the public sector to ensure judicious, economic and efficient use of public resources and to ensure that public procurement functions undertaken within the public sector are fair, transparent and non discriminatory. Professionalism is the discipline whereby educated, experienced and responsible procurement officers make informed decisions regarding procurement operations. It is in the recognition of this fact that the Public Procurement Authority focuses its resources on the training, professional development, promotion and support for individuals that are engaged in public procurement to ensure adherence to professional and ethical standards. The module also states that transparent procurement procedures can contribute to a more efficient allocation of resources through increased competition, higher quality procurement and budgetary savings for governments and thus for taxpayers (PPB, 2007).

According to the World Bank (2003), achieving VFM requires a strategic and integrated approach to procurement. This, of course, has significant organizational and institutional implications. VFM may be compromised if the Public Procurement Act and Regulations are not followed. This in procurement function is an important test against which well functioned procurement management must be addressed to justify a procurement outcome as necessary conditions for best value, transparency and accountability in public procurement (World Bank, 2003). It is associated with deployment of resources for realization of some expected value in an economic, in efficient and effective manner.

Government Policy
The area of Public Procurement received increased attention during the first few years of this new millennium (Thai, 2005). Most of the discussion concerned strategic Issues of governing such as relationships of the regulatory environment (Krüger, 2004), the possible support of high-level policy goals (Erridge, 2005), emerging practices involving private financing (Lawther & Martin, 2005), questions surrounding the development of long-term supplier relationships, or investigation of the effect of strategic procurement decisions on particular sector markets (Caldwell et al., 2005). These strategic challenges seemed to overshadow the problems of everyday procurement activities, the issues public officers and private procurement
professionals’ face as decision makers when trying to cope with the requirements placed upon them by the environment.

The World Bank (1996) postulates that prudent management of public procurement systems has been identified a very important to accelerated national development. For this reason, successive governments have realized that reformation in the procurement laws is a justification for judicious use of the taxpayer’s money. Thus procurement regimes are strongly regulated and implemented to ensure attainment of value for money through transparency, fairness, cost-effectiveness, efficiency and promotion of competitive local industry. Major or complex contracts that were financed by the government through architectural consultancy services and project supervision were assigned to the Architectural and Engineering Services Limited (AESL) on single basis without recourse to fair competition (World Bank, 1996). These uncoordinated and unregulated systems of procurement were the consequences of poor procurement situation leading to the much acclaimed reform of public procurement practices to instill trust and confidence in the public and the donor community.

**Procurement Process**

According to (PPDA, 2005) for open tenders, an advertisement is placed in daily newspapers to reach prospective bidders nationally. It is a requirement that such an advertisement be placed in at least two daily newspapers that have wide circulation in Kenya. The procuring entities are then supposed to release the tender documents. Such documents should contain sufficient information to enable competition among the bidders to take place. The laws and regulations define that the tender invitation should be such to enable bidders to submit their tenders and proposals, each enjoying equal opportunities. The buyer obviously expects answers to be offered in the bid as to what will satisfy its requirements and expectations primarily in terms of quality and capacity/performance indicators. It is, however, important to note that, more often than not, this assumption is never the case. Procurement entities seldom provide the necessary data and information or provide deficient or semi-finished documentation, which prevents bidders from preparing effective bids (RoK, 2001).

The next step in the tendering process is the opening of the tenders. The laws and regulations stipulate that this must be done as soon as possible. In Kenya, opening of the tenders must be done at least two hours after the deadline for submission of tenders. Bidders and their representatives are allowed to attend the opening of tenders. After tenders have been opened, the procuring entity examines and evaluates each of the tender documents. Successful bidders are then notified and a formal contract is entered into (RoK, 2001).

**Critique of Existing Literature**

Rossi (2010) in his study on compliance opined that formal controls must first be defined, agreed, and applied top-down internally within an organization if they are to be effective. Heneghan and O’Donnell, (2007) also found that a compliance culture in an organization must start in the boardroom and should be reflected and evidenced in directors’ own
behaviours and attitudes. These studies have enriched the current study in reviewing the management style variable. However, these studies were carried in developed nations and an African perspective is of essence so as to offer a more reliable and familiar opinion as observed at KeNHA.

