

**INFLUENCE OF CONTEXTUAL AND COGNITIVE  
FACTORS ON THE RELATIONSHIP BETWEEN  
PERFORMANCE CONTRACTING SYSTEM AND  
ORGANIZATIONAL PERFORMANCE IN GOVERNMENT  
MINISTRIES IN KENYA**

**By**

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**A Thesis Submitted in Fulfillment of the Requirements for the Award of the Degree of  
Doctor of Philosophy in Project Planning and Management of the University of Nairobi**

**2014**

## **DECLARATION**

This Research Thesis is my original work and has not been presented in any other university or institution of higher learning for examination or academic purposes.

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## **DEDICATION**

This study is dedicated to the Kenya Association of Project Managers (KAPM) to make positive contribution in the body of knowledge and practice of project management in Kenya.

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## LIST OF ABBREVIATIONS AND ACRONYMS

<b>AIDS</b>	Acquired Immune Deficiency Syndrome
<b>BPM</b>	Business Process Management
<b>BSC</b>	Balance Score Card
<b>CK 2010</b>	Constitution of Kenya 2010
<b>CPM</b>	Critical Path Method
<b>CSR</b>	Corporate Social Responsibility
<b>DRC</b>	Democratic Republic of Congo
<b>EPC</b>	Engineer-Procure-Construct
<b>EPROMIS</b>	Electronic Project Management Information Systems
<b>GDP</b>	Gross Domestic Product
<b>GoK</b>	Government of Kenya
<b>GST</b>	General System's Theory
<b>GPRA</b>	Government Performance and Results Act
<b>HIV</b>	Human Immune Deficiency Virus
<b>HRD</b>	Human Resource Development
<b>IFMIS</b>	Integrated Finance Management Information System
<b>IPMS</b>	Integrated Performance Management System
<b>KETEPA</b>	Kenya Tea Packers
<b>KNAC</b>	Kenya National Aids Council
<b>KSPA</b>	Kenya Service Provision Assessment
<b>LAPF</b>	Local Authorities Provident Fund

<b>MATS</b>	Maine Addiction Treatment System
<b>MBA</b>	Master of Business Administration
<b>MBO</b>	Management By Objectives
<b>MBWA</b>	Management By Walking Around
<b>MDG</b>	Millennium Development Goal
<b>M&amp;E</b>	Monitoring and Evaluation
<b>NACADA</b>	National Council Against Drug and Substance Abuse
<b>New KCC</b>	New Kenya Creameries Cooperative
<b>NGO</b>	Non-Governmental Organization
<b>NIMES</b>	National Integrated Monitoring Evaluation System
<b>NPM</b>	New Public Management
<b>OCB</b>	Organizational Citizenship Behavior
<b>OSA</b>	Office of Substance Abuse
<b>OT</b>	Organizational Theory
<b>PA</b>	Performance Agreement
<b>PBC</b>	Performance Based Contracting
<b>PC</b>	Performance Contracts
<b>PHD</b>	Doctor of Philosophy
<b>PERT</b>	Project Evaluation Review Technique
<b>PPOA</b>	Public Procurement Oversight Authority
<b>PS</b>	Principal Secretary
<b>PSR</b>	Public Sector Reforms
<b>RRI</b>	Rapid Results Initiative

<b>SOE</b>	State Owned Enterprise
<b>SOU</b>	State Owned University
<b>SPS</b>	Sector Performance Standard
<b>TTC</b>	Teachers Training College
<b>USD</b>	United States of America Dollar
<b>VIF</b>	Variance Inflation Factors

## ABSTRACT

This study sought to establish the relationship between performance in Government Ministries in Kenya and the implementation of performance contracting (PC) system. The study investigated the influence of contextual and cognitive factors on the relationship between PC system and organizational performance in Government Ministries. This study was grounded on Results Theory because the PC system in Kenya is a results oriented performance measurement system. The research designs that guided this study were descriptive survey design and correlational research design. The research approach in this study was mixed methods research approach and pragmatism paradigm. Quantitative data was collected through a self-administered structured questionnaire while qualitative data was collected through an interview guide after the research instruments were pilot tested for validity through content related method and reliability through test-retest criterion. A sample size of 310 respondents was selected by use of Sekaran's (2003) sampling size criterion from a population of 103,010 employees in Government Ministries through multi-stage sampling technique. The statistical tools of analysis that were used for descriptive data were the arithmetic mean and the standard deviation while the statistical tools of analysis that were used for inferential statistics were Pearson's Product Moment Correlation ( $r$ ) and Stepwise Regression ( $R^2$ ). F-tests were used to test the hypotheses in the study. Tests of statistical assumptions were carried out before data analysis to avoid invalidation of statistical analysis. Out of the ten hypotheses tested in the study, five were accepted while five were rejected. With  $r = 0.232$ ,  $F(3,177) = 3.358$  at  $p = 0.02 > 0.05$ , H1 was accepted and concluded that PC systems significantly influence organizational performance. With  $r = 0.003$ ,  $F(1,181) = 0.001$  at  $p = 0.969 > 0.05$ , H1a was rejected and it was concluded that PC targets do not significantly influence organizational performance. With  $r = 0.193$ ,  $F(1,181) = 6.9$  at  $p = 0.009 > 0.05$ , H1b was accepted and it was concluded that PC tools significantly influence organizational performance. With  $r = 0.058$ ,  $F(1,179) = 0.612$  at  $p = 0.435 > 0.05$ , H1c was rejected and it was concluded that PC implementer participation does not significantly influence organizational performance. With  $R^2 = 0.094$ ,  $F(1,179) = 18.470$  at  $p < 0.05$ , H2 was accepted and it was concluded that the strength of the relationship between PC system and organizational performance depends on contextual factors. With  $R^2 = 0.057$ ,  $F(2,177) = 5.315$  at  $p = 0.006 < 0.05$ , H2a was rejected and it was concluded that the strength of the relationship between PC system and organizational performance does not depend on organizational structure. With  $R^2 = 0.118$ ,  $F(2,177) = 11.864$  at  $p < 0.005$ , H2b was accepted and it was concluded that the strength of the relationship between PC system and organizational performance depends on organizational culture. With  $R^2 = 0.033$ ,  $F(1,179) = 6.074$  at  $p = 0.015 < 0.05$ , H3 was rejected and it was concluded that the strength of the relationship between PC system and organizational performance does not depend on cognitive factors. With  $R^2 = 0.033$ ,  $F(1,179) = 6.074$  at  $p = 0.015 < 0.05$ , H3a was rejected and it was concluded that the strength of the relationship between PC system and organizational performance does not depend on implementer attitude. With  $R^2 = 0.140$ ,  $F(2,177) = 9.588$  at  $p < 0.05$ , H3b was accepted and it was concluded that the strength of the relationship between PC system and organizational performance depends on implementer Monitoring and Evaluation (M&E) skills. It was recommended that performance measurement systems in Government Ministries should be synchronized through an integrated M&E system. In addition, the PC system should be contextualized per Government Ministry and anchored through parliamentary legislation to safeguard related gains from future political manipulation. It was also recommended that the simplicity, validity and reliability of PC tools should be enhanced and PC implementers equipped with M&E skills. Since this study delimited itself to the PC system, further research can be carried to investigate the influence of NIMES, EPROMIS and Vision 2030 on organizational performance in Government Ministries in Kenya.

# CHAPTER ONE

## INTRODUCTION

### 1.1 Background to the Study

Management of complex entities like governments have taken various practices spanning historical civilizations. With the emergence of strong economies in Europe like Germany and France, the United Kingdom (UK) undertook a new initiative in the 80s popularized by then Premier Margaret Thatcher as Public Sector Reforms (PSR) with the objective of revamping performance in the public sector to remain competitive (Batley and George, 2004). The strategy in Public Sector Reforms introduced in the UK was based on performance measurement through holding actors in the public sector individually accountable against pre-negotiated performance targets. In the United States of America (USA), performance measurement was spearheaded in 1993 by then President Bill Clinton in a structure promoted as Performance Agreements (PAs) (Schiavo-Campo, 2008). Although the concept of performance measurement traces its roots from the private sector and Non-Governmental Organizations (NGOs), Ear (2007) indicates that the UK tied government funding to developing nations to implementation of Public Sector Reforms to pressurize the public sector in upcoming economies towards service delivery. Both the PSR initiative in the UK and the PA in the USA were government strategies to address public sector performance.

Little support was initially given to Public Sector Reforms (PSR) by governments of countries in Africa because of tying development aid to implementation of PSR. For organizational performance to be optimized, Mohan (2001) indicates that the performance measurement process should be participatory. In the psychology of prejudice and discrimination, Whitley and Kite (2010) suggests unsatisfactory performance in the public sector in black Africa has been due to poor governance, colonial heritage and African countries being late comers to modern civilization. In popular publications such as “How the West has failed the poorest continent” by Giles (2007), the ‘West’ is implicated for deliberately causing unsatisfactory performance in the public sector among black Africa nations. These sentiments on the ‘West’ impoverishing black Africa are shared by Susan (2009) in her publication on “How the other half dies”. Contrary to publications implicating the ‘West’ for under performance in the public sector among black Africa countries, Chan et al. (2008) associates unsatisfactory performance in the public sector among black Africa

nations to lack of performance measurement through sound monitoring and evaluation frameworks. These arguments were grounded on the fact that despite securing independence at the same period in history with most African nations and sharing similar challenges, governments of 'Asian Tigers' have comparatively sustained national performance indexes higher than most European Union (EU) countries conventionally regarded as first world in respect to leading in industrial revolution.

The concept of performance measurement linked with public sector performance by Chan et al. (2008) can be traced to the postulates of results theory. Proponents of results theory such as Kusek and Rist (2004), Joley (2003), Mohan (2001) and Marsh and David (1999) argue that organizational performance is influenced by the performance system in place and the implementers irrespective of the organizational structure. Coming from results theory school of thought, O'Brien (2000) links the comparably higher performance in the public sector in the Arab north in Africa to performance measurement singling out commendable performance in Libya explicit in universal education, health, water and electricity for all citizens subsidized by the Government since 1990. On the same note, Thomas et al. (2007) argues that although the Arab Africa is an oil-driven economic zone, most black Africa countries are more endowed with natural resources. Nigeria in particular has more oil reserves than any other country in Africa. The Democratic Republic of Congo (DRC) has natural resources ranging from diamonds, gold and copper yet the majority of the Congolese live below the World Bank poverty index. In addition, Botswana, Namibia, South Sudan, Zambia, Zimbabwe and Angola are endowed with natural resources yet they are among the bottom twenty poorest nations globally (Thomas et al., 2007). Poor service delivery characterized by poverty, lack of infrastructure and recurrent civil wars is an indicator of unsatisfactory performance of public sector in black Africa.

Balogun (2008) in a study on organizational performance in the public sector in black Africa nations suggests that poor governance, negative attitude, lack of necessary skills and a culture of unsatisfactory performance rather inadequacy of natural resources have contributed to unsatisfactory performance. In support of these arguments, Bright (2012) indicates that Africa supplies up to 31 percent of the world's demand for bauxite, cobalt, gold, manganese, phosphate and uranium. Additionally, Africa supplies 57 percent of the world's need for chromium and diamonds. Hydrocarbon deposits in Africa supplies 12 percent of the world's oil with about 8

percent of reserves (Bright, 2012). There was, therefore, genuine concern regarding the prevalence of unsatisfactory performance in the public sector in black Africa despite rich endowment with natural resources. An objective scientific research was hence necessary to examine this phenomenon of unsatisfactory performance in the public sector in black Africa despite the continent's relatively fair climatic conditions and natural resources of high economic worth. Informed by the quest to unearth this phenomenon, the current study focused on unsatisfactory performance in the public sector in Kenya narrowing down to performance of Government Ministries.

### **1.1.1 Organizational Performance**

Performance is the driving force of every organization. Basing arguments on Results Theory, Cummings and Worley (2008) indicate that the essence for the existence of organizations is performance. Nirmala and Akhilesh (2006) indicate that organizational performance is measured through various indicators depending on the organizational structure. Maurice (2011) indicates that whereas profit oriented organizations tend to measure performance through financial turn-overs and profit earnings, non-profit oriented organizations tend to measure performance through social benefits. According to Chan et al. (2008) performance of a governments should be measured through service delivery. His arguments seem to have been informed by sentiments advanced by results theory. In results theory, Joley (2003) notes that performance focuses on results rather than processes and deliverables rather than activities.

In organizational responses to environmental demands, Delmas and Offel (2008) suggest that an organization should be responsive to environmental dictates through involvement in social responsibilities. This is because an organization's environment provides both the market and the resources needed for the survival of the organization (Sapru, 2008). Agencies of governments therefore, should be responsive to the social needs of the society even if they are not necessarily aligned to their core mandate (OECD, 2012). Njiru (2008) indicates that state corporations have played a lead role in corporate social responsibilities.

In measuring organizational performance, Richard et al. (2009) indicate that employee satisfaction is an indicator of organizational performance. Proponents of neo-classical theory such as Kyle

(2006) and Ebeclin and Tatum (2005) identify employee motivation in the organization as a measure of organizational performance. While analyzing Human Resource Development (HRD) needs in the public service in Kenya, Angote (2009) identified employees' satisfaction as an indicator of performances of Government Ministries. In this study, organizational performance was the dependent variable and was measured through the rate of customer satisfaction, rate of employee satisfaction and level of corporate social responsibilities. The variables whose influence on organizational performance in Government Ministries that were investigated in this study were the PC System, organizational structure, organizational culture, implementer attitude and implementer monitoring and evaluation (M&E) skills.

### **1.1.2 Performance Contracting System**

Although the UK promoted the concept of Public Sector Reforms (PSR), the idea of Performance Contracts (PCs) can be traced to France in the 1970s with the aim of reforming State-Owned Enterprises (OECD, 1994). Unlike the UK model whose focus was the public sector, the performance framework experimented in France targeted the private sector. However, eventually the public sector in many countries warmed up to performance contracting system. By 1995, PCs had been experimented in more than 50 countries (Ghosh, 1997). As of June 1994, the World Bank (1995) documented 565 PCs adopted in 32 developing countries and 103,000 PCs in China alone (Cheung, 1997). The adaptability of PCs by various national governments in management of state affairs was aimed at measuring performance to enhance accountability and efficiency of public sector in service delivery. By December 2010, World Bank Report (2012) indicated that 110 countries across the globe had adopted the PC system in management of public sector. PC System helped governments to hold into account public officials individually as well as collectively for results in a government agency against pre-negotiated targets (Hatry, 2006).

In the United States of America (USA), accountability in management of government affairs was popularized by President Harry S. Truman in 1945 (Dallek, 2008). This concept of accountability of public officials evolved to the Performance Agreement (PA) concept in the USA and was introduced in the public sector by President Bill Clinton in 1993 (Schiavo-Campo, 2008). The PA System in the USA compares functionally with the Performance Contracting (PC) System in Kenya (NIMES, 2009). By analyzing the effect of PC System in the Ministry of Health for the

Government of Costa Rica, Abramson (2006) indicated that the PC system had a negative impact as the rate of absenteeism among health care workers in Costa Rica for the period under study increased. A study by Cheung (2003) on corporate governance of State Owned Enterprises (SOE) in China against targets set out in PCs indicated that PCs were not predictor indicators of organizational performance especially in sectors that provided social benefits to the community. Although Njiru (2008) indicated that the PC system has delivered results for Kenya, studies by Abramson (2006) and Cheung (2003) suggest need to ascertain the influence of PC systems on organizational performance in government operatives.

Among the developing nations, it is only in Kenya and Malaysia where PC System is in record to have been fully adopted in the public sector (World Bank, 2004). In most other developing nations, PCs are only implemented in SOEs implying that PCs are viewed as essential performance vehicles mainly for profit making organizations. This scenario requires an investigation on whether PCs lead to organizational performance in non-profit oriented organizations existing for social benefits to the public like Ministries of Government. Unlike in countries like Malaysia, New Zealand and the U.S.A., Njiru (2008) indicates that the Government of Kenya (GoK) makes public the results of Performance Contracting in the public sector which is an indicator of both political and public goodwill towards the PC system. In the USA, the executive has restrained from making public the performances of various ministries due to political risks associated with such pronouncements. This sets Kenya apart as a model nation in Performance Contracting in public service (Njiru, 2008).

However, although the PC system in Kenya ideally is a negotiated process among stakeholders, Nuguti (2009) indicates that negotiations are mainly at the top echelons in the management. Agreements between the executive and a Government Ministry through respective Principal Secretaries (PS) are cascaded down to all employees without their direct involvement (Nuguti, 2009). In participatory development, Mohan (2001) indicates that sustainable development occurs when all stakeholders are involved. Pragmatists such as Lutan (2011) suggest that in performance measurement, participation of all stakeholders is essential in setting and evaluating targets. In addition, Crawford et al. (2003) and Hatry (2006) indicate that tools used in performance measurement should be easy to use and appropriate for their purpose. In this study, indicators of the effectiveness of the PC system were PC tools, PC targets and PC implementer participation.

### **1.1.3 Contextual Factors**

In this study, contextual factors are organizational factors, outside the individual, that influence organizational performance. The contextual factors examined in this study are organizational structure and organizational culture.

#### **1.1.3.1 Organizational Structure**

Hatch (2006) indicates that an organizational structure consists of activities such as task allocation, coordination and supervision, which are directed towards the achievement of organizational objectives. Paurav (2009) suggests that organizational structure guides allocation of responsibilities for different functions and processes to different entities such as the branch, department and individual. Lim et al. (2010) argues that organizational structure affects organizational action in that it provides the foundation on which standard operating procedures and routines rest and also determines which individuals get to participate in which decision-making processes, and thus to what extent their views shape the organization's actions. Qingmin et al. (2012) indicate that organizational structure influences organizational performance. In the study by Qingmin et al. (2012), organizational structure is viewed as the size and mandate of the organization which can be measured by the ability by employees to know each other in a department and holding departmental meetings regularly.

Levent and Mehmet (2004) noted that an organizational structure has to do with the model of the organization which Max Weber's 1947 organizational model referred to as departmentalization. Bruun (2007) suggests that the bureaucratic system of a government is based on Max Weber's 1947 organizational model. Although bureaucracies are inevitable for large organizations like a government, Angote (2009) argues that they have negatively influenced employee innovation and performance in the public sector in Kenya. In this study, the role played by organizational structure on the relationship between the PC system in Government Ministries and organizational performance was investigated. Morgan (2007) suggests that the effectiveness of a performance measurement system depends on organizational structure and the macro environment. Maurice (2011) indicates that there exists a significant relationship between organizational strategy, organizational structure and organizational performance.

### **1.1.3.2 Organizational Culture**

In the study on responding to organizational threats, Ravasi and Schultz (2006) indicate organizational culture is a determinant of organizational performance. Ravasi and Schultz (2006) define organizational culture as a set of shared mental assumptions that guide interpretation and action in organizations by defining appropriate corporate behavior for various situations. Hartnell (2011) suggests organizations are entities often having very differing cultures as well as subcultures. According to Hartnell (2011), organizational culture as a variable of performance is an indicator of organizational identity. From systems theory, organizational culture is an entity that adds to the organization as a whole (Dostal, 2005). Gomez (2008) argues that organizational culture can be manipulated and altered depending on the leadership and individual members in the organization to favour desired performance.

Raja (2009) indicates that organizational culture is cultivated by the shared mission and inspired by the organization's vision and reflected in common values and belief system. Olu (2012) indicates that organizational culture influences employee work behavior. Olu (2012) suggests that organizational culture is reflected through norms, artefacts, values, traditions, assumptions and beliefs shared across the organization. Marc and Susan (2006) suggest that organizational performance is enhanced by a culture of teamwork and concern for performance and these two factors vary with job description of various cadres of employees. In addition, Marc and Susan (2006) argue that organizational recognition is an indicator of team work in an organization. Bruun (2007) indicates that a culture of promptness to duty is a factor of organizational performance.

In this study, the role played by organizational culture on the relationship between PC system and organizational performance was investigated. Policies put in place in Government Ministries in Kenya to cultivate the right organizational cultures that would enhance and sustain organizational performance in the public sector were examined in this study. This is premised on studies by Jolise (2007) that indicate a significant difference exists between a prevailing culture and a preferred culture in an organization. In addition, from systems theory, Barzilai (2011) indicates that such a gap between sub-systems in an organization leads to a state of organizational imbalance whose consequence is unsatisfactory performance. Ryan (2009) therefore argues that management should seek ways to bridge the gap between 'power culture' and 'support culture' and 'normative

commitment' and 'absolute commitment' to enhance organizational performance. Lutans (2011) suggest that organizational culture can be acquired and unlearned through capacity building.

#### **1.1.4 Cognitive Factors**

In this study, cognitive factors are organizational factors, within the individual, that influence organizational performance. The cognitive factors examined in this study are implementer attitude and implementer M&E skills.

##### **1.1.4.1 Implementer Attitude**

Many scholars such as Walker et al. (2007), Richard (2005) and Spencer et al. (2006) have linked employees' attitudes with organizational performance. Richard (2005) defines attitude as human feelings and beliefs that may be scientifically irrational towards someone or some task. Cognitive theorists such as Raja (2009) indicate that human behavior is shaped through how we think (cognitive) and what we feel (humanism) and thus focus on taking their attitudes and feelings into account through performance targets. Daniel (2006) notes that attitude is a cognitive factor of performance that is individual rather than organizational. Therefore to control for organizational performance, focus on the role of the individual need to be considered. Although measuring attitude is not an easy task, Raja (2009) indicates that the level of support of organizational performance systems by an employee and the willingness to support team members achieve their targets are indicators that can be used to measure an individual's attitude towards work. In this study, employees' level of support on the PC system was used as a measure of implementer attitude.

Although employees' level of support of organizational performance systems has been identified as a measure of an individual's work attitude, time taken to accomplish allocated tasks can be a more measureable indicator of one's attitude towards organizational performance. Gee (2012) notes that the time taken by an employee to meet individual work obligations can be used as a measure of the individual's attitude towards work. Time taken to meet PC obligations by employees in Government Ministries was also used in this study to measure employees' attitudes towards the PC system. In measuring social attitudes, Mueller (1986) suggests that the number of indiscipline cases can be used to indicate an individual's attitude. Sharing the same views, Whitley

and Kite (2010) indicate that an employee with low self-esteem and negative work attitude is likely to be more involved in indiscipline cases than one with a positive mental work attitude. All other factors being equal, Susan and Anastasia (2005) indicate that individuals with positive work attitudes perform better than those with negative attitudes. In this study, the role played by implementer attitude on the relationship between the PC system and organizational performance was investigated. Huczynski and Buchanan (2007) argue that organizational behavior can be manipulated through a structured system. Therefore the measures that Government Ministries in Kenya have put in place to sustain positive work attitudes among PC implementers were examined and the influence of such interventions on performance contracting system investigated.

#### **1.1.4.2 Implementer Monitoring and Evaluation Skills**

While monitoring helps improve an ongoing undertaking by addressing weaknesses in implementation, evaluation establishes the worth of a project as a basis for planning for future projects. Viewing monitoring and evaluation (M&E) as a component of project management Crawford and Bryce (2003) define monitoring as a process of continuous collection and analysis of data to enhance an ongoing project and evaluation as a scientific rigorous procedure that is similar in approach to research whose objective is to learn lessons from a given project for the purpose of improving future projects. Proponents of results theory such as Kusek and Rist (2004), Crawford and Bryce (2003), Joley (2003), Mohan (2001) and Marsh and David (1999) indicate that performance measurement is achieved through monitoring and evaluation. For organizations to attain and sustain desired performance, performance measurement ought to be participatory and the performance system integrated with all functions in the organization. Mohan (2001) suggests that for performance measurement to be effective, the process of monitoring and evaluation should be participatory. Studies by Marsh and David (1999) on results frameworks indicate that performance measurement should be integrated with all managerial aspects of the organization.

One of the most widely used performance measurement systems is the Results-based M&E system by Kusek and Rist (2004). This system links project processes with performance indicators and implementers. Besides a monitoring and evaluation system being supported by Information Communication Technology (ICT), the project implementers and evaluators should have the required M&E skills necessary for performance measurement. Marsh and David (1999) indicate that a monitoring and evaluation personnel requires skills in understanding M&E frameworks,

identifying and developing performance indicators, undertaking quarterly reports, conducting an evaluation, developing work breakdown structures, undertaking performance appraisals, writing an evaluation report and designing as well as auditing a monitoring and evaluation system. Although it is not required for all team members in an organization to have advanced M&E skills, a certain minimum level of skills are essential in performance measurement like developing performance indicators and filling in appraisal forms. In this study, the type and level of skills of PC implementers were identified as indicators of implementer M&E skills. The PC system in Kenya compares favourably with the M&E system advanced by Kusek and Rist (2004). In Performance Contracting in Kenya – a critical evaluation of the monitoring and evaluation system, Nuguti (2009) indicates that the PC system in Kenya is an M&E tool for measuring performance.

### **1.1.5 Government Ministries in Kenya**

There are 18 Ministries of the national Government in Kenya. Other public entities like parastatals and State Owned Universities (SOU) operate under the umbrella of the 18 Ministries of Government (GOK, 2013). With the restructuring of Government functions after the March 4<sup>th</sup> 2013 General elections that inaugurated the first Government under the Constitution of Kenya 2010 (CK 2010), the Judiciary, the Office of the Attorney General as well as the Presidency were not housed under the jurisdiction of the 18 Ministries of Government (GOK, 2013; Kenya Gazette Supplement Acts, 2010). Although there exists the Ministry of Devolution and Planning, the 47 County Governments in Kenya are semi-autonomous entities and are therefore not answerable directly to any line Ministry unlike the now defunct local authorities which were housed by the Ministry of Local Government (GOK, 2013; Kenya Gazette Supplement Acts, 2012). As such, the County Governments are required to establish their own performance management system that ensures service delivery to the public (GOK, 2012).

Performance contracting (PC) System was introduced in the public service in Kenya in the year 2003 by the Government being part of the Rapid Results Initiative (RRI) approach to management of public resources (GOK, 2003). Sector Performance Standards (SPS) require all Government Ministries to individually enter contractual agreements with the Executive annually through Performance Contracting (GOK, 2010). By signing the PC agreements, entities under Government Ministries like parastatals and State Owned Universities (SOU) are by extension duty bound by

the PC system requirements (GOK, 2010). Every year, external evaluators are contracted to evaluate the performance of Government Ministries through pre-negotiated targets (NIMES, 2009). The performance of Government Ministries is evaluated in three broad areas: customer service; employee satisfaction; and corporate social responsibilities (GOK, 2010).

Performance indicators of Government Ministries are outlined in the strategic plan of a given Ministry (NIMES, 2009). Customer service in Government Ministries is reflected through service charters and implemented through various strategies like establishment of customer service desks, complaints boxes, Office of the Ombudsman, Ethics and Integrity Commission, open procurement process safeguarded through the Public Procurement Oversight Authority (PPOA) Act 2006, customer satisfaction surveys and corruption index surveys among others (NIMES, 2009). Various strategies are used to enhance employee satisfaction including employee satisfaction surveys, gender mainstreaming, drug and substance abuse policies, policies for persons living with disabilities, HIV/AIDS policies and Human Resource (HR) policies that are geared towards employees' welfare and personal growth and career development (NIMES, 2009). Hatry (2006) indicates that involvement in Corporate Social Responsibilities (CSR) is the going strategic trend in the private sector and performances of governments too should be measured partially through responsiveness to social realities. Government Ministries in Kenya are required to identify and engage in various CSR activities.

Although Kenya has not been a mineral driven economy, the country enjoys one of the best agricultural climatic conditions in the world that favour tea, coffee, dairy, cereals, sugar and horticultural sectors (World Bank, 2003). In addition, Kenya enjoys a coast line and wildlife that attracts foreign exchange (World Bank, 2003). Despite these natural vantage points, unsatisfactory performance is evident in all Government Ministries ranging from road carnage, poverty, diseases, crime, corruption, tribalism, tribal clashes, insecurity, slum expansion, water crisis, recurrent food shortage and poor service delivery to members of the public above the global average index (GOK, 2010). In addition, Government institutions operating under line Ministries like Teachers Training Colleges (TTCs) are characterized by dilapidated infrastructures (Ministry of Education, 2012).

To reverse unsatisfactory performance in the country, the Government of Kenya introduced Performance Contracting (PC) System in the entire public service in 2003 as part of the Rapid Results Initiative (RRI) management approach (GOK, 2003). Although Kenya pursued

Millennium Development Goals (MDG) 2015 as part of the RRI management strategy and formulated Kenya Vision 2030, Angote (2009) notes that indicators of unsatisfactory performance in the public sector such as social-human problems like prevalence of HIV/AIDS, rampant drug and substance abuse, industrial action among public servants and proliferation of small arms that propagate crime still prevail. Obong'o (2009) further argues that despite the implementation of the Performance Contracting (PC) system in the public sector in Kenya in 2003, unsatisfactory performance in the public sector in Kenya is evident in lack of basic social amenities, crime, poverty, tribalism, dilapidated infrastructure, poor governance, graft, rampant disease outbreaks, high levels of illiteracy and dysfunctional institutions characterized by poor service delivery and failure to be customer responsive.

Although Nuguti (2009) indicates that the PC system implemented in the public sector in Kenya is a Monitoring and Evaluation (M&E) tool and despite the fact that Government Ministries are ranked on the basis of achieving targets set in the PC system by external evaluators, the results do not reflect the level of service delivery to the public. In addition, although the PC System has been implemented in the public service since 2003, the national mean growth rate between 2003 and 2011 at 4.5% still remained the lowest in East Africa for the same period (World Bank, 2012). Although Njiru (2008) links the increase in the economic growth rate to 7% in 2007 from 0.1% in 2002 to Performance Contracting, there was need for an independent study to investigate the influence of the PC system in Government Ministries in Kenya in respect to service delivery, employee satisfaction and corporate social responsibilities.

## **1.2 Statement of the Problem**

Implementation of sound performance measurement systems in an organization should enhance performance. Mohan (2001) links organizational performance with the performance measurement system put in place in the organization. This implies that if a performance management system implemented in an organization does not deliver the desired results, then the performance system could be having performance gaps that need to be addressed. After studying performance contracting systems implemented in various countries, Chan et al. (2008) indicated that PCs are monitoring and evaluation systems meant to improve organizational performance. That

performance contracts were adopted in the public sector in 2003 and implemented in Government Ministries in the 2004/5 Financial Year and service delivery, employee satisfaction and involvement in corporate social responsibilities are still not satisfactory necessitated this study.

The problem this study, therefore, sought to address is the relationship between performance in Government Ministries in Kenya and the implementation of performance contracting system. Customer satisfaction, employee satisfaction and participation in corporate social responsibilities were the indicators of organizational performance in the study. Kobia and Mohammed (2006) argues that although service delivery to customers (public) by Government Ministries has improved, the performance is still not satisfactory. Obong'o (2009) indicates that customers of Government Ministries still contend with delayed service delivery despite the fact that Ministries periodically undertake customer satisfaction surveys and are fairly rated by external evaluators with most of them scoring above 70%. Sector Performance Standards (SPS) indicate that Government Ministries have service charters guiding service delivery to customers and mechanisms like on-line reporting and manual corruption and complaints reporting boxes to enforce service charter which are written commitments to customers (GOK, 2010).

Employees are the implementers of policies in any organization. Their welfare therefore has a bearing on organizational performance. Angote (2009) indicates that although Government Ministries have sound HR policies, terms of employment of employees are below market rates when compared with the private sector. Angote (2009) further indicates that employees of Government Ministries rarely participate in team building activities and promotions and capacity building opportunities are not transparent. Despite these employee issues, Obong'o (2009) argues that employee satisfaction levels for most Ministries as rated by external evaluators through the PC System are above 70%. Government Ministries are also required to be responsive to Corporate Social Responsibilities (CSR) (GOK, 2010). However, Government Ministries hardly prioritize CSRs (NIMES, 2009). Kobia and Mohammed (2006) indicate that the private sector in Kenya and NGOs drive CSR agenda which is supposed to be spearheaded by the Government.

Effective performance measurement is a participatory process. Mohan (2001) indicates that implementer participation is the guarantor of organizational performance in a result based management system. Although the PC System is supposed to be a participatory process, Nuguti (2009) argues that targets in the public sector in Kenya are set and signed between top management

and the executive and cascaded down with little or no negotiations to lower cadres. In addition, targets set in a performance system should be measurable and achievable within the implementation period. Hatry (2006) indicates that for performance management to warrant desired results, the targets set in a performance based system must be precise, measurable and attainable. Nuguti (2009) indicates that the tools used to measure performance under the PC system in Kenya are uniform across all Government Ministries. Studies of performance management such as Crawford et al. (2003) and Hatry (2006) indicate that in a performance management system, the tools used in a performance system should be contextualized, appropriate, consistent and simple to use by the implementers. There was, therefore, need to examine the validity, reliability and simplicity of the PC tools and the PC targets setting process.

Contextualizing performance measurement is important in respect to the organization's environment and structure. Kobia and Mohammed (2006) indicate that the PC system has been implemented uniformly across the entire public sector ignoring dynamics of organizational structures. The influence of organizational structure on the relationship between PC system and organizational performance was therefore examined in this study. Organizational mandate, size and model were the indicators of organizational structure in the study. In addition, work cultures vary with organizations and they influence performance. Kobia and Mohammed (2006) indicate that in the implementation of the PC System in Kenya, it was assumed that organizational cultures in Government Ministries support performance management. While Bruun (2007) indicates organizational culture is indicated by clarity of vision and promptness to duty, Marc and Susan (2006) indicate that team work is an indicator of an organizational culture that supports performance. The influence of organizational culture on the relationship between PC system and organizational performance was examined in the study. Clarity of vision, promptness to duty and team work were the indicators of organizational culture in the study.

Studies such as Daniel (2006) and Gee (2012) link employees' attitudes with organizational performance. Nuguti (2009) argues that in the implementation of the PC System in Kenya, it was assumed that implementers had positive attitude towards PCs. There was therefore need to examine the influence of implementer attitude on the relationship between PC System and organizational performance. Although measuring an individual's attitude can be a complex matter, Raja (2009) indicates that the level of cooperation, nature of language used and number of

indiscipline cases are pointers of an employee's attitude on the organization. Level of support of the PC system and time taken to meet PC obligations were the indicators of implementer attitude in this study. Although proponents of performance measurement such as Kusek and Rist (2004) and Mohan (2001) indicate that monitoring and evaluation are requirements for organizational performance, Nuguti (2009) argues that most employees of Government Ministries are either ill equipped or do not have M&E skills. Type and level of M&E skills of implementers were therefore identified as indicators of M&E skills in this study. The problem this study sought to address was the relationship between performance in Government Ministries in Kenya and implementation of performance contracting system.

### **1.3 Purpose of the Study**

The purpose of this study was to investigate the influence of contextual and cognitive factors on the relationship between performance contracting system and organizational performance in Government Ministries in Kenya.

### **1.4 Objectives of the Study**

The research objectives of this study were:

1. To examine the extent to which performance contracting system influences organizational performance in government ministries in Kenya
2. To establish the extent to which contextual factors influence the relationship between performance contracting system and organizational performance in government ministries in Kenya
3. To establish the extent to which cognitive factors influence the relationship between performance contracting system and organizational performance in government ministries in Kenya

## 1.5 Research Questions

This study sought to answer the following research questions:

1. To what extent does performance contracting system influence organizational performance in government ministries in Kenya?
  - a) To what extent does performance contracting targets influence organizational performance in government ministries in Kenya?
  - b) To what extent does performance contracting tools influence organizational performance in government ministries in Kenya?
  - c) To what extent does performance contracting implementer participation influence organizational performance in government ministries in Kenya?
2. To what extent do contextual factors influence the relationship between performance contracting system and organizational performance in government ministries in Kenya?
  - a) To what extent does organizational structure influence the relationship between performance contracting system and organizational performance in government ministries in Kenya?
  - b) To what extent does organizational culture influence the relationship between performance contracting system and organizational performance in government ministries in Kenya?
3. To what extent do cognitive factors influence the relationship between performance contracting system and organizational performance in government ministries in Kenya?
  - a) To what extent does implementer attitude influence the relationship between performance contracting system and organizational performance in government ministries in Kenya?
  - b) To what extent does implementer monitoring and evaluation skills influence the relationship between performance contracting system and organizational performance in government ministries in Kenya?

## 1.6 Research Hypotheses

The following are the alternate hypotheses tested in this study:

**Hypothesis 1:** There is a significant relationship between performance contracting system and organizational performance

**Hypothesis 1a:** There is a significant relationship between performance contracting targets and organizational performance

**Hypothesis 1b:** There is a significant relationship between performance contracting tools and organizational performance

**Hypothesis 1c:** There is a significant relationship between performance contracting implementer participation and organizational performance

**Hypothesis 2:** The strength of the relationship between performance contracting system and organizational performance depends on contextual factors

**Hypothesis 2a:** The strength of the relationship between performance contracting system and organizational performance depends on organizational structure

**Hypothesis 2b:** The strength of the relationship between performance contracting system and organizational performance depends on organizational culture

**Hypothesis 3:** The strength of the relationship between performance contracting system and organizational performance depends on cognitive factors

**Hypothesis 3a:** The strength of the relationship between performance contracting system and organizational performance depends on implementer attitude

**Hypothesis 3b:** The strength of the relationship between performance contracting system and organizational performance depends on implementer monitoring and evaluation skills

## **1.7 Significance of the Study**

This study was expected to contribute significantly to policy and practice, PC implementation, research and theory, university lecturing and research and to the body of knowledge of professional practitioners. This study was expected to make significant contribution to policy and practice. Since the PC system is applied uniformly across the entire public sector, it was anticipated that this study will form the basis for contextualizing the PC system commensurate to the specific needs per ministry. In addition, the ranking criteria used for evaluating performances of Government Ministries was scrutinized in this study. The current study was expected to help decision makers in Government Ministries objectively compare and contrast the ranking evaluation criteria with the indexing methodology in respect to performance measurement through the PC system. Further, it was expected that this study will help policy makers in designing and developing PC tools to measure the desired constructs in performance management.

It was expected that this study will assist PC implementers with additional knowledge necessary for effective implementation of the PC system. Monitoring and evaluation skills needed in the PC system as well as the effectiveness of the PC system were examined in this study. It was therefore expected that PC implementers would benefit through this study by identifying and bridging M&E skills gaps and performance lapses in the PC system.

This study was expected to contribute to theory especially to the body of knowledge of project monitoring and evaluation. Results Theory in which this study was grounded, was examined in the light of previous theories in management like the Goal Setting Theory, Bureaucratic Theory, Scientific Management Theory, Systems Theory, Social-Technical Theory and Contingency Theory. Interrelationships between these theories and the contribution this has in the doctrine of monitoring and evaluation was expected to make a meaningful contribution to the knowledge of performance measurement by integrating organizational structure, organizational culture, implementer attitude and implementer M&E skills to an existing performance measurement system.

In addition, it was expected that the current study will make insightful contribution to teaching and lecturing in project monitoring and evaluation as well as in project management disciplines. PCs were indicated as M&E tools in this study. The degree to which the implementation of PCs in

Government Ministries in Kenya was effective was therefore expected to help students of project monitoring and evaluation draw key lessons on effective management of performance management systems. Moreover, it was expected that this thesis will guide students of project monitoring and evaluation in future research work.

This study was expected to be a reference point to the professional body of knowledge in project management, the Kenya Association of Project Managers (KAPM). This field being relatively new in Kenya, it was expected that this study in the field of project management at doctorate level would guide professional practice among practitioners in project management. Short courses and certifications to be offered by KAPM and individual as well as corporate members of the association were expected to be informed by a scientifically researched study to set benchmarks for practice. Findings from this study were therefore expected to form the baseline for professional practice in the industry in project management.

### **1.8 Limitations of the Study**

The main limitations of this study were time and cost. This is because the researcher would have preferred to take a census of all employees in Government Ministries. The practicability of the same was prohibitive due to constraints in resources. To overcome these constraints, sampling from the target population was undertaken and the sample size taken was large enough such that it was a presentation of the entire population. In addition, the sampling procedure was scientifically done to the extent that the statistical principle of randomization was not compromised in the sampling frame.

The other limitation that was encountered in the study was the restructuring of Government operations taking place in Kenya in the sense that some employees of line Ministries had been deployed under secondment arrangement to County Governments during the second phase of the transition of National Government functions as provided for in the County Government Act, 2012 (Kenya Gazette Supplement Acts, 2012) and in the 11<sup>th</sup> Chapter on devolved Government provided for in the Constitution of Kenya, 2010 (Kenya Gazette Supplement Acts, 2010). The performances of such employees cannot be classified together with the performances of Government Ministries, and as such, they were excluded from this study. The performances of employees deployed in the

Counties by Ministries are integrated with those of the public servants working for County Governments. To overcome this structural limitation, the research population that was considered for study was the total number of employees working directly in Government Ministries as provided for in the organization of the Government of the Republic of Kenya publication of May 2013 (GOK, 2013).

### **1.9 Delimitations of the Study**

This study was delimited to employees working in mainline Government Ministries' headquarters situated in Nairobi, Kenya. This was informed by the fact that the Government of Kenya has devolved functions to counties and therefore majority of employees in Government Ministries congregate within the headquarters (GOK, 2013). Further, although public universities and parastatals are state agencies, they are housed by main line ministries; and as such, decisions at the respective Ministry level are ultimately cascaded down to all Government agencies. However, it should be noted that the mandate and operational methodology in state owned universities and parastatals are fundamentally different from Ministries and hence clustering these three sectors in a study may not lead to statistical generalizations (NIMES, 2009).

Structurally, parastatals also differ from one another; some being profit oriented and others leaning towards provision of social services. For instance although New Kenya Creameries Cooperative (KCC) and Kenya Tea Packers (KETEPA) are State Owned Enterprises (SOEs), they are profits oriented organizations and hence compete with other players in their respective industries. On the other hand, National Campaign Against Drugs and Alcohol Abuse (NACADA) and Kenya National Aids Council (KNAC), though state agencies, exist for social benefits to the public rather than for profits (Nuguti, 2009). Parastatals are therefore not homogeneous for strict scientific generalizations. Further, although County Governments are part of the public sector, they were excluded from this study since they are new establishments and have not yet implemented the PC system nor has any evaluation of the same been done.

The scope of this study was also informed by the fact that Government Ministries would be interested with the findings from this research to enhance Performance Contracting system since evaluation results are made public (GOK, 2012). The improvement of Government Ministries

would lead to enhanced service delivery for the entire country (GOK, 2009). Although Barzilai (2011) suggests there are many variables that influence organizational performance, this study delimited itself to the influence of performance contracting system; organizational structure; organizational culture; implementer attitude; and implementer M&E skills on organizational performance of Government Ministries in Kenya.

### **1.10 Basic Assumptions of the Study**

In this study, it was assumed that the respondents would be responsive as research respondents. It was, therefore, assumed that since public servants working in Government Ministries were duty bound by performance contracts, they would appreciate the significance of the study at hand and thus cooperate with the research work.