Parker and Bradley (2000) in their study on organizational culture in the public sector, indicated that awareness of the nature of public organizational culture is vital in explaining and assessing the appropriateness and outcome of the current reform process. This applies to developing countries where waves of procurement reforms have resulted into enactment of procurement rules and regulations. The study contributed a little to the current study but it did not dwell so much on the procurement process. A similar study which is more inclined on the procurement process is required.

The Africa Development Bank and the OECD (2005) concluded that it is not in the interest of civil society to be perceived as having a stake in public procurement as this will compromise their status as independent. This study, no matter how relevant to the current study, it was done almost a decade ago and a more recent study is required here in Kenya.

Research gap
Many national and international instruments have been concerned with building an effective procurement system. The elaborate process of public procurement audit includes a bid process audit, contract audit, award audit, contract award audit, performance audit and disposal audit. Public procurement is increasingly recognized as essential in service delivery and it accounts for a high proportion of total expenditure. However, it is not clear what the critical success factors of the procurement process are since the studies that have been on procurement did not cover this phenomenon. This study seeks to fill the existing research gap by assessing the determinants of procurement process at Kenya National Highways Authority (KeNHA)

Research Methodology
Introduction
The research methodology is discussed under the following sub-topics; research design, study location, target population, sample size and sampling procedure, research instruments, validity and reliability of instruments, data collection and data analysis.

Research Design
Research design refers to the overall method applied to satisfy the research aim and objective (Holt, 1998). Kothari (2008) defines a research design as the “arrangement of conditions for collection of analysis of data in a matter that aims to combine relevance to the research purpose”. According to Hindess (1977), in the social sciences methodology is a philosophy, whose function is to examine the research methods, which are used to produce knowledge. Methodology is a way to systematically solve the research problem. It may be understood as a science of studying how research is done scientifically. It is the various steps that are generally
adopted by a researcher in studying his research problem along with the logic behind them (Kothari, 2008). In this research, the research design that was employed is a descriptive case study design.

**Target Population**

**Table 3.1: Target Population**

<table>
<thead>
<tr>
<th>Target population</th>
<th>Percentage</th>
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<tbody>
<tr>
<td>Top Management</td>
<td>25</td>
</tr>
<tr>
<td>Middle level management</td>
<td>65</td>
</tr>
<tr>
<td>Low level management</td>
<td>90</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>180</strong></td>
</tr>
</tbody>
</table>

Source: (KeNHA, 2013)

**Sampling and Sampling Procedure**

Sampling is defined as a technique for selecting a set of components used for analysis from a population (Balnaves&Caputi, 2001). Within this research, the main objective of the sampling plan was to select a representative and non-biased sample to increase the reliability and validity of findings. This was achieved by selecting the various levels of employment at KeNHA, these being the top, middle and low level management who are believed to be the best placed to offer the required information for the study.

**Table 3.2: Sample Size**

<table>
<thead>
<tr>
<th>Sections</th>
<th>Population</th>
<th>Sample Ratio</th>
<th>Sample</th>
</tr>
</thead>
<tbody>
<tr>
<td>Top Management</td>
<td>25</td>
<td>0.3</td>
<td>8</td>
</tr>
<tr>
<td>Middle level management</td>
<td>65</td>
<td>0.3</td>
<td>20</td>
</tr>
<tr>
<td>Low level management</td>
<td>90</td>
<td>0.3</td>
<td>27</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>180</strong></td>
<td><strong>0.3</strong></td>
<td><strong>55</strong></td>
</tr>
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</table>

(Source: KeNHA, 2013)

**Data Collection Procedure**

Quantitative and qualitative techniques are used for data collection. Quantitative techniques adopt a scientific method (Fellows & Liu, 1997) and involve consideration of size and magnitude and may be perceived as being more analytical in nature (Holt, 1998). Therefore quantitative data deals with numbers and uses statistical methods to explain the data. Qualitative techniques on the other hand, refers to exploration of the subject where the aim is to gain understanding and collect information (Fellows & Liu, 1997), thus qualitative data deals with words. Both
approaches were adopted in this research. The quantitative methods used in this research are close ended questions and likert scale statements posed in the questionnaire. The qualitative methods that were used are the open-ended questions in the questionnaire. Fellows and Liu (1997) postulate that the questions may occur in two forms: open-ended and close-ended questions. Open-ended questions enabled the respondent to answer questions in full, with whatever content and to whatever extent he/she feels fit. Close-ended questions on the other hand have a set number of responses as determined by the researcher. In this research both types of questions were used to investigate the determinants of procurement process at Kenya National Highways Authority (KeNHA). In order to ensure that the research is credible, the research itself as well as the methods that were utilized to achieve the objectives must be both reliable and valid.