In addition, since the respondents were employees who signed performance targets under the PC system, it was assumed in this study that they were literate and therefore would understand the items in the research instruments. Since majority of employees of Ministries of national Government were located in the headquarters in Nairobi, it was assumed that the respondents would be easily accessible for data collection.

### **1.11 Definition of Significant Terms**

<b>Cognitive Factors</b>	Individual determinants of organizational performance like an individual's attitudes, skills, abilities, talents and knowledge
<b>Contextual Factors</b>	Organizational factors, outside the individual, that influence organizational performance like organizational structure and culture
<b>Implementer</b>	Implementer refers to public servants in Government Ministries in Kenya entrusted with implementing the PC system

<b>Implementer Attitude</b>	Implementer attitude refers to the attitudes of public servants in Government Ministries towards work especially in respect to measurement of results through the PC system
<b>Implementer M&amp;E Skills</b>	Formal M&E skills possessed by public servants in Government Ministries in view of the PC system in Kenya as an M&E tool
<b>Organizational Culture</b>	Employees' corporate behavior guided by the organization's vision and reflected through team work and promptness to duty
<b>Organizational Performance</b>	The extent to which targets set out in the PC system in respect to customer service, employee stewardship and social responsibility in a given Government Ministry are achieved
<b>Organizational Structure</b>	The size, model and mandate of a given Government Ministry
<b>Performance Contracts</b>	Contractual agreement signed between the Government of Kenya and a Government Ministry in respect to targets set annually against specific negotiated deliverables between the two parties
<b>Performance Contracting System</b>	The coordination scheme of setting targets as well as measuring and evaluating the achievements of the targets set out for a given Ministry by the Government of Kenya

## 1.12 Organization of the Study

This thesis is organized in five chapters. In the first chapter on introduction to the study, the background of the study and the problem the study seeks to address were examined. The purpose of the study, research objectives, research questions and the hypotheses in the study were then examined. This was followed by examining the significance, delimitations, limitations, basic assumptions and definition of significant terms in the study. The second chapter of this study examined the theoretical, empirical and conceptual framework. Organizational theories and modern theories on organizational performance were examined in the theoretical framework. Empirical review was done to identify knowledge gaps on the relationships investigated in the study. Conceptual framework was designed to model the relationships in the study.

The third chapter of the study is research methodology. In this chapter the research design, target population, sampling procedures, data collection procedures, research instruments and data

analysis techniques were examined. The fourth chapter is on data presentation, analysis, interpretation and discussion. Since the research designs in the study were descriptive research design and correlational research design and the research approach mixed methods, descriptive and inferential analysis were carried out in a cross-sectional manner per research objective. Chapter five of the study is on findings, conclusions, recommendations and suggestions for further research. References made in the study are appended in the Reference section of this thesis. In addition, statistical tables, authorization letter to collect data, research instruments, organizational structure of the Government of Kenya and the map of Kenya are appended in the Appendices section of this research thesis.

## **CHAPTER TWO**

### **LITERATURE REVIEW**

#### **2.1 Introduction**

This chapter covers the theoretical framework, empirical review and the conceptual framework. In the first section of this chapter, organizational theories were examined. The organizational theories that were examined were: Classical Organizational Theory, Neoclassical Organizational Theory and Environmental (Contingency) Organizational Theory. Organizational performance theories were then examined. The organizational performance theories that were examined in this study were: Goal Setting Theory, Systems Theory and Results Theory. This is followed by an empirical review on the relationships under study with the aim of identifying the knowledge gaps from previous studies. Finally, the chapter is concluded with a conceptual framework which forms the model that guides the relationships subjected to scientific analysis.

#### **2.2 Organizational Theories**

Although the dependent variable in this study was organizational performance, organizational theories were examined in this study since they form the foundation of theories on organizational performance (Barzilai, 2011). Robbins (2005) indicates that the concept of organizational performance can only be appreciated after a thorough understanding of organizational theories. An organization's performance can only be adequately addressed when the organizational structure examined under organizational theories is accentuated, observes Nirmala and Akhilesh (2006). Building on the same argument, Walker et al. (2007) underscore the need for managers and students of organizational performance to understand organizational theories by indicating that an organizational culture evolves from the organizational structure and therefore the two, in essence, are the context of an organization from which organizational performance emanates.

These views by Walker et al. (2007) could have been a response to issues raised by Jones (2004) in a study on organizational theory, design and change. In this study, Jones (2004) linked organizational performance with the organizational design which was later identified by Delmas and Offel (2008) as the organization's environment. Based on these scholarly arguments, an

examination of organizational theories was seen in the current study as a critical building block of organizational performance which was the main focus of the study at hand.

Although there are many organizational theories, three of them were examined in this study: Classical Organizational Theory, Neoclassical Organizational Theory and Environmental (Contingency) Theory. While studying on organizational theories, Gibson et al. (2009) indicate that these three theories have had wide usage in formation of organizational context, and in particular, organizational structure and culture; hence the choice of these three theories in this study. Further, Goal Setting Theory, Systems Theory and Results Theory examined as theories on organizational performance in this study evolved from organizational theories.

Kleiman and Lawrence (2010) link goal setting theory with classical school of thought. Systems Theory has been linked with Environmental (Contingency) Theory by Nirmala and Akhilesh (2006) in a study on redefining justice in a right sizing environment. By emphasizing on participatory approach in management and positive work attitudes, Cummings and Worley (2008) argue that Results Theory has its foundation on Neoclassical Organizational Theory. Following these arguments, literature on organizational theories was examined in this study.

### **2.2.1 Classical Organizational Theory**

Carnal (2007) indicates that the classical perspective emerged from the industrial revolution and emphasized on the efficiency of the organization. There are two extensively discussed efficiency theories under the Classical Organizational Theory: the Scientific Management Theory and the Bureaucratic Theory (Jones, 2004). The Scientific Management Theory was popularized by Taylor, Fredrick Winslow (1856 – 1915) to encourage efficiency and productivity in industrial production. Taylor argued that inefficiencies could be controlled through managing production as a science (Carnal, 2007). Taylor defined scientific management as "being concerned with knowing exactly what you want employees to do and then see to it that they do it in the best and cheapest way possible" (Kanigel, 1997).

Proponents of scientific management theory such as Carnal (2007), often referred to as Taylorism, argue that the management approach influences both employees and employers in equal measure and emphasizes on control of the labour force by the organization's management. Critics of the

Scientific Management Theory such as Epstein (1996) argue that the approach is based on the concept of planning of work to achieve efficiency, standardization, specialization and simplification. Other critics such as Boddy (2002) argue that Taylorism as a managerial approach views workers merely as factors of production rather than employees with personal goals. Although the scientific managerial approach increased organizational performance, Kyle (2006) argues that the mutual trust that existed between management and workers was mainly due to continuous capacity building, fear of reprisal and performance based incentives.

The early studies by Taylor (1947) suggest that organizational performance can only be enhanced by reducing or eliminating physical stress and anxiety as much as practically possible and developing the capacities of workers through training and eliminating the traditional 'boss' concept. Radkau and Patrick (2009) argue that Taylorism differed with the Bureaucratic Classical Theory advanced by Max Weber in that the latter emphasized on organizational structure. By largely ignoring organizational structure and external environment as determinants of organizational performance, John and Michael (2004) argue that the scientific management approach postulated by Taylor is practical in profit oriented organizations but stands challenged in organizations oriented towards social benefits like Governments.

Based on the Scientific Management Theory, Cummings and Worley (2008) indicate that organizational performance can be improved by enhancing the skills and developing positive work attitudes of employees through continuous capacity building. Sapru (2008) argues that Taylorism agreed with other studies that organizational culture is a factor of organizational performance. In addition, Sapru (2008) indicates that Taylor was able to demonstrate that cultures can be consciously developed and therefore can be manipulated towards organizational performance. Paurav (2009) indicates that this argument concurs with the postulates advanced by contingency theory that culture can be acquired and unlearned depending on the prevailing environmental dictates. Further, scientific management approach emphasized on putting up water tight systems to enhance individual accountability which compares relatively with the Performance Contracting system in the public sector in Kenya (Obong'o, 2009). Although this theory contributed significantly to organizational performance, it fell short of appreciating other determinants of organizational performance. In particular, the theory largely ignored aspects of organizational structure as variables of organizational performance (Richard et al., 2009).

By examining the four principles of scientific management for improving organizational performance as advanced by Taylor, Head (2005) indicates that the theory was grounded on capacity building employees to deliver results in a participatory environment. This is in conformity with the results theory in which this study is grounded in the sense that proponents of results theory such as Maurice (2011) emphasize on involving employees in managerial decisions, providing a conducive work environment (organizational structure and culture) and providing implementers with the right tools to achieve desired organizational results.

Developed in the Industrial Age, Max Weber's Theory of Bureaucracy is also classified as an organizational Classical Theory (Bruun, 2007). Commonly known as the Bureaucratic Theory, Bruun (2007) argues that this theory revolves around the theme of rationalization, rules and expertise. Korotayev (2006) indicates that large organizations like Governments, due to the complexity of the organization, are structured bureaucratically. Proponents of this theory such as Radkau and Patrick (2009) argue that the theory focuses on organizational efficiency and clearly defined roles. Since large organizations require formalization of roles, then almost by default, the most common form of management by governments, national or county is the bureaucratic approach with emphasis on observing the chain of command.

Critics of the Bureaucratic Theory such as Kenneth and Kenneth (2005) indicate that employees, in most cases, easily hide in the system which leads to unsatisfactory performance due to lack of a defined accountability system. In the study on performance management, Kusek and Rist (2004) attempted to eliminate the lack of defined roles through a monitoring and evaluation system which was adopted by organizations and Governments as performance contracting. Angote (2009) argues that until the introduction of the PC system as part of the Government Rapid Results Initiative (RRI) management approach in Kenya, Government Ministries were characterized by many non-existent workers. Furthering the same thought, Njiru (2008) argues that the RRI management approach was introduced to restructure the bureaucratic organizational structure in the public service for the purposes of delivering results for Kenyans as advanced by Results Theory.

Bruun (2007) indicates that followers of Max Weber's Bureaucratic Theory put emphasis on the influence of organizational structure in delivery of results and advocate for management to invest in putting up strong organizational structures. Korotayev (2006) argues that bureaucratic approach to management is non-inclusive in the sense that it is almost non cognizant of other factors at play

on organizational performance like the performance system in place, organizational culture and implementers' skills and attitudes. Since classical theory focuses mainly on organizational structure, the current study will be grounded on results theory which seems to be more inclusive of other factors such as the performance system in place.

### **2.2.2 Neoclassical Organizational Theory**

The Neoclassical perspective on organizations can be traced to the Hawthorne studies way back in the 1920s (John and Michael, 2004). Neoclassical Theory emphasized on “affective and socio-psychological aspects of human behaviours in organizations” (Sapru, 2008). The human relations movements was a movement whose primary concerns were employees' motivation as the main contributor of organizational performance. Consequently, the trade unionists got their inspirations from the Hawthorne studies resulting to unprecedented industrial action (Richard, 2005). Although this approach helped management to improve the work environment of employees in an attempt to achieve organizational performance, Kyle (2006) argues that neoclassical theory cannot be handled in isolation from other managerial theories. This is especially because neoclassical theory discourages putting pressure on employees to enhance performance in a target oriented organization.

While investigating the effects of the Hawthorne studies in an industrial plant of the Western Electric Company between 1927 and 1932, Elton Mayo observed that organizational performance is influenced by satisfying the social-psychological needs among employees (Tosi et al., 1986). These observations were validated by studies carried out by sociologists and psychologists Ebeclin and Tatum (2005) that linked neoclassical perspective with human relations style of management.

The Hawthorne studies suggested that employees have social and psychological needs along with economic needs in order to be motivated to complete their assigned tasks which too must be satisfied for productivity to increase (John and Michael, 2004). This theory of management was a product of the strong opposition against the Scientific and Universal Management Process Theory postulated by Taylor (1947) and Fayol (1949). This theory was seen by critics such as Huczynski and Buchanan (2007) as a direct response to the manner in which employees were treated in organizations and the deprivation of their personal needs and ambitions in a purely performance

based organization. Although Spencer and Myers (2006) support the Hawthorne studies, they suggest that taking care of employees' need not eliminate other realities that lead to enhanced organizational performance.

Proponents of the Hawthorne studies such as Kyle (2006) thus concluded that human social element existed in the workplace and that organizational performance was influenced by social group dynamics just as much as managerial demands among other physical factors. While supporting the same view, Huczynski and Buchanan (2007) added that although financial motives were important factors; social factors are just as important in defining the performance of employees in an organization. This argument conforms to the participatory approach advanced by results theory (Mohan, 2001). Based on these grounds, the Government of Kenya made performance contracts a negotiated process between the employer (GOK) and the employee (Nuguti, 2009). Making performance targets participatory by involving employees in all cadres leads to sustained organizational performance (Richard et al., 2009).

While studying on the Hawthorne Effect, Sapru (2008) argued that organizational performance is a factor of satisfactory interrelationships between coworkers in an organization and viewing employees as social beings who must possess a sense of belongingness in the workplace. These attributes can only be developed by improving the interpersonal skills through motivations, top-down leadership, communication and counseling just as argued by Taylorism (Carnal, 2007). From studies carried out by Huczynski and Buchanan (2007), it can, therefore, be concluded that Hawthorne perspective encourages managers to acquire considerable knowledge on behavioral sciences so as to understand and focus on improving the inter-personal relations among employees in an organization to enhance corporate performance.

Critics such as Ravasi (2006) believed that Mayo gave a lot of importance to the social side of the study rather than addressing the multiple needs of an organization. Further, Sapru (2008) argues that the approach takes advantage of employees by exciting them emotionally making it seem as if they are satisfied through realizing a singular organizational objective rather than helping employees view realizing social objectives as one of the tools contributing to the performance of the organization as a whole. Notwithstanding, Jolley (2003) argues that the studies carried out by Mayo were important building blocks for Results Theory especially due to the emphasis on participatory management which is a key pillar in monitoring and evaluation.

### **2.2.3 Environmental Organizational Theory**

Commonly known as the Contingency Theory, the environmental perspective on organizational performance is a class of behavioral theory founded on the belief that there does not exist any one best way to manage an organization (Lutans, 2011). To this extent, the theory suggests that an organizational, leadership, or decision making style that is effective in some situations, may not necessarily be effective in other circumstances. Thus, the optimal organization, leadership, or decision making style depends upon diverse internal and external variables (Morgan, 2007). Under the Contingency Theory, organizational performance is therefore influenced by the size of the organization, a firm's adaptation to its environment and differences among resources and operations activities (Dobbin, 2012).

In their study on organizational responses to environmental demands, Delmas and Offel (2008) indicate that the Contingency Theory is an organizational model that links organizational performance with roles assigned to individuals and the group variables. The two widely studied contingency theories are: the Contingency Model Theory and the Hersey-Blanchard situational theory. The Contingency Model Theory, developed by Fred Fieldler explains that group performance is a result of interaction between the managerial style of the leader and the characteristics of the environment in which the leader works (Delmas and Offel, 2008). The Hersey-Blanchard situational theory is an extension of Blake and Mouton's Managerial Grid and Reddin's 3-D Management Style Theory which linked organizational performance to the environmental situation of the organization like other players in the industry and the responsiveness of the organizational leader to environmental demands (Morgan, 2007).

Proponents of Contingency Theory such as Lutans (2011) argue that contextual factors are the main determinants of organizational performance in the sense that the performance of any given organization, profit oriented or otherwise, depends on the context. Holding the same view, Maurice (2011) suggests that managers need to consider organizational culture and structure as important components of organizational context. More recent studies by Dobbin (2012) suggest that employees' attitudes are equally influenced by the organizational context. Dobbin (2012) seems to suggest that an employee's attitude is determined by the culture of the organization as well as the organizational structure. Dobbin's (2012) arguments seem to have been influenced by a study carried out by Nicole and Michael (2000) that suggested organizational structures and cultures

shape attitudes of employees only in a performance based work environment. Such a performance based environment creates the desire for career growth and development among employees that propels the organization forward even in a challenging environment, a thought shared by results theorists such as Kusek and Rist (2004).

While critiquing the contingency approach, Hemant (2011) argues that whereas to a large extent an organization's performance is determined by the leader; leadership is broader than any one given individual. This critic was based on the fact that contingency theory implies that a change in leadership is the only method to correct unsatisfactory organizational performance. This argument offends more inclusive theories like Results Theory that advocate for participatory performance whereby organizational goals are only achieved through the summation of team effort among all stakeholders (Kusek and Rist, 2004).

Hatry (2006) indicates that an organization's performance is determined by many factors and cannot therefore be narrowed down to any one individual or factor in the organization. As such, this study cannot be grounded on Contingency Theory since this study is designed to examine the entire performance system in an organization and not just the role played by the top leadership in organizational performance. By examining Results Theory as expounded by Richard et al. (2009) and Kusek and Rist (2004), this gap in knowledge in respect to delivery of results in a participatory environment seems to be satisfactorily addressed by results theory. This is because whereas contextual factors as expounded by Contingency Theory determine organizational performance, results theory as argued by Walker et al. (2007) is an integrative approach to management cognizant of the contextual and cognitive factors in a performance based system that is participatory among all implementers.

## **2.3 Theories on Organizational Performance**

Theories on organizational performance tend to be grounded on the concept that the organization is a system which has to adapt to changes in an ever-changing environment. In a study on organization theory, Hatch (2006) defines an organization as a well-designed and structured system in which individuals collectively interact for specified objectives. The contemporary approach to the organization is multidisciplinary, as many scholars from different fields have contributed to its development, emphasizing the dynamic nature of communication and importance of integration of individual and organizational interests (Daft and Armstrong, 2009). Three of the more recent theories on organizational performance that are examined in this study are: Goal Setting Theory; Systems Theory; and Results Theory.

### **2.3.1 Goal Setting Theory**

While explaining that good intentions do not necessarily lead to performance in the study on organizational justice and decision making, Ebeclin and Tatum (2005) argue that if you cannot measure success, probably you are rewarding failure. Individuals in an organization therefore must have clearly stated goals to achieve intended performance, they argue. From this angle, a goal is seen as a road map to where the individual or an organization intends to go. Ebeclin and Tatum (2005) therefore suggest that a goal must be written down, quantifiable and precise. On the same note Kleiman and Lawrence (2010) argued that for goals to be useful tools to steer the organization towards a desired end, they must be SMART – Specific, Measurable, Attainable, Realistic and Time-bound. This concept is now commonly referred to as Management By Objectives (MBO) and can be traced to the studies carried out by Drucker (Robbins, 2005).

While building on Drucker's (1954) work, Luthan's (1985) argues that goal setting must be linked with task performance. As such, every employee must understand individual targets and consequences of performance or lack of it. Proponents of this theory such as Van et al. (1996) argue that when employees appreciate the implication of non-performance by being assigned specific and measurable targets, there is overall dedication towards work in an organization. Further, goal setting leads to team effectiveness as individual employees are able to appreciate the interdependence of tasks in a production line (West et al., 1998). The end result of this approach is elimination or at least reduction of a feeling of prejudice and discrimination while reprimanding

unwanted behavior or rewarding success since it is based on attainment of individual targets Whitley and Kite (2010).

However, opponents of the theory such as Lim et al. (2010) argue that the performance of an individual employee goes way beyond one's self to the organization and hence performance cannot solely be attributed to an individual's effort but rather the entire team effort as well as the organizational structure. While opposing the application of the goal setting theory in organizations oriented to social services, Bem (2011) argues that this approach ignores multiple realities including an individual's talents, abilities, skills and capacity and hence it is a judgmental approach which should not be applied uniformly across the organization since this would create an antagonistic organizational culture. While disagreeing with the views of Bem (2011), Nicole and Michael (2000) suggest that organizations never realize performance unless they are linked to individual performance through a goal setting process.

In an attempt to bridge the gap between these two opposing views, Kotter and Dan (2002) in the 'heart of change' discourse propose that individual goals should be set but through a negotiated process. As such, employees should be involved in the goal setting process as well as in agreeing the tools to be used for rewards and punishments to reinforce performance. This argument was advanced by Mullikin (2003) while studying on reference pricing and consumer encounters in which the study indicated that salespeople were unable to sell goods that they felt were overpriced by the organization. However, even with no changes in pricing, sales team was able to sell the products when they understood the pricing derivations.

In addition to employee involvement in setting targets, proponents of Goal Setting Theory such as Lim et al. (2010) argue that that the organizational structure has to be aligned with organizational goals. Thus, management needs to be cognizant of the mandate; size; and model of the organization as they develop organizational goals to enhance innovative performance measurement (Maurice, 2011). Thus, the conventional top-down approach of goal setting as proposed by Luthans (1985) may be counterproductive in modern day management. The Goal Setting Theory, in many aspects, forms the basis for performance contracting, a system in which individuals are held accountable for delegated authority (Crawford and Bryce, 2003). To effectively examine performance contracting, one has to look back to the principles guiding the Goal Setting Theory especially in respect to setting both individual and organizational targets.

Luthans (1985) outlined the steps to be followed in setting goals as follows: identifying key result areas in the organization; identifying measures of performance; stating specific objectives; and agreement between members of top management on the objectives and the goals set. Once goals are formulated, the second step is to activate the system for implementation. For successful implementation of such a system, it is essential to prepare the members in the organization on their expectation. A closer look at these two first steps in goal setting point many similarities with the setting up of the monitoring and evaluation system proposed by Kusek and Rist (2004). Nuguti (2009) argues that the PC system in Government Ministries in Kenya compares favorably with the monitoring and evaluation system proposed by Kusek and Rist (2004).

The third step in goal setting in Luthans (1985) criterion is to set individual targets. Individual goals are decided jointly by superiors and subordinates under the Goal Setting Theory which conforms to participatory management principle in Results Theory (Gomez et al., 2008). Once goals are finalized in the goal setting process, an action plan is developed for implementation. The fourth step involves ensuring that work is carried out in the right direction, identifying obstacles, and making adjustments to eliminate obstacles which Kleiman (2010) compares with the evaluation phase in the results theory. The last step in goal setting in Luthans (1985) criterion is appraisal of performance of the individual against the set targets. At the appraisal and feedback step in the goal setting criterion, an individual employee is given feedback on personal performance and provided with suitable rewards and motivation. Monitoring and Evaluation System advanced by the Results Theory has its genesis on the appraisal and feedback system under the goal setting theory (Kusek and Rist, 2004). As such, appreciation of Results Theory calls for a reflection on the principles advanced by the Goal Setting Theory.

The World Bank Development Report (2004) on making services work for poor people, was largely drawn from the goal setting approach. This is because although the report was on how PCs deliver results in the public sector, the steps that were proposed in the report were borrowed heavily from Luthans (1985) work but grounded on participatory management postulated by the results theory (Kleiman, 2010). Building on the same perspective, Arie (2005) argues that to a large extent performance contracting system as a means of enhancing organizational performance in public service evolved from the Goal Setting Theory.

### **2.3.2 Systems Theory**

Studies on Systems Theory can be traced from the work of Daft and Armstrong (2009) in a study on organizational theory and design. In this study, organization is viewed as a system comprising interconnected and mutually dependent sub-systems. These sub-systems can have their own sub-sub-systems. Daft and Armstrong (2009) were building on earlier studies by Dostal (2005) that perceived a system as composed of some components, functions and processes. This school of thought can be traced from Bakke's (1959) studies which viewed an organization as a system consisting of the following three basic elements: components, linking processes and organizational goals. As applied in some organizations today, especially those involved in manufacturing, proponents of System Theory such as Baron and Byrne (2004) view the organization as a society or a social family with various sub-components within the whole.

Barzilai (2011) suggests that the systems approach views an organization to be in a state of equilibrium only if all its components are stable and perfectly interlinked to achieve organizational goals. For instance, if a member in a system, say, an employee, is dissatisfied, such an individual can negatively influence overall organizational performance. Thus, for an organization to achieve set objectives, the employees ought to believe in the performance of the organization in which they are a part of. Management therefore needs to involve employees in management and appreciate the influence they have towards organizational performance in all decision making processes (Ryan, 2009).

In addition, for organizations to achieve the intended goals there has to be work-able inter-linkages between functions, that is, departments in the organizations (Daft and Armstrong, 2009). In this case, the organization is the system while the departments are the sub-systems. The overall organizational performance is, therefore, a factor of the extent to which the horizontal logistics coordination is effective in the organization (Barzilai, 2011). For results to be achieved in an organizational system, Cummings and Worley (2008) suggest that processes, therefore, need to have a central coordination unit, usually the Chief Executive Officer (CEO) in a profit making organization or a Principal Secretary (in the case of Government Ministries in Kenya). Similarly, each sub-system, that is, a department, also needs to have a central coordination unit which is the nucleus upon which all elements in that sub-system revolves. The departmental head allocates duties commensurate to designated power and delegated authority from which performance is

measured. Ryan (2009) argues that the systems approach was developed to enhance performance by allocating specific duties to every individual in the organization.

Using social research methods, Bryman (2001) suggested that it is not just job enlargement and enrichment which is important, but also transforming technology into a meaningful tool in the hands of the users. For organizations therefore to enhance performance, the technology in place should be in position to help the organization deliver results. These arguments culminated into the Social-Technical Theory which was grounded on the Systems Theory. Under the social technical theory, Gomez et al. (2008) argue that the system is no longer viewed as the organization but rather the people as well as the performance systems put in place. Harnell et al. (2011) suggest that cultivating the right organizational culture in the right organizational structure is a determinant of organizational performance.

Whereas the social technical approach is closely related with the objectives of the current study, a critical examination of the theory suggests the emphasis is on enhancing processes rather than results which partially contravenes the objects of the performance contracting system in Kenya whose emphasis is on results. Therefore the PC system in Kenya is premised on Results Theory as postulated by Kusek and Rist (2004). The Socio-Technical Systems theory views the organization as an amalgamation of people, the technical system and the environment (Delmas and Offel, 2008). The social system (employees) use the technical system (tools, techniques and knowledge) to produce goods or services valued by the organization's external environment (customers). Therefore, equilibrium among the social system, the technical system and the environment is necessary to make the organization effective (Delmas and Offel, 2008). Richard et al. (2009) argue that the Systems Theory and the Social-Technical Theory did not accentuate the need to set and measure individual targets as underscored in the Results Theory.

Critics of both the social technical approach and systems theory such as Lim et al. (2010) argue that these theories attribute organizational performance to the performance system in place, organizational structure and organizational culture. Although Systems Theory advocates for the right organizational structures, cultures and performance systems that are adaptive to the organization's environment; a view closely shared by proponents of contingency theory such as Nicole and Michael (2000); Systems Theory can be enhanced to include cognitive factors of organizational performance.

### **2.3.3 Results Theory**

Originally borrowed from the non-governmental organizations and viewed by scholars such as Kusek and Rist (2004) as the most modern approach to organizational performance, results theory is now adopted by many governments across the world (World Bank, 2012). This was largely informed by arguments advanced by Kusek and Rist (2004) on results based management as a performance monitoring and evaluation system is the best solution to sustained development among the developing nations. However, Kusek and Rist (2004) argues that for an M&E system to enhance organizational performance, it should be an integrated performance management system. Kusek and Rist (2004) developed a monitoring and evaluation system that sought to simplify results framework for monitoring performance developed by Marsh and David (1999). In matters principle and processes, Nuguti (2009) argues that the PC system in Kenya resembles the M&E system proposed by Kusek and Rist (2004).

Under Results Theory, Joley (2003) argues that organizations exist to achieve certain results; and as such, implementers should not confuse activities for accomplishments; processes for results; and list-to-do items for deliverables. Measurements of performance must be results based rather than processes oriented. For this to be achieved, the tools used in performance measurement in organizations should be valid, reliable and simple to use (Richard et al., 2009). While examining the best method for enhancing effectiveness and efficiency of implementing aid projects, Crawford and Bryce (2003) argue that the best way to achieve results for a large organization like a country is through stakeholders' participation. Further, Crawford and Bryce (2003) suggest that the only way for the stakeholders to safeguard the project and guarantee its sustainability is when the process is inclusive from the project design to its closure.

While working on a community health services project in Australia, Jolley (2003) proposed a systematic method to enhance stakeholders' participation from the project inputs, activities, outputs, outcomes and impact. When this theory was being popularized, proponents such as Ebeclin and Tatum (2005) almost ignored organizational processes and systems due to their desire to compel governments to improve performance by emphasizing on results management. For instance, in understanding public sector reforms, Cheung and Anthony (1997) advanced the theory that the end justifies the means; and as such, as long as results are seen; how and who gets the

work done is not as important. This school of thought has been critiqued by proponents of participatory development such as Mohan (2001) for organizational results to be achieved.

Arie (2005) suggests that students of Results Theory agree that performance measurement is the best way of managing performance. In the study on inadequate performances of Governments of African nations, Balogun (2008) recommends the key to desired performance in the public service as results oriented performance management. The work by Balogun (2008) was adopted in a Millennium Development Goals (MDGs) Conference in Paris in 2012 where it was agreed that governments of developing nations ought to adopt results-oriented management approach (OECD, 2012). The United States in particular, following the recommendations from this conference tied its funding of developing projects to developing countries to the implementation of a performance based system in the public sector (OECD, 2012).

This study was grounded on Results Theory. This is because performance contracts are monitoring and evaluation tools designed for measuring results as indicated by Hatry and Harry (2006). While undertaking a critical evaluation of the PC system in Kenya, Nuguti (2009) agreed with Hatry and Harry (2006) that the PC system in Kenya is a monitoring and evaluation system. This was indeed the original idea that made the Government of Kenya introduce the PC system in the public sector under the Rapid Results Initiative (RRI) management approach (NIMES, 2009). The tools that were designed in the PC system in Kenya complied in many aspects with the monitoring and evaluation system proposed by Kusek and Rist (2004).

In addition, although the classical perspective encourages efficiency, Morgan (2007) argues that the theory often ignores the importance of human needs which is considered an important factor of organizational performance in this study. Under the Results Theory, human aspects in the realization of organizational goals are referred to as stakeholders' participation (Mohan, 2001). Although the Neoclassical Theory, in attempting to bridge the gaps identified in Classical Theory, identified the social factors of organizational performance, the theory did not address the objects of an organization as an entity. Neoclassical approach, therefore, isolates employees' social needs as the main determinants of organizational performance. This approach was seen by Sapru (2008) to potentially excite employees' emotions leading to industrial action through organized employees' trade unions. Results Theory bridges this gap in the sense that organizational performance is seen to be preceded by an effective M&E system (Kusek and Rist, 2004).

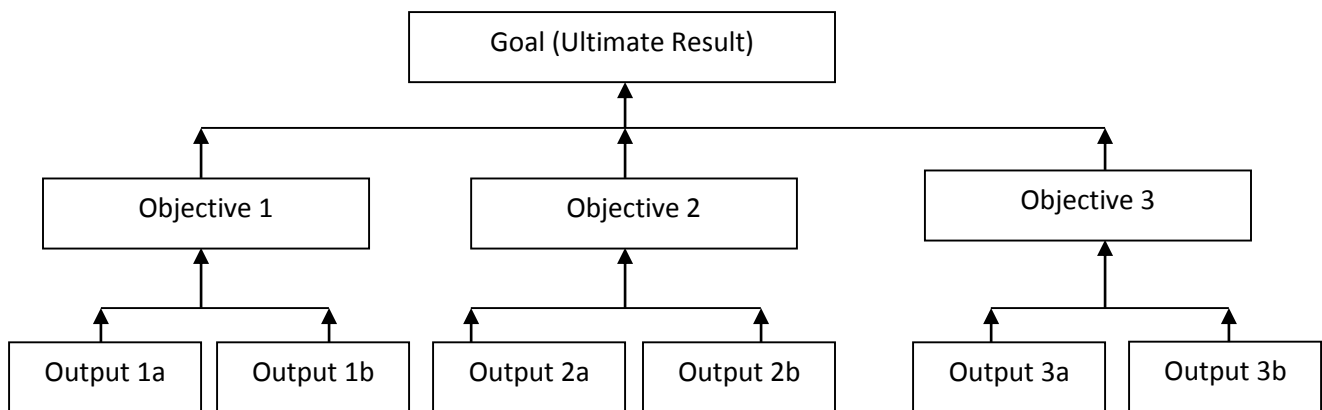
Whereas Crawford and Bryce (2003) indicate that Contingency Theory encourages innovativeness based on the situational uniqueness of every organization, the approach over-emphasizes on the role of the organizational leader rather than the entire project team. Contingency Theory therefore would limit the scope of the current study which envisions the performance of the entire project team. This is because whereas the performance of an organization is influenced by external factors, proponents of Contingency Theory such as Aronson (2006) view management purely as an art with no science element in it. This school of thought can potentially encourage inadequate performance in the sense that management may fail to benchmark success from other organizations in the industry (Lutans, 2011). The study at hand is grounded on the view that management is both an art and a science. Joley (2003) indicates that whereas management encourages innovativeness to enhance performance, the same must be guided by universally acceptable and scientifically sound principles and procedures.

Although the Goal Setting Theory has delivered results for many organizations over the years, Hemant (2011) argues that the theory fails to link the influence of an individual's performance in the project team with the performance of the other team members and assumes that by allocating individual targets, organizational performance is inevitable. Critics of the Goal Setting Theory such as Gomez et al. (2008) argue that the approach assumes that by setting goals for every individual in the organization, members will focus on their personal targets which automatically leads to organizational performance. Kenneth and Kenneth (2005) argue that this view ignores the interconnectivity between individuals and the linkages from one individual to the next one in the chain of production and the fact that the whole organization can be failed by one individual since the organization is one whole.

Proponents of the Goal Setting Theory such as Ebeclin and Tatum (2005) appraise the approach by arguing that the buck stops with the individual which is considerably progressive in comparison with older theories on organizational performance. However, more recent studies by Daft and Armstrong (2009) indicate that an organization is a unit (system) made of interdependent parts rather than independent entities. Thus if one element in a system is non-performing, then the entire system will be failed to some extent. Since this study is premised on the fact that the components of the organization are inter-dependent as advanced by Hatry and Harry (2006) on Results Theory, this study was, therefore, grounded on Results Theory.

Although Systems Theory postulates an organization as a system (major whole) comprising of subsystems (departments) within it that determine organizational performance, Head (2005) indicates that an organization not only consists of sub-systems but also processes and objectives. Whereas this theory was advanced by the social technical approach that appreciated the role played by the tools and technology in the organization’s performance; the emphasis on the theory was enhancing processes rather than advocating for results which contradicts the essence for performance contracting system in Government Ministries in Kenya which Kobia et al. (2006) argue is a results oriented system.

These gaps have been addressed by Results Theory sufficiently for this study in that results theory incorporates both the technical and human aspects as factors of organizational performance as indicated by Richard et al. (2009). This study, therefore, will be grounded on Results Theory since the PC system in Government Ministries in Kenya is a result oriented management approach as observed by (Obong’o, 2009). Further, Dobbin (2012) portrays Results Theory as a participatory management approach which is the principle under which performance contracting systems were founded. Derived from Results Theory, Eltville Results Model illustrates attainment of results in three levels whereby attainment of third level results (outputs) leads to attainment of second level results (objectives) which in turn lead to the ultimate project result (project goal) (Balogun, 2008). Figure 1 illustrates the Eltville Results Model.



**Figure 1: Eltville Results Model (Balogun, 2008)**

## **2.4 Empirical Review**

Under this section, an empirical analysis of previous studies on the relationships under study is undertaken. The objectives of various articles, research methodologies used and findings are critically examined to identify knowledge gaps in the areas identified of interest in this study. Specifically, relationships between the predictor variable, PC system on the dependent variable, organizational performance are evaluated. In addition, the influence of cognitive and contextual factors on the relationship between the predictor variable and the dependent variable is examined.

### **2.4.1. Performance Contracting System and Organizational Performance**

Organizational performance is the essence for the existence of organizations (Gomez et al., 2008). Debate however surrounds the relationship between performance contracting in the public sector and enhanced service delivery (Balogun, 2008). Studies by Njiru (2008) attempt to link performance contracting system and improvement in service delivery in the public sector in Kenya. Although studies carried out by Njiru (2008) were empirical, a study carried out by World Bank in various countries where the PC system has been implemented did not always reveal positive influence on service delivery to the public (World Bank, 2003). There is therefore need to critically examine the influence of the PC system in Kenya on service delivery to customers, employee stewardship and corporate social responsibilities.

While studying on the influence of employees' involvement in performance assessment system on employees' creativity of sales and engineering departments of Ebtakar manufacturer Sayyed (2012) undertook an empirical survey and analyzed data by descriptive analytical methods. A sample size of 97 employees was selected by simple random. In the study by Sayyed (2012), questionnaires were used for data collection and structural equation modeling was used for data analysis. The results of the study by Sayyed (2012) showed that all effects were adopted with the theoretical framework. Therefore, the variable of employees' involvement in performance assessment system positively influences the employees' abilities and skills to create creativity. The findings by Sayyed (2012) concur with a study carried out by Mohan (2001) on participatory development that indicate that an effective performance measurement system ought to be participatory. That Sayyed (2012) noted the influence of employees' abilities and skills on performance confirm findings from a study on the influence of cognitive factors on performance by Aronson and Wilson (2006).

In addition, that Sayyed (2012) indicated that employee's attitudes, social pressures and norms, and employees' abilities and skills positively influence creativity attests the findings of Harnell et al. (2011) that linked organizational culture and effectiveness. Although the study by Sayyed (2012) indicated skills, attitudes and culture influence performance, the study was not cognizant of the influence of organizational structure on performance. In addition, the study by Sayyed (2012) did not consider other factors influencing the performance assessment system such the tools used and aspects of target setting. In performance measurement, Hatry (2006) indicates that the tools used in a performance measurement system influences performance. Effective tools ought to be simple to use and reliable, observes Hatry (2006). In addition, Maurice (2011) argues that the deployment of innovative performance measurement systems depends on organizational context.

In a study on Selection Incentives in a Performance-Based Contracting System, Yujing (2003) undertook to investigate whether a performance-based contracting (PBC) system provides incentives for nonprofit providers of substance abuse treatment to select less severe clients into treatment. The data was collected from the Maine Addiction Treatment System (MATS) standardized admission and discharge data provided by the Maine Office of Substance Abuse (OSA) for fiscal years 1991–1995. The data provided demographic, substance abuse, and social functional information on clients of programs receiving public funding (Yujing, 2003).

The study by Yujing (2003) focused on OSA clients and Medicaid clients in outpatient programs. Aronson et al. (2006) argue that experimental designs in research are grounded on positivism philosophy and, therefore, largely ignore social human aspects in the construction of reality making it difficult to allocate resources objectively and thus meet the intended social objectives. In addition, by choosing multivariate regression analysis to predict the marginal effect of PBC on the probability of OSA clients' being most severe, Yujing's (2003) study did not control contextual and cognitive factors in the design. In contextual factors affecting deployment of innovative performance measurement systems, Maurice (2011) argues that in experimental designs, the researchers' role is lost thus compromising contextual influence on performance. In participatory development, Mohan (2001) links organizational performance and pragmatic paradigm in the construction of reality so that respondents are freed to be expressive in their responses which is limited by experimental designs.

Yujing's (2003) study found that the percentage of OSA outpatient clients classified as most severe users dropped by 7 percent ( $p \leq 0.001$ ) after the innovation of performance-based contracting, compared to the increase of 2 percent for Medicaid clients. The regression results also showed that PBC had a significantly negative marginal effect on the probability of OSA clients being most severe. It was concluded that performance-based contracting gave providers of substance abuse treatment financial incentives to treat less severe OSA clients in order to improve their performance outcomes. Fewer OSA clients with the greatest severity were treated in outpatient programs with the implementation of PBC (Yujing, 2003). These results suggest that regulators, or payers, should evaluate PC programs comprehensively taking this type of selection behavior into consideration. The study carried out Kobia and Mohammed (2006) indicate that some employees in the public sector in Kenya collude with evaluators to score Ministries favorably against the targets set in the PC. This implies that ranking of Ministries of Government may not necessarily be an indication of actual performance.

The study by Yujing (2003) unearthed a limitation in performance based contracting system in that when performance is measured solely against numbers, other critical factors are overlooked. In addition, Lutan (2011) argues that when performance measurement is exclusively parametric, employees only seek to meet the formal measurement requirements ignoring moral aspects of their job. The study by Yujing (2003), however, did not make corrective recommendations but rather left the task for further research. For instance, Yujing (2003) overlooked previous studies such as those carried out by Lutan (2011) that propose effective PC management should be participatory and therefore qualitative aspects in measurement of results should also be considered. The influence of PC management approach on organizational performance should, therefore, be examined through a mixed mode research design incorporating both qualitative and quantitative aspects of performance.

Arie (2005) advanced the argument that performance measurement is only one way of managing performance but not the only effective management style for governments as had been indicated earlier by Mohan (2001). The purpose of Arie's (2005) work was to introduce to a symposium, a set of linked studies, which illustrate the reality that, when it comes to improving organizational performance, performance management is a broader and more meaningful concept than simply

performance measurement. Thus the study sought to emphasize earlier concepts by Marsh (1999) on participatory management in respect to organizational performance.

Arie (2005) provided a brief review of the issues involved in using performance measurement in general and balanced scorecard (BSC) approach in particular. It was found that performance management can take many forms from dealing with issues internal to the organization to catering to stakeholders or handling issues in its environment. It was concluded in the study by Arie (2005) that performance management involves the use of both quantitative and qualitative techniques and paying due attention to the human (behavioral) side of the organization. This conclusion confirmed Mohan's (2001) discourse on participatory development whereby it was argued that development cannot be taken to the people but rather the people must initiate development for it to be sustainable. This argument was informed by the concept of sustainable development being analogous to a tree by Kamla (1991).

It can therefore be deduced that Arie's (2005) study identifies performance measurement as a sub-system of performance management which is consistent with the systems approach theory (Ryan, 2009). Further, Arie's (2005) study suggests that resorting to performance management is in fact a return to the basic concept of management, which assumes that there is need to include employees in management in order to ensure that the use of resources results in the attainment of desired goals (Lutans, (2011). Whereas these arguments are sound from a management perspective, the study fails to recognize the need for negotiated target setting with employees in PC management as well as the use of tools that are simple to use, valid and reliable as postulated by Kusek and Rist (2004) which is identified as a knowledge gap in this study.

A critique of the performance contracting system in Costa Rica evaluating the impact of hospital management reforms on employees' absenteeism similarly revealed undesired results. In particular, a study was carried out by AGarcía (2006) and presented to the Ministry of Health officials in Costa Rica on the reduction of high levels of absenteeism among health care workers as a means of improving public hospital performance. The purpose of the study was to review the impact of changes in reimbursement methods and organizational reform on absence rates among health care personnel in Costa Rican public hospitals for the period 1997–2001. This was implemented in the year 2002 in line with recommendations by World Bank to fast track

development in developing countries (World Bank, 2003) and the Paris Conference on sustained development among the developing countries (OECD, 1994).