**Data Quality and Analysis**
Data analysis refers to interpreting the data gathered in the data collection phase. Within this research both quantitative and qualitative data were collected. The characteristics of qualitative analysis is that it deals with data presented in words, thus qualitative analysis deals with subjective opinions and viewpoints that are presented in descriptive formats. In this research qualitative data collected from the questionnaires was analyzed by collecting all the relative data, assimilating and categorizing similar responses and summarizing the responses. Analysis was done using SPSS Version 20 software. Regressions and ANOVA (Analysis of Variance) test was used to assess the determinants of procurement process at Kenya National Highways Authority (KeNHA).

\[ Y' = A + b_1 X_1 + b_2 X_2 + b_3 X_3 + b_4 X_4 + b_5 X_5 \]

Where \( Y' \) = Dependent variable and \( X_1, X_2, X_3, \) and \( X_4 \) are the four independent variables, \( X_5 \) Moderating variable

Where \( Y' \)-Procurement Performance

\( X_1 \)-Management Styles

\( X_2 \)-organization culture

\( X_3 \)- Stakeholder Influence

\( X_4 \)- Organizational resources

\( X_5 \)- Government policy

\( A \) – Is the constant or intercept
b_{1.5} \text{ Are the regression coefficients or Change induced in } Y' \text{ (Dependent Variable) by each } X \text{ (Independent variables)}

**Data Analysis and Interpretation**

**Background Information**

Out of the survey respondents, 45.3% had worked in the organization for above 5 years, 28.3% for 3-5 years and the remaining 26.4% for below 2 years.

The study also determined the number of years respondents have held their positions. From the findings, 35.85% had been in their positions for between 3 and 5 years, 33.96% for below 2 years, and the remaining 30.19% for above 5 years.

**Study variables**

Respondents agreed that management styles influenced the procurement Performance to a very high extent as shown by 52.83%, to a high extent as shown by 41.51%, and to a moderate extent as shown by 5.66%.

Study findings revealed that efficient management provides a good basis to prevent corruption in the procurement Performance as shown by a mean of 4.2 and a standard deviation of 0.6; that Institutional support at top levels of government is needed by procurement personnel in order to promote integrity, monitor the public procurement Performance and apply procurement law appropriately as shown by a mean of 4.2 and a standard deviation of 0.7; that Efficient management is one of the most effective preventive mechanisms for it promotes transparency and accountability as shown by a mean of 4.1 and a standard deviation of 0.6; that Efficient management facilitates oversight in the procurement Performance as shown by a mean of 3.8 and a standard deviation of 0.7.

75.47% of the respondents agreed that organizational culture influences the procurement Performance, while the remaining 24.53% did not. 52.83% of the respondents indicated that organizational culture influences the procurement Performance to a high extent, 26.42% to a very high extent, 15.09% to a moderate extent, and only 5.66% to a low extent. 73.58% of the respondents agreed that stakeholders influence affect the procurement performance, while the rest (20.42%) disagreed.

The study established that 62.26% of the respondents agreed that stakeholders influenced the procurement Performance to a high extent, 16.98% to a very high extent, 11.32% to a moderate extent, 1.69% to a low extent and the remaining 7.55% did not respond to the question.

Stakeholder interests could encompass a broad range of issues some of which might be contrary to a firm’s interests as shown by a mean of 4.2 and a standard deviation of 0.7; that managers
must formulate and implement processes which satisfy all and only those groups who have a stake in the business as shown by a mean of 4.0 and a standard deviation of 1.1; that Stakeholder management could be seen as managing potential conflict stemming from diverging interests as shown by a mean of 3.7 and a standard deviation of 1.4; that procurement procedures are usually group decision processes by various organizational leaders as shown by a mean of 3.4 and a standard deviation of 1.6.