The methodology used in AGarcía's (2006) study was quantitative with the Costa Rican public hospitals forming the research population. The results from AGarcía's (2006) study, just like was the case with a similar study by Abramson (2001) carried out exclusively on experimental designs on M&E contracts for health service delivery in Costa Rica, showed that the reforms had a negative impact on absenteeism, which increased throughout the considered period. Results further indicated that the policy of not substituting absentee workers, which was introduced through the reforms, did not work as expected in a permissive environment in which peer pressure mechanisms were lacking. Spencer and Myers (2006) suggest that such anomalies indicate influence of cognitive factors on organizational performance. In addition, although explicit incentives for workers included in the reforms were retained and used at facility level, this motivation did not lead to performance which validates Ravasi (2006) that motivation on its own does not enhance performance without the necessary organizational culture and structures.

Nevertheless, the study by AGarcía (2006) provided insights into how Costa Rican public hospitals responded to the pressure for increased efficiency and quality introduced by the reforms carried out over the period 1997–2001 through performance contracts. For such a purpose to be scaled up and replicated in the public sector in Kenya, a generalized output distance function by means of non-parametric mathematical modeling to construct a productivity index need to be developed. Nuguti (2009) suggest that this approach will account for improved performance while controlling for quality of performance indicators computed. Such results will demonstrate an improvement in real performance of Government Ministries mainly driven by the quality of the evaluation criteria as well as the M&E skills of the evaluators and the implementers (Obong'o 2009).

There is, therefore, need to examine the influence of implementers' attitudes and skills as well as organizational cultures and structures in enhancing performance in Government Ministries in Kenya. The adoption of management contracts in the public sector seems to have unearthed and quantified the role of implementers unlike in the past when many public servants would lack clear job descriptions (Angote, 2009). Enhanced organizational performance was indicated to be influenced primarily by change in technical and scale efficiency rather than changes in the systems

in respect to nature of technology used. This is because it is people who produce results and not technology as advanced in the social technical approaches ((Richard et al., 2009).

Although a number of policy implications were drawn from the results of the study carried out by AGarcía (2006) in that the study identified contextual factors in organizational performance; the study fell short of addressing cognitive factors especially the attitude of the health workers in respect to organizational performance. Whitley and Kite (2010) suggest that organizational performance cannot be exhaustively explained without recognizing the role played by the attitudes and skills acquired by the players. For this reason, the current study identifies the influence of cognitive factors on the relationship between a performance measurement system and organizational performance as a gap in knowledge.

The Kenyan case of performance contracting reveals a different scenario from the Costa Rican experience on public hospitals. Obong'o (2009) examined the implementation of performance contracting in the public sector in Kenya between 2003 and 2007. The author embarked on quantitative research design and cluster sampled his target population, the public sector. The questionnaire was used for data collection and the raw data collected was analyzed parametrically. The study revealed that emphasis of the New Public Management (NPM) in the public sector was borrowed from practices in the private sector which were seen to be results oriented (NIMES, 2009).

NPM models have been seen through the public service reform initiatives in many developing countries as the solution to effective service delivery (Balogun, 2008). Under the Sector Performance Standards (SPS), the Government of Kenya (GOK) introduced the PC system in the management of its public institutions in 2003 with the aim of refocusing the mind-set of the public service from a culture of inward looking towards a culture of being customer and results oriented (GOK, 2012). The guidelines set out in the SPS in the public sector in Kenya broadly cover customer service, employee stewardship and social responsibility (GOK, 2012).

In another study, Kobia and Mohamed (2006) agree that the Government of Kenya experimented with performance contracting to improve performance, reduce inefficiencies and enhance accountability and transparency in the public sector. With the exception of Malaysia, Kenya is the only country on record to have used performance contracting approach across the entire public

sector which includes all Government Ministries, State Owned Enterprises (SOEs), Public Universities and the defunct Local Authorities (World Bank, 2003). Most countries employ the PC management approach only in State owned Enterprises as they perceive the approach fit only for profit making institutions and not applicable for social services (World Bank, 2003).

While the use of Performance Contracts in public sector is not a new phenomenon, the Kenyan experience stands out in that in no other country do PCs enjoy political support of comparable scale due to associated political risks feared by political leaders who head governments (Njiru, 2008). In Kenya, performance results of public sector institutions emanating from PCs are made public in a chronological manner measured against pre-determined indicators. Moreover, the PC system in Kenya is driven by the head of state which implies that the public servants in essence get into a performance contractual agreement with the country's CEO and they in turn cascade the performance targets down the chain of command (Njiru, 2008).

Whereas studies carried out by Njiru (2008) and Kobia and Mohammed (2006) reveal the improved performance in service delivery through the implementation of the PC system in Kenya, Nuguti (2009) argues that they fail to recognize the political risk of performance contracting system operating under a presidential decree rather than PCs being anchored in law. This scenario implies that an incoming government with transition in leadership can dismiss the gains brought forth by the PC system. For organizational structures in public service to deliver results, they must be safeguarded from the whims of politics (Paurav, 2009). To this end, the moderating role played by organizational structure on the relationship between the PC system in Government Ministries in Kenya and organizational performance ought to be examined.

In addition, under the PC system in Kenya, Nuguti (2009) argues that the tools used to measure performance are not vetted for validity, reliability or ease of use and thus front a major flaw in the PC system. For instance, the PC evaluators use information provided for in the PC guidelines to determine the performance of a given public body without interrogating the authenticity of the documents they receive (GOK, 2012). According to Obong'o (2009), when reports compiled by evaluators are not subjected to academic scrutiny, the process can be compromised. Further, although performance contracting is arguably a negotiated process between employer and employee; the PC system in Kenya is in reality negotiated at top echelons in the management hierarchy and assumed that subordinates will intuitively comply (Nuguti, 2009). This notion

erodes gains made by proponents of participatory management approach like Kusek (2004) and is thus identified in this study as a gap in knowledge worth scientific scrutiny.

Nuguti (2009) indicates that the performance measurement system in Kenya is quantitative in design. While expounding on organizational theory, Hatch (2006) argues that quantitative designs in performance measurements limit broad issues influencing organizational performance which are best addressed in mixed methods designs. In support of views proposed by Hatch (2006), Walker et al. (2007) propose that performances of individuals in an organization should take into account social dynamics like gender, disabilities, age, addictions to drugs and substance abuse and other marginalization issues as advocated for by pragmatists.

While undertaking a critical evaluation of the PC System in Kenya as an M&E System, Nuguti (2009) indicates that the PC system in Kenya is implemented uniformly across all Government Ministries and the tools used in evaluation are not flexible from one Ministry of Government to the other in recognition of their specific mandate. There is therefore need to address organizational structural dynamics especially in respect to organizational size, mandate and model. In “Which Country Matters?” Chan et al. (2008) argue that organizational performance starts with getting the organizational structure right from the outset whether in the private or public sector. Further, Maurice (2011) indicates that an effective organizational structure should integrate the number of employees (size of the organization), model of the organization (departmentalization) and the performance system in place in a participatory environment.

Since the PC experiences in various countries reveal contradicting results as indicated by Balogun (2003), there is, therefore, need to interrogate the relationship between performance contracting system and organizational performance in Government Ministries in Kenya. Such a study should not only be focused on the overall organizational performance in the public sector but should also scrutinize the simplicity, validity and reliability of the tools as proposed in performance measurement by Crawford et al. (2003). In addition, the research should investigate the influence of contextual and cognitive factors on the relationship between PC system and organizational performance in the public sector in Kenya. This direction is informed by previous studies that linked organizational structure and performance (Daft et al., 2009); organizational culture and performance (Hartnell et al., 2011); implementer attitude and performance (Nicole, 2000); and implementer M&E skills and performance (Hatry, 2006).

## **2.4.2 Contextual Factors and PC System and Organizational Performance**

Organizations, just like individuals, are unique entities with peculiar features or characteristics that influence their performances (Nicole and Michael, 2000). As advanced by contingency theorists, although management is both a science and an art, there are unique environmental as well as internal factors in every organization that cannot be generalized not even in a given industry (Daft and Armstrong, 2009). As such, although Kusek (2004) links effective measurement of results with organizational performance, there still remains need to examine the outcome of organizational performance given prevailing contextual factors. The contextual factors that will be examined in this study are organizational structure and organizational culture. Maurice (2011) identifies organizational structure and organizational culture as the most common contextual factors that influence performance measurement systems.

### **2.4.2.1 Organizational Structure and PC System and Organizational Performance**

The influence of contextual factors on organizational performance has been of interest to many scholars (Marc and Susan, 2006). For instance, Maurice (2011) undertook a study on the influence of contextual factors on the deployment of innovative performance systems. The study examined the association between strategy, structure and environmental uncertainty, and the design and the use of performance measurements systems. The study provided empirical evidence on the contextual factors associated with the use of financial and non-financial measures, process and outcome measures and the deployment of innovative performance measurement systems in manufacturing business units (Maurice, 2011).

In this study, Maurice (2011) administered questionnaires to 200 Canadian manufacturing organizations which were randomly sampled. Respondents were asked to indicate to what extent they used different measures. They also had to mention if they had adopted an innovative performance measurement approach such as the balanced scorecard traced to Drucker's (1954) studies. The research instrument also included items that helped to classify organizations as prospectors, defenders or analyzers and to measure the levels of decentralization and perceived environmental uncertainty. This study was informed by the influence of organizational structure on performance as advanced by other scholars from the same school of thought (Lim et al., 2010).

Though the work of Maurice (2011) is a strong building block on reversing past trends that overlooked organizational structures in public service, Hartnel (2011) argues that the study ignored cultural aspects of an organization's context.

Maurice (2011) indicated that there was a significant relationship between strategy, organizational structure and environmental uncertainty and the use of non-financial and process measures. In addition, the results indicated that there is a relationship between strategy and environmental uncertainty and the deployment of innovative performance measurement systems in agreement with environmental theories on organizational performance (Morgan, 2007). The work by Maurice (2011) can be enhanced by being cognizant of cultural influence on organizational performance by identifying factors such as team work, promptness to duty and clarity of organizational vision as indicated in studies undertaken by Ravasi (2006).

It was concluded in the study carried by Maurice (2011) that managers should design innovative performance measurement systems such as balanced scorecards that include financial and non-financial measures and also process and outcome measures. Whereas the work of Maurice (2011) provided a better understanding of the factors that affect the implementation of innovative performance measurement systems and the contingent factors that influence the design and the use of innovative performance measurement systems; the study did not expound on an effective performance management systems as indicated in performance management by Hatry (2006). This is because unless targets, tools used for measuring results and the role of the implementers are clearly stated, then performance cannot be guaranteed (Kusek and Rist, 2004).

Some of the most commonly used terms by organizations are 'innovations' and 'tailor-made' products or services (Boddy, 2002). In some cases, however, these terms have no practical meaning in that what works for a given customer rarely fits another customer's requirements. For organizations then to satisfy customers; the product features must be unique and this can only be grounded on considering the size, type and model of the organization commensurate to services rendered (Barzilai, 2011). These contextual aspects of the organization were not explicit in the study carried out by Maurice (2011) and therefore are identified as knowledge gaps in this study.

Qingmin et al. (2012) undertook a study to investigate the relationship between organizational structure and organizational performance. In the study, a conceptual and structural equation model

was set up through a questionnaire survey and a sample of 90 Austrian and 71 Chinese companies was undertaken. Data was analyzed quantitatively through partial least squares and the results tested by bootstrap methods. The findings from this study by Qingmin et al. (2012) reinforced the influence of organizational structure on performance as indicated by studies carried out by Paurav (2009) on the same subject. In studies carried out by Qingmin et al. (2012), organizational structure was found to have more influence on organizational learning than on innovation. In addition, whereas organizational structure was found to have a direct influence on performance, organizational learning was found to have an indirect influence on performance.

In the study by Qingmin et al. (2012), innovation and learning were found out to be the main factors influencing the relationship between organizational structure and organizational performance. The study indicated that senior managers think organizational structure improves organizational performance directly through innovation while middle level managers think organizational learning has an important mediating effect on organizational performance. Qingmin et al. (2012) concluded that ability by staff members to know each other and regular holding of meetings by departments indicates the organizational size and model. Learning as a cognitive factor influencing organizational performance was also identified by Dobbin (2012) while innovation as a factor influencing organizational performance was also identified by studies carried out by Paurav (2009). Therefore organizational performance is depicted as a variable of both contextual and cognitive factors and not just the performance system in place.

In another study by Levent and Mehmet (2004) on the influence of organizational structure on entrepreneurial orientation and expansion performance, the expansion decision-making process of an international hotel group was investigated. In the study, in-depth interviews, observations and document analysis were used as the data collection techniques. Findings from the study indicate that protecting and developing internationally recognized brands profitably caused the organizational structure to be centralized. These findings suggest that centralized organizational structures are likely to be formations of managerial insecurity. Angote (2009) observes the same trend in the public sector in Kenya where some departmental heads hardly delegate nor do they take leave sessions due to the centralized system of corporate governance.

Although studies carried out by Levent and Mehmet (2004) did not address the influence of organizational culture, implementer attitudes and skills on organizational performance, the study

demonstrated the negative influence of a centralized decision-making structure on organizational performance. In respect to Government bureaucracies, Angote (2009) argue that they negatively influence employee innovation and performance in the public sector in Kenya. That the study by Levent and Mehmet (2004) indicated lack of motivation among employees entrusted with organizational expansion in a bureaucratic system is a pointer to the negative influence of an organizational structure based on Max Weber's 1947 model on organizational performance as suggested by Bruun (2007).

#### **2.4.2.2 Organizational Culture and PC System and Organizational Performance**

In this section, an empirical review on the influence of organizational culture on the relationship between performance contracting system and organizational performance is examined. Ravasi and Schultz (2006) indicate that contextual factors are not just the structural aspects of an organization but the organizational culture as well. Organizational culture is cultivated by the shared mission and inspired by the organization's vision and reflected in common values and belief system (Raja, 2009). Jolise (2007) conducted a survey in South Africa to investigate service delivery to the community by local municipalities. The problem the study sought to address was poor standards of service to the community. In this study, Jolise (2007) indicated that if there is commitment within the organization, then employees will identify with their organization and its goals, and will deliver the service more effectively. The study by Jolise (2007) was analyzed in the current study because of the similarities in the purpose of the study in that the current study seeks to address non satisfactory performance in the public sector as well. Gomez et al. (2008) argue that organizations are established to optimize performance.

In the study by Jolise (2007), organisational commitment and organisational culture of employees within the selected municipality were indicated to be the determinants of performance. In the study, a survey was conducted on 148 respondents from a selected local municipality. The study by Jolise revealed a significant difference between the existing culture and the preferred culture and between the existing commitment and the preferred commitment. From systems theory, Barzilai (2011) indicates that such a gap between sub-systems in an organization leads to a state of organizational imbalance. Ryan (2009) adds that management should seek ways to bridge the

gap of 'power culture' and 'normative commitment' and cultivate 'support culture' and 'absolute commitment' based on mutual trust.

In addition, the study by Jolise (2007) indicated that although biographical variables do not influence existing organizational culture, there are significant relationships between the biographical variables, namely the departments in which respondents work, and the education level of respondents, and the preferred organizational culture. That organizational culture can be manipulated through re-organizing organizational structure was also observed by Paurav (2009). In addition, Lutans (2011) suggest that organizational culture can be acquired and unlearned through capacity building.

Olu (2012) examined the influence of organizational culture on employee work behavior. Survey research design was used in the study in which respondents were selected through stratified and simple random sampling techniques. Primary data were collected through questionnaires and data were presented and analyzed by means of percentages while hypotheses were tested by chi-square test statistics. The study indicated that organizational culture (norms, artefacts, values, traditions, assumptions and belief) influences employee work behavior. Employee work behavior identified by Olu (2012) as a dependent variable can be studied as a moderating variable and its influence on the relationship between performance management system and organizational performance determined. This is because as observed by Joley (2003), the 'end product' in organizations is 'performance' and not 'processes'. Therefore employee behavior is seen in this study as part of the organizational process whose end product is organizational performance.

In another study, Ul Mujeeb (2011) empirically tested the relationship between the components of organizational culture and performance management practices. The study adopted the exploratory research approach. In the study, primary data was collected through questionnaires from 140 employees at the COMSATS Institute of Information Technology. Regression and correlation statistical analysis were used for data analysis. Results from the study indicated that involvement of employees had a strong correlation on performance. Although the study by Ul Mujeeb (2011) is consistent with participatory management proposed by Mohan (2001) and Kamla (1991), the scope of the study can be extended to investigate the influence of organizational structure as well as cognitive factors on the relationship between performance management system and organizational performance.

Marc and Susan (2006) examined the relationships between four contextual factors related to empowerment (communication with supervisor, general relations with company, teamwork, and concern for performance) and the four components of psychological empowerment (meaning, impact, self-determination, and competence). In the study, 203 employees of a manufacturing firm were surveyed using new and established measures of contextual factors and Spreitzer's measures of empowerment components. The contextual factors were found to be differentially associated with the elements of psychological empowerment (Marc and Susan, 2006). Communication with supervisor and general relations with company were significantly related to the empowerment facets of meaning, self-determination, and impact, but were not related to the facet of competence as indicated in studies done by Kenneth and Kenneth (2005). The study by Marc and Susan (2006) revealed that organizational performance was influenced by teamwork which is indicated by concern for performance and employees' recognition by management.

The study by Marc and Susan (2006) enriched the arguments surrounding the influence of contextual factors on organizational performance. Dobbin (2012) argues that most studies carried before 1990 focused chiefly on structural aspects of organizational context. Delmas and Offel (2008) argue that the work of Marc and Susan (2006) contributed significantly in helping organizational management to pay attention on determinants of organizational culture. However, the same can be enriched by looking at other aspects of organizational culture such as clarity of organizational vision, promptness to duty and the degree to which team work is experienced in the entire chain of command as indicated by Bruun (2007).

The studies of Marc and Susan (2006) focused on team work from a departmental perspective and the only factor that was measured down the chain of command was communication and hence the need to examine cross-sectional and top-down team work in respect to organizational performance as indicated in studies by John and Michael (2004). In addition, although communication with supervisor, general relations with company, teamwork, and concern for performance were identified as important contextual factors, they were viewed as predictors of employee empowerment in the studies carried by Marc and Susan (2006). The influence of these factors on organizational performance can be tested as proposed by Mohan (2001) in participatory development. Thus the moderating role played by these contextual factors on the relationship

between performance management and organizational performance provides grounds for further research.

A separate study was carried out by Van and Stephan (1996) on interpersonal facilitation and job dedication as separate facets of contextual performance. The study attempted to refine the construct of contextual performance by dividing it into two narrower constructs, interpersonal facilitation and job dedication. Supervisors rated 975 U.S. Air Force mechanics on at least 1 of 4 aspects of job performance (different supervisors rated each aspect of performance), and 515 of these mechanics also completed self-report individual difference measures. Although the research by Van and Stephan (1996) linked organizational context with performance, the study did not address the influence of organizational type, model, size and departmentalization as indicated by Gomez et al. (2008).

The study by Van and Stephan (1996) drew correlations between performance ratings and individual difference variables support distinguishing task performance from interpersonal facilitation but not from job dedication. Thus the study pointed to the need to redefine task performance to include motivational elements of job dedication. Then task performance would include task proficiency and motivation to perform one's own tasks effectively, and contextual performance would include interpersonal skills, the motivation to maintain good working relationships and help others perform their tasks (Van and Stephan, 1996). Aspects of participatory management were not factored in the determination of performance. Richard (2005) argues that involving employees in management decisions is a major incentive that can be used by employers as a retention strategy to guard against high staff turn overs.

In the results-based monitoring and evaluation system, Kusek and Rist (2004) equally indicate that the performance of an organization is influenced by the extent to which the performance management is participatory. While critiquing the study carried out by Van and Stephan (1996), Barzilai (2011) argues that the study excluded possibilities of other variables as predictors of organizational performance save contextual factors. There is, therefore, need for an independent study to investigate the moderating influence of cognitive factors on the relationship between performance contracting system and organizational performance.

### **2.4.3 Cognitive Factors and PC System and Organizational Performance**

In 1956, the fervent belief in an impending apocalypse by followers of a UFO cult was clashed by a harsh reality as the world continued to unfold conventionally unmoved. The strong belief in a lie was closely studied by Leon (1956) and documented in his publication “When Prophecy Fails” where he outlined a theory which he called cognitive dissonance. Since then cognitive dissonance is one of the most influential and extensively studied theories in social psychology and has been extended in the science of management (Whitley and Kite, 2010). Leon’s (1956) cognitive dissonance theory discourses the inner struggles between the ‘desire to do something’ or attitude and the ‘ability to do the same’ or skill.

Baron (2004) argues that the need to avoid cognitive dissonance may bias one towards a certain decision even though other factors favour an alternative. Hemant (2011) observes that a state of conflict exists between the desire to smoke and the knowledge that smoking is harmful. An individual therefore may try to change their feelings about the odds that they will actually suffer the ill consequences of smoking; or they might add the consonant element that the short term benefits of smoking outweigh the long term harm. Hemant (2011) therefore suggests that employees in an organizational struggle between the ‘want to do’ or ‘attitude’ and the ‘ability to do’ or ‘skills’. These two aspects are individual rather than organizational and have an influence on the performance of an organization. These two factors of performance, attitudes and skills, have been identified in this study as ‘contextual factors’. Kyle (2006) notes that when cognitive factors are integrated in the right organizational structure, performance is inevitable.

#### **2.4.3.1 Implementer Attitude and PC System and Organizational Performance**

Walker et al. (2007) argues that attitude is the most prominent cognitive factor. Richard (2005) defines attitude as human feelings and beliefs that may be scientifically irrational towards someone or some task. Cognitive dissonance theory sheds light on otherwise puzzling, irrational, and even destructive behavior both at the individual as well as organizational level (Bruun, 2007). Spencer et al. (2006) demonstrated that dissonance is aroused when people are confronted with information that is inconsistent with their beliefs. If the dissonance is not reduced by changing one's belief, the dissonance can result in misperception or rejection or refutation of the information,

seeking support from others who share the beliefs, and attempting to persuade others to restore consonance (Spencer et al., 2006).

Ostroff (1992) investigate the relationship between employee satisfaction, job-related attitudes (commitment, adjustment, and psychological stress), and performance at the organizational level of analysis. In the study by Ostroff (1992), data were collected from 298 schools; employee satisfaction and attitude data were collected from 13,808 teachers within these schools. Correlation and regression analyses supported the expected relationships between employee satisfaction and attitudes and organizational performance. While expounding on the influence of contextual and individual factors on organizational performance, Walker and Berneth (2007) noted that attitude has a significant influence on an individual's performance.

Although the study by Ostroff (1992) supported the expected relationships between employee satisfaction and attitudes and organizational performance, other indicators of attitude such as level of cooperation with team members, number of indiscipline cases and nature of language used in the work place can be used. In the psychology of prejudice and discrimination, Whitley and Kite (2010) suggest that the language an employee uses in the work place is an indicator of one's esteem levels and attitude towards self and work. Further, Whitley and Kite (2010) suggest that an employee with low self-esteem and negative work attitude is likely to be more involved in indiscipline issues than one with a positive mental work attitude.

Daniel (2006) undertook a study on the influence of employee attitudes and behaviors on business outcomes. In the study, it was hypothesized that employee satisfaction, organizational citizenship behavior, and employee turnover influence profitability and customer satisfaction. Data were gathered from the units of a regional restaurant chain by use of employee surveys, manager surveys, customer surveys, and organizational records. Cross-lagged regression analyses showed that employee attitudes and behaviors influenced organizational effectiveness. However, organizational effectiveness did not influence employee attitudes and behaviors. Although the study carried out by Daniel (2006) supported other studies such as those carried out by Richard (2005) and Kyle (2006), the scope of the dependent variable in the study, business outcomes, can be expounded to include aspects of customer service, employee satisfaction and corporate social responsibilities rather than just organizational profitability.

In an exploratory study of attitudes about knowledge sharing, Gee (2002) indicated that many CEOs and managers understand the importance of knowledge sharing among their employees and are eager to introduce the knowledge management paradigm in their organizations. While agreeing with Gee (2012) in the publication on management and executive development Kleiman (2010) notes that skills and competences in an organization are influenced by knowledge sharing. However, Gee (2012) indicates that little is known about the determinants of the individual's knowledge sharing behavior. The purpose of the study by Gee (2012) was to develop an understanding of the factors affecting the individual's knowledge sharing behavior in the organizational context.

The research model in the study undertaken by Gee (2012) included various constructs based on Social Exchange Theory, self-efficacy, and Theory of Reasoned Action (Rapp et al., 2013). Research results from the field survey of 467 employees of four large, public organizations showed that expected associations and contribution are the major determinants of the individual's attitude toward knowledge sharing. In addition, Gee (2012) indicated that expected rewards, believed by many as the most important motivating factor for knowledge sharing, are not significantly related to the attitude toward knowledge sharing. On the contrary, Gee (2012) indicated that time taken by employees to meet work obligations is the best pointer of an employee's attitude towards work. The gap in knowledge identified in this study following postulates by Gee (2012) would be whether time taken to meet PC obligations by employees in Ministries of Government in Kenya would be an indicator of their attitudes towards the PC system and whether this finding has an implication on organizational performance.

While undertaking a study on critical evaluations in business management, John and Michael (2004) indicate that knowledge sharing in an organization is an employee's prerogative. While critiquing this notion, Huczynski and Buchanan (2007) argue that organizational behavior can be manipulated through a structured system. Therefore, knowledge sharing behavior which was the dependent variable in the study undertaken by Gee (2012) can be considered as a moderating variable between the performance management system in place and organizational performance. Gee's (2012) study, therefore, can be expanded to control for the performance management system put in place and the role of organizational culture in determination of performance. In addition, Raja (2009) indicated that the level of individual support of organizational systems is an indicator

of an employee's attitude towards work. Based on arguments by Gee (2012) and Raja (2009), the level of support of the PC system and the time taken to meet PC obligations were identified as the indicators of implementer attitude in this study.

On the basis of 7 charismatic and transformational leadership theories, three core components (vision, vision implementation through task cues, and communication style) were identified in a study carried out by Kirkpatrick et al. (1996). In the study by Kirkpatrick et al. (1996), a laboratory simulation manipulated the 3 components in a completely crossed experimental design, where 2 trained actors portrayed the leader. Participants were 282 students in upper level business classes who performed a simulated production task. In the study by Kirkpatrick et al (1996), the vision of high quality weakly was shown to influence performance quality and significantly influenced others' attitudes while vision implementation, in the form of task cues, affected performance quality and quantity. In a study on organizational culture and organizational effectiveness, Hartnell et al. (2011) also indicated that an organizational vision affects organizational culture which in turn influences performance. However, neither the study by Kirkpatrick et al. (1996) nor by Hartnell et al. (2011) investigated the influence of organizational culture on the relationship between performance management system and organizational performance.

Through an exploratory path analysis, Kirkpatrick et al. (1996) further showed a 2-part causal sequence where the vision of quality and vision implementation each affected self-set goals and self-efficacy which in turn influenced performance. Findings from studies by Kirkpatrick et al. (1996) point aspects of performance measurement as discussed by Hatry (2006) in that issues of type of leadership, organizational vision, target setting and attitude were seen to be integral components of performance. That Kirkpatrick et al. (1996) also indicated that charismatic communication style positively affected the attitude of employees is an indicator that leadership skills were identified as factors of performance. In the ten steps to a results based monitoring and evaluation system by Kusek and Risk (2004), participatory management and M&E skills have been identified as some of the main skills needed by results oriented project managers.

Although vision, vision implementation through task cues, and communication style were shown to influence performance and attitudes, the study by Kirkpatrick et al. (1996) can be done through a mixed mode approach where the research design is mixed methods allowing data to be analyzed both parametrically and non-parametrically. This is because critics of the practicability of

experimental designs in business management research such as Johnson (2004) argue that the approach is limiting in that it does not free the respondents to be expressive in their responses. Johnson (2004) suggests an inclusive pragmatic paradigm in the construction of social realities.

Susan and Anastasia (2005) undertook a study to investigate the relationship between locus of control and performance among Russian employees using survey data collected at 28 workplaces in 2002 in Taganrog and at 47 workplaces in 2003 in Ekaterinburg. In the study Susan and Anastasia (2005) developed a measure that allowed categorizing the Russian employees participating in the survey as exhibiting an internal or external locus of control. The extent to which there are significant differences between “internals” and “externals” in work-related attitudes that may affect performance was then assessed. The statistical approach of categorizing a research population by Susan and Anastasia (2005) is identified by Sekaran (2003) as an approach that reduces variability and sampling error.

While controlling for a variety of worker characteristics Susan and Anastasia (2005) indicated that individuals who exhibited an internal locus of control perform better but this result is not always statistically significant; among “internals,” women earn significantly less than men and have a much lower expectation of promotion; and still among “internals,” experience with unemployment has a negative influence on performance. Susan and Anastasia (2005) indicated that performance is a broad construct determined by many factors rather than any single variable, a view shared by Jones (2004) in organizational theory, design and change. The study by Susan and Anastasia (2005) however can be broadened to control for contextual factors like organizational structure as indicated by contingency theory and organizational culture as indicated in results theory on cultivating a results oriented work culture. Considerations on the influence of the performance measurement system as indicated by systems theory and results theory can also enrich the study.

#### **2.4.3.2 Implementer M&E Skills and PC System and Organizational Performance**

Sylvia (2008) undertook a study to determine whether technical skills provide incremental value over managerial skills in managerial performance for first-tier managers, and explore potential mediators of this relationship. In the study by Sylvia (2008) a total of 107 first-tier supervisors from local petrochemical and engineering companies completed an online survey about their

professional background and managerial skills; subordinates rated supervisors' technical skills, power, and influence tactic habits. Managerial performance was measured as: production output, subordinate job satisfaction, and subordinate ratings. Critics of on-line surveys such as Johnson and Anthony (2004) argue that the data collection methodology restricts insightful information that can be extracted through face to face interviews.

Further, although the dependent variable in the study by Sylvia (2008) had employee satisfaction as an indicator, the scope could have been broadened to include corporate social responsibilities which Paurav (2009) argues seems to be the going trend in performance management. In the study conducted by Sylvia (2008), technical skills incrementally predicted subordinate perceptions of managerial performance over managerial skills. Referent power mediated the relationship between technical skills and both subordinate ratings and job satisfaction; expert power only mediated for job satisfaction. Rational persuasion mediated the relationship between expert power and subordinate ratings of managerial performance. That technical skills influenced the attitudes of subordinates towards the performance of their managers in the study conducted by Sylvia (2008) was validated by a more recent study carried out by Mark et al. (2013) that evaluated the frequency of and risk factors for poor cognitive performance using detailed neurocognitive testing that linked cognitive factors with performance.

Clear measurement of multidimensional constructs such as managerial performance and technical skills lacked in the study by Sylvia (2008) and self-selection bias and availability of objective technical skills measures limited the study necessitating for component-based measures of such constructs for future research. However, studies by Sylvia (2008) agreed with other studies such as one carried out by John and Michael (2004) that indicated technical skills are essential for performance. However, Lim et al. (2010) argue that technical skills should not be the only criterion for selecting project managers. Although project managers should have M&E skills, Ravasi and Schultz (2006) also indicate that leadership and team work related skills are also key for project managers. In this study, M&E skills are found to be essential for unit managers heading the PC units in Government Ministries in Kenya. This is informed by the results framework and performance monitoring strategy indicated by Marsh (1999) that suggest M&E skills are the most desired skills required for performance measurement.

Ikhlas (1983) modified part of Heller's contingency model of leadership and decision making. The basic components of the modified part of the model were influence, skill use, job performance and job satisfaction. Data from a study of 97 British and Sudanese managers were used to test the modified model. Positive relationships were found between the four components. The major findings of the research by Ikhlas (1983) were that while the strength of the relationship between 'influence and satisfaction' on one part and 'skill use and satisfaction' on the other differs slightly, the relationship between 'skill use and performance' is much stronger and much more established than the relationship between 'influence and performance'.

That studies by Ikhlas (1983) pointed a strong relationship between skills and performance was vindicated by Obong'o (2009) following a critical evaluation of the skills required to improve performance of Ministries of Government in Kenya through the PC system. In addition, Angote (2009) indicates that there lacks a clear match between job description and designated authority in many positions in public service in Kenya. The current study therefore seeks to establish the moderating role played by M&E skills on the relationship between PC system and organizational performance in Government Ministries in Kenya. In the study on governance and public sector reforms in Asia, Cheung and Scott (2003) suggest that reforms in the public service begin with awareness and capacity building for implementers of performance measurement systems in place to possess requisite skills commensurate to roles and responsibilities.

Testing for the influence of performance measurement system and contextual factors on organizational performance can enrich the study undertaken by Ikhlas (1983). In the research by Rapp et al. (2013), resource allocation and social exchange perspectives to build and test theory focusing on the moderating role of time management skill in the non-monotonic relationship between organizational citizenship behavior (OCB) and task performance were integrated. Results from matching survey data collected from 212 employees and 41 supervisors and from task performance metrics collected several months later indicated that the curvilinear association between OCB and task performance is significantly moderated by employees' time management skill.

Although time management skills were tested in the study conducted by Rapp et al. (2013), the influence of M&E skills can be tested for organizational performance. This is because effective time management of projects is a component of the Marsh and David (1999) Project Evaluation

Review Techniques (PERT) that are useful for resource allocations and time scheduling. As a results based system, Crawford and Bryce (2003) indicate project M&E require the project to be participatory and implementers to be equipped with M&E skills. In results frameworks and performance monitoring, Marsh and David (1999) indicate that the type and level of M& skills determine the outcome of performance management. Marsh and David (1999) therefore argue that an M&E officer requires skills in understanding M&E frameworks, performance indicators, types of evaluations, conducting and evaluation, writing an evaluation report, developing work breakdown structures, appraising a project and designing as well as auditing an M&E system. In this study, the indicators of M&E skills were identified as ability to conduct performance evaluation, develop performance indicators, undertake project appraisals, produce quarterly reports, develop work breakdown structures and effectively fill in performance appraisal reports.

*Table 2.1: Summary of Research Gaps*

Study	Focus of the Study	Methodology	Findings	Gap in knowledge	Focus of the current study
<b>Performance Contracting System and Organizational Performance</b>					
AGarcía (2006)	To review the impact of changes in reimbursement methods and organizational reform on absence rates among health care personnel in Costa Rican public hospitals for the period 1995–2001.	The methodology used in the study was quantitative with the Costa Rican public hospitals as the research population. A generalized output distance function by means of non-parametric mathematical programming to construct a productivity index, which accounts for productivity changes while controlling for quality of care was computed.	Reforms had a negative impact on absenteeism. Results further indicated that the policy of not substituting absentee workers, which was introduced through the reforms, did not work as expected in a permissive environment in which peer pressure mechanisms were lacking. In addition, the explicit incentives for workers included in the reforms were retained and used at facility level.	That the results from the study showed that the reforms had a negative impact on absenteeism despite a sound performance management system; indicates the need to investigate the role of cognitive factors on organizational performance.	The moderating influence of cognitive factors on organizational performance.
Arie (2005)	Influence of Performance Management on Organizational Performance.	The study provided a brief review of the issues involved in using performance measurement in general and balanced scorecard (BSC) approach in particular.	Performance management can take many forms from dealing with issues internal to the organization to catering to stakeholders or handling issues in its environment. Performance management involves the use of both quantitative and qualitative techniques and paying due attention to the human (behavioural) side of the organization.	Although the study identified stakeholders’ participations as a factor of performance, it failed to point out the need for negotiated target setting with employees in PC management. In addition, the study did not indicate that the tools used in the PC system should be reliable, valid and simple to use.	Testing the influence of PC tools on organizational performance in respect to their simplicity, reliability and validity
Obong'o (2006)	Implementation of performance contracting in Kenya.	Quantitative research design was undertaken and cluster sampling of the target population, the public sector, was done. The questionnaire was used for data	The PC system in the public sector in Kenya positively influenced performance index. The PC system in Kenya had political support from the top management. The PC system in	It was assumed the tools used in the PC System in Kenya were valid, reliable and simple to use although they were not pilot tested. There	Testing the simplicity, reliability and validity of PC tools and

Study	Focus of the Study	Methodology	Findings	Gap in knowledge	Focus of the current study
		collection and the raw data collected was analyzed parametrically.	Kenya is unique in that results of various Government agencies are ranked chronologically and disclosed to the public.	was need to investigate the role of contextual and cognitive factors on the relationship between the PC system and the performance of Government Ministries.	moderating role played by contextual and cognitive factors on the relationship between the PC system and organizational performance
Sayed (2012)	Influence of employees' involvement in performance assessment system on employees' creativity.	An empirical survey of Ebtekar manufacture was done and data was analyzed by descriptive analytical methods. A sample size of 97 employees was selected by simple random. Questionnaires were used for data collection and structural equation modeling was used for data analysis.	Employees' involvement in performance assessment system positively influences employees' abilities and skills to create creativity. This variable positively effects on employees' attitudes toward creativity and employees' perceptions of social pressures and norms. Employee's attitudes, social pressures and norms, and employees' abilities and skills positively influence creativity.	Although the study indicated the influence of skills, attitudes and culture on performance, it did not consider the influence of organizational structure. In addition, the study did not consider other factors influencing the performance assessment system such the tools used and aspects of target setting.	The moderating influence of organizational structure on the relationship between PC system and organizational performance
Yujing (2003)	Influence of performance-based contracting (PBC) system provides incentives for nonprofit providers of substance abuse treatment to select less severe clients into treatment.	Experimental research design was undertaken whereby the likelihood for OSA clients being "most severe" before PBC and after PBC using Medicaid clients as the control was compared. Multivariate regression analysis was employed to predict the marginal effect of PBC on the probability of OSA clients' being most severe after controlling other factors.	The percentage of OSA outpatient clients classified as most severe users dropped by 7 percent ( $p \leq 0.001$ ) after the innovation of performance-based contracting, compared to the increase of 2 percent for Medicaid clients. The regression results also showed that PBC had a significantly negative marginal effect on the probability of OSA clients being most severe.	Although the study raised moral concerns in using experimental designs with patients, corrective measures were left for further research. The gap in knowledge would be to triangulate while measuring performance to incorporate qualitative aspects and to test the influence of the PC system in a participatory environment.	Mixed methods approach in research methodology to examine both parametric and non-parametric aspects of organizational performance

Study	Focus of the Study	Methodology	Findings	Gap in knowledge	Focus of the current study
<b>Organizational Structure and the relationship between Performance Contracting System and Organizational Performance</b>					
Levent and Mehmet (2004)	Influence of organizational structure on entrepreneurial orientation and performance.	Decision-making process of an international hotel group was investigated. Interviews, observations and document analysis were used as the data collection techniques.	A centralized decision making organizational structure was found to demotivate employees and negatively influenced organizational performance.	Although the study was qualitative in design, the determinants of organizational performance could be expanded to include employees' skills and attitudes.	The moderating influence of PC implementer attitudes and M&E skills on the relationship between PC system and organizational performance
Maurice (2011)	The association between strategy, structure and environmental uncertainty, and the design and the use of performance measurements systems.	Questionnaires were administered to randomly selected respondents from 200 Canadian manufacturing organizations. The research design was mixed mode.	Organizational strategy, structure, environmental uncertainty and deployment of innovative performance measurement systems were found to influence organizational performance.	Although this study considered multiple determinants of organizational performance, it can be expanded to investigate the role of organizational culture and implementers' attitudes and skills on organizational performance.	The moderating influence of organizational culture; PC implementers' attitudes; and implementers' M&E skills on the relationship between PC system organizational performance.
Quingmin et al. (2012)	The relationship between organizational structure and performance	Conceptual and structural equation model was set up through a questionnaire survey and sample of 90 Austrian and 71 Chinese companies undertaken. Data was analyzed through partial least squares and the results tested by bootstrap methods.	Learning and innovation were identified as moderating factors influencing the relationship between organizational structure and organizational performance.	The study can be enriched though mixed methods research approach. The influence of the performance management system can be incorporated in the study.	Influence of PC system on performance and mixed methods approach in research methodology

Study	Focus of the Study	Methodology	Findings	Gap in knowledge	Focus of the current study
<b>Organizational Culture and the relationship between Performance Contracting System and Organizational Performance</b>					
Jolise (2007)	Influence of organizational culture and employees' commitment on performance.	A mixed methods design survey was conducted to canvas the opinions of respondents 148 respondents from a selected municipality.	Organizational culture was found to have a significant effect on the organizational commitment of employees and therefore can affect organizational service delivery.	Although service delivery was identified as an indicator of performance, the scope can be broadened to include employee satisfaction and corporate social responsibilities.	Employee satisfaction and level of involvement in CSR as indicators of organizational performance
Marc and Susan (2006)	Influence of contextual factors on psychological empowerment	In the study, 203 employees of a manufacturing firm were surveyed, using new and established measures of contextual factors and Spreitzer's measures of empowerment components.	The contextual factors were found to be differentially associated with the elements of psychological empowerment. Communication with supervisor and general relations with company were significantly related to the empowerment facets of meaning, self-determination, and impact, but were not related to the facet of competence. Teamwork was related to meaning and impact. Concern for performance was related to meaning and self-determination. These associations also varied by the type of job done by employees.	Although the study indicated that organizational culture influences performance, there is need for a study that includes other aspects of organizational culture such as vision, promptness to duty and team work. Although communication, general relations, teamwork, and concern for performance were identified as predictors of employee empowerment; the influence of these factors on organizational performance was not tested.	Organizational vision, promptness to duty and team work as indicators of organizational culture whose moderating influence on the PC system and organizational performance was tested in this study.
Olu (2012)	Influence of organizational culture on employee work behavior.	A survey research design and stratified and simple random sampling techniques. Primary data were collected through questionnaires and analyzed by arithmetic mean. Chi-square was used to test hypotheses.	The study indicated that organizational culture (norms, artefacts, values, traditions, assumptions and belief) influences employee work behavior.	Employee work behavior identified as a dependent variable can be studied as a factor influencing the relationship between performance management system and organizational performance.	Influence of organizational culture on the relationship between PC system and organizational performance