Asked whether organizational resources influence the procurement performance, 76.47% of them indicated that it did, 22.64% indicated that it did not, while the rest did not respond to the question. Majority (43.40%) of the respondents indicated that organizational resources influenced the procurement Performance to a high extent, 35.85% to a very high extent, 7.55% to a moderate extent, 1.89% to a low extent, and 1.89% to a very low extent. Only 9.43% of them did not respond to the question.

Respondents indicated that government policy moderates the procurement Performance at KeNHA to a very high extent as shown by 43.40%, and to a high extent as shown by 45.28%. The remaining 11.32% of them did not respond to the question. Tender documents should contain sufficient information to enable competition among the bidders to take place as shown by a mean of 3.9 and a standard deviation of 1.3; that advertisements are placed in daily newspapers to reach prospective bidders nationally as shown by a mean of 3.8 and a standard deviation of 0.9; that bidders and their representatives are allowed to attend the opening of tenders as shown by a mean of 3.1 and a standard deviation of 1.2; that Procurement entities seldom provide the necessary data and information or provide deficient or semi-finished documentation, which prevents bidders from preparing proper bids as shown by a mean of 1.8 and a standard deviation of 0.7.

**Inferential statistics**

The study’s findings indicated that the relationship between management styles and procurement performance is positive. The coefficient was 2.117 which is greater than zero implying that management styles positively influences the procurement performance. The p value of the f statistic also was 0.014 which is less than 0.05, implying that the model is significant.

These study findings are in agreement with studies done by Hui et al (2011) who stipulates that efficient management is one of the most effective preventive mechanisms for it promotes transparency and accountability, facilitates oversight and provides a good basis to prevent corruption.

Further studies by Rossi (2010) suggest that formal controls must first be defined, agreed, and applied top-down internally within an organization if they are to be effective.
The research study therefore infers that proper management styles are necessary for any procurement performance.

Findings indicated that the relationship between Organizational Culture and procurement performance is positive. The coefficient was 0.147 which is greater than zero implying that Organizational Culture positively influences the procurement performance. The p value of the f statistic also was 0.014 which is less than 0.05, implying that the model is significant.

This is in line with previous studies by Collins and Porras (1994) that today’s organizations, are characterized by rapidly changing environments and internal workforce diversity, and hence need a strong organizational culture that is less pervasive in terms of prescribing particular norms and behavioral patterns than may have existed in the for strong and lasting performance.

Findings indicated that the relationship between Organizational resources and procurement performance is positive. The coefficient was 5.057 which is greater than zero implying that Organizational resources positively influence the procurement performance. The p value of the f statistic also was .031 which is less than 0.05, implying that the model is significant.

Findings indicated that the relationship between Government policy and procurement performance is negative. The coefficient was 2.117 which is greater than zero implying that Government policy negatively influences the procurement performance. The p value of the f statistic also was 0.001 which is less than 0.05, implying that the model is significant.

**Summary of the Findings, Conclusions and Recommendations**

**Management Styles**

The study established that efficient management provides a good basis to prevent corruption in the procurement Performance as shown by a mean of 4.2 and a standard deviation of 0.6; that Institutional support at top levels of government is needed by procurement personnel in order to promote integrity, monitor the public procurement Performance and apply procurement law appropriately as shown by a mean of 4.2 and a standard deviation of 0.7; that Efficient management is one of the most effective preventive mechanisms for it promotes transparency and accountability as shown by a mean of 4.1 and a standard deviation of 0.6; that Efficient management facilitates oversight in the procurement Performance as shown by a mean of 3.8 and a standard deviation of 0.7

**Organization Culture**

The role of culture in organizational compliance has gained momentum as shown by a mean of 4.2 and a standard deviation of 0.7; that awareness of the nature of public organizational culture is vital in explaining and assessing the appropriateness and outcome of the current reform process as shown by a mean of 3.3 and a standard deviation of 1.3; that culture plays a central role in the compliance process and associated outcomes as shown by a mean of 1.7 and a
standard deviation of 0.7; that conformity and compliance are achieved through enforcement of formerly stated rules and procedures as shown by a mean of 1.0 and a standard deviation of 0.0

**Stakeholder influence**

Stakeholder interests could encompass a broad range of issues some of which might be contrary to a firm’s interests as shown by a mean of 4.2 and a standard deviation of 0.7; that managers must formulate and implement processes which satisfy all and only those groups who have a stake in the business as shown by a mean of 4.0 and a standard deviation of 1.1; that Stakeholder management could be seen as managing potential conflict stemming from diverging interests as shown by a mean of 3.7 and a standard deviation of 1.4; that procurement procedures are usually group decision processes by various organizational leaders as shown by a mean of 3.4 and a standard deviation of 1.6

**Organizational Resources**

The study also found out that VFM is associated with deployment of resources for realization of some expected value in an economic, in efficient and effective manner as shown by a mean of 3.9 and a standard deviation of 0.8; that transparent procurement procedures can contribute to a more efficient allocation of resources through increased competition as shown by a mean of 3.6 and a standard deviation of 1.1; that Procurement regulations are to harmonize public procurement Performance es in the public sector to ensure judicious, economic and efficient use of public resources as shown by a mean of 3.1 and a standard deviation of 1.5; that organizations focus their resources on the training, professional development, promotion and support for individuals engaged in public procurement to ensure adherence to professional and ethical standards as shown by a mean of 1.8 and a standard deviation of 1.2

**Government policy**

Successive governments have realized that reformation in the procurement laws is a justification for judicious use of the taxpayer’s money as shown by a mean of 3.83 and a standard deviation of 1.5; that uncoordinated and unregulated systems of procurement were the consequences of poor procurement situation as shown by a mean of 3.71 and a standard deviation of 0.8; that prudent management of public procurement systems has been identified as very important to accelerated national development as shown by a mean of 3.45 and a standard deviation of 1.7; that procurement regimes are strongly regulated and implemented to ensure attainment of value for money through transparency, fairness, cost-effectiveness, efficiency and promotion of competitive local industry as shown by a mean of 3.26 and a standard deviation of 1.7

**Procurement Performance**

Tender documents should contain sufficient information to enable competition among the bidders to take place as shown by a mean of 3.9 and a standard deviation of 1.3; that advertisements are placed in daily newspapers to reach prospective bidders nationally as shown by a mean of 3.8 and a standard deviation of 0.9; that bidders and their representatives are allowed to attend the opening of tenders as shown by a mean of 3.1 and a standard deviation of...
1.2; that procurement entities seldom provide the necessary data and information or provide deficient or semi-finished documentation, which prevents bidders from preparing proper bids as shown by a mean of 1.8 and a standard deviation of 0.7.

Conclusions and Recommendations

The study therefore concludes that efficient management provides a good basis to prevent corruption in the procurement Performance; that Institutional support at top levels of government is needed by procurement personnel in order to promote integrity, monitor the public procurement Performance and apply procurement law appropriately; that Efficient management is one of the most effective preventive mechanisms for it promotes transparency and accountability; that Efficient management facilitates oversight in the procurement performance. It also concludes that the role of culture in organizational compliance has gained momentum; that awareness of the nature of public organizational culture is vital in explaining and assessing the appropriateness and outcome of the current reform process; that culture plays a central role in the compliance process and associated outcomes; that conformity and compliance are achieved through enforcement of formerly stated rules and procedures.

The study further concludes that stakeholder interests could encompass a broad range of issues some of which might be contrary to a firm’s interests; that managers must formulate and implement processes which satisfy all and only those groups who have a stake in the business; that Stakeholder management could be seen as managing potential conflict stemming from diverging interests; and that procurement procedures are usually group decision processes by various organizational leaders.

The study also concludes that VFM is associated with deployment of resources for realization of some expected value in an economic, in efficient and effective manner; that transparent procurement procedures can contribute to a more efficient allocation of resources through increased competition; that procurement regulations are to harmonize public procurement Performance in the public sector to ensure judicious, economic and efficient use of public resources; and that organizations focus their resources on the training, professional development, promotion and support for individuals engaged in public procurement to ensure adherence to professional and ethical standards.

The study also concludes that successive governments have realized that reformation in the procurement laws is a justification for judicious use of the taxpayer’s money; that uncoordinated and unregulated systems of procurement were the consequences of poor procurement situation; that prudent management of public procurement systems has been identified as very important to accelerated national development; that procurement regimes are strongly regulated and implemented to ensure attainment of value for money through transparency, fairness, cost-effectiveness, efficiency and promotion of competitive local industry
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References