Study	Focus of the Study	Methodology	Findings	Gap in knowledge	Focus of the current study
UI-Mujeeb (2011)	The relationship between the components of organizational culture and performance management practices.	The study adopted the exploratory research approach. In the study, primary data was collected through questionnaires from 140 respondents. Regression and correlation statistical analysis were used for data analysis.	Results from the study indicated that involvement of employees had a strong correlation on performance.	The gap in knowledge in this study is to investigate the influence of organizational structure as well as cognitive factors on the relationship between performance management system and organizational performance.	The moderating influence of organizational structure; and cognitive factors on the relationship between PC system and organizational performance
Van et al. (1996)	Interpersonal facilitation and job dedication as separate facets of contextual performance.	Supervisors rated 975 U.S. Air Force mechanics on at least 1 of 4 aspects of job performance (different supervisors rated each aspect of performance) and 515 of these mechanics also completed self-report individual difference measures.	The study revealed that correlations between performance ratings and individual difference variables support distinguishing task performance from interpersonal facilitation but not from job dedication.	From this study, there was need to redefine task performance to include motivational elements of job dedication like enhancing implementers' skills and attitudes towards work. The study did not test the influence of the performance system (targets, tools etc) on organizational performance.	PC implementers' attitudes and M&E skills as indicators of cognitive factors. The influence of PC system on organizational performance
<b>Implementer Attitude and the relationship between Performance Contracting System and Organizational Performance</b>					
Daniel (2006)	Influence of employee attitudes and behaviors on business outcomes.	Data were gathered from the units of a regional restaurant chain by use of employee surveys, manager surveys, customer surveys, and organizational records. Analysis was done through cross-lagged regression analyses.	Results indicated that employee attitudes and behaviors influenced organizational effectiveness. However, organizational effectiveness did not influence employee attitudes and behaviors.	The dependent variable, business outcomes, can be expounded to include aspects of customer service, employee satisfaction and corporate social responsibilities rather than just organizational profitability.	Rate of customer satisfaction, rate of employee satisfaction and level of involvement in CSR as indicators of organizational performance

Study	Focus of the Study	Methodology	Findings	Gap in knowledge	Focus of the current study
Gee (2012)	Factors affecting the individual's knowledge sharing behavior in the organizational context.	The research model in the study undertaken included various constructs based on social exchange theory, self-efficacy, and theory of reasoned action. A research survey of 467 employees of 4 large, public organizations was undertaken and both parametric and non-parametric data analysis was done.	Results showed that expected associations and contribution are determinants of individual's attitude toward knowledge sharing. Expected rewards are not significantly related to the attitude toward knowledge sharing. Positive attitude toward knowledge sharing is leads to positive intention to share knowledge and enhances knowledge sharing behaviors.	Knowledge sharing behavior which was the dependent variable in this study can be considered as a moderating variable between the performance management system in place and organizational performance. The study can be expanded to control for the performance management system put in place and the role of organizational culture in determination of performance.	The moderating influence of organizational culture on the relationship between PC system and organizational performance
Kirkpatrick et al. (1996)	Direct and indirect effects of three core charismatic leadership components (vision, vision implementation through task cues, and communication style) on performance and attitudes.	In the study a laboratory simulation manipulated the 3 components in a completely crossed experimental design, where 2 trained actors portrayed the leader. Participants were 282 students in upper level business classes who performed a simulated production task. Data was analyzed through an exploratory path analysis.	The vision of high quality weakly affected performance quality but significantly affected many attitudes. Vision implementation influenced performance quality and quantity. Charismatic communication style affected the perception of charisma. A 2-part causal sequence, where the vision of quality and vision implementation each affected self-set goals and self-efficacy which in turn influenced performance.	Although vision, vision implementation through task cues, and communication style were shown to influence performance and attitudes, the study can be done through a mixed mode approach allowing data to be analyzed both parametrically and non-parametrically.	Mixed methods approach in research methodology to examine both parametric and non-parametric aspects of organizational performance
Ostroff (1992)	Influence of employee satisfaction and	Data were collected from 298 schools; employee satisfaction and attitude data were collected from	The study supported the expected relationships between employee	Other indicators of attitude such as level of support of organizational performance	Level of support of the PC system and time taken to meet

Study	Focus of the Study	Methodology	Findings	Gap in knowledge	Focus of the current study
	job-related attitudes on organizational performance	13,808 teachers within these schools. Correlation and regression analyses were used as the tools of analysis.	satisfaction and attitudes and organizational performance.	system and time taken to meet work obligations can also be to indicate an employee's attitudes.	PC obligations as indicators of PC implementers' attitudes
Susan and Anastasia (2005)	The relationship between locus of control and performance among Russian employees.	Survey data was collected at 28 workplaces in 2002 in Taganrog and at 47 workplaces in 2003 in Ekaterinburg. A measure that allowed categorizing employees participating in the survey as exhibiting an internal or external locus of control was developed and significant differences tested.	Controlling for a variety of worker characteristics, the study indicated that individuals who exhibit an internal locus of control perform better, but this result is not always statistically significant. Among "internals," women earn significantly less than men and have a much lower expectation of promotion. Among "internals," experience with unemployment has a negative influence on performance.	The study can be broadened to control for contextual factors like organizational structure as indicated by Contingency Theory and organizational culture as indicated in Results Theory on cultivating a results oriented work culture. Considerations on the influence of the performance measurement system as indicated by Systems Theory and Results Theory can also enrich the study.	The moderating influence of contextual factors on the relationship between PC system and organizational performance
<b>Implementer M&amp;E Skills and the relationship between Performance Contracting System and Organizational Performance</b>					
Ikhlas (1983)	Influence, skill use, job performance and job satisfaction.	Data from a study of 97 British and Sudanese managers were used to test the modified Heller's contingency model of leadership and decision making.	The strength of the relationship between 'influence and satisfaction' and 'skill use and satisfaction' is weak. Relationship between 'skill use and performance' is stronger and more established than the relationship between 'influence and performance'.	Influence of performance measurement system and contextual factors on organizational performance need to be tested.	Influence of PC system on organizational performance. Influence of contextual factors on organizational performance.
Rapp et al. (2013)	Influence of time management skill on the curvilinear relationship	Resource allocation and social exchange perspectives to build and test theory focusing on the moderating role of time	Results from matching survey data collected from 212 employees and 41 supervisors and from task performance metrics collected several months later	Although time management skills were tested, the influence of M&E skills can be tested for organizational	Type of M&E skills and level of M&E skills as indicators of

Study	Focus of the Study	Methodology	Findings	Gap in knowledge	Focus of the current study
	between organizational citizenship behavior and task performance.	management skill in the non-monotonic relationship between organizational citizenship behavior (OCB) and task performance were integrated.	indicated that the curvilinear association between OCB and task performance is significantly moderated by employees' time management skill.	performance. Type of skills and level of skills of project managers to be tested in performance based systems.	implementers' M&E skills and the role of M&E skills on the relationship between PC system and organizational performance
Sylvia (2008)	To determine whether technical skills provide incremental value over managerial skills in managerial performance for first-tier managers, and explore potential mediators of this relationship.	107 first-tier supervisors from local petrochemical and engineering companies completed an online survey about their professional background and managerial skills; subordinates rated supervisors' technical skills, power, and influence tactic habits. Managerial performance was measured as: production output, subordinate job satisfaction, and subordinate ratings.	Technical skills incrementally predicted subordinate perceptions of managerial performance over managerial skills. Referent power mediated the relationship between technical skills and both subordinate ratings and job satisfaction; expert power only mediated for job satisfaction. Rational persuasion mediated the relationship between expert power and subordinate ratings of managerial performance.	Clear measurement of multidimensional constructs such as managerial performance and technical skills is essential. Limitations include self-selection bias and availability of objective technical skills measures. Component-based measures of these constructs to be developed.	Type of M&E skills and level of M&E skills as indicators of PC implementers' M&E skills and the moderating influence of M&E skills on the relationship between PC system and organizational performance

## 2.5 Conceptual Framework

In this study, a conceptual framework was used as the study model to guide the relationship of the variables under study to keep the research work focused on the objectives of the study.

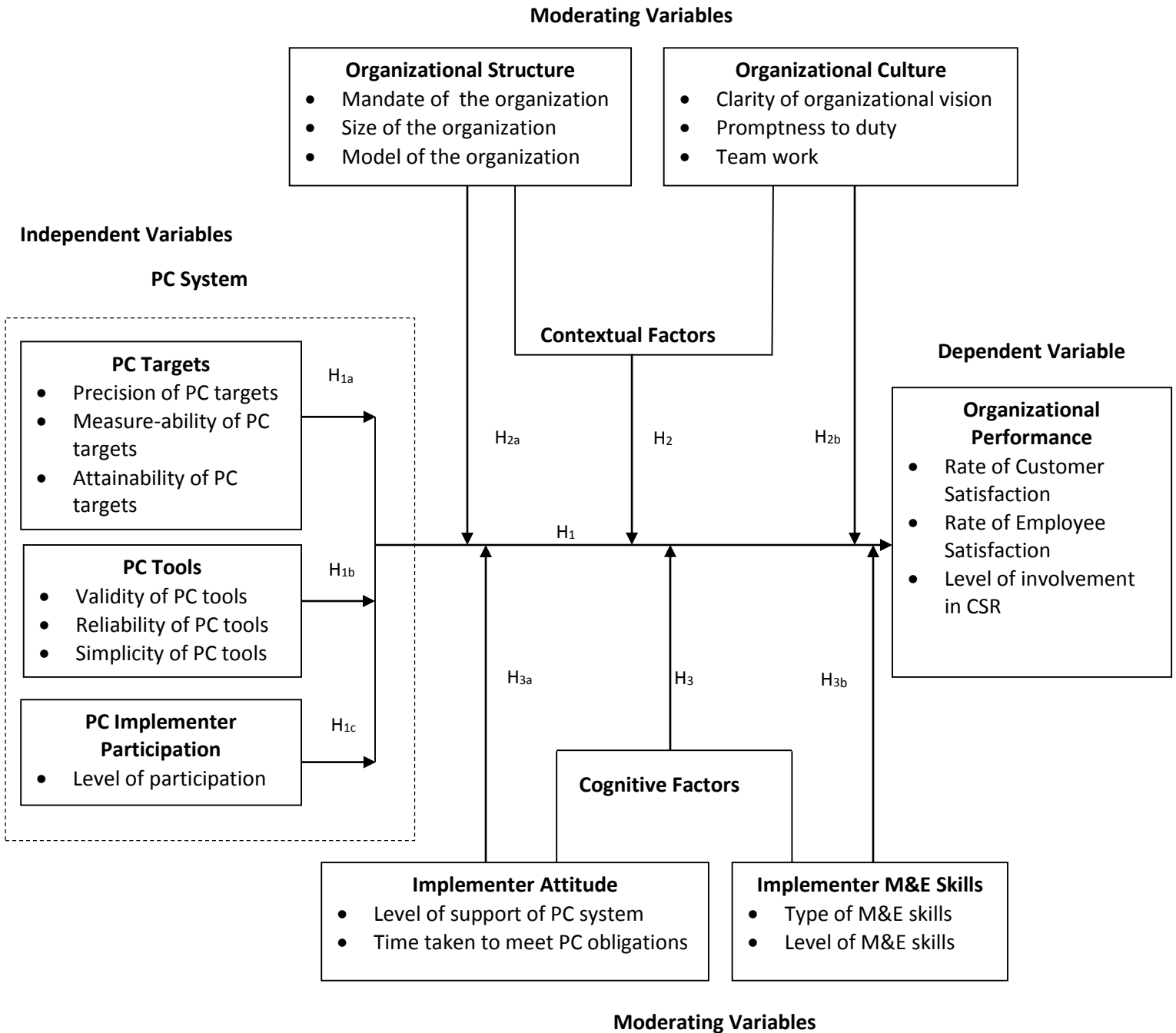


Figure 2: Conceptual Framework

The dependent variable in this study is organizational performance. Cummings and Worley (2008) indicate that the essence for the existence of organizations is performance. The indicators that were used to measure organizational performance are: level of customer satisfaction; level of employee satisfaction; and number of corporate social responsibilities. Chan et al. (2008) suggest that performances of Governments should be measured through service delivery. Delmas and Offel (2008) suggest that an organization should be responsive to environmental dictates through involvement in social responsibilities. Richard et al. (2009) indicate that employee satisfaction is an indicator of organizational performance.

The predictor variable in this study is Performance Contracting System. The indicators of an effective Performance Contracting System are: PC Targets; PC Tools; and PC Implementer Participation. Crawford and Bryce (2003) and Hatry (2006) indicate that tools used in performance measurement should be easy to use and appropriate for their purpose. Lutan (2011) indicates that in performance measurement, participation of all stakeholders is essential in setting and evaluating targets. Organizational structure, organizational culture, implementer attitude and implementer M&E skills were the moderating variables in this study. The influence of the moderating variables on the relationship between the predictor variable and the dependent variable was investigated. Organizational structure and organizational culture were classified in this study as contextual factors in the sense that they are organizational internal environmental factors outside the individual while implementer attitude and implementer M&E skills were classified as cognitive factors in that they are within the individual in the organization.

The indicators of organizational structure in this study were identified as the mandate, size and model of a given Government Ministry. Qingmin et al. (2012) indicates that organizational structure comprises the size and mandate of the organization. Levent and Mehmet (2004) noted that an organizational structure has to do with the model of the organization which Max Weber's 1947 organizational model referred to as departmentalization. The indicators of organizational culture in this study are clarity of organizational vision, promptness to duty and team work among employees in a Government Ministry. Raja (2009) indicates that organizational culture is cultivated by the shared mission and inspired by the organization's vision and reflected in common values and belief system. Marc and Susan (2006) suggest that organizational performance is

enhanced by a culture of teamwork and concern for performance. Bruun (2007) indicates that a culture of promptness to duty is a factor of organizational performance

The indicators that were used to measure implementer attitude in this study are: level of support of PC system and time taken to meet PC obligations. Raja (2009) indicates that the level of support for an organizational performance management system is an indicator of an employee's attitude towards work. In addition, Gee (2012) indicates that the time taken by an employee to meet work obligations is an indicator of an employee's attitude towards work. The indicators that were used to measure implementer M&E skills in this study are: type of M&E skills and level of M&E skills. Marsh and David (1999) indicate that the type and level of M& skills determine the outcome of performance management and are indicated by an employee's understanding of performance frameworks, performance indicators, evaluations, reports, work breakdown structures, appraising a project and designing as well as auditing an M&E system

## **2.6 Summary of Literature Review**

The literature review in this study comprised of the theoretical framework, empirical review and conceptual framework. In the theoretical framework, organizational theories were examined. This was done because the focus of this study was organizational performance and theories on organizational performance are founded on organizational theories. The organizational theories examined were: Classical Organizational Theory; Neoclassical Organizational Theory; and Environmental Organizational Theory. The focus of Classical Organizational Theory was control of the labour force by the organization's management through rationalization, rules and expertise (Carnal, 2007; Bruun (2007)). The focus of neoclassical organizational theory was addressing the social aspects of employees (Sapru, 2008). The focus of environmental organizational theories was an organization's adaptation to its environment Lutans (2011).

Modern theories on organizational performance were examined. The modern theories on organizational performance that were examined were: the Goal Setting Theory, Systems Theory and Results Theory. Goal Setting Theory focused on a systematic approach to appraising employees' performance through measuring pre-set targets (Robbins, 2005). Systems Theory focuses on an organization maintaining a state of equilibrium by ensuring all its components are

stable and perfectly interlinked to achieve organizational goals (Barzilai, 2011). Results Theory focuses on delivery of results through performance measurement Marsh and David (1999). This study was grounded on Results Theory. This is because performance contracting is an M&E results oriented management approach grounded on Results Theory (Nuguti, 2009).

Empirical review on the relationships in the study was carried out to identify the knowledge gaps from previous studies relevant to the current study. The scope of organizational performance should be broadened from service delivery to include other factors such as employee satisfaction and involvement in corporate social responsibilities. Design of performance measurement system can be done under mixed methods design rather than quantitatively. Another gap identified in this study is stakeholders' participation in the PC system especially in setting targets. Nuguti (2009) indicated that target setting in the PC system in Kenya is carried out between a PS and the executive on behalf of a given Ministry of Government. Another gap in knowledge identified is to ascertain the precision, measure-ability and attainability of the targets set in performance contracting. The validity, reliability and simplicity of the PC tools also need to be investigated. The tools used in the PC system are uniformly applied in all Ministries of Government as set out in the Sector Performance Standards (SPS) performance contracting guidelines (GOK, 2010).

Multiple determinants of organizational performance that include the role organizational structure, organizational culture and implementers' attitudes and skills play on the relationship between performance contracting system and organizational performance were identified as gaps in knowledge. Influence of contextual and cognitive factors on the relationship between performance measurement system and organizational performance was also identified as a knowledge gap. Indicators of organizational structure that were identified for consideration were: organizational mandate, size and model. Broader aspects of organizational culture such as vision, promptness to duty and team work were also identified as knowledge gaps. Indicators of attitude such as level of support of performance systems and time taken to meet performance obligations were identified as gaps in knowledge. Clear measurement of multidimensional constructs such as organizational performance and technical skills such as M&E is essential. As such, type of skills and level of skills of implementers' of PCs in a performance based systems were identified for study. Development of component-based measures of these constructs was identified.

## **CHAPTER THREE**

### **RESEARCH METHODOLOGY**

#### **3.1 Introduction**

This chapter describes the research design, target population, sampling procedure, data collection methods, research instruments, data analysis, ethical considerations and operationalization of variables. Research methodology was used in this study to guide the investigation of the identified research questions. According to Industrial Research Institute (2010), research methodology helps the researcher to systematically find out all the possible answers of given research questions till logical conclusion.

#### **3.2 Research Design**

The research designs that were used in this study were descriptive survey design and correlational research design. The choice of these two research designs was informed by the fact that descriptive and inferential data analysis were required in this study. Shield and Rangarjan (2013) indicate that descriptive survey is used to describe characteristics of a population or a phenomenon being studied. Creswell (2012) indicates that correlational research design is the measurement of two or more factors to determine or estimate the extent to which the values for the factors are related or change in an identifiable pattern. Since in this study both the causal effects of relationships as well as the extent to which the combination of predictor variables influenced the outcome of the dependent variable was desired, then both descriptive research design and correlational research design were the most suitable for the current study. While descriptive survey helped the researcher to describe phenomena, correlational research design helped the researcher to identify predictive relationships by using correlations and stepwise regression modelling.

The research approach that was used in this study was mixed mode research approach. By use of mixed mode research approach, qualitative and quantitative data analysis were carried out simultaneously in a cross-sectional manner. In research methods for business, Sekaran (2003) indicates that mixed mode approach can be classified into mixed models and mixed methods. Under mixed models approach, descriptive data analysis is undertaken independently followed by

inferential data analysis. Under mixed methods approach, both descriptive and inferential data analysis are carried out simultaneously in a cross-sectional integrated manner. In this study, mixed methods approach was followed. This means that descriptive, inferential and qualitative analysis were carried out in the study per research objective. Proponents of mixed methods approach such as Alan Bryman and Emma Bell (2011) argue that mixed methods helps researchers undertake data analysis with the research freedom to make use of both descriptive and inferential data analysis techniques as advanced by pragmatism research paradigm.

Although many paradigms exist, the paradigm that guided this study was pragmatism. Buchanan and Bryman (2007) argue that ‘paradigm’ wars among researchers have intensified due to increased epistemological diversity within business and organizational research. The choice of pragmatism paradigm in this study was informed by the ontological, epistemological, axiological and methodological underpinnings of pragmatism in retrospect of the other paradigms. In the formation of a paradigm, Alan (2009) indicates that a researcher is guided by the ontological, epistemological, axiological and methodological orientations.

While arguing on mixed methods research as the research approach whose time has come, Johnson and Anthony (2004) indicate that pragmatism paradigm is the best suited for mixed methods research approach. Ontologically, pragmatism offers the middle ground desired in mixed methods approach balancing between the fixed nature in the construction of reality advocated by positivism paradigm in quantitative designs and the subjective nature of reality propagated by both constructivism and emancipatory paradigms in qualitative designs. In this study, both quantitative and qualitative aspects of the PC system were investigated necessitating the need for pragmatism.

Epistemologically, pragmatism frees the researcher to selectively interact with the research. In positivism and post-positivism, the researcher distances from the research while in constructivism and emancipatory paradigms, the researcher and the research are inseparable (Alan and Emma, 2011). In this study, the researcher and the research were distanced in the quantitative aspects of the study which would have been restricted by both constructivism and emancipatory paradigms. At the same time, the researcher indulged with the research in collection and analysis of qualitative data which would have been limited by either positivism or post-positivism paradigms.

From an axiological perspective, Johnson and Anthony (2004) argue that pragmatism is the best suited for mixed methods research approach in that the paradigm balances between quantitative research which is value free with no researcher bias and qualitative research which is potentially value laden. In this study, values were not exclusively ignored nor did they absolutely guide the study because in so doing quantitative aspects required in performance measurement would have been compromised. Since positivism and post-positivism paradigms are value free, had these paradigms guided this study, qualitative aspects of the study would have been compromised. On the other hand, had the study been guided by either constructivism or emancipatory paradigms, quantitative aspects desired in this study leading to inferential analysis would not have been effectively realized.

The other underpinning that informs the researcher's choice of a given research paradigm is the research methodology. Other proponents of pragmatism such as Tashakkori and Teddlie (2010) indicate that methodologically, the paradigm balances between deductive logic used in quantitative research and inductive logic used in qualitative research. Since both deductive and inductive logic were desired in this study, pragmatism emerged as the best paradigm to guide the research methodology. Since both positivism and post-positivism guide deductive logic, the paradigms would have limited the current study. On the other hand, methodologically, constructivism guides inductive logic which would have limited the deductive aspects desired in this study. Although emancipatory paradigm frees respondents to be as expressive as possible, Alan (2009) indicates that the paradigm seems advocacy in nature in the sense that it requires inclusion of multiple realities in the study by incorporating the disadvantaged in the society. This aspect was not desired in the current study and hence emancipatory as a paradigm would not have satisfied the objectives of this study besides limiting the study to qualitative methodological orientation.

### **3.3 Target Population**

A research population is generally a large collection of individuals or objects that is the main focus of a scientific query (Donald and Delno, 2006). The target population in this study comprised the public servants in Government Ministries in Kenya who are employed on permanent terms basis and are party to performance contracts. The research population in this study was 103,010 public service employees in the 18 Government Ministries in Kenya (GOK, 2013). The details of the

number of employees in each Government Ministry are shown in Appendix 4. Although parastatals and public universities are subsets of Government Ministries, they were excluded from the target population. This is because of the heterogeneous nature among these organizations in respect to their mandate, operations, structure and culture. The target population therefore was employees in mainline Government Ministries. The unit of the research was employees in Government Ministries in Kenya. Research respondents were employees employed on permanent term basis selected by use of the sampling technique and procedure discussed in this thesis.

Although the Ministry of Devolution and Planning was established in 2013, the County Governments were not functionally or structurally answerable to this Ministry but rather were autonomous entities. This was a deviation from the structure prior to the second phase of the implementation of the Constitution of Kenya 2010 whereby the local authorities were under the Ministry of Local Government. Therefore, although Counties are public entities, the employees in these devolved units were excluded from this study due to their autonomous nature including in performance evaluation. In addition, the County Governments were expected to develop their own performance evaluation criteria. As such, the target population in this study was delimited to the Ministries of the National Government as indicated in the organization of the Government of the Republic of Kenya publication of May 2013 (GOK, 2013). Further, under the new Government structures, the Presidency, Cabinet Affairs Office in the Presidency and the office of the Attorney General and Department of Justice were organized separately from the 18 mainline Ministries (GOK, 2013). Therefore these entities were also excluded from this study.

### **3.4 Sampling Procedures and Sample Size**

In this section, sampling technique and sampling procedures as well as derivation of the sample size were examined. A sample in this study referred to the respondents from which information was obtained. Sampling refers to the process of selecting these groups.

### **3.4.1 Sampling Procedures**

Identification of sampling technique and procedures helped this research discourse to remain objective and devoid of subjective biasness in selection of the research sample that would have potentially compromised statistical generalizations. Although there are many sampling techniques, multi-stage sampling technique was used in this study. Multi-stage sampling technique was selected because the research context comprised Government Ministries which are large and complex organizations in respect to departmentalization. Multi-stage sampling technique helped the researcher to select respondents through three sampling stages giving respondents more reliable equal chances of being selected in a stepwise procedure starting with selection of ministries at the first stage, followed by selection of departments at the second stage and finally selection of respondents from the departments. Huber (2004) (2003) argues that multi-stage sampling technique would be the most preferred sampling technique for large organizations with various departments in research situations whereby it is desired every sub-population to be presented in the sample.

In addition, Sekaran (2003) indicates that in sampling procedures, a minimum of 30% of sub-populations is essential for statistical analysis. At the first stage of the sampling procedure in this study, 50% of the Government Ministries were selected. In selecting 50% of the Government Ministries, the 18 Ministries were arranged alphabetically and every even number Ministry was selected for study. The 9 selected Ministries formed the research sub-populations.

At the second stage of the sampling procedure, departments (research categories) were randomly selected for study from the Ministries (sub-populations). For Ministries with less than 30 departments, only one department was selected at random. For ministries with more than 30 departments, 2 departments were selected at random. With the exception of the Ministry of Land, Housing and Urban Development which had 31 departments, all the other ministries had less than 30 departments. Therefore one department was selected from each of the other eight ministries and two departments were selected from the Ministry of Land, Housing and Urban Development. In total therefore, 10 departments were selected in the study. Sekaran (2003) indicates that for every 30 research categories in a sub-population, one research category randomly selected is sufficient in the selection of the research sample.

At the third and last stage of the sampling procedure, individual respondents were randomly sampled from the selected 10 departments. This is because by selecting respondents from each strata (research category) in the research population, the sample was more representative. In stratified sampling technique, Kothari (2002) indicates that a random sample is drawn from all the strata. In addition Sekaran (2003) argues that random sampling respondents from each homogeneous research category (stratified sampling) reduces sampling error and gives a sample size that is more representative than applying simple random sampling technique uniformly across the entire research population. This sampling procedure can also produce a weighted mean that has less variability than the arithmetic mean of a simple random sample of the entire population (Larry, 2013). For acquisition of the qualitative data in the study, the ten departmental heads for the selected departments were interviewed.

### **3.4.2 Sample Size**

In this study, the sampling unit was employees in Government Ministries in Kenya. In the selection of the sample size, Huber (2004) in Robust Statistics argues that a researcher is informed by precision rate and the desired confidence level. A sample size of 310 respondents from a research population of 103,010 public service employees in the 18 Ministries of the Government of Kenya was selected. Three hundred (300) of the respondents were selected from ordinary employees while 10 of the respondents were the heads of the selected departments. In the determination of the sample size in this study, Sekaran's (2003) criterion on selection of sample size was considered. Although critics of Sekaran's (2003) criterion such as Anthony and Nancy (2004) challenge the selection of a sample size of 30 respondents from a research category, other proponents of pragmatism paradigm such as Tashakkori and Teddlie (2010) indicate that methodologically, Sekaran's (2003) criterion is consistent with pragmatism research paradigm. In addition Anthony and Nancy (2004) also agree with Sekaran (2003) that sampling in mixed approach requires both qualitative and quantitative strands to be considered.

In this study, a sample size of 30 respondents was selected from each research category. Sekaran (2003) indicates that when samples are broken into subsamples, a minimum sample size of 30 for each research category is essential. In addition, the sample size selected in multivariate research

should be many times larger than the number of variables in the given study. Based on Sekaran's (2003) criterion on selection of sample size, 30 respondents were selected from each selected department in the selected ministries. In addition, Sekaran (2003) argues that for each category in a homogeneous research population, one category is sufficient for statistical conclusions for a sub-population with less than 30 categories. In this study, categories were departments while a sub-population was a Government Ministry. For the Government Ministries with less than 30 departments, only 1 department was selected at random. For the Government Ministries with more than 30 departments, 2 departments were randomly selected. This ensured that each respondent had an equal chance of being selected for study. Three hundred (300) respondents were therefore selected by use of Sekaran's (2003) sample size criterion while the ten departmental heads were interviewed for qualitative data. In total therefore the respondents were 310. The sampling frame that was used in this study for the respondents who participated in the data collection exercise through a self-administered questionnaire is shown in Table 3.1.

**Table 3.1 Sampling Design**

<b>Government ministry</b>	<b>Departments per ministry</b>	<b>Selected number of departments per ministry</b>	<b>Selected number of respondents per department</b>
Defense	5	1	30
East African Affairs, Commerce and Tourism	19	1	30
Energy and Petroleum	11	1	30
Foreign Affairs	15	1	30
Industrialization and Enterprise Development	20	1	30
Interior and Coordination of National Government	26	1	30
Land, Housing and Urban Development	31	2	60
Sports, Culture and Arts	17	1	30
National Treasury	20	1	30
<b>Total</b>	<b>164</b>	<b>10</b>	<b>300</b>

### **3.5 Research Instruments**

In this study, both secondary and primary data were used. Secondary data was used to acquire information on the performances of the Ministries of Government. This information was obtained from previous evaluation reports carried out as well as the performance contracting documents. Raw data was gathered directly from the respondents and was used to analyze the relationships that were being investigated in the study. To obtain sufficient information, triangulation of research instruments was done. The research instruments that were used in this study for data collection were a self-administered structured questionnaire and an interview guide. A research instrument in this study is a device that the researcher used to collect data. A self-administered structured questionnaire was used to collect the quantitative strands while the interview guide was used to collect the qualitative strands of the research.

#### **3.5.1 Self-Administered Questionnaires**

A self-administered structured questionnaire was used to collect quantitative data from ordinary employees in Government Ministries. The items that were in the questionnaire were close ended and were used for parametric analysis to test the relationships under investigation in the study. Structured questionnaires are regarded the most appropriate for large populations of respondents and when the nature of the information required is detailed. The usage of this tool assumes that the respondents understand the significance of the research and can understand the items in the instrument (Donald and Delno, 2006). The choice of structured questionnaires in this study was informed by the fact that the respondents in the study, being the implementers of the PC system, were expected to appreciate the significance of the study and to understand the items in the research instrument. In addition, since the research population was accessible, clarifications required in the research instruments were attended to with relative ease.

The questionnaire administered to employees in Government Ministries had three major parts: introduction; demographic information; and specific information. The first part explained the purpose of the research to respondents. The second part of the questionnaires was used to strike a rapport with the respondent by seeking demographic information regarding the name of the Ministry of Government where the respondent was working; age group of respondent; gender of

respondent; highest level of education of respondent; and number of years that the respondents had worked in their current department. Part three of the questionnaire had nine sections each with items in a Likert type scale format using a scale of SD – Strongly Disagree; D – Disagree; N – Neutral; A – Agree; and SA – Strongly Agree as recommended by Alan (2001).

Items in the Likert Scale were both affirmative and negation statements. This was done to make the respondents alert while filling in the questionnaire. Each of the nine sections of Likert type scale format had ten statements. Questions were limited to ten so as to increase the response rate. Frauke et al. (2008) argue that when a questionnaire is too lengthy, the response rate is low and the quality of the responses is compromised. In addition, Frauke et al. (2008) propose that ten objectively constructed items for each research variable in a Likert type scale are sufficient to measure a desired construct where mathematical modelling is involved in data analysis thus necessitating the need for coalescing indicators of various variables. During analysis of data collected by Likert scale, Carifio and Rocco (2007) indicates Strongly Disagree (SD)  $1 < SD < 1.8$ ; Disagree (D)  $1.8 < D < 2.6$ ; Neutral (N)  $2.6 < N < 3.4$ ; Agree (A)  $3.4 < A < 4.2$ ; and Strongly Agree (SA)  $4.2 < SA < 5.0$ . These propositions were followed in data analysis in this study in the interpretation of descriptive data obtained by use of Likert scale.

Section one in this part of the questionnaire was on information on Organizational Performance which was the dependent variable in the study. Section two contained items on the influence of Performance Contrating (PC) System on Organizational Performance. Section three contained items on the influence of Performance Contrating (PC) Targets on Organizational Performance. Section four contained items on the influence of Performance Contrating (PC) Tools on Organizational Performance. Section five contained items on the influence of Performance Contrating (PC) Implementer Participation on Organizational Performance. Section six contained items on the influence of Organizational Structure on PC System and Organizational Performance. Section seven contained items on the influence of Organizational Culture on PC System and Organizational Performance. Section eight contained items on the influence of Implementer Attitude on PC System and Organizational Performance. Section nine contained items on the influence of Implementer Monitoring and Evaluation (M&E) Skills on PC System and Organizational Performance.

### **3.5.2 Interview Guide**

For sufficient information to be gathered regarding the performances of Government Ministries, departmental heads were interviewed by use of an open ended interview guide. Interviews were conducted to probe for in-depth information on performance contracts that may not have been unearthed by the structured questionnaire. Thus the data that was gathered through the interviews was qualitative and therefore was analyzed through non-parametric analysis. The qualitative data that was collected during interviews was synthesized with the quantitative data collected by use of questionnaires in the discussion sections of this study in line with the research design and paradigm that guided this research to make inferences of the relationships under investigation. The interview guide had three sections.

The first section of the interview guide was the introduction. This section explained the purpose of the research to the respondent and was also used to strike a rapport with the respondent. The second section in the interview guide was on demographic information. The information that was solicited in this section was on respondent's highest level of education, the number of years the respondents had worked in their current department and the respondents' tenure in public service. This section was used to ascertain that the respondent had sufficient experience in public service to give reliable information on the implementation of performance contracts in Government Ministries in Kenya.

The third section of the interview guide contained items on performance of Government Ministries in respect to customer satisfaction, employee satisfaction and corporate social responsibilities. Questions that were used to measure the effectiveness of the PC system in Government Ministries. Items in this section focused on the precision, measure-ability and attainability of PC targets; the validity, reliability and simplicity of PC tools; and the extent to which PC implementers' participated in the PC system. Information on the influence of organizational structure, organizational culture, implementers' attitudes and implementers' M&E skills on the relationship between the PC system and organizational performance was also solicited for in this section.

### **3.5.3 Pilot Testing Research Instruments**

The quality of research instruments determines the outcome of the study (Alan and Emma, 2011). In this study, the researcher pilot tested the research instruments. To check for the validity of the research instruments, expert opinion was sought through a focus group discussion. While testing for the reliability of the research instruments, questionnaires were administered to 27 respondents; 3 from each selected Ministry conveniently picked from the M&E units in the Ministries prior to the actual data collection exercise. The respondents who participated in the pilot testing of the research instruments were exempted from being respondents in the main study to eliminate biasness in the research results based on prior knowledge of the contents in the research instrument.

### **3.5.4 Validity of Research Instruments**

Testing the validity of research instruments helps the researcher to be sure that the items measure the desired constructs. Donald and Delno (2006) define the validity of a research instrument as the appropriateness, meaningfulness and usefulness of the research instrument in respect to the inferences a researcher makes. There are three types of validity that are of interest to researchers: content related, criterion related and construct validity (Donald and Delno, 2006). Huber (2004) defines content related validity as the content and format of the instrument; criterion related validity as the relationship between scores obtained using an instrument and scores obtained using one or more instruments or measures; and construct validity as the nature of the psychological construct or characteristic being measured. A measure then is said to possess construct validity to the degree that it conforms to predicted correlations with other theoretical propositions.

The validity of the research instruments in this study was tested through the content-related method. This test of validity method was so selected because it was consistent with the objectives of the study and the research paradigm that sought to unearth the details of the contents in performance contracting system as well as their relevance, usefulness and appropriateness to measure performance in Government Ministries. To test for validity of the research instruments in this study, expert opinion from three experts in the PC system in Kenya through a focus group discussion was used. In this forum, the clarity, relevance and appropriateness of the items was

discussed. While determining the validity of the items in the research instruments, the advice of two experts was followed as proposed by Kothari (2002).

### **3.5.5 Reliability of Research Instruments**

Testing reliability of research instruments helps check for internal consistency of scores obtained by a research instrument. Donald and Delno (2006) define reliability of research instruments as the consistence of scores obtained and has two aspects; stability and equivalency. Reliability then is said to be achieved if it gives consistent results with repeated measurements of the same object with the same instrument. Equivalency is the measure of how much error gets introduced by different investigators or different samples of the items being studied. There are many methods used by researchers to obtain reliability of research instruments. In this study, the test-retest method was used. This method involves administering the same test twice to the same group after a certain time interval has elapsed since the previous test (Coopers and Schindler, 2003). The test re-test criterion was selected because the respondents in this study were expected to understand the significance of the research and were therefore expected to willingly fill the questionnaires for the second time. In addition, Ministries of Government in Kenya, being public entities, were easily accessible and hence the practicality of re-testing the research instruments.

A time lapse of two weeks was allowed between the first and the second administration of the research instruments while testing for reliability of the research instruments. To measure the reliability coefficient of the research instruments, Cronbach's  $\alpha$  (Alpha) Reliability Coefficients were obtained for all the variables in the study. Just like the probability range, Cronbach's Alpha Reliability Coefficients range between zero and one. A coefficient of zero implies the tool has no internal consistency while that of one implies complete internal consistency. Creswell (1994) indicates that a reliable research instrument should have a composite Cronbach Alpha Reliability Coefficient of at least 0.7 for all items under study. Where  $\alpha < 0.7$ , the research instruments were revised before going for field work to acceptable levels. In the pilot test, the composite Cronbach Alpha Reliability Coefficient for the research instrument was 0.705222.

In advanced statistics, Larry (2013) indicates that Cronbach Coefficient is used to test internal consistencies of samples of a given population when research instruments with Likert type scales

with multiple responses are used for data collection. Developed by Lee Cronbach in 1951, Cronbach coefficient has been viewed by scholars as an improvement of the Kuder-Richardson Formula 20 (KR-20) which is an equivalent measure for dichotomous items (Larry, 2013). Larry (2013) further indicates that the limiting factor in the use of the Cronbach's  $\alpha$  (alpha) Coefficient is when the data analysis involves missing data due to varying reasons like poor return of research instruments. Due to the literacy nature and accessibility of the respondents in this study, significant data losses were minimal. This was attributed to the fact that the target population from which respondents were sampled were public servants who were duty bound by performance contracts and were also expected to appreciate the significance of the study.

**Table 3.2 Reliability Coefficients**

<b>Variables</b>	<b>N of cases</b>	<b>N of items</b>	<b>Reliability coefficient</b>
Organizational Performance	23	10	0.633
PC System and Organizational Performance	22	10	0.697
PC Targets and Organizational Performance	20	10	0.79
PC Tools and Organizational Performance	24	10	0.717
PC Implementer Participation and Organizational Performance	23	10	0.725
Organizational Structure, PC System and Organizational Performance	22	10	0.574
Organizational Culture, PC System and Organizational Performance	24	10	0.744
Implementer Attitude, PC System and Organizational Performance	24	10	0.732
Implementer M&E Skills, PC System and Organizational Performance	24	10	0.735
<b>Composite Cronbach's <math>\alpha</math> (alpha) reliability coefficient</b>			<b>0.705222</b>

N is number of items

### **3.6 Data Collection Procedures**

Donald and Delno (2006) indicate that both primary and secondary sources of data are permitted in research. Although in this study both primary and secondary sources of data were obtained, the main focus was data obtained from primary sources through a self-administered structured questionnaire and an interview guide. In the journal of mixed methods research, Tashakkori and Teddlie, (2010) indicate that the type of data collected is informed by the objectives of the study. In this study, primary data was collected from public servants in Ministries of Government while secondary data was obtained from PC evaluation reports, department of Performance Contracting and the Directorate of Monitoring and Evaluation at the National Treasury.

The data collection methods selected in this study were informed by the research objectives. While collecting data from heads of the selected departments from the 9 Ministries of Government under study, interviews were conducted. Prior to conduction of the interviews, letters expressing the desire to undertake research from the targeted departments were dispensed. Follow up was done through both telephone calls and emails to book appointments for the interviews. During the interviews, the researcher introduced the purpose of the research and its significance in respect to the performance of Government Ministries. The interviews helped clarify various aspects of performance contracting that may not have been unearthed by a close ended questionnaire.

Data collection from the ordinary employees in Government Ministries was done with the aid of research assistants. This approach improved the rate of return of the questionnaires. Nine research assistants were engaged. Each of the research assistants was assigned one Ministry. Prior to deploying the research assistants for field work, the researcher trained the research assistants on research ethics as well as on the items in the research instruments to the extent that they could comfortably and independently clarify queries raised by respondents. A follow up time schedule was agreed upon and drawn between the researcher and the research assistants to guide supervision of the research progress. The research assistants were also equipped with a copy of the cover letter permitting them to collect data on behalf of the researcher.

### 3.7 Data Analysis Techniques

Data analysis refers to examining what has been collected in a survey or experiment and making decision and inferences (Donald and Delno, 2006). Mixed methods data analysis techniques were employed in this study incorporating both descriptive and inferential data analysis. Non-parametric data was analyzed descriptively by use of measures of central tendency and measures of dispersion as the tools of data analysis. The arithmetic mean was the measure of central tendency statistical tool that was used for data analysis while the standard deviation was the measure of dispersion statistical tool of data analysis that was used.

In data analysis, measures of central tendency are used when the set of data values are finite and the data is expected to cluster around some central value (Weisberg, 1992). Due to the relative homogeneity nature of Government Ministries in Kenya guided by a common national vision and implemented through a common management approach typified in the uniformly applied performance contracts, the finite research population was anticipated to be normally distributed and data was expected to cluster around statistical averages. Data was therefore measured whether it had a strong or a weak central tendency based on the standard deviation from the arithmetic mean. Although there are various measures of dispersion, standard deviation was selected in this study because it is often regarded by statisticians as the best measure of statistical dispersion. Besides expressing the variability of a given population, standard deviation also measures confidence for statistical conclusions (Ghahramani, 2000).

For the parametric data, Pearson's Product Moment Correlation Coefficient ( $r$ ) and Stepwise Regression ( $R^2$ ) analysis were used. In statistics, Pearson's Product Moment Correlation ( $r$ ) is a measure of the linear dependence (correlation) between two variables and can give a positive or negative value of their relationship (Huber, 2004). Pearson's Product Moment Correlation Coefficient ( $r$ ) was used in this study to analyze the linear relationship between the main predictor variable and the dependent variable. Developed by Karl Person, Pearson's Product Moment Correlation Coefficient ( $r$ ) is widely used in social sciences as a measure of the strength of linear dependence between two variables (Huber, 2004).

To analyze the influence of the moderating variables on the relationship between the independent variable and the dependent variable, Stepwise Regression ( $R^2$ ) analysis was used. Larry (2013) indicates that Stepwise Regression ( $R^2$ ) involves mathematical modeling whereby the predictor

variables are deliberately chosen without necessary being backed by theory. Although literature has been cited in this study on the influence of each of the predictor variables on the dependent variable, no previous literature has been identified that directly indicates the influence of each of the moderating variables on the relationship between the main predictor variable and the dependent variable. Since the influence of each of the moderating variables on the relationship between the main predictor variable and the dependent variable is deliberately chosen in this study, then the requirement for the use of Stepwise Regression ( $R^2$ ) for parametric data analysis was satisfied.

Although various tests are used to test hypotheses for Pearson's Product Moment Correlation Coefficient ( $r$ ) and Stepwise Regression ( $R^2$ ) like Student t-Tests, adjusted  $R^2$ , Akaike Information Criterion, Mallows's  $C_p$  and Bayesian Information Criterion; Moriya (2008) argues that in practice, F-Tests are the most commonly used to test confidence intervals and hypotheses. If for a given sample,  $F(r)$  is the Fisher transformation of  $r$ , and  $n$  is the sample size, then  $F(r)$  approximately follows a normal distribution given the assumption that the sample pairs are independent and identically distributed and follow a bivariate normal distribution. Thus an approximate  $r$ -value can be obtained from a normal probability table. For a large enough sample where  $n > 30$  as was the case in this study, then  $F$ -values can be obtained using Fisher transformation and the hypotheses tested normally by use of  $F$ -Tests (Moriya, 2008).

Four hypotheses were identified under research objective one. These hypotheses were on the influence of: PC System on Organizational Performance; PC Targets on Organizational Performance; PC Tools on Organizational Performance; and PC Implementer Participation on Organizational Performance. Since these four relationships were linear, Pearson's Product Moment Correlation ( $r$ ) was used for data analysis. In the interpretation of results for the linear relationships in the study, for a weak correlation, " $r$ " ranged from  $\pm 0.10$  to  $\pm 0.29$ ; in a moderate correlation, " $r$ " ranged between  $\pm 0.30$  and  $\pm 0.49$ ; while in a strong correlation, " $r$ " ranged from  $\pm 0.5$  and  $\pm 1.0$ . The interpretation for the strength of the correlation by use of ' $r$ ' values was as indicated by Shirley et al. (2005). Three hypotheses were identified for each of the research objectives 2 and 3 and Stepwise Regression ( $R^2$ ) was used for data analysis because these relationships were non-linear. The values of " $r$ " and " $R^2$ " were considered while interpreting results and a confidence level of at least 95% in the tests of hypotheses was required.

### 3.7.1 Correlation and Regression Models

The indicators of the variables in the study were denoted as shown in Table 3.2

**Table 3.3 Variables and Indicators**

Variable		Indicator
Dependent Variable	Organizational Performance (y)	Customer Satisfaction; Employee Satisfaction; Corporate Social Responsibilities
Independent Variable	Performance Contracting System (X <sub>1</sub> ,X <sub>2</sub> ,X <sub>3</sub> )	PC Targets (X <sub>1</sub> ); PC Tools (X <sub>2</sub> ); and PC Implementer Participation (X <sub>3</sub> )
Moderating Variables	Contextual Factors (X <sub>6</sub> )	Organizational Structure (X <sub>4</sub> ); Organizational Culture (X <sub>5</sub> )
	Cognitive Factors(X <sub>9</sub> )	Implementer Attitude (X <sub>7</sub> ); Implementer M&E Skills (X <sub>8</sub> )

The following correlation and regression models guided the data analysis whereby:

- $y$  – Dependent Variable
- $\beta_0$  – Constant Term
- $\beta_1, \beta_2, \beta_3, \dots \beta_n$  – Beta Coefficients
- $X_1, X_2, X_3, \dots X_n$  – Predictor Variables
- $\varepsilon$  – Error Term

### 3.7.2 Correlation Models for Research Objective one

For research objective one, four hypothesis were formulated and corresponding correlation models developed since the relationships tested were linear.

#### Model 1

Hypothesis 1: There is no significant relationship between PC System and organizational performance

Organizational Performance = f (PC Targets, PC Tools, PC Implementer Participation)

$$y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \varepsilon$$

#### Model 1a

Hypothesis 1a: There is no significant relationship between PC Targets and organizational performance

Organizational Performance = f (PC Targets)

$$y = \beta_0 + \beta_1 X_1 + \varepsilon$$

#### Model 1b

Hypothesis 1b: There is no significant relationship between PC Tools and organizational performance

Organizational Performance = f (PC Tools)

$$y = \beta_0 + \beta_2 X_2 + \varepsilon$$

#### Model 1c

Hypothesis 1c: There is no significant relationship between PC Implementer Participation and organizational performance

Organizational Performance = f (PC Implementer Participation)

$$y = \beta_0 + \beta_3 X_3 + \varepsilon$$

### 3.7.3 Regression Models for Research Objective two

For research objective two, three hypothesis were formulated and corresponding regression models developed since the relationships tested were non-linear. Hypotheses 2a and 2b were tested before hypothesis 2. This is because contextual factors were a combination of organizational structure and organizational culture.

#### Model 2

Hypothesis 2: The strength of the relationship between performance contracting system and organizational performance does not depend on contextual factors

Organizational Performance = f (PC System, Contextual Factors)

$$y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_6 X_6 + \beta_{16} X_1 X_6 + \beta_{26} X_2 X_6 + \beta_{36} X_3 X_6 + \varepsilon$$

#### Model 2a

Hypothesis 2a: The strength of the relationship between performance contracting system and organizational performance does not depend on organizational structure

Organizational Performance = f (PC System, Organizational Structure)

$$y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + \beta_{14} X_1 X_4 + \beta_{24} X_2 X_4 + \beta_{34} X_3 X_4 + \varepsilon$$

#### Model 2b

Hypothesis 2b: The strength of the relationship between performance contracting system and organizational performance does not depend on organizational culture

Organizational Performance = f (PC System, Organizational Culture)

$$y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_5 X_5 + \beta_{15} X_1 X_5 + \beta_{25} X_2 X_5 + \beta_{35} X_3 X_5 + \varepsilon$$

### 3.7.4 Regression Models for Research Objective three

For research objective three, three hypothesis were formulated and corresponding regression models developed since the relationships tested were non-linear. Hypotheses 3a and 3b were tested before hypothesis 3. This is because cognitive factors were a combination of implementer attitude and implementer M&E skills.

#### Model 3

Hypothesis 3: The strength of the relationship between performance contracting system and organizational performance does not depend on cognitive factors

Organizational Performance = f (PC System, Cognitive factors)

$$y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_9 X_9 + \beta_{19} X_1 X_9 + \beta_{29} X_2 X_9 + \beta_{39} X_3 X_9 + \varepsilon$$

#### Model 3a

Hypothesis 3a: The strength of the relationship between performance contracting system and organizational performance does not depend on implementer attitude

Organizational Performance = f (PC System, Implementer Attitude)

$$y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_7 X_7 + \beta_{17} X_1 X_7 + \beta_{27} X_2 X_7 + \beta_{37} X_3 X_7 + \varepsilon$$

#### Model 3b

Hypothesis 3b: The strength of the relationship between performance contracting system and organizational performance does not depend on implementer M&E skills

Organizational Performance = f (PC System, Implementer M&E Skills)

$$y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_8 X_8 + \beta_{18} X_1 X_8 + \beta_{28} X_2 X_8 + \beta_{38} X_3 X_8 + \varepsilon$$

### 3.7.4 Tests of Hypotheses

For empirical conclusions to be arrived at, tests of various hypotheses were conducted. Table 3.3 indicates the summary of the research objectives, research hypotheses, type of analysis and the interpretation of the results.

**Table 3.4 Statistical Tests of Hypotheses**

<b>Research Objective</b>	<b>Hypothesis</b>	<b>Type of Analysis</b>	<b>Interpretation of Results</b>
<b>1.</b> To examine the extent to which PC System influence Organizational Performance in Government Ministries in Kenya	<b>H<sub>1</sub></b> : There is no significant relationship between PC System and Organizational Performance	Pearson's Correlation	For $p < 0.05$ , $H_0$ was rejected; and $H_A$ accepted  For the strength of the relationships, $r$ values were considered whereby:  $+ 0.10 < r < + 0.29$ ; weak correlation;  $+ 0.30 < r < + 0.49$ ; moderate correlation;  $+ 0.5 < r < + 1.0$ ; strong correlation.
<b>1a.</b> To examine the extent to which PC Targets influence Organizational Performance in Government Ministries in Kenya	<b>H<sub>1a</sub></b> : There is no significant relationship between PC Targets and Organizational Performance	Pearson's Correlation	
<b>1b.</b> To examine the extent to which PC Tools influence Organizational Performance in Government Ministries in Kenya	<b>H<sub>1b</sub></b> : There is no significant relationship between PC Tools and Organizational Performance	Pearson's Correlation	
<b>1c.</b> To examine the extent to which PC Implementer Participation influence Organizational Performance in Government Ministries in Kenya	<b>H<sub>1c</sub></b> : There is no significant relationship between PC Implementer Participation and Organizational Performance	Pearson's Correlation	

<b>Research Objective</b>	<b>Hypothesis</b>	<b>Type of Analysis</b>	<b>Interpretation of Results</b>
<b>2.</b> To establish the extent to which Contextual Factors influence the relationship between Performance Contracting System and Organizational Performance in Government Ministries in Kenya	<b>H<sub>2</sub>:</b> The strength of the relationship between Performance Contracting System and Organizational Performance does not depend on Contextual Factors	Stepwise Regression	In stepwise regression modelling, if the variable under consideration was excluded from the final regression model, H <sub>0</sub> was accepted. Where H <sub>0</sub> was rejected R <sup>2</sup> values were considered in determination of the strength of the relationship.
<b>2a.</b> To assess the extent to which Organizational Structure influence the relationship between Performance Contracting System and Organizational Performance in Government Ministries in Kenya	<b>H<sub>2a</sub>:</b> The strength of the relationship between Performance Contracting System and Organizational Performance does not depend on Organizational Structure	Stepwise Regression	
<b>2b.</b> To determine the extent to which Organizational Culture influence the relationship between Performance Contracting System and Organizational Performance in Government Ministries in Kenya	<b>H<sub>2b</sub>:</b> The strength of the relationship between Performance Contracting System and Organizational Performance does not depend on Organizational Culture	Stepwise Regression	

<b>Research Objective</b>	<b>Hypothesis</b>	<b>Type of Analysis</b>	<b>Interpretation of Results</b>
<b>3.</b> To establish the extent to which Cognitive Factors influence the relationship between Performance Contracting System and Organizational Performance in Government Ministries in Kenya	<b>H<sub>3</sub>:</b> The strength of the relationship between Performance Contracting System and Organizational Performance does not depend on Cognitive Factors	Stepwise Regression	In stepwise regression modelling, if the variable under consideration was excluded from the final regression model, H <sub>0</sub> was accepted. Where H <sub>0</sub> was rejected R <sup>2</sup> values were considered in determination of the strength of the relationship.
<b>3a.</b> To examine the extent to which Implementer Attitude influence the relationship between Performance Contracting System and Organizational Performance in Government Ministries in Kenya	<b>H<sub>3a</sub>:</b> The strength of the relationship between Performance Contracting System and Organizational Performance does not depend on Implementer Attitude	Stepwise Regression	
<b>3b.</b> To determine the extent to which Implementer M&E skills influence the relationship between Performance Contracting System and Organizational Performance in Government Ministries in Kenya	<b>H<sub>3b</sub>:</b> The strength of the relationship between Performance Contracting System and Organizational Performance does not depend on Implementer M&E skills	Stepwise Regression	

### **3.8 Ethical Issues**

Written communication seeking permission to carry out research was done and letters dispatched to the targeted respondents in Government Ministries. The respondents indicated their readiness to respond to the research by signing the letters of consent before the actual data collection commenced. The respondents were assured that disclosures will not be made on the identity of the respondents. As such, the respondents were requested not to indicate their names on the questionnaires and disclosure of the findings will be availed on request. Further, the researcher committed to make compensations in the event of any damages to the organizations under study or individual respondents, especially reputational related, arising as a result of this research.

### 3.9 Operationalization of Variables

Table 3.4 indicates the operational definition of variables which includes their respective indicators, measurement, research design, type of statistical analysis and the tool of analysis.

*Table 3.5: Operationalization of Variables*

<b>Objective</b>	<b>Variables</b>	<b>Indicators</b>	<b>Measurement</b>	<b>Measuring Scale</b>	<b>Research Approach</b>	<b>Type of Statistical Analysis</b>	<b>Tool of Analysis</b>
1. To examine the extent to which performance contracting system influence organizational performance in Government Ministries in Kenya	Dependent Variable:  Organizational Performance	Customer Satisfaction	Rate of Customer Satisfaction	Ratio	Quantitative	Parametric	Pearson's Correlation (r)
		Employee Satisfaction	Rate of Employee Satisfaction	Ratio	Quantitative	Parametric	Pearson's Correlation (r)
		Level of involvement in CSR	Number of CSR activities	Ordinal	Quantitative	Non-parametric	Arithmetic Mean and Standard Deviation

Objective	Variables	Indicators	Measurement	Measuring Scale	Research Approach	Type of Statistical Analysis	Tool of Analysis
	Independent Variable:  Performance Contracting System	PC Targets  PC Tools  Implementer Participation	Precision, measurability and attainability  Validity, reliability and simplicity  Level of participation	Ratio  Ratio  Ordinal	Quantitative  Quantitative  Quantitative	Parametric  Parametric  Non-parametric	Pearson's Correlation (r)  Pearson's Correlation (r)  Arithmetic Mean and Standard Deviation
2. To assess the extent to which organizational structure influence the relationship between performance contracting system and organizational performance in Government Ministries in Kenya	Moderating Variable:  Organizational Structure	Size of Organization  Mandate of Organization	The strength of the relationship	Ratio	Quantitative	Parametric	Stepwise Regression  (R <sup>2</sup> )  (r)

Objective	Variables	Indicators	Measurement	Measuring Scale	Research Approach	Type of Statistical Analysis	Tool of Analysis
		Model of Organization					
3. To determine the extent to which organizational culture influence the relationship between performance contracting system and organizational performance in Government Ministries in Kenya	Moderating Variable:  Organizational Culture	Clarity of Vision  Promptness of duty  Team work	The strength of the relationship	Ratio	Quantitative	Parametric	Stepwise Regression  (R <sup>2</sup> )  (r)
4. To examine the extent to which implementer attitude influence the relationship between performance contracting system and organizational performance in	Moderating Variable:  Implementer Attitude	Level of cooperation with others	The strength of the relationship	Ratio	Quantitative	Parametric	Stepwise Regression  (R <sup>2</sup> )

<b>Objective</b>	<b>Variables</b>	<b>Indicators</b>	<b>Measurement</b>	<b>Measuring Scale</b>	<b>Research Approach</b>	<b>Type of Statistical Analysis</b>	<b>Tool of Analysis</b>
Government Ministries in Kenya		Number of indiscipline cases  Nature of language used					(r)
5. To determine the extent to which implementer M&E skills influence the relationship between performance contracting system and organizational performance in Government Ministries in Kenya	Moderating Variable:  Implementer M&E Skills	Type of M&E skills  Level of M&E skills	The strength of the relationship	Ratio	Quantitative	Parametric	Stepwise Regression  (R <sup>2</sup> )  (r)
6. To establish the extent to which contextual factors influence the relationship between performance contracting system and organizational performance in	Moderating Variable:  Contextual Factors	Performance Contracting System + (Organizational Structure +	The strength of the relationship	Ratio	Quantitative	Parametric	Stepwise Regression  (R <sup>2</sup> )

<b>Objective</b>	<b>Variables</b>	<b>Indicators</b>	<b>Measurement</b>	<b>Measuring Scale</b>	<b>Research Approach</b>	<b>Type of Statistical Analysis</b>	<b>Tool of Analysis</b>
Government Ministries in Kenya		Organizational Culture)					(r)
7. To establish the extent to which cognitive factors influence the relationship between performance contracting system and organizational performance in Government Ministries in Kenya	Moderating Variable:  Cognitive Factors	Performance Contracting System + (Implementer Attitude + Implementer M&E Skills)	The strength of the relationship	Ratio	Quantitative	Parametric	Stepwise Regression  (R <sup>2</sup> )  (r)

## **CHAPTER FOUR**

### **DATA ANALYSIS, PRESENTATION, INTERPRETATION AND DISCUSSION**

#### **4.1 Introduction**

This chapter is on data analysis, presentation, interpretation and discussion. The first section in this chapter is on the response rate of the respondents. The second section of this chapter presents the profiles of respondents. The third section presents tests of statistical assumptions and usage of the Likert-type scales in data analysis. The fourth section in this chapter is on the analysis, presentation, interpretation and discussion of the relationships under investigation. Since descriptive research design and correlational research design under mixed mode research approach were used in this study, descriptive, inferential and qualitative statistical analysis were carried out in this chapter simultaneously in a cross-sectional manner. For each research objective, descriptive analysis was first done by use of the arithmetic mean and the standard deviation followed by inferential analysis by use of Person's Product Moment Correlation and Stepwise Multiple Regression analysis to test the relationships under study. Since qualitative data was collected through interviews, qualitative analysis was done for each research objective after the descriptive and inferential statistics. Discussions in this chapter were done from the analysis and interpretation of descriptive, inferential and qualitative data.

#### **4.2 Questionnaire Response Rate**

A sample size of 310 respondents from a research population of 103,010 employees in the 18 Government Ministries was selected. Questionnaires were administered to a sample of 300 employees while interviews were conducted from the 10 departmental heads from each of the ten selected departments. Out of the 300 questionnaires that were administered, 184 questionnaires were duly filled and returned and therefore regarded as the responsive instruments and formed the basis for data analysis. This formed a response rate of 61.3%. Saunders et al. (2003) indicate that 30 to 50 percent response rate is reasonable enough for statistical generalizations.

### 4.3 Profiles of the Respondents

This section profiles the respondents in respect to the organization where they work, gender, age, level of educational and tenure of service in the organization. Profiling of the respondents was informed by the items in the research instruments used in the study.

#### 4.3.1 Distribution of Respondents by Ministry

To check whether respondents were normally distributed across all the ministries under consideration, respondents were asked to indicate the Ministry where they worked. This data was sought because this study involved all ministries of government equally and none was given preferential consideration in the selection of respondents. The responses were as shown in Table 4.1.

*Table 4.1: Distribution of Respondents by Organization*

<b>Ministry</b>	<b>Targeted respondents (N)</b>	<b>Responsive respondents (n)</b>	<b>Response percentage</b>
Defense	30	11	6.0
East African Affairs, Commerce and Tourism	30	13	7.1
Energy and Petroleum	30	27	14.7
Foreign Affairs	30	16	8.7
Industrialization and Enterprise Development	30	20	10.9
Interior and Coordination of National Government	30	20	10.9
Land, Housing and Urban Development	60	46	25.0
Sports, Culture and Arts	30	20	10.9
National Treasury	30	11	6.0
<b>Total</b>	<b>300</b>	<b>184</b>	<b>100.0</b>

The research findings indicate that 6.0% of the respondents worked in the Ministry of Defense; 7.1% in the Ministry of East African Affairs, Commerce and Tourism; 14.7% in the Ministry of

Energy and Petroleum; 8.7% in the Ministry of Foreign Affairs; 10.9% in the Ministry of Industrialization and Enterprise Development; 10.9% in the Ministry of Interior and Coordination of National Government; 25.0% in the Ministry of Land, Housing and Urban Development; 10.9% in the Ministry of Sports, Culture and the Arts; and 6.0% in The National Treasury.

### 4.3.2 Distribution of Respondents by Gender

Data was sought on whether respondents were males or females. This was done to ascertain that respondents were normally distributed between the two genders because in this study, none of the gender was given preferential consideration in the selection of respondents. Respondents were therefore asked to indicate their gender. The responses were as shown in Table 4.2

*Table 4.2: Distribution of Respondents by Gender*

<b>Gender</b>	<b>Frequency</b>	<b>Percentage</b>
Females	77	41.8
Males	106	57.6
Non-responsive	1	.5
<b>Total</b>	<b>184</b>	<b>100.0</b>

Results indicate that 42.1% of the respondents were females while 57.9% were males. One respondent was not responsive in this particular item of the research instrument. This indicates that Government Ministries had complied with the requirement of employment in the public sector to be at least 30% of either gender (GOK, 2012). That respondents in this study were skewed favourable in respect to gender spread enhanced the quality of the analysis of results given that the study was guided by pragmatism research paradigm which Anthony (2004) indicates as the best suited paradigm for mixed methods research design in that it incorporates multiple realities in research like the gender factor.

### 4.3.3 Distribution of Respondents by Age Group

Respondents were asked to indicate their age group in years. This was done to ascertain that respondents were normally distributed in respect to age since an individual's age was not a consideration in the selection of respondents in this study. Age groups were classified into eight categories: 21 – 25 years; 26 – 30 years; 31 – 35 years; 36 – 40 years; 41 – 45 years; 46 – 50 years; 51 – 55 years; and above 55 years. The responses were as shown in Table 4.3.

*Table 4.3: Distribution of Respondents by Age Group*

Age group	Frequency	Percentage
21-25 Years	7	3.8
26-30 Years	27	14.8
31-35 Years	24	13.1
36-40 Years	29	15.8
41-45 Years	30	16.4
46-50 Years	34	18.6
51-55 Years	24	13.1
Above 55 years	8	4.4
<b>Total</b>	<b>183</b>	<b>100.0</b>

The research findings indicate that 3.8% of the respondents were between the ages of 21 and 25 years; 14.8% between 26 and 30 years; 13.1% of the respondents between 31 and 35 years; 15.8% of the respondents between 36 and 40 years; 16.4% of the respondents between 41 – 45 years; 18.6% of the respondents between 46 and 50 years; 13.1% of the respondents between 51 and 55 years; while 4.4% of the respondents were above 55 years of age. That 95.6% of the respondents were 55 years and below implies that majority of the respondents were productive employees and therefore in respect to organizational performance in Government Ministries, age of the respondents would be an insignificant factor. Therefore in determination of the influence of the PC system on organizational performance, other factors other than respondents' age were under consideration in this study.

#### 4.3.4 Distribution of Respondents by Level of Education

The respondents were asked to indicate their highest level of education. Respondent's level of education was considered important in this study in respect to responding to the research instruments as well understanding the PC system in Government Ministries in Kenya. The options that were provided in this item were: high school; certificate; diploma; bachelor's degree; and post graduate degree. The responses were as shown in Table 4.4.

*Table 4.4: Distribution of Respondents by Level of Education*

Level of Education	Frequency	Percentage
High school	16	8.7
Certificate	12	6.5
Diploma	36	19.6
Bachelor's degree	60	32.6
Post graduate Degree	57	31.0
Others	3	1.6
<b>Total</b>	<b>184</b>	<b>100.0</b>

The research findings indicate that 8.8% of the respondents had high school education; 6.6% had a certificate; 19.9% had a diploma; 33.1% had an undergraduate degree; and 31.5% had post graduate degree. Three respondents indicated that they had other levels of education. The three respondents who indicated that they had other levels of education were asked to indicate the level of education that they possessed. The responses were as shown in Table 4.5.

*Table 4.5: Other Levels of Education*

Other levels of Education	Frequency	Percentage
CPAK	1	.5
EACE	1	.5
PhD	1	.5
<b>Total</b>	<b>3</b>	<b>1.5</b>

The responses in Table 4.5 indicate that 0.5% of the respondents had CPAK certificate; 0.5% of the respondents had EACE certificate; and 0.5% of the respondents had a PhD. The level of education for the respondents was considered important in this study because the respondents were required to fill in the questionnaire individually. Therefore the data collection procedures used in the study were based on the assumption that the respondents were literate and had basic understanding of the importance of research and therefore they would willingly act as the respondents in the study. Ideally, respondents with postgraduate qualifications have undertaken research projects during their post graduate studies. Respondents with these qualifications who comprised 31% of the respondents were expected to appreciate contributions made by research undertakings and therefore they were expected to assist with the research work especially in encouraging the other respondents to fill in the questionnaires objectively.

In addition, although many respondents with diploma and bachelors qualifications may not have personally undertaken comprehensive research projects, the level of their training allowed them to appreciate the significance of research in the society. Since 84.5% of the respondents had at least diploma level qualifications, then it was anticipated that these respondents would willingly cooperate with the research work. Interviews conducted in the study indicated that respondents with diploma and bachelors level qualifications had basic monitoring and evaluation skills like development of performance indicators and production of quarterly reports.

Further, interviews conducted indicated that respondents with postgraduate qualifications had more advanced monitoring and evaluation skills like undertaking performance evaluation and developing terms of reference for external evaluators of the PC system. From the interviews conducted, the 15.5% of the respondents who either had high school education or college certificates could only fill in PC appraisal forms and largely this contributed to senior management not involving them actively in negotiating and developing performance indicators in their PC targets. However, the interviews revealed that 100% of the respondents had relative understanding of the PC system and in addition, they could all fill in the questionnaires individually objectively.

#### 4.3.5 Distribution of Respondents by Tenure of Service in the Organization

Respondents were asked to indicate how long they had worked in their organizations. The duration an individual had worked in government ministries was considered important in appreciating the concept of the PC system. The data was clustered and categorized as shown in Table 4.6

*Table 4.6: Distribution of Respondents by Tenure of Service in the Organization*

<b>Years of Service</b>	<b>Frequency</b>	<b>Percentage</b>
Less than 1 year	33	18
1 year – 5 years	89	48
6 years – 10 years	31	17
11 years – 15 years	5	3
16 years – 20 years	7	4
21 years – 25 years	4	2
26 years – 30 years	6	3
31 years – 35 years	2	1
Non- responsive	7	4
<b>Total</b>	<b>184</b>	<b>100</b>

The results indicate that 18% of the respondents had worked in their current organization for one year or less while 68% had worked for five years or less. This result implies that 28% of the respondents had worked in the organization for five years and above. Although majority (68%) of the respondents had worked for five years or less in the organization, this was not an indicator of the respondents experience in the public service. Interviews conducted in this study indicated that many respondents had worked in the public sector for more than five years which was considered in this study sufficient to make objective responses on the PC system used in Government Ministries in Kenya. The reason most respondents indicated that they had worked for five years of less in their current organizations was attributed to inter-ministerial transfers mainly caused by reorganization of Government structure in 2008 and 2013. However, although there was reshuffling of employees in 2008 and 2013 in respect to Government Ministries, most departments were largely left intact and were either made full Government Ministries in the 2008 structural expansion or were consolidated to a single Ministry in 2013 (GOK, 2013).

## 4.4 Tests for Statistical Assumptions and Analysis of Likert-Type Data

Pedace (2013) indicates that violation of statistical assumptions can invalidate statistical assumptions. This section shows how tests of normality, multicollinearity, singularity, homoscedasticity and heteroscedasticity were carried out as well as how Type I and Type II errors which occur due to the wrong interpretation of results during tests of various statistics were controlled. In addition, the usage of the Likert Scale in data analysis is also explained in this section.

### 4.4.1 Tests for Normality

Regression analysis assumes that data was collected from normal population (Moriya, 2008). Violation of this assumption would therefore invalidate regression analysis. In this study, Kolmogorov-Smirnov test statistic (KS-test) and Shapiro-Wilk test (SW-test) were carried out to ascertain whether the research data was collected from a normal population. Kolmogorov-Smirnov test statistic (KS-test) determines if two datasets differ significantly without making any assumption about the distribution of data. In addition to calculating the D statistic, KS-test indicates whether the data is normal or lognormal. The test helps researchers to view the data graphically to understand how the data is distributed. The KS-test quantifies a distance between the empirical distribution function of the sample and the cumulative distribution function of the reference distribution, or between the empirical distribution functions of two samples (Corder and Foreman, 2009).

The KS-test for a given cumulative distribution function  $F(x)$  is given by:-

$$D_n = \sup_x |F_n(x) - F(x)|$$

Lopes et al. (2007) indicate that if the sample comes from distribution  $F(x)$  where  $\sup x$  is the supremum (least upper bound) of the set of distances, then  $D_n$  converges to 0 as  $n$  approaches infinity. In addition, under the KS-test statistic, we reject the null hypothesis if  $p < 0.05$ . While testing for normality, the null hypothesis in the study was that the sample population was not normal. In all the variables under investigation,  $p < 0.05$  in which case we reject the null hypothesis and conclude that the samples were picked from a normal population.

To countercheck the validity of the normality tests from KS-test statistic, Shapiro-Wilk tests (SW-test) were carried out. SW-test tests the null hypothesis that a sample:

$$X_1, X_2, X_3, \dots, X_n$$

came from a normally distributed population. The SW test statistic,  $W$ , is given by:

$$W = \frac{(\sum_{i=1}^n a_i x_{(i)})^2}{\sum_{i=1}^n (x_i - \bar{x})^2}$$

Where

$x_i$  is the  $i$ th order statistic and  $\bar{x} = (x_1 + \dots + x_n)/n$  is the sample mean. The constants  $a_i$  are given by:

$$(a_1, \dots, a_n) = \frac{m^T V^{-1}}{(m^T V^{-1} V^{-1} m)^{1/2}}$$

Where

$m = (m_1, \dots, m_2, \dots, m_n)^T$  and  $m_1, m_2, \dots, m_n$  are the expected values of the order statistics of independent and identically distributed random variables sampled from the standard normal distribution while  $V$  is the covariance matrix of those order statistics. While testing whether a population is normal by use of SW-test, statistic, the null hypothesis is rejected if the value of  $W$  is too small (Shapiro and Wilk, 1965). In this study, all the SW-test statistics were approaching 1  $> 0.05$  and hence the null hypothesis that the population was not normal is rejected. In conjunction with the  $W$  values, the p-values are also checked while using the SW-test statistic. In this case, if the p-value is more than the chosen alpha level, the null hypothesis is rejected and concluded that the set of data values are from a normally distributed population (Shapiro and Wilk, 1965). In this study, the alpha level was 0.05 and in all variables,  $p > 0.05$  and hence it was concluded that the research population was normally distributed. The results of Kolmogorov-Smirnov test statistic and Shapiro-Wilk test are shown in Table 4.7.

**Table 4.7: Tests for Normality**

Variable	Kolmogorov-Smirnov <sup>a</sup>			Shapiro-Wilk		
	Statistic	df	Sig.	Statistic	df	Sig.
Organizational Performance	.092	179	.024	.968	179	.089
PC targets	.120	179	.013	.956	179	.077
PC tools	.126	179	.012	.974	179	.076
PC Implementer Participation	.077	179	.012	.990	179	.257
Organizational Structure	.073	179	.022	.987	179	.086
Organizational Culture	.076	179	.013	.986	179	.077
Implementer Attitude	.083	179	.015	.976	179	.083
Implementer M&E Skills	.055	179	.200*	.988	179	.131

a. Lilliefors Significance Correction

\*. This is a lower bound of the true significance

#### **4.4.2 Tests for Multicollinearity and Singularity**

Linear assumptions of singularity and multicollinearity were also checked before undertaking regression analysis through correlations and residual tables generated by SPSS. During data analysis, singularity occurs when an independent variable is formed from a combination of other independent variables. On the other hand, multicollinearity is checked by analyzing the tolerance values under collinearity to ensure that the assumption is not violated (Asteriou and Hall, 2011). In particular,  $1 - R^2$  values should be more than 0.1 which implies low multicollinearity (Shirley et al., 2005). If two variables are perfectly collinear, singularity is said to exist and an exact linear relationship exists between the two predictor variables with a correlation coefficient equal to 1.0 or -1.0. On the other hand, Pedace (2013) argues that multicollinearity occurs when the correlation coefficient of two predictor variables is equal to or greater than 0.7. In this study, multicollinearity was non-existent between the predictor variables. Correlations and residual tables that were used to test for collinearity are attached as Appendix 6.

#### **4.4.3 Tests for Homoscedasticity and Heteroscedasticity**

Scatter diagrams were plotted prior to undertaking correlation analysis to counter check homoscedasticity and heteroscedasticity. In statistics, a sequence of random variables is homoscedastic if all random variables in the sequence have the same finite variance. Although the assumption of homoscedasticity simplifies mathematical modelling, Moriya (2008) argues that serious violations in homoscedasticity may result in overestimating the goodness of fit as measured by the Pearson coefficient although this does not invalidate regression results. In this study, homoscedasticity was checked by looking at scatterplots between each predictor variable and the dependent variable to ascertain that the cluster of points were approximately the same width in the residuals plots derived by SPSS.

Heteroscedasticity is the absence of homoscedasticity. A collection of random variables is heteroscedastic if there are sub-populations that have different variabilities from others. Heteroscedasticity in regression analysis can invalidate statistical tests of significance that assume that the modelling errors are uncorrelated and normally distributed and that their variances do not vary with the effects being modelled. In Spherical-Homoscedastic Distributions, Hamsici and Aleix (2007) argue that the correlation and residual tables generated by SPSS that are used to test for collinearity can also be used to check for existence of heteroscedasticity. In this study, this assumption was not violated. Correlation and residual tables are attached as Appendix 6.

#### **4.4.4 Control of Type I Error and Type II Error**

For statistical findings to be valid, a researcher has to control Type I and Type II errors which occur due to the wrong interpretation of results during tests of various statistics. Type I error occurs when the null hypothesis is rejected when it was supposed to be accepted while Type II error occurs when the null hypothesis is accepted when it was supposed to be rejected (Larry, 2013). In this study, Type I error was minimized by using a confidence level of 95% implying that the standard variate was 1.96 and the sample proportion ( $p$ ) was less than or equal to 0.05 as recommended by Larry (2013). Type II error was minimized by taking a large enough sample of 310 respondents as recommended by Sekaran's (2003) sample size criterion.

#### 4.4.5 Analysis of Likert-Type Data

The interpretation of research findings by use of Likert Scale determine the accuracy of results. In the self-administered questionnaire in this study, nine of the sections comprised of items in a Likert type scale format using a scale of SD – Strongly Disagree; D – Disagree; N – Neutral; A – Agree; and SA – Strongly Agree as recommended by Alan (2001). The items in the Likert Scale were both affirmative and negation statements. The items that were phrased in negation were done so to keep the respondent alert while responding to the research instruments. However, during the data analysis by use of SPSS, the scale was reversed for the negatively phased statements to ensure uniformity in computation of means and standard deviations. Each of the nine sections of Likert type scale format had ten items. Items were limited to ten so as to increase the response rate. Frauke et al. (2008) argue that when a questionnaire is too lengthy, the response rate is low and the quality of the responses is compromised. In addition, Frauke et al. (2008) propose that ten objectively constructed items for each research variable in a Likert type scale are sufficient to measure a desired construct where mathematical modelling is involved in data analysis thus necessitating the need for coalescing indicators of various variables.

In the study on equidistance of Likert-type scales and validation of inferential methods using experiments and simulations, Lantz (2013) indicates that Likert-type data are often assumed to be equidistant by applied researchers so that they can use parametric methods to analyse the data. Since the equidistance assumption is rarely tested, Lantz (2013) argues that the validity of parametric analyses of Likert-type data is often unclear and that the preferred statistical method to analyse Likert-type data depends on the nature of their non-equidistance as well as their skewness. In addition, during analysis of Likert-type data, Carifio and Rocco (2007) indicates Strongly Disagree (SD)  $1 < SD < 1.8$ ; Disagree (D)  $1.8 < D < 2.6$ ; Neutral (N)  $2.6 < N < 3.4$ ; Agree (A)  $3.4 < A < 4.2$ ; and Strongly Agree (SA)  $4.2 < SA < 5.0$ . This scale gives an equidistance of 0.8. This weighting criteria of responses of Likert-type data advanced by Carifio and Rocco (2007) were followed in data analysis in this study in the interpretation of results obtained by use of Likert scale.

#### **4.5 Analysis on Organizational Performance**

Organizational performance was identified in this study as the dependent variable. Theoretical and empirical review in this study indicated that customer satisfaction, employee satisfaction and involvement in corporate social responsibilities are pointers of organizational performance. Data was therefore collected to measure these aspects of organizational performance. In addition, customer satisfaction, employee satisfaction and involvement in corporate social responsibilities have been identified as indicators of performance in the Sector Performance Standards (SPS) which guides the evaluation of performance of various actors in the public sector in Kenya based on the PC system (GOK, 2010).

To measure organizational performance in Ministries of Government in Kenya, ten items were developed in the self-administered questionnaire. Item 6a sought to establish the extent to which the performance of the respondent's department was satisfactory. The mean score was 4.1902 while the standard deviation was 0.86946. This result indicates that the majority of the respondents agreed that the performance of their department was satisfactory. Item 6b sought to establish the extent to which the annual targets set in the PCs were achieved. The mean score was 4.0055 while the standard deviation was 0.86759. This result indicates that the majority of the respondents agreed that the annual targets set in the PCs were achieved.

Item 6c sought to establish the extent to which the respondent was satisfied as an employee in a Ministry of the Government of Kenya. The mean score was 3.8297 while the standard deviation was 0.97403. This result indicates that the majority of the respondents agreed that they were satisfied as employees in Ministries of the Government of Kenya. Item 6d sought to establish the extent to which the rating of customer satisfaction by external evaluators was satisfactory. The mean score was 3.7877 while the standard deviation was 0.86093. This result indicates that the majority of the respondents agreed that the rating of customer satisfaction by external evaluators was satisfactory.

Item 6e sought to establish the extent to which gender equity existed in all sections in departments of Government Ministries in Kenya. Due to the negation format of this item, the scale was reversed during analysis to ensure uniformity in computation of mean and standard deviation. The mean score was 3.2473 while the standard deviation was 1.17024. This result indicates that the majority

of the respondents were neutral on whether gender equity existed in all sections in departments of Government Ministries in Kenya. Item 6f sought to establish the extent to which Government Ministries regularly received complaints from customers. The mean score was 3.3202 while the standard deviation was 1.11169. This result indicates that the majority of the respondents were neutral on whether Government Ministries regularly received complaints from customers. Kleiman (2010) indicates that while receiving of feedback is positive, receiving of complains is negative in an organization.

Item 6g sought to establish the extent to which the work environment in Government Ministries in Kenya was conducive for employees. This item was phrased in a negation format. However, during the data analysis by use of SPSS, the scale was reversed to ensure uniformity in computation of mean and standard deviation. The mean score was 3.4581 while the standard deviation was 1.26854. This result indicates that the majority of the respondents agreed that the work environment in Government Ministries in Kenya was conducive for employees. Item 6h sought to establish the extent to which respondent participated in corporate social responsibilities every year. The mean score was 2.5028 while the standard deviation was 1.26480. This result indicates that the majority of the respondents did not agree that they participated in corporate social responsibilities every year.

Item 6i sought to establish the extent to which the terms of employment of employees in Government Ministries were satisfactory. This item was phased in negation format. However, during the data analysis by use of SPSS, the scale was reversed to ensure uniformity in computation of mean and standard deviation. The mean score was 3.5301 while the standard deviation was 1.18966. This result indicates that the majority of the respondents agreed that the terms of employment of employees in Government Ministries were satisfactory. Item 6j sought to establish the extent to which Ministries of Government participated in HIV/AIDS campaigns. This item was negatively worded to keep the respondents alert while responding to the items in the research instrument. This item was negatively phased. However, during the data analysis by use of SPSS, the scale was reversed to ensure uniformity in computation of mean and standard deviation. The mean score was 3.5435 while the standard deviation was 1.34622. This result indicates that the majority of the respondents agreed that Ministries of Government participated in HIV/AIDS campaigns.

The Cronbach Alpha Reliability Coefficient for these ten items that were used to measure organizational performance in Ministries of Government in Kenya was 0.633. The composite mean score for these items was 3.54151 while the composite standard deviation was 0.40533. The implication of this result in respect to the study is that respondents agreed organizational performance of Government Ministries in respect to customer satisfaction, employee satisfaction and involvement in social responsibilities was positive. These statistics are shown in Table 4.8.

**Table 4.8: Means and Standard Deviations for Organizational Performance**

No	Item	N	Minimum	Maximum	Mean	Std. Deviation
6a	The performance of our department is satisfactory	184	1.00	5.00	4.1902	.86946
6b	We always achieve the annual targets set in the PCs as a department	183	1.00	5.00	4.0055	.86759
6c	I am satisfied as an employee in our department	182	1.00	5.00	3.8297	.97403
6d	The rating of customer satisfaction by external evaluators in our department is always satisfactory	179	1.00	5.00	3.7877	.86093
6e	There is gender equity in all sections in our department	182	1.00	5.00	3.2473	1.17024
6f	We regularly receive complains as a department from our customers (R)	178	1.00	5.00	3.3202	1.11169
6g	The work environment in our department is not always conducive for employees (R)	179	1.00	5.00	3.4581	1.26854
6h	We participate in corporate social responsibilities every year	179	1.00	5.00	2.5028	1.26480
6i	The terms of employment in our department are not satisfactory (R)	183	1.00	5.00	3.5301	1.18966
6j	We do not participate in HIV/AIDS campaigns in our department (R)	184	1.00	5.00	3.5435	1.34622
	Valid N (listwise)	162				
	Alpha					
	Coefficient = 0.633					
	Composite Mean Score = 3.54151					
	Composite Standard Deviation = 0.40533					

R: The scale of the item was reversed during analysis

Although the alpha coefficient for the items under this variable was 0.633, the overall reliability coefficient for the questionnaire was 0.7052 (Table 3.2). That the alpha coefficient for the items in the dependent variable was 0.633 is an indicator that some items were factual statements that did not measure opinions rather than an indicator of absence of internal consistency of the items under this variable. From the decision level measurement scale used in this study, a composite mean of 3.54151 of the dependent variable indicates that on the overall, respondents agreed that organizational performance in Ministries of Government was satisfactory. This finding is supported by other findings in this study. For instance respondents indicated that the PC system in Government Ministries delivered results for Kenya. In addition, results from this study indicated that PC tools positively influenced organizational performance.

However, respondents interviewed indicated that Government Ministries were not actively involved in corporate social responsibilities. Results from interviews concurred with those from the descriptive analysis that indicated that Government Ministries do not actively participate in corporate social responsibilities every year. Participation in corporate social responsibilities was identified in this study as an indicator of organizational performance. In addition, respondents were neutral on whether there was gender equity in Government Ministries. Although results of the distribution of respondents by gender indicated 42.1% of the respondents were females, gender equity is a broader concept that goes beyond compliance with the affirmative action of at least 30% of either gender in terms of employment. The concept of gender equity also includes equitable opportunities for promotions, positions, career growth and development as well as participation in managerial decisions equitably between the two genders. Interviews conducted indicated that the requirement of 30% of either gender in managerial decision making had not fully been implemented. This has an implication on employee satisfaction.

Further, although respondents indicated that customer satisfaction rating by external evaluators was satisfactory, descriptive statistics indicated that respondents were neutral on whether they regularly received complaints from external customers. Kleiman (2010) indicates that while receiving of feedback is positive, receiving of complains is negative in an organization. Respondents interviewed indicated that despite customer satisfaction ratings being ranked favourably by external evaluators, service delivery in Government Ministries ought to be enhanced and aligned with the core mandate of the Ministries.

Respondents interviewed indicated that due to the ranking criteria of the PC system, tools used to evaluate performance in performance contracts are often compromised. For instance, respondents interviewed indicated that the dockets entrusted with employee satisfaction surveys and customer satisfaction surveys often compromise outsourced consultants to rate their Ministries favourably due to the aspect of evaluation ranking of Ministries in the PC system. Respondents further indicated that surveys that are used to rate the extent to which Government Ministries participate in social responsibilities like drug and substance abuse surveys also get compromised. In addition, respondents indicated that although Government Ministries have policies for ensuring customers satisfaction through consultative management like enacting anti-corruption reporting boxes, the analysis of the findings, which is meant to enhance service delivery, is equally compromised.

Further, respondents indicated that the hiring of the external evaluators is not transparent enough to deliver useful results for enhancing organizational performance. Interviews conducted also showed many un-synchronized Government interventions intended to enhance performance of Government Ministries like National Integrated Management Evaluation System (NIMES), electronic management project management information systems (EPROMIS) and Vision 2030. These unsynchronized interventions make it difficult to ascertain where the buck stops with unsatisfactory performance as senior management point fingers to the other performance management Government interventions.

#### **4.5.1 Discussions on Organizational Performance**

The purpose of this study was to investigate the influence of contextual and cognitive factors on the relationship between PC system and organizational performance. The dependent variable in the study was organizational performance. Theoretical and empirical literature reviewed in the study indicated that customer satisfaction, employee satisfaction and involvement in corporate social responsibilities are indicators of organizational performance. In performance management and agency governance for Africa development, Balogun (2008) indicates that there are many interventions used by governments to enhance performance in the public sector of which performance contracts is one of them. Nuguti (2009) indicates that the PC system in Kenya is a performance measurement tool. Njiru (2008) associates the relative economic growth since 2003

in Kenya to the PC system. However, Obong'o (2009) argues that despite the implementation of the PC system in Kenya, service delivery was still unsatisfactory. While descriptive statistics in this study indicates organizational performance in Government Ministries was positive, a composite mean of 3.54151 in a Likert Type scale whose interval for the 'Agree' response ranged between 3.4 and 4.2 suggests a satisfaction level that was relatively weak. In the interpretation of results obtained from Likert type data Lantz (2013) indicates that the rating obtained by a Likert-Scale is a pointer of the strength of the relationships under investigation.

While organizational performance in Government Ministries was positive throughout the implementation period of the PCs, with an interruption in the 2007/2008 Financial year associated with post-electoral violence (PEV), respondents interviewed indicated that it was difficult to ascertain which intervention delivered results. This is because National Integrated Management Evaluation System (NIMES), electronic management project management information systems (EPROMIS) and Vision 2030 were all meant to help enhance organizational performance in Government Ministries in Kenya through performance measurement. There is therefore need to synchronize all performance measurement interventions and re-align them with the Ministries' core mandate in consultation with members of the public.

In addition, although respondents indicated that performance contracts had improved performance of Government Ministries, due to the ranking criteria in the PC system, interviews conducted indicated that the focus of the evaluation indicators may not necessarily reflect the core mandate of Government Ministries. This is because PC implementers are more concerned with performance evaluation while setting annual targets rather than implementing the core mandate of the Ministries. The implication of this is that although respondents may indicate performance was satisfactory based on the PC evaluation rating criteria, this may not necessarily reflect the national development agenda. Performance indicators used in the PC system may therefore be spreading too thinly at the expense of customer satisfaction, employee satisfaction and social responsibilities. Another possible interpretation of this finding is that even if the rating by outsourced consultants on customer satisfaction, employee satisfaction and involvement in social responsibilities may be favourable, the performance indicators used or the survey methodology may not be exhaustive.

## **4.6 Analysis on Influence of PC System on Organizational Performance**

Research objective one was on the influence of PC system on organizational performance. The constructs under the PC system were: PC Targets; PC Tools and PC Implementer Participation. In this section therefore, the influence of each of these three constructs as independent variables on organizational performance was examined. In addition, the combined influence of PC Targets; PC Tools and PC Implementer Participation on organizational performance, a concept in this study referred to as the PC System, was examined.

### **4.6.1 Analysis on Influence of PC Targets on Organizational Performance**

In this section, descriptive and inferential statistics on the influence of PC targets on organizational performance were analyzed. In addition, discussions on the influence of PC targets on organizational performance were done based on the research analysis.

#### **4.6.1.1 Descriptive Analysis on Influence of PC Targets on Organizational Performance**

Both theoretical and empirical review indicated that PC targets influence organizational performance. Ten items were developed to measure the extent of this relationship. Item 8a sought to establish the extent to which targets are set in performance contracts. The mean score was 4.4144 while the standard deviation was 0.66634. This result indicates that the majority of the respondents strongly agreed that targets are set in performance contracts.

Item 8b sought to establish the extent to which PC targets were attained in Ministries of Government in Kenya. This item was negatively phrased to ensure that the respondent was alert while responding to the items in the research instrument. However, during the analysis of data, the scale was reversed to ensure uniformity in computation of means and standard deviations. The mean score was 4.2090 while the standard deviation was 0.91473. This result indicates that the majority of the respondents strongly agreed that targets set in performance contracts were attained.

Item 8c sought to establish the extent to which the respondent attained PC targets. The mean score was 4.2044 while the standard deviation was 0.65590. This result indicates that the majority of the respondents strongly agreed that they attained the targets set in performance contracts. Item 8d sought to establish the extent to which PC targets were measurable. The mean score was 4.1326

while the standard deviation was 0.83937. This result indicates that the majority of the respondents agreed that targets set in performance contracts were measurable.

Item 8e sought to establish the extent to which the respondent signed performance contracts annually. The mean score was 4.0829 while the standard deviation was 1.06395. This result indicates that the majority of the respondents agreed that they signed performance contracts annually. Item 8f sought to establish the extent to which PC targets were attainable. The mean score was 4.0820 while the standard deviation was 0.80442. This result indicates that the majority of the respondents agreed that targets set in performance contracts were attainable. Item 8g sought to establish the extent to which PC targets were realistic. The mean score was 4.0333 while the standard deviation was 0.85155. This result indicates that the majority of the respondents agreed that targets set in performance contracts were realistic.

Item 8h sought to establish the extent to which PC targets were attainable. This item was phrased in negation to keep the respondent alert while responding to the research instruments but during the data analysis by use of SPSS, the scale was reversed. The mean score was 3.8883 while the standard deviation was 0.98233. This result indicates that the majority of the respondents agreed that targets set in performance contracts were attainable. This result is consistent with results obtained from a similar item, 8f, which was positively worded although the score was slightly lower which could indicate that some respondents might not have been alert while responding to item 8h since it was negatively phrased.

Item 8i sought to establish whether PC targets were demanding. Since this item was negatively phrased, the scale was reversed in the analysis to maintain uniformity of the mean and the standard deviation. The mean score was 3.3352 while the standard deviation was 1.10887. This result indicates that the majority of the respondents were neutral on whether the PC targets were demanding. Item 8j sought to establish the extent to which measurement of PC targets needed to be changed. The mean score was 3.0437 while the standard deviation was 1.08853. This result indicates that the majority of the respondents were neutral on the extent to which PC targets needed to be changed.

The Cronbach Alpha Reliability Coefficient for these ten items that were used to measure influence of PC targets on organizational performance was 0.805. The composite mean score for these items

was 3.9374 while the composite standard deviation was 0.53424. This indicates that majority of the respondents indicated that they signed PC targets annually and that the PC targets in Government Ministries are attainable, realistic and measurable. That the reliability coefficient for these items was 0.805 indicates internal consistencies of the items that were used to indicate the direction of this variable in respect to the research objectives. The descriptive statistics are shown in Table 4.9.

**Table 4.9: Means and Standard Deviations for PC Targets and Organizational Performance**

No	Item	N	Minimum	Maximum	Mean	Std. Deviation
8a	Targets are set in performance contracts	181	1.00	5.00	4.4144	.66634
8b	No one attains PC targets in our department (R)	177	1.00	5.00	4.2090	.91473
8c	I attain my PC targets	181	2.00	5.00	4.2044	.65590
8d	PC targets are measurable	181	1.00	5.00	4.1326	.83937
8e	I sign performance contracts annually	181	1.00	5.00	4.0829	1.06395
8f	PC targets are attainable	183	1.00	5.00	4.0820	.80442
8g	PC targets are realistic	180	1.00	5.00	4.0333	.85155
8h	Targets set in the PC system are not attainable (R)	179	1.00	5.00	3.8883	.98233
8i	PC targets are too demanding (R)	182	1.00	5.00	3.3352	1.10887
8j	Measurement of PC targets need to be changed	183	1.00	5.00	3.0437	1.08853
	Valid N (listwise)	163				
	Alpha					
	Coefficient = 0.805					
	Composite Mean Score = 3.9374					
	Composite Standard Deviation = 0.53424					

R: The scale of the item was reversed during analysis

#### **4.6.1.2 Inferential Analysis on Influence of PC Targets on Organizational Performance**

Objective 1a of the study was designed to establish the relationship that exists between performance contracting system and organizational performance. PC Targets were identified in this study as indicators of PC system. The literature that was reviewed in this study as well as theoretical reasoning associated setting of PC targets with organizational performance. The effectiveness in PC targets was found to be influenced by precision, measure-ability and attainability of the PC targets. Organizational performance on the other hand was indicated by the rate of customer satisfaction, rate of employee satisfaction and number of corporate social responsibilities carried out by the organization.

Indications from both the theoretical and empirical literature pointed to a positive significant influence between PC targets and organizational performance. Following the theoretical arguments, the following hypothesis was formulated and tested:

#### **Hypothesis 1a:**

H<sub>0</sub>: There is no significant relationship between PC Targets and organizational performance

H<sub>A</sub>: There is a significant relationship between PC Targets and organizational performance

#### **Correlation Model**

The corresponding mathematical model for the hypotheses was identified as follows:

Organizational Performance = f (PC Targets)

$$y = \beta_0 + \beta_1 X_1 + \varepsilon$$

The data that was used to test this hypotheses were collected using items 8a to 8j measuring the influence of PC targets on organizational performance (Appendix 8). In the Likert type scale that was used, each item consisted of a statement that measured the extent to which PC targets influenced organizational performance. Respondents were asked to indicate by way of ticking the appropriate statement using a scale of 5 to 1 where 5 represented SA – Strongly Agree; 4 represented A – Agree; 3 represented N – Neutral; 2 represented D – Disagree; while 1 represented SD – Strongly Disagree.

The Pearson’s Product Moment Correlation coefficients showed the value of  $r = 0.003$ . Shirley et al. (2005) indicates that for a weak correlation, “r” ranges from  $\pm 0.10$  to  $\pm 0.29$ ; in a moderate correlation, “r” ranges between  $\pm 0.30$  and  $\pm 0.49$ ; while in a strong correlation, “r” ranges from  $\pm 0.5$  and  $\pm 1.0$ . The positive or negative sign points to the direction of the relationship. It can therefore be argued that for  $r < 0.1$ , there was no correlation between the two variables under investigation. Since  $r = 0.003$  in this case, then there was no correlation between PC targets and organizational performance.

When the hypothesis was tested at 3.1% confidence interval given that the p value was 0.969;  $F(1, 181) = 0.001$ . This confidence interval was much lower than the required minimum threshold in this study of 95% in determination of the existence of a correlation model. A correlation model therefore does not exist between PC targets and organizational performance. The null hypothesis was therefore accepted and it was concluded that there was no significant relationship between PC Targets and organizational performance. Table 4.10 presents the correlation results for PC targets and organizational performance.

**Table 4.10: Correlation Results for the Influence of PC Targets on Organizational Performance**

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	3.183	.225		14.167	.000
	PC targets	-.002	.057	-.003	-.039	.969

$F(1, 181) = 0.001$  at level of significance,  $p = 0.969$ ;  $r = 0.003$

Although correlation analysis indicates that there is no significant relationship between PC targets and organizational performance, with a composite mean of 3.9374, descriptive analysis indicated that respondents agreed that targets set in the PC system are attainable, measurable and realistic. In addition, the descriptive analysis indicated that respondents signed PC targets annually and that they attained the targets set in performance contracts. However, the descriptive statistics indicate that respondents were neutral on whether PC targets were too demanding and whether they needed to be changed. Interviews conducted in this study indicated that respondents were not comfortable with the process of PC targets. Respondents indicated that organizational performance would still be achieved without setting individual performance targets.

Further, respondents interviewed indicated that most employees in Government Ministries signed PCs as an obligation but their work plan was not directed by targets set in performance contracts. Since ranking of Ministries was introduced through evaluation of PC targets, respondents ended up setting unchallenging targets which explains why respondents indicated that they achieved PC targets. It was also indicated in the interviews that some of the targets set in the PCs were not informed by the organizational mandate and, therefore, even achieving them did not necessarily enhance customer satisfaction, employee satisfaction and involvement in social responsibilities. This means that although a given Ministry would be ranked favourably on the basis of attainability of PC annual targets, the effect was not necessarily experienced by either internal or external customers.

#### **4.6.1.3 Discussions on Influence of PC Targets on Organizational Performance**

Research objective one of the study was to examine the extent to which performance contracting system influence organizational performance in Ministries of Government in Kenya. Four hypotheses were formulated under this research objective. Hypothesis 1a under research objective one was that there was a significant relationship between PC Targets and organizational performance. From the goal setting theory examined in this study, setting targets is a prerequisite to organizational performance (Drucker, 1954; Luthan, 1985; Van et al., 1996; Kleiman and Lawrence, 2010). On the same note, Ebeclin and Tatum (2005) argue that if you cannot measure targets, you are probably rewarding non-performance. In addition, proponents of Results Theory

such as Mohan (2001) postulated that targets need not only to be set but the process must be participatory for organizational performance to be enhanced.

Critics of setting targets for employees such as Lim et al. (2010) and Bem (2011) argue that setting targets is counter-productive. Such views suggest that setting targets make employees feel policed by management. Results from this study concur with the critics of setting targets for employees in that PC targets negatively influence organizational performance. Not only did the process of setting PC targets negatively influence performance as an independent variable, but a combination of PC targets with any other predictor variable reflected the counter-productive role played by setting targets for employees in Government Ministries. Although Mohan (2001) and Kusek and Rist (2004) emphasized on the need for performance management to be participatory, the results from this study indicate that setting PC targets even in a participatory process do not lead to organizational performance if targets are set focusing on the ranking evaluation criteria of PCs rather than to enhance service delivery to customers, conducive work environment for employees and participation in corporate social responsibilities.

In addition to the quantitative analysis on the influence of PC targets on organizational performance, interviews conducted in this study indicated that although employees in Ministries of Government supported the PC system, they were reluctant with the concept of setting individual targets. This reluctance leads to setting targets that are not necessarily addressing the core mandate of the Ministries but rather the evaluation criteria to ensure favourable ranking in the evaluation process. This implies that although Ministries may be ranked highly during evaluation by external evaluators, the results may not necessarily be experienced by the public they were meant to serve. The criteria for setting targets therefore need to be aligned with the core mandate of Government Ministries to be responsive to the needs of the country. For instance, respondents indicated that although the Ministry of Defense was ranked favourably in the 2010 / 2011 Financial Year, the core mandate of the Ministry was still wanting in that external threats were being experienced virtually from all international boundaries as well as within the country.

## **4.6.2 Analysis of Influence of PC Tools on Organizational Performance**

In this section, descriptive and inferential statistics on the influence of PC tools on organizational performance were analyzed. In addition, discussions on the influence of PC tools on organizational performance were done based on the research analysis.

### **4.6.2.1 Descriptive Analysis on Influence of PC Tools on Organizational Performance**

Theoretical and empirical literature in this study indicated that PC tools influence organizational performance. Ten items were developed to measure the extent of this relationship. Item 9a sought to establish the extent to which the respondent was familiar with the tools used in the PC system. The mean score was 4.1421 while the standard deviation was 0.74975. This result indicates that the majority of the respondents agreed that they were familiar with the tools used in the PC system. Item 9b sought to establish whether respondents were comfortable using the tools in the PC system. The mean score was 4.0055 while the standard deviation was 0.86124. This result indicates that the majority of the respondents agreed that they were comfortable using the tools in the PC system.

Item 9c sought to establish whether the tools used in the PC system were relevant. The mean score was 3.8564 while the standard deviation was 0.78974. This result indicates that the majority of the respondents agreed that the tools used in the PC system were relevant. Item 9d sought to establish whether the tools used in the PC system were appropriate for measuring performance. The mean score was 3.7556 while the standard deviation was 0.84313. This result indicates that the majority of the respondents agreed that the tools used in the PC system were appropriate for measuring performance. Item 9e sought to establish whether the tools used in the PC system were simple to use. The mean score was 3.7111 while the standard deviation was 0.91840. This result indicates that the majority of the respondents agreed that the tools used in the PC system were simple to use.

Item 9f sought to establish whether the tools used in the PC system were reliable for measuring performance. The mean score was 3.6983 while the standard deviation was 0.83366. This result indicates that the majority of the respondents agreed that the tools used in the PC system were reliable for measuring performance. Item 9g sought to establish whether the tools used in the PC system were consistent. The mean score was 3.6556 while the standard deviation was 0.92345. This result indicates that the majority of the respondents agreed that the tools used in the PC system were consistent. Item 9h sought to establish whether employees in Ministries of Government were

comfortable with the tools used in the PC system. The mean score was 3.6209 while the standard deviation was 0.87583. This result indicates that the majority of the respondents agreed that employees in Ministries of Government were comfortable with the tools used in the PC system.

Item 9i sought to establish whether the results obtained using PC tools were consistent. The mean score was 3.4778 while the standard deviation was 0.96564. This result indicates that the majority of the respondents agreed that the results obtained using PC tools were consistent. Item 9j sought to establish whether tools in the PC system needed to be restructured. The mean score was 2.7430 while the standard deviation was 0.98921. This result indicates that the majority of the respondents were neutral on whether the tools in the PC system needed to be restructured.

The Cronbach Alpha Reliability Coefficient for these ten items that were used to measure influence of PC tools on organizational performance was 0.86. This reliability coefficient of 0.86 indicates that there was internal consistency with the items that were used to measure the validity, reliability and simplicity of the PC tools. The composite mean score for these items was 3.6636 while the composite standard deviation was 0.58165. The implication of this finding is that respondents agreed that the tools used in the PC system were valid, reliable and simple to use by the implementers. However, since in the scale used in the study the weighting component of 'agree' was ranging between 3.5 and 4.4, then although the respondents indicated 'agree' on this variable, the weighting level at 3.6636 was relatively weak. The descriptive statistics are shown in Table 4.11.

**Table 4.11: Means and Standard Deviations for PC Tools and Organizational Performance**

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<b>No</b>	<b>Item</b>	<b>N</b>	<b>Minimum</b>	<b>Maximum</b>	<b>Mean</b>	<b>Std. Deviation</b>
9a	I am familiar with the tools in the PC system	183	2.00	5.00	4.1421	.74975
9b	I am comfortable using the tools in the PC system	183	1.00	5.00	4.0055	.86124
9c	The tools used in the PC system are relevant	181	2.00	5.00	3.8564	.78974
9d	The tools used in the PC system are appropriate for measuring performance	180	1.00	5.00	3.7556	.84313
9e	The tools used in the PC system are simple to use	180	1.00	5.00	3.7111	.91840
9f	Tools used in the PC system are reliable for measuring performance	179	1.00	5.00	3.6983	.83366
9g	The tools used in the PC system are consistent	180	1.00	5.00	3.6556	.92345
9h	Employees in our department are comfortable with the tools used in the PC system	182	1.00	5.00	3.6209	.87583
9i	Results obtained using PC tools are consistent	180	1.00	5.00	3.4778	.96564
9j	Tools used in the PC system need to be re-structured	179	1.00	5.00	2.7430	.98921
	Valid N (listwise)	165				
	Alpha					
	Coefficient = 0.86					
	Composite Mean Score = 3.6636					
	Composite Standard Deviation = 0.58165					

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#### 4.6.2.2 Inferential Analysis on Influence of PC Tools on Organizational Performance

Objective 1b of the study was designed to establish the relationship that exists between performance contracting system and organizational performance. PC Tools were identified in this study as indicators of PC system. The literature that was reviewed in this study as well as theoretical reasoning associated validity, reliability and simplicity of PC tools with organizational performance. Organizational performance on the other hand was indicated by the rate of customer satisfaction, rate of employee satisfaction and number of corporate social responsibilities carried out by the organization.

Indications from both the theoretical and empirical literature pointed to a positive significant influence between PC tools and organizational performance. Following the theoretical arguments, the following hypothesis was formulated and tested:

##### **Hypothesis 1b:**

H<sub>0</sub>: There is no significant relationship between PC Tools and organizational performance

H<sub>A</sub>: There is a significant relationship between PC Tools and organizational performance

##### **Correlation Model**

The corresponding mathematical model for the hypotheses was identified as follows:

Organizational Performance = f (PC Tools)

$$y = \beta_0 + \beta_2 X_2 + \varepsilon$$

The data that was used to test this hypotheses were collected using items 9a to 9j measuring the influence of PC tools on organizational performance (Appendix 8). In the Likert type scale that was used, each item consisted of a statement that measured the extent to which PC tools influenced organizational performance. Respondents were asked to indicate by way of ticking the appropriate statement using a scale of 5 to 1 where 5 represented SA – Strongly Agree; 4 represented A – Agree; 3 represented N – Neutral; 2 represented D – Disagree; while 1 represented SD – Strongly Disagree.

The Pearson’s Product Moment Correlation coefficients showed the value of  $r = 0.193$ . Shirley et al. (2005) indicates that for a weak correlation, “r” ranges from  $\pm 0.10$  to  $\pm 0.29$ ; in a moderate correlation, “r” ranges between  $\pm 0.30$  and  $\pm 0.49$ ; while in a strong correlation, “r” ranges from  $\pm 0.5$  and  $\pm 1.0$ . The positive or negative sign points to the direction of the relationship. Since  $r = 0.193$ , then there was a correlation between PC tools and organizational performance. However, since  $0.1 < r < 0.29$  the correlation between PC tools and organizational performance was relatively a weak relationship.

When the hypothesis was tested at 99.1% confidence interval given that the p value was 0.009;  $F(1, 181) = 6.9$ . This confidence interval was much higher than the required minimum threshold in this study of 95% in determination of the existence of a correlation model. The model therefore indicates 99.1% confidence that PC tools influence organizational performance. The null hypothesis was therefore rejected and it was concluded that there was a significant relationship between PC Tools and organizational performance. By substituting the beta value as well as the constant term, the proceeding correlation model was as follows:

$$y = 2.684 + 0.134X_2$$

From the emerging correlation model, a unit % increase in implementation of PC Tools ( $X_2$ ) would result to 13.4% increase in organizational performance ( $y$ ). Therefore PC tools significantly influence organizational performance. Table 4.12 presents the correlation results for the influence of PC tools on organizational performance.

**Table 4.12: Correlation Results for the Influence of PC Tools on Organizational Performance**

Model	Unstandardized Coefficients		Standardized Coefficients		t	Sig.
	B	Std. Error	Beta			
1 (Constant)	2.684	.189			14.195	.000
PC tools	.134	.051	.192		2.627	.009

$F(1, 181) = 6.900$  at level of significance  $p = 0.009 < 0.05$ ; ;  $r = 0.193$

Although both descriptive and inferential analysis pointed to a positive relationship between PC tools and organizational performance, interviews conducted in this study indicated that results obtained from the tools used in the evaluation of the PC system may not necessarily be reliable and valid. Respondents indicated that reports written from surveys that are supposed to rate customer satisfaction, employee satisfaction and involvement in corporate social responsibilities are at times compromised to indicate predetermined results. The implication of such attempts is that although a given Ministry may be evaluated and ranked favourably by external evaluators, the results may not be useful in enhancing organizational performance. In addition, although respondents indicated that PC tools were consistent, with a mean of 3.4778 bearing in mind that the 'Agree' response in the Likert scale used in this study ranged between 3.4 and 4.2; then this rating, though positive, was relatively weak. This implies that there was still need to enhance the reliability of the PC tools to accurately measure the PC intents.

However, in respect to the tools used in development and implementation of performance indicators like appraisal forms signed between unit heads and the general employees, respondents interviewed indicated that the PC tools at this level are simple to use, reliable and valid to measure the desired constructs. Findings from interviews conducted concurred both with descriptive and inferential statistics obtained that the usage of PC tools positively influenced organizational performance. However, although respondents were neutral on whether tools used in the PC system needed to be restructured in the descriptive analysis, respondents interviewed indicated that tools used in the PC system should be contextualized to reflect a Ministry's mandate and mission rather than generalizations in the usage of PC tools.

#### **4.6.2.3 Discussions on Influence of PC Tools on Organizational Performance**

Research objective one of the study was to examine the extent to which performance contracting system influence organizational performance in Government Ministries in Kenya. Four hypotheses were formulated under research objective one. Hypothesis 1b under research objective one was that there was a significant relationship between PC Tools and organizational performance. Results of this study indicated that PC tools influence organizational performance. As such, Hypothesis 1b in this study that there was a significant relationship between PC Tools and organizational

performance was accepted. Therefore this study agrees with arguments by Nuguti (2009) that tools used to measure performance should be valid and reliable and also confirms studies carried out by Balogun (2003) that indicated that performance management tools should not only be valid and reliable but also simple to use by the users. In addition, the findings concur with Social Technical Theory examined in this study. Social Technical Theory links performance with the technical system which comprises of organizational tools, techniques and knowledge (Delmas and Offel, 2008).

Although in this study PC tools was the factor with the highest influence on organizational performance at 13.4%, other factors that were not tested in this study contributed more to organizational performance in Government Ministries. This implies that although PC tools contributed to organizational performance, there were other factors that were not investigated in this study that influenced organizational performance in Government Ministries. In addition, organizational performance of Government Ministries could have been influenced by other performance systems like National Integrated Management Evaluation System (NIMES), electronic management project management information systems (EPROMIS) and Vision 2030. There is therefore need to synchronize the performance management systems in Government Ministries to enhance coordination of performance management in realization of ministerial goals.

Additionally, although descriptive data indicated that respondents agreed that the PC tools were consistent, interviews conducted were conservative on the reliability of the tools used in the PC system. This implies that the reliability of the PC tools need to be enhanced to improve organizational performance. Reliability of the PC tools can be achieved by making the PC system more participatory. Further, respondents indicated that PC tools should not be applied uniformly across the Ministries; rather, they should be contextualized. Contextualizing PC tools and elimination of the ranking system in Government Ministries while adopting indexing criteria was seen by respondents as a better way to enhance organizational performance. This is because contextualizing PC tools would enhance their validity in respect to a given Ministry's mandate and mission. Although descriptive statistics indicated that PC tools were relevant, interviews conducted revealed a weakness in the relevance of the PC tools per given Ministry.

### **4.6.3 Analysis on Influence of PC Implementer Participation on Organizational Performance**

In this section, descriptive and inferential statistics on the influence of PC implementer participation on organizational performance were analyzed. In addition, discussions on the influence of PC implementer participation on organizational performance were done based on the research analysis.

#### **4.6.3.1 Descriptive Analysis on Influence of PC Implementer Participation on Organizational Performance**

Theoretical and empirical review pointed to a relationship between PC implementer participation and organizational performance. Ten items were developed to measure the extent of this relationship. Item 10a sought to establish the extent to which involving employees in setting PC targets was important for departmental performance. This item was negatively phrased but the scale was reversed during analysis for uniformity in computation of the mean and the standard deviation. The mean score was 4.1602 while the standard deviation was 1.03911. This result indicates that the majority of the respondents agreed involving employees in setting PC targets was important for departmental performance. Item 10b sought to whether employees signed performance contracts annually. The mean score was 4.0889 while the standard deviation was 1.04261. This result indicates that the majority of the respondents agreed that they signed performance contracts annually.

Item 10c sought to establish whether setting PC targets should be more participatory. The mean score was 4.0615 while the standard deviation was 0.82898. This result indicates that the majority of the respondents agreed that setting PC targets should be more participatory. Item 10d sought to establish whether respondents signed PC targets voluntarily. The mean score was 3.8343 while the standard deviation was 1.06204. This result indicates that the majority of the respondents agreed that they signed PC targets voluntarily. Item 10e sought to establish whether respondents were consulted in PC evaluations. This item was phrased in negation format to ensure the respondents were alert while responding to the research instruments. However, during data analysis by use of SPSS, the scale was reversed. The mean score was 3.6854 while the standard deviation was 1.20353. This result indicates that the majority of the respondents agreed that they were consulted in PC evaluations.

Item 10f sought to establish whether respondents were involved in setting PC targets. This item was phrased in negation format to ensure the respondents were alert while responding to the research instruments. However, during data analysis by use of SPSS, the scale was reversed. The mean score was 3.5307 while the standard deviation was 1.25997. This result indicates that the majority of the respondents agreed that they were involved in setting PC targets. Item 10g sought to establish whether PC evaluators were selected competitively. The mean score was 2.8771 while the standard deviation was 0.95192. This result indicates that the majority of the respondents were neutral on whether PC evaluators were selected competitively. Item 10h sought to establish whether PC targets for employees were set by section heads. The mean score was 2.7778 while the standard deviation was 1.35595. This result indicates that the majority of the respondents were neutral on whether PC targets for employees were set by section heads.

Item 10i sought to establish whether tools used in the PC system were selected by employees. The mean score was 2.7778 while the standard deviation was 1.17019. This result indicates that the majority of the respondents were neutral on whether tools used in the PC system were selected by employees. Item 10j sought to establish whether respondents were involved in setting PC targets. The mean score was 2.4078 while the standard deviation was 1.12985. This result indicates that the majority of the respondents did not agree that they were involved in setting PC targets. This result concurs with item 10c in which respondents indicated that setting PC targets should be more participatory. Since in item 10d respondents indicated that they sign PCs voluntarily, the result of 10j could imply that the PC system should be participatory at all levels from designing of the PC tools to determination of PC targets and evaluation of performance and not just in the signing of performance contracts.

The Cronbach Alpha Reliability Coefficient for these ten items was 0.429. That the internal consistency of the items in this variable had a low reliability coefficient indicates that a number of items were factual statements rather than opinions. For instance, item 10b, 10g and 10i on signing of PCs annually, selection of PC evaluators and selection of PC tools are factual statements rather than opinions of respondents. The composite mean score for these items was 3.4192 while the composite standard deviation was 0.44737. This result indicates that respondents agreed that the PC system was participatory. The descriptive statistics are shown in Table 4.13.

**Table 4.13: Means and Standard Deviations for PC Implementer Participation and Organizational Performance**

No.	Item	N	Minimum	Maximum	Mean	Std. Deviation
10a	Involving employees in setting PC targets is not important for departmental performance (R)	181	1.00	5.00	4.1602	1.03911
10b	I sign performance contracts annually	180	1.00	5.00	4.0889	1.04261
10c	Setting of PC targets should be more participatory	179	1.00	5.00	4.0615	.82898
10d	I voluntarily sign performance contracts	181	1.00	5.00	3.8343	1.06204
10e	Employees are not consulted in PC evaluations (R)	178	1.00	5.00	3.6854	1.20353
10f	Employees are not involved in setting PC targets (R)	179	1.00	5.00	3.5307	1.25997
10g	PC evaluators are selected competitively	179	1.00	5.00	2.8771	.95192
10h	PC targets for employees in our department are set by section heads	180	1.00	5.00	2.7778	1.35595
10i	Tools used in the PC system are selected by employees	180	1.00	5.00	2.7778	1.17019
10j	I am involved in setting PC targets	179	1.00	5.00	2.4078	1.12985
	Valid N (listwise)	171				
	Alpha					
	Coefficient = 0.429					
	Composite Mean Score = 3.4192					
	Composite Standard Deviation = 0.44737					

R: The scale of the item was reversed during analysis

#### **4.6.3.2 Inferential Analysis on Influence of PC Implementer Participation on Organizational Performance**

Objective 1c of the study was designed to establish the relationship that exists between performance contracting system and organizational performance. PC Implementer Participation was identified in this study as an indicator of PC system. Both theoretical and empirical literature reviewed in this study indicate that the level of participation of implementers in performance management influence organizational performance. Organizational performance on the other hand was indicated by the rate of customer satisfaction, rate of employee satisfaction and number of corporate social responsibilities carried out by the organization.

Indications from both the theoretical and empirical literature pointed to a positive significant influence of implementer participation on organizational performance. Following the theoretical arguments, the following hypothesis was formulated and tested:

##### **Hypothesis 1c:**

H<sub>0</sub>: There is no significant relationship between PC implementer participation and organizational performance

H<sub>A</sub>: There is a significant relationship between PC implementer participation and organizational performance

##### **Correlation Model**

The corresponding mathematical model for the hypotheses was identified as follows:

Organizational Performance = f (PC Implementer Participation)

$$y = \beta_0 + \beta_3 X_3 + \varepsilon$$

The data that was used to test this hypotheses were collected using items 10a to 10j measuring the influence of implementer participation on organizational performance (Appendix 8). In the Likert type scale that was used, each item consisted of a statement that measured the extent to which PC implementer participation influenced organizational performance. Respondents were asked to indicate by way of ticking the appropriate statement using a scale of 5 to 1 where 5 represented

SA – Strongly Agree; 4 represented A – Agree; 3 represented N – Neutral; 2 represented D – Disagree; while 1 represented SD – Strongly Disagree.

The Pearson’s Product Moment Correlation coefficients showed the value of  $r = 0.058$ . Shirley et al. (2005) indicates that for a weak correlation, “r” ranges from  $\pm 0.10$  to  $\pm 0.29$ ; in a moderate correlation, “r” ranges between  $\pm 0.30$  and  $\pm 0.49$ ; while in a strong correlation, “r” ranges from  $\pm 0.5$  and  $\pm 1.0$ . The positive or negative sign points to the direction of the relationship. It can therefore be argued that for  $r < 0.1$ , there was no correlation between the two variables under investigation. Since  $r = 0.058$  in this case, then there was no significant correlation between PC implementer participation and organizational performance.

When the hypothesis was tested at 56.5% confidence interval given that the p value was 0.435;  $F(1, 179) = 0.612$ . This confidence interval was much lower than the required minimum threshold in this study of 95% in determination of the existence of a correlation model. A correlation model therefore does not exist between PC implementer participation and organizational performance. The null hypothesis was therefore accepted and it was concluded that there was no significant relationship between PC implementer participation and organizational performance. Table 4.14 presents the correlation results for the influence of PC implementer participation on organizational performance.

**Table 4.14: Correlation Results for the Influence of PC Implementer Participation on Organizational Performance**

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
1 (Constant)	2.988	.233		12.851	.000
IP	.053	.067	.058	.782	.435

$F(1, 179) = 0.612$  at level of significance  $p = 0.435$ ;  $r = 0.058$

Interviews conducted in this study showed that performance contracts in Government Ministries were signed at four levels: between the President and the Cabinet Secretary; between the Cabinet Secretary and the Principal Secretary; between the Principal Secretary and departmental heads; and between departmental heads and the general employees employed on permanent term basis. Respondents indicated that although the PC process was supposed to be participatory at all levels of the PC system, in reality that rarely happened at the lowest level of management between departmental heads and general employees. Targets at this level were cascaded down from the departmental heads to the general employees through the unit heads. Descriptive analysis confirmed findings from interviews conducted that the PC process was not participatory in its entirety. This implies therefore that although inferential statistics delinked implementer participation from organizational performance, it could be because implementers at the implementation level of management were not actively engaged in performance measurement.

Respondents interviewed indicated that the PC system should be more participatory to enhance organizational performance. Respondents indicated that the process of setting PC targets should be reversed starting at the lowest level of management to the highest rather than the way it was structured from the highest level to the lowest. This would guarantee support throughout the managerial hierarchies and improve performance through ownership of ministerial vision. In addition, respondents indicated that the end-user served by Government Ministries was the public which was hardly consulted in any stage at the development, implementation and evaluation of the PC objectives. Findings from interviews conducted indicated that the ultimate primary beneficiaries, that is, members of the public, should equally be involved in the PC system for the desired organizational results to be realized and sustained.

#### **4.6.3.3 Discussions on Influence of PC Implementer Participation on Organizational Performance**

Research objective one of the study was to examine the extent to which performance contracting system influence organizational performance in Government Ministries in Kenya. Four hypotheses were formulated under this research objective. Hypothesis 1c under research objective one was that there was a significant relationship between PC implementer participation and organizational

performance. Inferential statistics in this study indicated that PC implementer participation does not influence organizational performance. Hypothesis 1c in this study that there was a significant relationship between PC implementer participation and organizational performance was therefore rejected.

These findings concur with deductions by Jones (2004) on Fredrick Taylor's Scientific Management Theory and deductions by Bruun (2007) on Max Weber's Bureaucratic Theory that suggest management is a science rather than an art. This implies that as long as systems are put in place, job rationalization and expertise, organizational performance is guaranteed. These arguments seem to ignore the artistic role played by employees in an organization and the emphasis is on enhancing control mechanisms to increase efficiency. Although these are relatively older theories, the findings in this study suggest that the role played by implementers in setting performance targets was not necessary for effective organizational performance. These findings contradict, to an extent, both Social Technical Theory and Results Theory.

In Social Technical Theory, Delmas and Offel (2008) argue that organizational performance is attained when a state of equilibrium is reached between the social system (employees), the technical system (tools, technique and knowledge) and the organizational environment. Therefore from the Social Technical Theory, performance system is only effective if there is implementer participation and a conducive work environment. Proponents of Results Theory such as Mohan (2001) indicate implementer participation is a prerequisite for organizational performance.

That implementer participation was not linked to organizational performance in this study could be attributed to the fact that respondents were not actively involved in target setting process. Descriptive analysis shows that respondents were not involved in setting targets nor did they even understand how the process takes place. Interviews conducted in the study indicated PC targets in Government Ministries were set at four levels: between the President and the Cabinet Secretary; between the Cabinet Secretary and the Principal Secretary; between the Principal Secretary and departmental heads; and between departmental heads and the general employees employed on permanent term basis. At the lowest level of the PC system, performance appraisals were signed.

Interviews conducted in the study indicated that signing of performance appraisals was supposed to be a participatory process. On the contrary, this study revealed that the PC targets were usually

cascaded down from departmental heads to the general employees through section / unit heads. This could explain why implementer participation was not linked with organizational performance in this study in the sense that there was still relative performance in Ministries of Government even though participatory target setting may have been minimal especially at the lower levels of management.

That setting of targets was not as participatory as originally envisioned in the adoption of the PC system in government functionaries may largely explain why the variable was not indicated to be influencing organizational performance. To this extent then, the findings from this study accords with Results Theory that advocates implementer participation in performance measurement. This is because Results Theory, grounded on the premise that management is both an art and a science, puts emphasis on involving implementers in a performance based system. Perhaps had PC implementers been fully involved in identifying and setting of targets, implementer participation as a predictor variable could have positively influenced organizational performance. The implication of these findings is that senior management in Ministries of Government need to embrace the concept of participatory management by involving employees at every stage of setting and evaluating both individual and organizational performance.

#### **4.6.4 Analysis on Influence of PC Targets, PC Tools and PC Implementer Participation on Organizational Performance**

In this study, the combination of PC Targets, PC Tools and PC Implementer Participation was referred to as the PC System. In this section, descriptive and inferential statistics on the joint influence of PC Targets, PC Tools and PC Implementer Participation on organizational performance were analyzed. In addition, discussions on the influence of PC system on organizational performance were done based on the research analysis.

##### **4.6.4.1 Descriptive Analysis on Influence of PC System on Organizational Performance**

From the theoretical and empirical literature in this study, both critics and proponents of PC systems indicated that PC systems positively influence organizational performance in profit oriented organizations. Critics of PC Systems such as Cheung (2003) indicated that PCs do not influence performance in government agencies that are oriented towards social benefits and as such should only be implemented in profit oriented organizations. However, proponents of the usage of PC systems in governments such as Njiru (2008) indicate that they positively influence organizational performance. Ten items were developed to measure the extent of this relationship. Item 7a sought to establish the extent to which the respondent was familiar with the PC system implemented in their department. The mean score was 4.3556 while the standard deviation was 0.74461. This result indicates that the majority of the respondents strongly agreed that they were familiar with the PC system in their department.

Item 7b sought to establish the extent to which the implementation of the PC system had influenced drug and substance abuse. This item was negatively phrased to ensure that the respondent was alert while responding to the items in the research instrument. However, during the analysis of data, the scale was reversed to ensure uniformity in computation of means and standard deviations. The mean score was 4.1467 while the standard deviation was 0.978. This result indicates that the majority of the respondents agreed that drug and substance abuse had significantly reduced with the implementation of the PC system. Item 7c sought to establish the extent to which the PC system was well implemented in the respondent's department. The mean score was 4.0984 while the standard deviation was 0.86517. This result indicates that the majority of the respondents agreed that the PC system was well implemented in their department. Item 7d sought to establish the extent to which the PC system had improved service delivery in their department. The mean score

was 4.0604 while the standard deviation was 0.84204. This result indicates that the majority of the respondents agreed that the PC system had improved service delivery in their department. Item 7e sought to establish the extent to which the PC system had improved performance in the respondent's department. The mean score was 3.9941 while the standard deviation was 0.83450. This result indicates that the majority of the respondents agreed that the PC system had improved performance in their department. Item 7f sought to establish the extent to which the respondent was happier as an employee in a government department with the implementation of PCs. The mean score was 3.9274 while the standard deviation was 0.89335. This result indicates that the majority of the respondents agreed that they were happier as employees in a government department with the implementation of PCs.

Item 7g sought to establish whether customers were more satisfied with the implementation of PC system. This item was negatively phrased to ensure that the respondent was alert while responding to the items in the research instrument. However, during the analysis of data, the scale was reversed to ensure uniformity in computation of means and standard deviations. The mean score was 3.8840 while the standard deviation was 1.01807. This result indicates that the majority of the respondents agreed that customers were more satisfied as a result of the PC system. Item 7h sought to establish the extent to which PCs had improved employees' work environment. The mean score was 3.7582 while the standard deviation was 0.91447. This result indicates that the majority of the respondents agreed that PCs had improved employees' work environment.

Item 7i sought to establish the extent to which implementation of PCs had increased participation in corporate social responsibilities. The mean score was 3.0497 while the standard deviation was 1.20313. This result indicates that the majority of the respondents were neutral on whether PCs had increased participation in corporate social responsibilities. Item 7j sought to establish the extent to which HIV/AIDS awareness had decreased with the implementation of PCs. The mean score was 2.4783 while the standard deviation was 1.11599. This result indicates that the majority of the respondents did not agree that HIV/AIDS awareness had decreased with the implementation of PCs.

The Cronbach Alpha Reliability Coefficient for these ten items that were used to measure influence of PC system on organizational performance was 0.733. This reliability coefficient indicates that items in this variable had internal consistency. The composite mean score for these items was

3.7702 while the composite standard deviation was 0.52203. This result indicates that respondents agreed that the PC system had positively influenced organizational performance. These statistics are shown in Table 4.15.

**Table 4.15: Means and Standard Deviations for PC System and Organizational Performance**

No	Item	N	Minimum	Maximum	Mean	Std. Deviation
7a	I am very familiar with the PC system implemented in our department	180	1.00	5.00	4.3556	.74461
7b	Drug and substance abuse has significantly increased in our department with the implementation of PCs (R)	184	1.00	5.00	4.1467	.97800
7c	PC system is well implemented in our department	183	1.00	5.00	4.0984	.86517
7d	PC system has improved service delivery in our department	182	1.00	5.00	4.0604	.84204
7e	PCs have improved performance in our department	169	1.00	5.00	3.9941	.83450
7f	I am happier as an employee in our department with the implementation of PCs	179	1.00	5.00	3.9274	.89335
7g	Customers in our department are less satisfied as a result of the PC system (R)	181	1.00	5.00	3.8840	1.01807
7h	PCs have improved employees' work environment	182	1.00	5.00	3.7582	.91447
7i	Implementation of PCs has increased participation in corporate social responsibilities in our department	181	1.00	5.00	3.0497	1.20313
7j	HIV/AIDS awareness has decreased with the implementation of PCs in our department	184	1.00	5.00	2.4783	1.11599
	Valid N (listwise)					
	Alpha	156				
	Coefficient = 0.733					
	Composite Mean Score = 3.7702					
	Composite Standard Deviation = 0.52203					

R: The scale of the item was reversed during analysis

#### 4.6.4.2 Inferential Analysis on Influence of PC System on Organizational Performance

Objective one of the study sought to establish the influence of performance contracting system on organizational performance. PC Targets, PC Tools and PC Implementer participation were identified in this study as indicators of PC system. The literature that was reviewed in this study as well as theoretical reasoning associated PC systems with organizational performance. Critics of the usage of the PC system in public sector such as Cheung (2003) indicate that the practicality of the performance management system is in profit oriented organizations. Proponents of the PC system such as Njiru (2008) indicate that the PC system improved performance in the public sector in Kenya. Following the theoretical and empirical arguments in the study, the following hypothesis was formulated and tested:

##### **Hypothesis 1:**

H<sub>0</sub>: There is no significant relationship between PC System and organizational performance

H<sub>A</sub>: There is a significant relationship between PC System and organizational performance

##### **Correlation Model**

The corresponding mathematical model for the hypotheses was identified as follows:

Organizational Performance = f (PC Targets, PC Tools, PC Implementer Participation)

$$y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \varepsilon$$

The data that was used to test this hypotheses were collected using items 7a to 7j measuring the influence of PC system on organizational performance (Appendix 8). In the Likert type scale that was used, each item consisted of a statement that measured the extent to which PC system influenced organizational performance. Respondents were asked to indicate by way of ticking the appropriate statement using a scale of 5 to 1 where 5 represented SA – Strongly Agree; 4 represented A – Agree; 3 represented N – Neutral; 2 represented D – Disagree; while 1 represented SD – Strongly Disagree.

The Pearson's Product Moment Correlation coefficients showed the value of  $r = 0.232$ . Shirley et al. (2005) indicates that for a weak correlation, "r" ranges from  $\pm 0.10$  to  $\pm 0.29$ ; in a moderate

correlation, “r” ranges between  $\pm 0.30$  and  $\pm 0.49$ ; while in a strong correlation, “r” ranges from  $\pm 0.5$  and  $\pm 1.0$ . The positive or negative sign points to the direction of the relationship. Since  $r = 0.232$ , then there was a correlation between PC system and organizational performance. However, since  $0.1 < r < 0.29$  the correlation between PC system and organizational performance was a weak relationship.

When the hypothesis was tested at 98% confidence interval given that the p value was  $0.02 < 0.05$ ;  $F(3, 177) = 3.358$ . This confidence interval was much higher than the required minimum threshold in this study of 95% in determination of the existence of a correlation model. The model therefore indicates 98% confidence that PC system influence organizational performance. The null hypothesis was therefore rejected and it was concluded that there was a significant relationship between PC system and organizational performance. By substituting the beta value as well as the constant term, the proceeding correlation model would be as follows:

$$y = 2.926 - 0.146X_1 + 0.197X_2 + 0.029X_3$$

From the emerging correlation model, a unit % increase in implementation of PC Targets ( $X_1$ ) would result to 0.146 (14.6%) decrease in organizational performance (y); a unit % increase in implementation of PC Tools ( $X_2$ ) would result to 0.197 (19.7%) increase in organizational performance (y); and a unit % increase in PC Implementer Participation ( $X_3$ ) would result to 0.029 (2.9%) increase in organizational performance (y). The correlation results for PC system and organizational performance are shown in Table 4.16.

**Table 4.16: Correlation Results for the Influence of PC System on Organizational Performance**

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
(Constant)	2.926	.258		11.332	.000
PC Targets	-.146	.075	-.192	-1.939	.054
PC Tools	.197	.065	.281	3.008	.003
PC IP	.029	.081	.032	.356	.723

$F(3,177)=3.358$  at level of significance  $p = 0.020 < 0.05$ ;  $r = 0.232$

Interviews conducted concurred with both descriptive and inferential statistics that the PC system in Government Ministries in Kenya had contributed to organizational performance. However, respondents interviewed indicated that there were multiple performance measurement systems that were implemented in Government Ministries could have influenced organizational performance. National Integrated Management Evaluation System (NIMES), electronic management project management information systems (EPROMIS) and Vision 2030 were singled out as interventions all implemented to enhance performance of Government Ministries through performance measurement. Respondents were however reserved whether all these interventions were playing the intended supplementary function to the PC system or were even derailing the effective implementation of the PC system. Therefore, although results from this study pointed to a positive significant influence of the PC system on organizational performance, the error term in the final correlation model indicate that there are many other factors not tested in the current study that had contributed to organizational performance in Government Ministries in Kenya. There is therefore need to either consolidate all the performance interventions into a single management system or synchronize all interventions under one central unit for coordinated service delivery as well as for avoidance of duplication of efforts.

In addition, although respondents indicated that PCs had generally improved performance of Government Ministries, participation in corporate social responsibilities and employee welfare were not satisfactory. Respondents interviewed indicated that the focus of the PC system had been mainly on service delivery. Respondents indicated that despite enhanced customer service and employee work environment, employee welfare like competitive remunerations and career growth and development were still a preserve of the higher managerial echelons. There is therefore need for the PC system to be responsive to employee welfare and social responsibilities. Further, respondents indicated that the ranking of Ministries based on a uniform evaluation criteria was counterproductive since it tempted PC implementers to shift focus from their core mandate to the ranking system. This made respondents to set targets that did not necessarily contribute to the core mandate of the Ministries. Respondents indicated that the best method to evaluate Ministries is through indexing criterion pegged on an individual Ministry's mandate in a contextualized organizational environment. The uniform ranking of Ministries was seen by respondents as counterproductive and whose objectives may not be positively reflected in the main indicators of organizational performance.

#### **4.6.4.3 Discussions on Influence of PC System on Organizational Performance**

Research objective one of the study was to examine the extent to which performance contracting system influence organizational performance in Ministries of Government in Kenya. Four hypotheses were formulated under this research objective. The first hypothesis under research objective one was that there was a significant relationship between PC system and organizational performance. This hypothesis was accepted and it was therefore concluded that there was a significant relationship between PC system and organizational performance. In this study, the components of PC system were PC targets, PC tools and PC implementer participation. Various arguments have surrounded the practicality of PCs in the public sector. For instance, Cheung (2003) indicates that PCs were linked with performance of State Owned Enterprises (SOE) but not in Government Ministries in China. Abramson (2006) indicated that PC system had a negative effect in health centers in Costa Rica. Njiru (2008) indicated that PCs had a positive influence in the public sector in Kenya.

The current study confirmed the position taken by Njiru (2008) regarding the influence of the PC system in Government Ministries in Kenya. However, this study confirms that position based only on one of the three components of the PC system; and that is, the PC tools. This implies that the PC tools used in the PC system have been measuring the desired constructs associated with organizational performance in Government Ministries in Kenya. In performance measurement, Crawford et al. (2003) agrees with proponents of validity, reliability and simplicity of PC tools as factors of organizational performance such as Nuguti (2009) and Balogun (2003).

Whereas the validity, reliability and simplicity of the PC tools component of the PC system could have been relatively achieved, the Government Ministries ought to enhance the target setting process and ensure that the targets are realistic, measurable and attainable to improve the PC system in delivery of results for Kenya. In addition, respondents indicated reluctance of Government Ministries in participation in corporate social responsibilities. Sapru (2008) argues that participation in social responsibilities by an organization is a key indicator of organizational performance which is consistent with Contingency Theory examined in this study. As such,

Government Ministries need to be responsive to corporate social responsibilities just as is the case in the private sector.

Although on the whole the PC system was shown to positively influence organizational performance, the correlation model indicates a 14.6% negative influence brought about by PC targets, 19.7% positive influence caused by PC tools and 2.9% positive influence caused by PC implementer participation. This indicates that on the overall, despite the PC system having influenced organizational performance, other factors played a more significant role in explaining the performance of Government Ministries in Kenya. This could be due to various unsynchronized performance based interventions in Government Ministries all meant to enhance service delivery ranging from National Integrated Management Evaluation System (NIMES), electronic management project management information systems (EPROMIS) and Vision 2030.

The implication of these findings is that Government Ministries should synchronize performance systems to enhance organizational performance. Besides, it would be difficult to ascertain which intervention contributed more to performances of Government Ministries. This anomaly could lead to some unnecessary interventions consuming public resources without clarity of their contributions. The Government may consider to centralize performance measurement not only to enhance performance but also to optimize on scarce public resources.

The PC system was adopted by the Government of Kenya in 2003 and was piloted in all parastatals in 2004 and in some Ministries in 2005 and eventually rolled in all Ministries in 2005 with the first ranking done in the 2005/2006 Financial Year. During the initial ranking, the Ministry of Agriculture was ranked highest and the results made public and employees in that Ministry were awarded the 13th salary as a motivation for good performance. Respondents indicated that this incentive made PC implementers shift their focus from their core mandate to the evaluation process while setting PC targets to be ranked favourably. The implication of this approach is that service delivery was compromised and unchallenging targets were set by Ministries. Respondents therefore indicated that the evaluation criteria was counterproductive and that the Government

should embrace the indexing method of evaluating performances of individual Ministries rather than generalizing the evaluation methodology across the entire public sector.

Although respondents indicated that the PC system in Kenya had improved organizational performance in Government Ministries, interviews conducted indicated that gains realized through the implementation of the PC system can potentially be reversed with scuffling of the PC system due to political reasons with subsequent administrations in government. This is because PCs in Kenya are not legislated but rather operate under a Presidential decree to direct the vision of the incumbent executive. The challenge of the sustainability of the PC system in Kenya is made more complex by the fact that both the judiciary and parliament are not parties to the PC system. Respondents indicated that these two arms of Government have not been supportive of the PC system and are unlikely to support a legislation of such effect.

Dallek (2008) observes that different government administrations in the United States of America had occasionally changed policies on Performance Agreements (PAs) which compares operationally with the PC system in Kenya. This therefore implies that although there has been relative support of the PC system in Kenya since they were introduced in the country in 2003, such support cannot be guaranteed in future. Participation of all stakeholders may therefore be required to legislate the PC performance measurement system to sustain and enhance performance of Government Ministries. Proponents of performance measurement in public sectors such as Arie (2005) argue that performance systems cannot guarantee organizational performance without involvement of all stakeholders and continuous improvement of such a system to address contemporary issues. To effectively match contemporary needs arising in the society, a performance system ought to be ICT driven. Hatry (2006) indicates an effective monitoring and evaluation system not only integrates business processes but is also the business driver.

## **4.7 Analysis on Influence of Contextual Factors on the Relationship between PC System and Organizational Performance**

Research objective two of the study was to establish the extent to which contextual factors influence the relationship between performance contracting system and organizational performance in Government Ministries in Kenya. The contextual factors identified in this study were organizational structure and organizational culture. The influence of each of these factors on the relationship between performance contracting system and organizational performance was examined in this section separately before examining their joint influence, a concept identified in this study as contextual factors, on organizational performance.

### **4.7.1 Analysis on Influence of Organizational Structure on the Relationship between PC System and Organizational Performance**

Research objective 2a of the study was to assess the extent to which organizational structure influence the relationship between performance contracting system and organizational performance in Government Ministries in Kenya. In this section, descriptive and inferential statistics on the influence of organizational structure on the relationship between PC system and organizational performance were analyzed. In addition, discussions on the influence of organizational structure on the relationship between PC system and organizational performance were done based on the research analysis.

#### **4.7.1.1 Descriptive Analysis on Influence of Organizational Structure on the Relationship between PC System and Organizational Performance**

Theoretical literature linked organizational structure with organizational performance. Empirical review indicated that organizational structure moderates the relationship between PC system and organizational performance. Ten items were developed to measure the extent of this relationship. Item 11a sought to establish whether implementation of PC is guided by the mandate of Government Ministries. The mean score was 4.3631 while the standard deviation was 0.70071. This result indicates that the majority of the respondents strongly agreed that implementation of PC is guided by the mandate of Government Ministries.

Item 11b sought to establish the extent to which external customers access section heads. This item was negatively phrased to ensure that the respondent was alert while responding to the items in the research instrument. However, during the analysis of data, the scale was reversed to ensure uniformity in computation of means and standard deviations. The mean score was 4.1453 while the standard deviation was 1.70956. This result indicates that the majority of the respondents agreed that external customers had access to section heads which implies a supportive organizational structure.

Item 11c sought to establish the extent to which employees had access to section heads. The mean score was 4.0778 while the standard deviation was 0.91819. This result indicates that the majority of the respondents agreed that employees had access to section heads. Easy accessibility by employees to section heads is an indicator of a supportive organizational structure associated with enhanced organizational performance.

Item 11d sought to establish whether the respondent knew all staff members in the department. The mean score was 4.0223 while the standard deviation was 1.04374. This result indicates that the majority of the respondents agreed that they knew all staff members in the department. Knowing colleagues in a department is an indicator that the organizational model in respect to departmentalization is conducive for performance management which in turn enhances organizational performance.

Item 11e sought to establish the size of a department in a Ministry of Government influences service delivery to customers. The mean score was 3.6798 while the standard deviation was 1.06497. This result indicates that the majority of the respondents agreed that the size of a department in a Ministry of Government influences service delivery to customers. Literature in this study linked service delivery to customers with organizational performance.

Item 11f sought to establish whether cross-sectional support was satisfactory in Government Ministries. This item was negatively phrased to ensure that the respondent was alert while responding to the items in the research instrument. However, during the analysis of data, the scale was reversed to ensure uniformity in computation of means and standard deviations. The mean score was 3.5810 while the standard deviation was 0.97028. This result indicates that majority of the respondents agreed that cross-sectional support was satisfactory in Government Ministries.

Item 11g sought to establish whether organizational structure in Ministries of Government supports corporate social responsibilities. This item was negatively phrased to ensure that the respondent was alert while responding to the items in the research instrument. However, during the analysis of data, the scale was reversed to ensure uniformity in computation of means and standard deviations. The mean score was 3.4611 while the standard deviation was 1.09015. This result indicates that majority of the respondents agreed that organizational structure in Ministries of Government supports corporate social responsibilities.

Item 11h sought to establish whether departmental meetings are held at least every quarter. The mean score was 3.4444 while the standard deviation was 1.15899. This result indicates that majority of the respondents agreed that departmental meetings were held at least every quarter. Regular meetings can be an indicator of an organization that cultivated conducive communication culture which in turn would enhance organizational performance.

Item 11i sought to establish whether departments in Ministries of Government have too many sections / units for effective performance. This item was negatively phrased to ensure that the respondent was alert while responding to the items in the research instrument. However, during the analysis of data, the scale was reversed to ensure uniformity in computation of means and standard deviations. The mean score was 3.2542 while the standard deviation was 1.20501. This result indicates that the majority of the respondents were neutral on whether departments in Government Ministries had too many sections / units for effective performance. Item 11j sought to establish whether signing of PCs in Ministries of Government was delayed by bureaucracies. The mean score was 3.2346 while the standard deviation was 1.22737. This result indicates that the majority of the respondents were neutral on whether signing of PCs in Government Ministries was delayed by bureaucracies.

The Cronbach Alpha Reliability Coefficient for these ten items that were used to measure influence of organizational structure on the relationship between PC system and organizational performance was 0.553. That the internal consistency of the items in this variable had a low reliability coefficient as measured by Cronbach Alpha Reliability Coefficient is an indicator that there were some factual statements that were included in the items measuring the relationships under investigation whose responses was independent of the opinion of respondents. In particular, item 11d and 11h on the knowledge of staff members in the department and holding of departmental

meetings at least every quarter were factual statements and were not used to seek opinions of respondents. The composite mean score for these items was 3.7286 while the composite standard deviation was 0.53194. This result indicates that majority of the respondents agreed that organizational structure positively influenced the relationship between the PC system and organizational performance. The descriptive statistics are shown in Table 4.17.

**Table 4.17: Means and Standard Deviations for Organizational Structure and PC System and Organizational Performance**

No	Item	N	Minimum	Maximum	Mean	Std. Deviation
11a	Implementation of PC in our department is guided by the mandate of the ministry	179	2.00	5.00	4.3631	.70071
11b	External customers in our department hardly access section heads (R)	179	1.00	22.00	4.1453	1.70956
11c	Employees in our department easily access section heads	180	2.00	5.00	4.0778	.91819
11d	I know all staff members in our department	179	1.00	5.00	4.0223	1.04374
11e	The size of a department in a ministry of Government influences service delivery to customers	178	1.00	5.00	3.6798	1.06497
11f	Cross-sectional support in our department is not satisfactory (R)	179	1.00	5.00	3.5810	.97028
11g	The organizational structure in our department does not support corporate social responsibilities (R)	180	1.00	5.00	3.4611	1.09015
11h	We hold departmental meetings at least every quarter	180	1.00	5.00	3.4444	1.15899
11i	Our department has too many sections/units for effective performance	177	1.00	5.00	3.2542	1.20501
11j	Signing of PCs in our department is delayed by bureaucracies	179	1.00	5.00	3.2346	1.22737
	Valid N (listwise)	166				
	Alpha					
	Coefficient = 0.553					
	Composite Mean Score = 3.7286					
	Composite Standard Deviation = 0.53194					

R: The scale of the item was reversed during analysis

**4.7.1.2 Inferential Analysis on Influence of Organizational Structure on the Relationship between PC System and Organizational Performance**

To analyze inferential data for research objective 2a, stepwise multiple regression was used. The hypothesis and the regression model for this objective were as follows:

**Hypothesis 2a:**

H<sub>0</sub>: The strength of the relationship between performance contracting system and organizational performance does not depend on organizational structure

H<sub>A</sub>: The strength of the relationship between performance contracting system and organizational performance depends on organizational structure

**Regression Model:**

Organizational Performance = f (PC System, Organizational Structure)

$$y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + \beta_{14} X_1 X_4 + \beta_{24} X_2 X_4 + \beta_{34} X_3 X_4 + \varepsilon$$

The regression results for the moderating influence of organizational structure on the relationship between PC system and organizational performance are presented in Table 4.18.

**Table 4.18: Regression Results for the Influence of Organizational Structure on the Relationship between PC System and Organizational Performance**

Model	r	R <sup>2</sup>	Adjusted R <sup>2</sup>	F	Beta	Predictor Variables
1	.184 <sup>a</sup>	.034	.028	6.250	2.696 .129	Constant Term PC Tools
2	.238 <sup>b</sup>	.057	.046	5.315	2.970 .209 -.145	Constant Term PC Tools PC Targets

Model 1 significant at p = 0.013 < 0.05; F(1,178) = 6.250

Model 2 Significant at p = 0.006 < 0.05; F(2,177) = 5.315

Since the components of PC system were PC targets, PC tools and implementer participation; stepwise multiple regression was performed to determine the best linear combination of PC targets, PC tools, PC implementer participation and organizational structure for predicting organizational performance. At the first step in stepwise regression modelling; PC targets; PC implementer participation; and organizational structure were excluded leaving PC tools as the only predictor variable of organizational performance. Since  $F(1,178) = 6.250$  at  $p = 0.013 < 0.05$  level of significance, it can 98.7% confidently be concluded that PC tools predicted organizational performance (y) when PC targets, PC Tools, PC implementer participation and organizational structure were combined in regression modelling. The  $R^2$  values of the model indicate that PC tools explained 3.4% of organizational performance. By substituting the beta values as well as the constant term, model 1 emanating from step one in regression modelling would be as follows:

$$y = 2.696 + 0.129X_2 + \varepsilon$$

Based on the beta values of model 1 at the first step in regression modelling, PC tools ( $X_2$ ) contributed to 12.9% of the model.

At the second and final step of stepwise regression modelling in this research objective; implementer participation and organizational structure were excluded in stepwise modelling leaving PC targets and PC tools as the predictor variables of organizational performance. Since  $F(2,177) = 5.315$  at  $p = 0.006 < 0.05$  level of significance; it can 99.4% confidently be concluded that the combination of PC targets ( $X_1$ ) and PC tools ( $X_2$ ) influenced organizational performance (y) when organizational structure and PC system were combined in determination of organizational performance. Since in this study the minimum required confidence interval for predicting influence on the dependent variable was 95% ( $p = 0.05$ ), then a regression model exists for this relationship. The  $R^2$  values of the model indicate that the combination of PC targets and PC tools explained 5.7% of organizational performance.

By substituting the beta values as well as the constant term, model 2 emanating from the second step in regression modelling would be as follows:

$$y = 2.970 - 0.145X_1 + 0.209X_2 + \varepsilon$$

Based on the beta values of model 2, it can be concluded that PC tools ( $X_2$ ) positively contributed 20.9% of the model while PC targets negatively contributed 14.5% of the regression model. That organizational structure was excluded in stepwise regression modelling indicates that organizational structure does not moderate the relationship between PC system and organizational performance. The null hypothesis was therefore accepted and it was concluded that the strength of the relationship between performance contracting system and organizational performance does not depend on organizational structure. The final model emerging from stepwise regression therefore excludes the moderating influence of organizational structure on the relationship between performance contracting system and organizational performance. This implies that with efficient PC tools (reliable, valid and simple to use), organizational performance would still be realized irrespective of the organizational structure. Setting targets on the other hand would produce undesired results in respect to organizational performance.

Respondents interviewed in this study indicated that both the tools used as well as the evaluation criteria in Government Ministries should be contextualized since organizational mandates varied. Respondents indicated that Ministries whose core mandate was infrastructural like the Ministry of Transport and Infrastructure appealed more to the public since projects executed by such Ministries were visible. However, quantifying the performance of Ministries that were service oriented like the National Treasury was more complex to the average citizen. This scenario was therefore seen by respondents to necessitate for contextualized performance measurement in Government Ministries. It was also indicated in interviews conducted in this study that inter-departmental delays in execution of activities negatively influenced the performance of other team members and this had an impact on the overall organizational performance. Respondents further indicated that the organizational size, departmentalization and bureaucracies in Government Ministries made it difficult for all employees to undertake joint team building sessions that would enhance inter-departmental coordination and a desired organizational culture that supports performance.

#### **4.7.1.3 Discussions on Influence of Organizational Structure on the Relationship between PC System and Organizational Performance**

Research objective 2a in this study was to assess the extent to which organizational structure influence the relationship between performance contracting system and organizational performance in Government Ministries in Kenya. Hatch (2006), Paurav (2009) and Lim et al. (2010) linked organizational structure with organizational performance. While Qingmin et al. (2012) recognized organizational size and mandate as aspects of an organizational structure that influence organizational performance, Levent and Mehmet (2004) identified organizational model as an aspect of organizational structure based on Max Weber's 1947 departmentalization organization model that influences organizational performance. Informed by these arguments, the size, mandate and model of an organization were identified in this study as indicators of an organizational structure.

To assess the moderating influence of organizational structure on the relationship between performance contracting system and organizational performance in Government Ministries in Kenya was partially informed by the fact that Sector Performance Standards (SPS) indicate that the PC system is applied uniformly across the entire public sector irrespective of organizational structures (GOK, 2010). Hypothesis 2a in this study that stated that the strength of the relationship between performance contracting system and organizational performance depends on organizational structure was tested to verify the relationship. The findings from this study indicated that organizational structure in respect to size, mandate and model of the organization does not influence the relationship between the PC system and organizational performance in Government Ministries in Kenya. This concurs with the Bureaucratic Theory examined in this study in respect to management of large entities like governments (Bruun, 2007; Korotayev, 2006; Radkau and Patrick, 2009). Although Kenneth and Kenneth (2005) argues that employees in large organizations hide in the system, this study concurs with Radkau and Patrick (2009) that the important factor in organizational performance in bureaucratic organizations is enacting an effective performance system. Further, Kusek and Rist (2004) indicate that an effective

performance monitoring and evaluation system would eliminate lack of defined roles in an organization and lack of performance accountability by employees.

In this study, an effective PC system was found to lead to organizational performance irrespective of organizational structure. Of importance then for Government Ministries is to ensure that the PC tools used are relevant to a specific Ministry since the validity, reliability and simplicity of PC tools were shown in this study to be the main determinants of organizational performance. Although respondents indicated that the organizational structures of Government Ministries in Kenya support performance, interviews conducted indicated that performance evaluation oriented meetings were habitually done at higher levels of management. That regular meetings can be irregular across board can indicate inadequate efficiency attributed to organizational structure. Qingmin et al. (2012) argue that ability by staff members to know each other in an organization and frequency of meetings indicate the extent to which an organization's structure is conducive for performance.

Respondents interviewed also indicated that Government Ministries were rarely involved in corporate social responsibilities. Interviews conducted in the study indicated that involvement in corporate social responsibilities was largely viewed as an obligation of the private sector rather than the public sector. Since Hatry (2006) indicates that public entities benchmarked the concept of performance contracts from performance measurement systems implemented in the private sector, the public sector therefore should embrace all aspects of performance measurement in organizations which includes involvement in corporate social responsibilities. This should be achieved at the stage of identification of performance indicators. Respondents also indicated that PC system in Government Ministries despite being a performance measurement system, it was not supported by an integrated information management system as is the case with the Integrated Finance Management Information System (IFMIS) used for management of public funds. There is therefore need to develop and implement an integrated performance monitoring and evaluation system in Government Ministries in Kenya.

#### **4.7.2 Analysis on Influence of Organizational Culture on the Relationship between PC System and Organizational Performance**

This section is on the analysis of research objective 2b. Descriptive and inferential statistics on the influence of organizational culture on the relationship between PC system and organizational performance were analyzed. In addition, discussions on the influence of organizational culture on the relationship between PC system and organizational performance were done based on the research analysis.

##### **4.7.2.1 Descriptive Analysis on Influence of Organizational Culture on the Relationship between PC System and Organizational Performance**

Theoretical literature reviewed in this study indicated that organizational structure influences organizational performance. Empirical review indicated that organizational culture moderates the relationship between PC system and organizational performance. Ten items were developed to measure the extent of this relationship. Item 12a sought to establish the extent to which service delivery to customers was effective in Government Ministries. This item was negatively phrased to ensure that the respondent was alert while responding to the items in the research instrument. However, during the analysis of data, the scale was reversed to ensure uniformity in computation of means and standard deviations. The mean score was 4.0167 while the standard deviation was 0.89365. This result indicates that majority of the respondents agreed that service delivery to customers was effective in Government Ministries. Item 12b sought to establish whether respondents always submitted reports promptly when they were due. The mean score was 3.9943 while the standard deviation was 0.75212. This result indicates that majority of the respondents agreed that they always submitted reports promptly when they were due.

Item 12c sought to establish whether telephone calls were promptly answered in Government Ministries. The mean score was 3.9832 while the standard deviation was 1.00825. This result indicates that majority of the respondents agreed that telephone calls were promptly answered in Government Ministries. Item 12d sought to establish whether corruption was regularly reported in Government Ministries. This item is negative in nature and therefore the scale was reversed during analysis to ensure uniformity in computation of means and standard deviations. The mean score was 3.8674 while the standard deviation was 1.03499. This result indicates that the majority of the respondents did not agree that corruption was regularly reported in Government Ministries.

Kleiman (2010) indicates that while receiving of feedback is positive, receiving of complains is negative in an organization. Respondents interviewed regarded regular reporting of corruption as an indicator of complaints rather than feedback. Item 12e sought to establish whether team work was always exercised in Government Ministries. The mean score was 3.7598 while the standard deviation was 1.00188. This result indicates that the majority of the respondents agreed that team work was always exercised in Government Ministries.

Item 12f sought to establish whether there was sufficient support from top management in Government Ministries. The mean score was 3.6796 while the standard deviation was 1.17240. This result indicates that the majority of the respondents agreed that there was sufficient support from top management in Government Ministries. Item 12g sought to establish whether most people in Ministries of Government reported to work on time. This item was negatively phrased to ensure that the respondent was alert while responding to the items in the research instrument. However, during the analysis of data, the scale was reversed to ensure uniformity in computation of means and standard deviations. The mean score was 3.6575 while the standard deviation was 0.96253. This result indicates that the majority of the respondents agreed that most people in Government Ministries report to work on time. The time employees report to work was identified in the empirical review in this study as an indicator of organizational culture.

Item 12h sought to establish whether performance was always recognized in Government Ministries. The mean score was 3.6409 while the standard deviation was 1.13934. This result indicates that the majority of the respondents agreed that performance was always recognized in Government Ministries. Item 12i sought to establish whether all employees in Government Ministries were familiar with their Ministry's vision. The mean score was 3.6243 while the standard deviation was 1.08641. This result indicates that the majority of the respondents agreed that all employees in Government Ministries were familiar with their Ministry's vision. Item 12j sought to establish whether employees in Government Ministries engaged in team building activities every year. The mean score was 2.8939 while the standard deviation was 1.24292. This result indicates that the majority of the respondents were neutral on whether they engaged in team building activities every year.

The Cronbach Alpha Reliability Coefficient for these ten items that were used to measure influence of PC system on organizational performance was 0.763. This reliability coefficient is an indicator

that the items in this variable had internal consistencies. The composite mean score for these items was 3.7115 while the composite standard deviation was 0.577. This result indicates that majority of respondents agreed that organizational culture influenced the relationship between PC system and organizational performance. These statistics are shown in Table 4.19.

**Table 4.19: Means and Standard Deviations for Organizational Culture and PC System and Organizational Performance**

No	Item	N	Minimum	Maximum	Mean	Std. Deviation
12a	Service delivery to customers is not effective in our department (R)	180	1.00	5.00	4.0167	.89365
12b	I always submit reports promptly when they are due	176	1.00	5.00	3.9943	.75212
12c	Telephone calls are promptly answered in our department	179	1.00	5.00	3.9832	1.00825
12d	Corruption is regularly reported in our department (R)	181	1.00	5.00	3.8674	1.03499
12e	Team work in our department is always exercised	179	1.00	5.00	3.7598	1.00188
12f	There is sufficient support from top management in our department	181	1.00	5.00	3.6796	1.17240
12g	Most people in our department do not report to work on time (R)	181	1.00	5.00	3.6575	.96253
12h	Performance is always recognized in our department	181	1.00	5.00	3.6409	1.13934
12i	All members in our department are familiar with the organizational vision	181	1.00	5.00	3.6243	1.08641
12j	We engage in team building activities in our department annually	179	1.00	5.00	2.8939	1.24292
	Valid N (listwise)	169				
	Alpha					
	Coefficient = 0.763					
	Composite Mean Score = 3.7115					
	Composite Standard Deviation = 0.577					

R: The scale of the item was reversed during analysis

**4.7.2.2 Inferential Analysis on Influence of Organizational Culture on the Relationship between PC System and Organizational Performance**

To analyze inferential data for research objective 2b, stepwise multiple regression was used. The hypothesis and the regression model for this research objective were as follows:

**Hypothesis 2b:**

H<sub>0</sub>: The strength of the relationship between performance contracting system and organizational performance does not depend on organizational culture

H<sub>A</sub>: The strength of the relationship between performance contracting system and organizational performance depends on organizational culture

**Regression Model:**

Organizational Performance = f (PC System, Organizational Culture)

$$y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_5 X_5 + \beta_{15} X_1 X_5 + \beta_{25} X_2 X_5 + \beta_{35} X_3 X_5 + \varepsilon$$

The regression results for the moderating influence of organizational culture on the relationship between PC system and organizational performance are presented in Table 4.20.

**Table 4.20: Regression Results for the Influence of Organizational Culture on the Relationship between PC System and Organizational Performance**

Model	r	R <sup>2</sup>	Adjusted R <sup>2</sup>	F	Beta	Predictor Variables
1	.310a	.096	.091	18.960	2.995 .265	Constant Term Organizational Culture
2	.344b	.118	.108	11.864	2.995 .874 -.151	Constant Term Organizational Culture (PC Targets + Organizational Culture)

a. Predictors: (Constant); X<sub>5</sub>

b. Predictors: (Constant); X<sub>5</sub>; X<sub>1</sub>X<sub>5</sub>

Model 1: F(1,178) = 18.96 at level of significance p < 0.05

Model 2: F(2,177) = 11.864 at level of significance p < 0.05

Since the components of PC system were PC targets, PC tools and implementer participation; multiple regression was performed to determine the best linear combination of PC targets, PC tools, PC implementer participation and organizational culture for predicting organizational performance. At the first step in stepwise regression modelling; PC targets; PC tools and PC implementer participation were excluded leaving organizational culture as the only predictor variable of organizational performance. By substituting the beta values as well as the constant term, model 1 emanating from step one in regression modelling would be as follows:

$$y = 2.995 + 0.265X_5$$

Based on the beta values of model 1, it can be concluded that organizational culture ( $X_5$ ) contributed to 26.5% of the model. Since  $F(1,178) = 18.96$  at  $p < 0.05$  level of significance, it can 95% confidently be concluded that organizational culture predicted organizational performance ( $y$ ). The  $r$  values of the model indicate that organizational culture explained 9.1% of organizational performance. This implies that although organizational culture predicted organizational performance, at 9.1%, it was a weak predictor of organizational performance on its own.

At the second and final step of stepwise regression modelling in this research objective; organizational culture independently was found to predict organizational performance and the interaction between organizational culture and PC targets was also found to predict organizational performance. Thus organizational culture was found to moderate the relationship between PC targets and organizational performance. At this step of the regression modelling, PC tools and PC implementer participation were excluded in the model. By substituting the beta values as well as the constant term, model 2 emanating from the second step in regression modelling would be as follows:

$$y = 2.995 + 0.974X_5 - 0.151X_1X_5$$

Based on the beta values of model 2, it can be concluded that organizational culture ( $X_5$ ) positively contributed to 97.4% of the model while PC targets negatively influenced organizational performance by 15.1% in the model. Since  $F(2,177) = 11.864$  at  $p < 0.005$  level of significance; it

was 95% confidently concluded that the interaction between PC targets ( $X_1$ ) and organizational culture ( $X_5$ ) influenced organizational performance ( $y$ ). The  $R^2$  values of the model indicate that the interaction between PC targets and organizational culture explained 10.8% of organizational performance.

Since organizational culture moderated a component of PC system (PC targets) in the determination of organizational performance, the null hypothesis was rejected and the alternate hypothesis accepted and concluded that the strength of the relationship between performance contracting system and organizational performance depends on organizational culture.

The implication of these findings in the context of Government Ministries in Kenya is that organizational performance is influenced by the clarity of organizational vision, promptness to duty and team work. However, when target setting is incorporated in the management of Ministries of Government, organizational performance declines. This implies that PC implementers may not be comfortable with the concept of setting targets but would rather management enhances work culture to improve on organizational performance. Further, although organizational culture has been shown to moderate the relationship between PC system and organizational performance, the variable only moderates one aspect of the PC system: PC targets.

Interviews conducted indicated that many respondents could not recite their organizational vision. Clarity of organizational vision was identified in this study as an indicator of organizational culture. Respondents interviewed also indicated that senior managers in Government Ministries reported to work more promptly than their subordinates which partially contradicts conventional reasoning. Promptness to duty was identified in this study as an indicator of organizational culture. Respondents attributed promptness to duty among senior managers to impromptu calls by higher authorities and requirement to respond to accountability queries raised by other arms of government like parliament. Although respondents interviewed agreed that involving staff members in team building activities would reduce the gap between senior managers and subordinates and enhance performance, respondents nonetheless indicated that they rarely engaged in team building activities. This was partially attributed to the organizational models of Government Ministries. However, on the overall, interviews conducted in this study indicated a positive work culture in Government Ministries with the implementation of PCs. Such an

improved work culture was seen by respondents interviewed to have positively influenced organizational performance.

However, respondents interviewed indicated that a positive work culture in Government Ministries was threatened by the ranking policy of Ministries and should therefore be replaced with an indexing criterion that is contextualized. In addition, positive gains made in the work culture in Government Ministries realized with the implementation of performance contracting system can be reversed if the PC system is scrapped from the public sector with regime change in government. This possibility was identified by respondents in that PCs were not anchored in law in Kenya but rather operated under a Presidential decree. The implication of such an arrangement is that subsequent governments may want to implement different performance measurement systems for political reasons. Dallek (2008) indicates that different government administrations in the United States of America had occasionally changed policies on Performance Agreements (PAs), the equivalent of PCs in Kenya. Therefore to safeguard the PC system, performance contracting may need to be legislated to sustain performance of Government Ministries. Respondents interviewed however argued that legislating PCs in Kenya had been difficult since both the legislative and judicial arms of government do not sign performance contracts and may therefore not be supportive of such a legislation.

#### **4.7.2.3 Discussion on Influence of Organizational Culture on the Relationship between PC System and Organizational Performance**

Research objective 2b in this study was to determine the extent to which organizational culture influence the relationship between performance contracting system and organizational performance in Government Ministries in Kenya. Previous studies carried out by Ravasi and Schultz (2006), Olu (2012) and March and Susan (2006) linked organizational culture with performance. Raja (2009) indicates that organizational culture is cultivated by the shared organizational mission and inspired by the organizational vision. In this study, clarity of organizational vision, promptness to duty and team work were identified as the indicators of organizational vision. March and Susan (2006) also argued that employee recognition by management reflects cohesiveness within an organization and therefore is a pointer of team work

in an organization. Based on these arguments, it was hypothesized in this study that the strength of the relationship between performance contracting system and organizational performance depends on organizational culture.

Based on the Classical Organizational Theory examined in this study, Cummings and Worley (2008) and Head (2005) indicate that organizational culture influences organizational performance and can be enhanced through continuous capacity building of employees. Findings from this study concur with proponents of enhancing organizational culture to improve organizational performance in that organizational culture was found to positively moderate the relationship between performance contracting system and organizational performance in Government Ministries in Kenya. However, when PC targets were factored in the regression model, organizational performance dropped. This could imply that although employees were willing to support management in improving organizational culture, they were not comfortable with the concept of setting targets.

Proponents of Results Theory such as Jolley (2003) and Ebeclin and Tatum (2005) argue that targets must be set in a performance management system. Since respondents interviewed indicated that they are rarely engaged in team building activities, Government Ministries ought to improve in this aspect to cultivate a positive work culture that appreciates target setting as part of performance management. Jolise (2007) indicates that improving an organization's work culture is a continuous process that requires regular integrated measures. With an improved work culture, it is envisioned in this study, that organizational performance in Government Ministries in Kenya would be enhanced.

### 4.7.3 Analysis on Influence of Organizational Structure and Organizational Culture on the Relationship between PC System and Organizational Performance

This section presents data analysis and discussions on research objective two. Inferential statistics on the joint influence of organizational structure and organizational culture, a term referred to as contextual factors in this study, on the relationship between PC system and organizational performance were analyzed. To analyze the inferential data for research objective two, stepwise multiple regression was used. The hypothesis and the regression model for this research objective were as follows:

#### Hypothesis 2:

H<sub>0</sub>: The strength of the relationship between performance contracting system and organizational performance does not depend on contextual factors

H<sub>A</sub>: The strength of the relationship between performance contracting system and organizational performance depend on contextual factors

#### Regression Model:

Organizational Performance = f (PC System, Contextual Factors)

$$y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_6 X_6 + \beta_{16} X_1 X_6 + \beta_{26} X_2 X_6 + \beta_{36} X_3 X_6 + \varepsilon$$

From literature reviewed in this study, contextual factors were organizational structure and organizational culture. The components of PC system were indicated to be PC targets, PC tools and implementer participation. This objective was designed to establish the joint moderating influence of contextual factors on the relationship between performance contracting system and organizational performance. Therefore in this research objective, multiple regression was performed to determine the best linear combination of PC targets, PC tools, PC implementer participation and a combination of organizational structure and organizational culture for predicting organizational performance.

The stepwise regression modelling procedure excluded all variables that were entered in the model leaving the interaction between PC tools and contextual factors as the only predictor variables of

organizational performance. However, individually, PC tools, organizational structure and organizational culture were also excluded in the model just like PC targets and PC implementer participation. By substituting the beta values as well as the constant term, the model proceeding from the regression modelling was as follows:

$$y = 2.958 + 0.073X_2X_6$$

Based on the beta values of the regression model, it was concluded that the interaction between PC tools and contextual factors ( $X_2X_6$ ) contributed to 7.3% of the model. Since  $F(1,179) = 18.47$  at  $p < 0.05$  level of significance, it was 95% confidently concluded that contextual factors moderated an aspect of PC system (PC tools) in predicting organizational performance ( $y$ ). The  $R^2$  values of the model indicate that the interaction between contextual factors and PC tools explained 9.4% of organizational performance. This indicates that although contextual factors predicted organizational performance, they were relatively weak predictors.

Therefore it was concluded that contextual factors moderated the relationship between PC system and organizational performance. The null hypothesis was therefore rejected and it was concluded that the strength of the relationship between performance contracting system and organizational performance depends on contextual factors. The regression results are shown in Table 4.21.

**Table 4.21: Regression Results for the Influence of Contextual Factors on the Relationship between PC System and Organizational Performance**

Model	r	R <sup>2</sup>	Adjusted R <sup>2</sup>	F	Beta	Predictor Variables
1	.306a	.094	.088	18.470	2.958  .073	Constant Term (PC tools + Contextual Factors)

a. Predictors: (Constant);  $X_2X_{12}$

Model:  $F(1,179) = 18.470$  at  $p < 0.05$  level of significance

Interviews conducted in this study indicated that organizational structure and organizational culture influence organizational performance. In addition, respondents interviewed indicated that organizational structure and organizational culture can moderate the relationship between PC system and organizational performance. However, the joint influence of organizational structure and organizational culture, a concept devised in this study as contextual factors, could not be achieved during interviews, but rather at the inferential analysis stage of the thesis. Therefore stepwise regression modelling was undertaken to combine organizational structure and organizational culture and investigate their joint influence on the relationship between the PC system in Government Ministries and organizational performance.

#### **4.7.3.1 Discussion on Influence of Contextual Factors on the Relationship between PC System and Organizational Performance**

Research objective two was to establish the extent to which contextual factors influence the relationship between performance contracting system and organizational performance in Government Ministries in Kenya. Although theoretical and empirical literature reviewed in this study showed positive relationships between each of the predictor variables with the dependent variable, no previous study was shown on the joint influence of organizational structure and organizational culture on the primary relationship between performance contracting system and organizational performance in Government Ministries in Kenya. As such, contextual factors was a concept coined in this study for the joint influence of organizational structure and organizational culture. To this end, no specific data was collected to ascertain this relationship. Rather, contextual influence as a single moderator was achieved at the analysis stage in this study by combining the items in organizational structure and those of organizational culture and factoring the combination on the relationship between PC system and organizational performance through stepwise regression modelling. It was therefore hypothesized that the strength of the relationship between performance contracting system and organizational performance depended on contextual factors.

Results from inferential statistics and interviews conducted indicate that contextual factors as an independent predictor variable influenced the relationship between performance contracting system and organizational performance in Government Ministries in Kenya. The implication of

this finding is that in spite of implementing an effective performance management system in the form of PC system in Government Ministries, PC implementers must factor the joint role played by the culture ingrained in a given organizational structure. That means that each Ministry should be viewed as a unique entity with a unique work culture that jointly influence the extent to which the PC system is able to help the Ministries achieve set targets in respect to customer satisfaction, employee satisfaction and responsiveness to corporate social responsibilities. These results indicate that although all Government Ministries are required to enhance customer satisfaction, employee satisfaction and corporate social responsibilities, the extent to which they achieve these organizational objectives is jointly influenced by the organizational mandate, size and model given prevailing organizational vision, promptness to duty and team work.

The implication of these findings in the context of Government Ministries in Kenya is that organizational performance is influenced by the organizational culture in a given organizational structure and the tools used in performance contracting system. Findings from research objective 1b indicated that PC tools on their own influenced organizational performance. Findings from research objective 2a indicated that organizational structure on its own did not moderate the relationship between performance contracting system and organizational performance. Findings from research objective 2b indicated that organizational culture on its own moderated the relationship between performance contracting system and organizational performance. It can therefore be argued that although organizational structure was found not to moderate the relationship between PC system and organizational performance; the aspect of organizational culture in contextual factors contributed to the moderating effect. Further, the stepwise regression modelling on contextual factors picked an aspect of the PC system, PC tools, which influenced organizational performance which further explains why contextual factors moderated the relationship between PC system and organizational performance.

## **4.8 Analysis on Influence of Cognitive Factors on the Relationship between PC System and Organizational Performance**

Research objective three of the study was to establish the extent to which cognitive factors influence the relationship between performance contracting system and organizational performance in Government Ministries in Kenya. The cognitive factors identified in this study were Implementer Attitude and Implementer M&E skills. The influence of each of these factors on the relationship between performance contracting system and organizational performance was examined in this section separately before examining their joint influence, a concept referred in this study as cognitive factors, on organizational performance.

### **4.8.1 Analysis on Influence of Implementer Attitude on the Relationship between PC System and Organizational Performance**

In this section, data on research objective 3a was analyzed. Descriptive and inferential statistics on the influence of implementer attitude on the relationship between PC system and organizational performance were analyzed. In addition, discussions on the influence of implementer attitude on the relationship between PC system and organizational performance were done based on the research analysis.

#### **4.8.1.1 Descriptive Analysis on Influence of Implementer Attitude on the Relationship between PC System and Organizational Performance**

Theoretical literature in the study indicated that implementer attitude influences organizational performance. In addition, empirical review pointed to a relationship between implementer attitude and the relationship between PC system and organizational performance. Ten items were developed to measure the extent of this relationship. Item 13a sought to establish whether respondents were always ready and willing to sign performance contracts. The mean score was 4.2912 while the standard deviation was 0.68756. This result indicates that majority of the respondents strongly agreed that they were always ready and willing to sign performance contracts.

Item 13b sought to establish whether respondents were always keen to follow the key indicators in their contracts. The mean score was 4.1823 while the standard deviation was 0.71873. This

result indicates that the majority of the respondents agreed that they were always keen to follow the key indicators in their PC contracts.

Item 13c sought to establish whether respondents always strived to achieve all that is stated in their performance contracts. The mean score was 4.1061 while the standard deviation was 0.84462. This result indicates that the majority of the respondents agreed that they always strived to achieve all that is stated in their performance contracts.

Item 13d sought to establish whether respondents viewed performance contracts as a waste of government resources. This item was negatively phrased to ensure that the respondent was alert while responding to the items in the research instrument. However, during the analysis of data, the scale was reversed to ensure uniformity in computation of means and standard deviations. The mean score was 4.0385 while the standard deviation was 1.15326. This result indicates that the majority of the respondents did not agree that performance contracts were a waste of government resources. This result implies that respondents had a positive view on performance contracts.

Item 13e sought to establish whether respondents viewed performance contracts as a political strategy to mislead the public. This item was negatively phrased to ensure that the respondent was alert while responding to the items in the research instrument. However, during the analysis of data, the scale was reversed to ensure uniformity in computation of means and standard deviations. The mean score was 4.0000 while the standard deviation was 1.03027. This result indicates that the majority of the respondents did not agree that performance contracts is a political strategy to mislead the public. This result implies that respondents had a positive view on performance contracts.

Item 13f sought to establish whether respondents felt the PC system should be scrapped from the public sector. This item was negatively phrased to ensure that the respondent was alert while responding to the items in the research instrument. However, during the analysis of data, the scale was reversed to ensure uniformity in computation of means and standard deviations. The mean score was 3.8268 while the standard deviation was 1.23532. This result indicates that the majority of the respondents did not agree that performance contracts should be scrapped from the public sector. Although this result implied that most respondents had a positive view on performance

contracts, the item had the highest standard deviation of all the items under the variable of implementer attitude.

Item 13g sought to establish whether PCs lead to organizational performance. This item was negatively phrased to ensure that the respondent was alert while responding to this item in the research instrument. However, during the analysis of data, the scale was reversed to ensure uniformity in computation of means and standard deviations. The mean score was 3.8258 while the standard deviation was 1.03498. This result indicates that the majority of the respondents agreed that PCs lead to organizational performance. This result implies that respondents had a positive attitude on performance contracts.

Item 13h sought to establish whether respondents signed their PCs every year within the time required. The mean score was 3.7514 while the standard deviation was 1.02689. This result indicates that the majority of the respondents agreed that they signed their PCs every year within the time required.

Item 13i sought to establish whether PC evaluators were skilled evaluators. This item was negatively phrased to ensure that the respondent was alert while responding to the items in the research instrument. However, during the analysis of data, the scale was reversed to ensure uniformity in computation of means and standard deviations. The mean score was 3.5912 while the standard deviation was 1.01035. This result indicates that the majority of the respondents agreed that PC evaluators were skilled evaluators.

Item 13j sought to establish whether the evaluation criteria for PCs was flawed. This item was negatively phrased to ensure that the respondent was alert while responding to the items in the research instrument. However, during the analysis of data, the scale was reversed to ensure uniformity in computation of means and standard deviations. The mean score was 3.5333 while the standard deviation was 0.99944. This result indicates that the majority of the respondents did not agree that the evaluation criteria for PCs was flawed. This result implies that respondents had a positive attitude on performance contracts.

The Cronbach Alpha Reliability Coefficient for these ten items that were used to measure influence of PC system on organizational performance was 0.821. This was a relatively high reliability coefficient implying that the internal consistencies of the items in this relationship under

investigation was relatively high. The composite mean score for these items was 3.9132 while the composite standard deviation was 0.60909. This result indicates that respondents had a positive attitude on PCs. These statistics are shown in Table 4.22.

**Table 4.22: Means and Standard Deviations for Implementer Attitude and Organizational Performance**

No	Item	N	Minimum	Maximum	Mean	Std. Deviation
13a	I am always ready and willing to sign my PC	182	1.00	5.00	4.2912	.68756
13b	I am keen to follow the key PC indicators in my contract	181	1.00	5.00	4.1823	.71873
13c	I always strive to achieve all that is stated in my PC	179	1.00	5.00	4.1061	.84462
13d	Performance contracts are a waste of government resources (R)	182	1.00	5.00	4.0385	1.15326
13e	PC system is a political strategy to mislead the public (R)	180	1.00	5.00	4.0000	1.03027
13f	PC system should be scrapped from public sector (R)	179	1.00	5.00	3.8268	1.23532
13g	PCs do not lead to organizational performance (R)	178	1.00	5.00	3.8258	1.03498
13h	I sign my PC every year within the time required	181	1.00	5.00	3.7514	1.02689
13i	PC evaluators are not skilled evaluators (R)	181	1.00	5.00	3.5912	1.01035
13j	The evaluation criteria for PCs is flawed (R)	180	1.00	5.00	3.5333	.99944
	Valid N (listwise)	171				
	Alpha					
	Coefficient = 0.821					
	Composite Mean Score = 3.9132					
	Composite Standard Deviation = 0.60909					

R: The scale of the item was reversed during analysis

**4.8.1.2 Inferential Analysis on the Influence of Implementer Attitude on the Relationship between PC System and Organizational Performance**

To analyze inferential data for research objective 3a, stepwise multiple regression was used. The hypothesis and the regression model for this research objective was as follows:

**Hypothesis 3a:**

H<sub>0</sub>: The strength of the relationship between performance contracting system and organizational performance does not depend on implementer attitude

H<sub>A</sub>: The strength of the relationship between performance contracting system and organizational performance depends on implementer attitude

**Regression Model:**

Organizational Performance = f (PC System, Implementer Attitude)

$$y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_7 X_7 + \beta_{17} X_1 X_7 + \beta_{27} X_2 X_7 + \beta_{37} X_3 X_7 + \varepsilon$$

The regression results for the moderating influence of implementer attitude on the relationship between PC system and organizational performance are presented in Table 4.23.

**Table 4.23: Regression Results for the Influence of Implementer Attitude on the Relationship between PC System and Organizational Performance**

Model	r	R <sup>2</sup>	Adjusted		F	Beta	Predictor Variables
			R <sup>2</sup>				
1	.181a	.033	.027		6.074	2.706	Constant Term
						.127	PC Tools

a. Predictors: (Constant); X<sub>2</sub>

Model 1: F(1,179) = 6.074 at level of significance p = 0.015 < 0.05

Since the components of PC system were PC targets, PC tools and PC implementer participation; multiple regression was performed to determine the best linear combination of PC targets, PC tools, PC implementer participation and implementer attitude for predicting organizational performance. While undertaking stepwise regression modelling; PC targets; PC implementer participation and implementer attitude were excluded leaving PC tools as the only predictor variable of organizational performance. By substituting the beta values as well as the constant term, the regression model emanating from step one in mathematical modelling for research objective four would be as follows:

$$y = 2.706 + 0.127X_2$$

Based on the beta values of the regression model, it can be concluded that PC tools ( $X_2$ ) contributed to 12.7% of the model. Since  $F(1,179) = 6.074$  at  $p = 0.015 < 0.05$  level of significance, it was 98.5% confidently concluded that PC tools predicted organizational performance ( $y$ ) when the moderating component of implementer attitude was combined with PC system in determination of organizational performance. The  $R^2$  values of the model indicate that PC tools explained 3.3% of organizational performance. This implies that PC tools were weak predictors of organizational performance when implementer attitude was factored in the primary relationship between PC system and organizational performance.

PC targets, PC implementer participation and implementer attitude were all excluded in the regression modelling. Thus in the interaction between implementer attitude and PC system, it has been shown that implementer attitude does not influence organizational performance in the implementation of the PC system which contradicts both empirical and theoretical literature in this study. Since implementer attitude did not moderate any component of the PC system in the determination of organizational performance in this study, the null hypothesis was accepted and it was therefore concluded that the strength of the relationship between performance contracting system and organizational performance does not depend on implementer attitude.

Interviews conducted in this study were consistent with the descriptive statistics. Respondents interviewed indicated that PC implementers had a positive attitude towards the PC system. In addition, respondents interviewed indicated that implementers' attitude influences organizational performance. Notwithstanding descriptive statistics and interviews conducted, only inferential

statistics in the study could indicate the strength of the influence of implementer attitude on the relationship between the PC system and organizational performance in Government Ministries in Kenya. Although respondents interviewed indicated that they were in support of the PC system, PC implementers were indifferent with the evaluation criterion used uniformly across Government Ministries preferring indexing individual Ministries in determination of performance.

#### **4.8.1.3 Discussion on Influence of Implementer Attitude on the Relationship between PC System and Organizational Performance**

Research objective 3a in this study was to examine the extent to which implementer attitude influence the relationship between performance contracting system and organizational performance in Government Ministries in Kenya. Following studies carried out by Raja (2009) and Gee (2012), indicators of implementer attitude in this study were identified as the level of support of the PC system and time taken to accomplish work obligations. However, none of these studies investigated the moderating role played by implementer attitude on the relationship between a performance management system and organizational performance. Since this was identified as a knowledge gap in this study, it was hypothesized under research objective 3a that the strength of the relationship between performance contracting system and organizational performance depends on implementer attitude.

From the findings of this study, the null hypothesis was rejected and implementer attitude was not found to moderate the relationship between performance contracting system and organizational performance in Government Ministries in Kenya. All independent variables factored in the same regression model with implementer attitude were excluded from the regression model with the exception of PC tools. This implies that given effective PC tools (valid, reliable and simple to use), organizational performance would still have been realized irrespective of the implementers'. This finding concurs with views from some proponents of Results Theory such as Ebeclin and Tatum (2005) who argue that when employees are given individualized targets in a performance based system, performance will be guaranteed irrespective of personal attributes (cognitive factors).

Although theoretical and empirical reasoning indicated that implementer attitude influences performance and the descriptive statistics as well as interviews conducted in this study indicated

that PC implementers had positive attitude towards the PC system, the implication of the inferential statistics is that implementer attitude did not influence the relationship between the PC system and organizational performance. Studies carried out by Baron and Kenny (1999) and Michael et al. (2004) suggest that a predictor variable known to influence the outcome of a given dependent variable may not always moderate a relationship between another independent variable and the same dependent variable. In this study, implementer attitude was identified as a moderating variable and studies carried out by Gee (2012), Daniel (2006) and Ostroff (1992) indicated that implementer attitude influences organizational performance.

However, Baron and Kenny (1999) argue that within a correlational analysis framework, a moderator is a third variable that affects the zero-order correlation between two other variables. In the analysis of variance (ANOVA) therefore, a basic moderator effect can be represented as an interaction between a focal independent variable and a factor that specifies the appropriate conditions for its operation. In such situations, a variable is said to be a moderator if it influences the strength of the relationship between two other variables, that is, the moderating variable explains the relationship between the two other variables. That implementer attitude did not moderate the relationship between PC system and organizational performance therefore does not suggest that implementer attitude does not influence organizational performance, but rather; implementer attitude did not explain the relationship between PC system and organizational performance. Michael et al. (2004) indicates that a variable is said to be a moderator to the extent it accounts for the relation between the predictor and the criterion.

The implication of these findings in the context of Government Ministries is that the implementation of the PC system is not determined by implementer attitude but rather the validity, reliability and simplicity of the PC tools in the PC system. Therefore enhancing the tools used in the PC system is more significant than deployment of resources towards attitudinal change in respect to organizational performance in Government Ministries. Therefore although implementer attitude was indicated to be a factor of organizational performance, since the variable did not moderate the relationship between PC system and organizational performance, then Government Ministries should deploy resources on improving PC tools in the implementation of performance contracting system.

#### **4.8.2 Analysis on Influence of Implementer Monitoring and Evaluation Skills on the Relationship between PC System and Organizational Performance**

In this section, data for research objective 3b was analyzed. Descriptive and inferential statistics on the influence of implementer monitoring and evaluation skills on the relationship between PC system and organizational performance were analyzed. In addition, discussions on the influence of implementer monitoring and evaluation skills on the relationship between PC system and organizational performance were done based on the research analysis.

##### **4.8.2.1 Descriptive Analysis on Influence of Implementer Monitoring and Evaluation Skills on the Relationship between PC System and Organizational Performance**

Theoretical literature in this study linked monitoring and evaluation skills with organizational performance. Empirical review in the study pointed to a moderating role played by monitoring and evaluation (M&E) skills on the relationship between PC system and organizational performance. Ten items were developed to measure the extent of this relationship. Item 14a sought to establish the extent to which respondents understood performance indicators. Performance Contracts were shown in the theoretical framework in this study as M&E tools. In addition, understanding of performance indicators is a measure of M&E skills. The mean score was 4.1326 while the standard deviation was 0.65327. This result indicates that the majority of the respondents agreed that they understood performance indicators.

Item 14b sought to establish the extent to which respondents could write an evaluation report. Ability to write an evaluation report was shown in the theoretical framework in this study as an indicator of M&E skills. This item was negatively phrased to ensure that the respondent was alert while responding to the items in the research instrument. However, during the analysis of data, the scale was reversed to ensure uniformity in computation of means and standard deviations. The mean score was 3.9497 while the standard deviation was 1.03465. This result indicates that the majority of the respondents agreed that they could write an evaluation report.

Item 14c sought to establish the extent to which respondents could comfortably undertake performance evaluation. Skills to undertake a performance evaluation assignment was shown in the theoretical framework in this study as an indicator of M&E skills. The mean score was 3.8757

while the standard deviation was 0.92707. This result indicates that the majority of the respondents agreed that they could comfortably undertake performance evaluation. Item 14d sought to establish whether all respondents could effectively fill in performance appraisals. Since PCs were shown to be M&E tools in the theoretical framework in this study, it can therefore be argued that ability to effectively fill in performance appraisals is an indicator of M&E skills. The mean score was 3.8187 while the standard deviation was 0.94902. This result indicates that the majority of the respondents agreed that they could effectively fill in performance appraisals.

Item 14e sought to establish the extent to which respondents had developed performance indicators. Theoretical review in this study indicated that ability to develop performance indicators is a measure of M&E skills. This item was negatively phrased to ensure that the respondent was alert while responding to the items in the research instrument. However, during the analysis of data, the scale was reversed to ensure uniformity in computation of means and standard deviations. The mean score was 3.7978 while the standard deviation was 1.02157. This result indicates that the majority of the respondents agreed that they had developed performance indicators.

Item 14f sought to establish whether regular monitoring of individual performance was necessary for performance evaluation. Appreciation of monitoring as a component of performance evaluation was shown in the theoretical framework in this study as a measure of M&E skills. This item was negatively phrased to ensure that the respondent was alert while responding to the items in the research instrument. However, during the analysis of data, the scale was reversed to ensure uniformity in computation of means and standard deviations. The mean score was 3.7901 while the standard deviation was 1.14023. This result indicates that the majority of the respondents agreed that regular monitoring of individual performance was necessary for performance evaluation.

Item 14g sought to establish whether all respondents had the skills to generate performance quarterly reports. Skills to generate performance quarterly reports were shown in the theoretical review in this study as an indicator of M&E skills. The mean score was 3.6389 while the standard deviation was 1.13238. This result indicates that the majority of the respondents agreed that they had the skills to generate performance quarterly reports. Item 14h sought to establish the extent to which respondents could appraise a project for implementation. Skills to appraise a project for implementation were shown in this study as indicators of M&E skills. The mean score was 3.5754

while the standard deviation was 1.17973. This result indicates that the majority of the respondents agreed that they had the skills to appraise a project for implementation. Although majority of the respondents indicated that they had the skills to appraise a project for implementation, the mean score was relatively low implying that the extent to which respondents could appraise a project for implementation was relatively low.

Item 14i sought to establish whether all respondents developed performance personal work breakdown schedules. Literature in this study identified work breakdown schedules as a monitoring tool. Therefore it can be argued that ability to develop personal work breakdown schedules is an indicator of M&E skills. The mean score for this item was 3.4693 while the standard deviation was 1.15287. This result indicates that majority of the respondents agreed that they could develop performance personal work breakdown schedules.

Item 14j sought to establish whether Ministries of Government had an integrated performance management system. The mean score for this item was 3.0889 while the standard deviation was 1.13003. This result indicates that majority of the respondents were neutral on whether Ministries of Government had an integrated performance management system. Kusek and Rist (2004) argue that an effective monitoring and evaluation system ought to be integrated to effectively measure performance. Lack of an integrated performance management system can deny employees in an organization the necessary M&E skills to measure performance. Therefore availability and usage of an integrated performance management system in an organization can be a pointer of specialized M&E skills in the organization.

The Cronbach Alpha Reliability Coefficient for these ten items that were used to measure influence of PC system on organizational performance was 0.75. This reliability coefficient was satisfactory that the items in this relationship under investigation had internal consistencies. The composite mean score for these items was 3.7115 while the composite standard deviation was 0.56682. This result indicates that majority of respondents agreed that they had monitoring and evaluation skills. These statistics are shown in Table 4.24.

**Table 4.24: Means and Standard Deviations for Implementer Monitoring and Evaluation Skills and Organizational Performance**

No	Item	N	Minimum	Maximum	Mean	Std. Deviation
14a	I understand performance indicators	181	2.00	5.00	4.1326	.65327
14b	I cannot write an evaluation report (R)	179	1.00	5.00	3.9497	1.03465
14c	I can comfortably undertake performance evaluation	177	1.00	5.00	3.8757	.92707
14d	Everyone in our department can effectively fill in performance appraisals	182	1.00	5.00	3.8187	.94902
14e	I have never developed performance indicators (R)	178	1.00	5.00	3.7978	1.02157
14f	Regular monitoring of individual performance is not necessary for performance evaluation (R)	181	1.00	5.00	3.7901	1.14023
14g	All employees in our department have the skills to generate performance quarterly reports	180	1.00	5.00	3.6389	1.13238
14h	I have the skills to appraise a project for implementation	179	1.00	5.00	3.5754	1.17973
14i	Everyone in our department develops performance personal work breakdown schedules	179	1.00	5.00	3.4693	1.15287
14j	We have an integrated performance management system in our department	180	1.00	5.00	3.0889	1.13003
	Valid N (listwise)	166				
	Alpha					
	Coefficient = 0.75					
	Composite Mean Score = 3.7115					
	Composite Standard Deviation = 0.56682					

R: The scale of the item was reversed during analysis

#### 4.8.2.2 Inferential Analysis on Influence of Implementer Monitoring and Evaluation Skills on the Relationship between PC System and Organizational Performance

To analyze inferential data for research objective 3b, stepwise multiple regression was used. The hypothesis and the regression model for this research objective was as follows:

##### **Hypothesis 3b:**

H<sub>0</sub>: The strength of the relationship between performance contracting system and organizational performance does not depend on implementer M&E skills

H<sub>A</sub>: The strength of the relationship between performance contracting system and organizational performance depends on implementer M&E skills

##### **Regression Model:**

Organizational Performance = f (PC System, Implementer M&E Skills)

$$y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_8 X_8 + \beta_{18} X_1 X_8 + \beta_{28} X_2 X_8 + \beta_{38} X_3 X_8 + \varepsilon$$

Since the components of PC system were PC targets, PC tools and implementer participation; stepwise multiple regression was performed to determine the best linear combination of PC targets, PC tools, PC implementer participation and implementer monitoring and evaluation (M&E) skills for predicting organizational performance.

At the first step in stepwise regression modelling; PC targets; PC tools and PC implementer participation were excluded leaving implementer M&E skills as the only predictor variable of organizational performance. By substituting the beta values as well as the constant term, model 1 emanating from step one in regression modelling would be as follows:

$$y = 3.007 + 0.234X_8$$

Based on the beta values of model 1, it can be argued that implementer M&E skills ( $X_8$ ) contributed to 23.4% of the model. Since  $F(1,179) = 13.841$  at  $p < 0.05$  level of significance, it can 95%

confidently be concluded that implementer M&E skills predicted organizational performance (y). The R<sup>2</sup> values of the model indicate that implementer M&E skills explained 7.2% of organizational performance. Although implementer M&E skills were identified as predictors of organizational performance; at 7.2%, they were weak predictors at the first step in the regression modelling.

At the second step of stepwise regression modelling in this research objective; PC tools and PC implementer participation were excluded in stepwise modelling leaving implementer M&E skills and a combination of PC targets and M&E skills as the predictor variables of organizational performance. By substituting the beta values as well as the constant term, model 2 emanating from the second step in regression modelling would be as follows:

$$y = 3.007 + 1.042X_8 - 0.199X_1X_8$$

Based on the beta values of model 2, it was argued that implementer M&E skills (X<sub>8</sub>) contributed to 104.2% of the model while PC targets negatively influenced organizational performance by 19.9% in the model. Since  $F(2,178) = 10.973$  at  $p < 0.05$  level of significance; it was 95% confidently concluded that the interaction between M&E skills (X<sub>8</sub>) and PC targets (X<sub>1</sub>) negatively influenced organizational performance (y) at this step of the regression modelling. The R<sup>2</sup> values of the model indicate that the combination of implementer M&E skills and PC targets explained 11.0% of organizational performance.

At the third and final step of stepwise regression modelling in this research objective; implementer participation was excluded in stepwise modelling leaving implementer M&E skills; a combination of PC targets and M&E skills; and PC tools as the predictor variables of organizational performance. By substituting the beta values as well as the constant term, model 3 emanating from the third step in regression modelling would be as follows:

$$y = 2.527 + 0.145X_2 + 1.288X_8 - 0.278X_1X_8$$

Based on the beta values of model 3, it can be concluded that implementer M&E skills (X<sub>8</sub>) contributed to 128.8% of the model while PC tools contributed to 14.5% of the model. The interaction between M&E skills and PC targets negatively influenced organizational performance

by 27.8% in the model. Since  $F(2,177) = 9.588$  at  $p < 0.05$  level of significance; it was 95% confidently concluded that the interaction between M&E skills ( $X_8$ ) and PC targets ( $X_1$ ) negatively influenced organizational performance ( $y$ ). Since model 3 was the last step in stepwise regression modelling, the  $R^2$  values of the model indicate that the interaction between implementer M&E skills and PC system explained 14.0% of organizational performance.

Therefore it can be concluded that implementer M&E skills moderated the relationship between PC system and organizational performance. We therefore reject the null hypothesis and conclude that the strength of the relationship between performance contracting system and organizational performance depends on implementer M&E skills. The implication of these findings in the context of Government Ministries in Kenya is that organizational performance is influenced by the type and level of implementers' M&E skills. Therefore for Ministries of Government to enhance performance, implementers of the PC system need to be equipped with M&E skills. The regression results are shown in Table 4.25.

**Table 4.25: Regression Results for the Influence of Implementer M&E Skills on the Relationship between PC System and Organizational Performance**

Model	r	R <sup>2</sup>	Adjusted R <sup>2</sup>	F	Beta	Predictor Variables
1	.268a	.072	.067	13.841	3.007 .234	Constant Term M&E Skills
2	.331b	.110	.100	10.973	3.007 1.042 -.199	Constant Term M&E Skills (PC Targets + M&E Skills)
3	.374c	.140	.125	9.588	2.527 1.288 -.278 .145	Constant Term M&E Skills (PC Targets + M&E Skills) PC Tools

a. Predictors: (Constant);  $X_8$

b. Predictors: (Constant);  $X_8$ ;  $X_1X_8$

c. Predictors: (Constant);  $X_8$ ;  $X_1X_8$ ;  $X_2$

Model 1:  $F(1,179) = 13.841$  at  $p < 0.05$  level of significance

Model 2:  $F(2,178) = 10.973$  at  $p < 0.05$  level of significance

Model 3:  $F(3,177) = 9.588$  at  $p < 0.05$  level of significance

Although descriptive statistics indicate that respondents had monitoring and evaluation skills, interviews conducted indicated respondents were inadequately equipped with Monitoring and Evaluation (M&E) skills for continual improvement of the PC system. For instance, although descriptive statistics indicated that respondents were neutral on whether Government Ministries had an Integrated Performance Management System (IPMS), interviews conducted indicated that there was no IPMS implementer in Government Ministries. That descriptive statistics indicated that implementers were neutral on whether IPMS existed in Government Ministries suggests that PC implementers may not have been knowledgeable on Integrated Performance Management System. Another possibility for the findings from the descriptive statistics is that respondents did not want to look ignorant in as far as monitoring and evaluation skills were concerned. This is because interviews showed that respondents did not have most of the skills required in performance measurement like development of clearly stated performance indicators, conducting and writing evaluation reports and generation of performance based quarterly reports based on objectively verifiable indicators.

#### **4.8.2.3 Discussion on Influence of Implementer M&E Skills on the Relationship between PC System and Organizational Performance**

Research objective 3b in this study was to determine the extent to which implementer Monitoring and Evaluation (M&E) skills influence the relationship between performance contracting system and organizational performance in Government Ministries in Kenya. The PC system implemented in Government Ministries in Kenya was regarded in the current study as a monitoring and evaluation system. Studies carried out by Nuguti (2009) indicate that the PC system in Kenya compares favourably with the monitoring and evaluation (M&E) system proposed by Kusek and Rist (2004). Ability to identify and develop performance indicators, conduct and write evaluation reports and generate quarterly reports based on objectively verifiable indicators are pointers of M&E skills. Marsh and David (1999) indicate that ability to undertake performance evaluation, develop performance indicators, undertake project appraisals, produce quarterly reports, develop work breakdown structures and develop M&E frameworks are indicators of M&E skills.

Research hypothesis 3b was therefore developed to test whether the strength of the relationship between performance contracting system and organizational performance depended on implementer M&E skills. This hypothesis was formulated because although other studies linked M&E skills with organizational performance in a performance management system, no previous study was found that investigated the moderating role played by implementer M&E skills on the relationship between a performance management system and organizational performance. Findings from this study indicate that M&E skills moderate the relationship between performance contracting system and organizational performance in Government Ministries in Kenya. This implies that despite having an effective performance management system in the form of PC system, implementer M&E skills were required to achieve desired organizational performance.

Descriptive statistics indicated that respondents had the requisite M&E skills needed for effective implementation of the PC system. However, interviews conducted indicated that respondents did not have the necessary M&E skills required at their performance level of operation in respect to implementation of the PC system. For instance, at the lowest level of management, unit/section heads, respondents were expected to be in position to identify and develop objectively verifiable indicators and produce quarterly reports. At higher levels of management, departmental heads, respondents were expected to be in position to conduct performance evaluations and produce commensurate reports. For the M&E units in Ministries, respondents, being the M&E specialists, were expected to be in position to develop integrated M&E systems.

Without the required M&E skills for performance measurement, even though Government Ministries may outsource the services of external consultants, it would be difficult to objectively appraise reports submitted or systems implemented through outsourcing. Interviews conducted indicated that there was hardly any formal M&E training undertaken by M&E experts in Government Ministries and even most of the implementers charged with the specialized responsibility of the M&E units had not undertaken comprehensive M&E training at University level standards but rather they had a few days or weeks of rushed trainings through seminars. There is therefore need for Government Ministries to equip PC implementers with comprehensive M&E skills to enhance organizational performance.

### 4.8.3 Analysis on Influence of Implementer Attitude and Implementer M&E Skills on the Relationship between PC System and Organizational Performance

In this section, data analysis and discussions on research objective three were done. Data analysis involved inferential statistics on the joint influence of implementer attitude and implementer M&E skills, a term referred to as cognitive factors in this study, on the relationship between PC system and organizational performance. While analyzing the inferential data for research objective three, stepwise multiple regression was used. The hypothesis and the regression model for this research objective were as follows:

#### Hypothesis 3:

H<sub>0</sub>: The strength of the relationship between performance contracting system and organizational performance does not depend on cognitive factors

H<sub>A</sub>: The strength of the relationship between performance contracting system and organizational performance depends on cognitive factors

#### Regression Model:

Organizational Performance = f (PC System, Implementer Attitude, Implementer M&E Skills)

$$y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_9 X_9 + \beta_{19} X_1 X_9 + \beta_{29} X_2 X_9 + \beta_{39} X_3 X_9 + \varepsilon$$

Literature reviewed in this study identified implementer attitude and implementer monitoring and evaluation (M&E) skills as indicators of cognitive factors. In addition, the components of PC system were indicated to be PC targets, PC tools and implementer participation. This objective was designed to establish the joint moderating influence of cognitive factors on the relationship between performance contracting system and organizational performance. Therefore in this research objective, multiple regression was performed to determine the best linear combination of PC targets, PC tools, PC implementer participation and a combination of implementer attitude and implementer M&E skills in predicting organizational performance.

The stepwise regression modelling procedure excluded all variables that were entered in the model leaving PC tools as the only predictor variables of organizational performance. However, the

interaction between PC tools and cognitive factors was also excluded in the model. By substituting the beta values as well as the constant term, the model proceeding from the stepwise regression modelling would be as follows:

$$y = 2.706 + 0.127X_2$$

Based on the beta values of the regression model, it was concluded that PC tools ( $X_2$ ) contributed to 12.7% of the model and no other variable contributed to the model. Thus from the emerging regression model, a unit % increase in implementation of PC Tools ( $X_2$ ) would result to 12.7% increase in organizational performance ( $y$ ) irrespective of cognitive factors ( $X_9$ ). Since  $F(1,179) = 6.074$  at  $p = 0.015 < 0.05$  level of significance, it was 95% confidently concluded that PC tools predict organizational performance ( $y$ ) irrespective of cognitive factors ( $X_9$ ). The  $R^2$  values of the model indicate that PC tools explained 9.4% of organizational performance given cognitive factors. This indicates that cognitive factors behaved as constants rather than variables in determination of the relationship between PC system and organizational performance.

It was therefore concluded that cognitive factors do not moderate the relationship between PC system and organizational performance. The null hypothesis was therefore accepted and it was concluded that the strength of the relationship between performance contracting system and organizational performance does not depend on cognitive factors. The regression results are shown in Table 4.26.

**Table 4.26: Regression Results for the Influence of Cognitive Factors on the Relationship between PC System and Organizational Performance**

Model	r	R <sup>2</sup>	Adjusted R <sup>2</sup>	F	Beta	Predictor Variables
1	.181a	.033	.027	6.074	2.706 .127	Constant Term (PC tools)

a. Predictors: (Constant);  $X_2$

Model:  $F(1,179) = 6.074$  at  $p = 0.015 < 0.05$  level of significance

Respondents interviewed in this study indicated that implementer attitude and implementer Monitoring and Evaluation (M&E) skills influence organizational performance. In addition, respondents interviewed indicated that implementer attitude and implementer M&E skills moderate the relationship between PC system and organizational performance. However, the joint influence of implementer attitude and implementer M&E skills, a concept devised in this study as cognitive factors, could not be achieved during interviews, but rather at the inferential analysis stage of the thesis. Therefore stepwise regression modelling was undertaken to combine implementer attitude and implementer M&E skills and investigate their joint influence on the relationship between the PC system in Government Ministries and organizational performance.

#### **4.8.3.1 Discussion on Influence of Cognitive Factors on the Relationship between PC System and Organizational Performance**

Research objective three was to establish the extent to which cognitive factors influence the relationship between performance contracting system and organizational performance in Government Ministries in Kenya. Although theoretical and empirical literature reviewed in this study showed positive relationships between each of the predictor variables with the dependent variable, no previous study was shown on the joint influence of implementer attitude and implementer M&E skills on the primary relationship between performance contracting system and organizational performance in Government Ministries in Kenya. As such, cognitive factors was a concept devised in this study to investigate the joint influence of implementer attitude and implementer M&E skills on the relationship between performance contracting system and organizational performance of Government Ministries. Therefore there is no specific raw data that was collected to determine this relationship. Rather, cognitive influence as a single moderator was achieved at the data analysis stage in this study by combining the items in implementer attitude and implementer M&E skills and factoring the combined items in the relationship between PC system and organizational performance through stepwise regression modelling. It was therefore

hypothesized that the strength of the relationship between performance contracting system and organizational performance depended on cognitive factors.

Inferential statistics in this study indicated that the strength of the relationship between performance contracting system and organizational performance did not depend on cognitive factors. Although inferential statistics in this study indicated implementer M&E skills as a single moderating variable influenced the relationship between performance contracting system and organizational performance in Government Ministries, inferential analysis excluded implementer attitude as a moderating variable between PC system and organizational performance. The role played by implementer attitude may explain why cognitive factors were excluded in stepwise regression as moderating factors between PC system and organizational performance. This is because although interviews conducted in this study pointed to a positive relationship between cognitive factors and organizational performance, the significance of the relationship could only be established through inferential statistics.

After factoring contextual factors and PC system on organizational performance in stepwise regression modelling; contextual factors, PC targets, PC implementer participation, implementer attitude and implementer M&E skills were all excluded from the mathematical model leaving PC tools as the only predictor variables. It was therefore concluded that the strength of the relationship between performance contracting system and organizational performance does not depend on cognitive factors. The implication of this finding is that in the implementation of the PC system given cognitive factors, the PC implementers should focus on the PC tools in respect to their validity, reliability and simplicity. Since M&E skills were shown to influence the relationship between PC system and organizational performance, resources in Government Ministries in respect to the PC system should be directed towards attainment of reliable, valid and simple to use tools and equipping implementers with necessary M&E skills to effectively handle PC tools and the entire PC system to achieve and sustain optimal organizational performance.

## CHAPTER FIVE

### SUMMARY OF FINDINGS, CONCLUSIONS AND RECOMMENDATIONS

#### 5.1 Introduction

This chapter presents summary of findings, conclusions and recommendations. In the summary of findings, the results and remarks for each of the hypothesis in the study were presented for the three research objectives. The conclusions presented in this section were guided by the research objectives and informed by the findings, analysis, interpretation and discussions in the study. Based on the conclusions made, the contribution of the study to knowledge was examined. Recommendations based on the results for policy and practice and for methodology as well as suggestions for further research were made.

#### 5.2 Summary of Findings

In the testing of the hypotheses in the study, Pearson's Product Moment Correlation and Stepwise Multiple Regression analysis were used. In total, ten hypotheses were formulated and tested in the study. Five were accepted while five were rejected. Four hypotheses were identified under research objective one. In testing these hypothesis, levels of significance of F statistics and Pearson's Product Moment Correlation were considered since these relationships were linear. Where  $p < 0.05$ , the null hypothesis was rejected and it was concluded that a correlation model existed implying a significant relationship was established between the variables under consideration. For the strength of the established relationships, r values were considered while interpreting results. Where  $r < 0.1$ , the relationship was considered too weak to be statistically significant. For  $0.1 < r < 0.3$ , the relationship was considered weak; for  $0.3 < r < 0.5$ , the relationship was considered moderate; and for  $0.5 < r < 1.0$ , the relationship was considered strong. The positive or negative sign of the 'r' values denoted the direction of the relationship under investigation.

For  $H_1$ ,  $r = 0.232$ ,  $F(3,177) = 3.358$  at  $p = 0.02 > 0.05$  was accepted and concluded that PC system influences organizational performance. For  $H_{1a}$ ,  $r = 0.003$ ,  $F(1,181) = 0.001$  at  $p = 0.969 > 0.05$  was rejected and concluded that PC targets do not influence organizational performance. For  $H_{1b}$ ,  $r = 0.193$ ,  $F(1,181) = 6.9$  at  $p = 0.009 > 0.05$  was accepted and concluded that PC tools influence

organizational performance. For  $H_{1c}$ ,  $r = 0.058$ ,  $F(1,179) = 0.612$  at  $p = 0.435 > 0.05$  was rejected and concluded that PC implementer participation does not influence organizational performance.

For research objectives two and three, three hypotheses were formulated and tested for each of the two research objectives. In testing these hypotheses, the existence of a regression model that included the variable under investigation was considered. If the variable under consideration was excluded from the model, the null hypothesis was accepted and it was concluded that a relationship did not exist between the dependent variable and the predictor variable(s). Where the regression model was found to exist, the decision level on the strength of the relationships under investigation was arrived from the final regression model realized in stepwise regression. In such situations whereby the null hypothesis was rejected and a relationship was thus established, the strength of the relationship between the predictor variable and the dependent variable was determined by the  $R^2$  values.

For  $H_2$ ,  $R^2 = 0.094$ ,  $F(1,179) = 18.470$  at  $p < 0.05$  was accepted and it was concluded that the strength of the relationship between PC system and organizational performance depends on contextual factors. For  $H_{2a}$ ,  $R^2 = 0.057$ ,  $F(2,177) = 5.315$  at  $p = 0.006 < 0.05$  was rejected and it was concluded that the strength of the relationship between PC system and organizational performance does not depend on organizational structure. For  $H_{2b}$ ,  $R^2 = 0.118$ ,  $F(2,177) = 11.864$  at  $p < 0.005$  was accepted and it was concluded that the strength of the relationship between PC system and organizational performance depends on organizational culture.

For  $H_3$ ,  $R^2 = 0.033$ ,  $F(1,179) = 6.074$  at  $p = 0.015 < 0.05$  was rejected and it was concluded that the strength of the relationship between PC system and organizational performance does not depend on cognitive factors. For  $H_{3a}$ ,  $R^2 = 0.033$ ,  $F(1,179) = 6.074$  at  $p = 0.015 < 0.05$  was rejected and it was concluded that the strength of the relationship between PC system and organizational performance does not depend on implementer attitude. For  $H_{3b}$ ,  $R^2 = 0.140$ ,  $F(2,177) = 9.588$  at  $p < 0.05$  was accepted and it was concluded that the strength of the relationship between PC system and organizational performance depends on implementer Monitoring and Evaluation (M&E) skills. Table 5.1 presents a summary of the results of the tests of hypotheses in this study.

**Table 5.1: Summary of Tests of Hypotheses and Results**

<b>Research Objective</b>	<b>Hypothesis</b>	<b>Results</b>	<b>Table</b>	<b>Remarks</b>
1. To examine the extent to which PC System influence Organizational Performance in Government Ministries in Kenya	<b>H<sub>1</sub></b> : There is no significant relationship between PC System and Organizational Performance	r = 0.232 p = 0.02 < 0.05 F (3,177) = 3.358	4.16	Rejected
1a. To examine the extent to which PC Targets influence Organizational Performance in Government Ministries in Kenya	<b>H<sub>1a</sub></b> : There is no significant relationship between PC Targets and Organizational Performance	r = 0.003 p = 0.969 > 0.05 F (1,181) = 0.001	4.10	Accepted
1b. To examine the extent to which PC Tools influence Organizational Performance in Government Ministries in Kenya	<b>H<sub>1b</sub></b> : There is no significant relationship between PC Tools and Organizational Performance	r = 0.193 p = 0.009 < 0.05 F (1,181) = 6.9	4.12	Rejected
1c. To examine the extent to which PC Implementer Participation influence Organizational Performance in Government Ministries in Kenya	<b>H<sub>1c</sub></b> : There is no significant relationship between PC Implementer Participation and Organizational Performance	r = 0.058 p = 0.435 > 0.05 F (1,179) = 0.612	4.14	Accepted

Research Objective	Hypothesis	Results	Table	Remarks
2. To establish the extent to which Contextual Factors influence the relationship between Performance Contracting System and Organizational Performance in Government Ministries in Kenya	<b>H<sub>2</sub></b> : The strength of the relationship between Performance Contracting System and Organizational Performance does not depend on Contextual Factors	r = 0.306  R <sup>2</sup> = 0.094  F (1,179) = 18.470  p < 0.05	4.21	Rejected
2a. To assess the extent to which Organizational Structure influence the relationship between Performance Contracting System and Organizational Performance in Government Ministries in Kenya	<b>H<sub>2a</sub></b> : The strength of the relationship between Performance Contracting System and Organizational Performance does not depend on Organizational Structure	r = 0.238  R <sup>2</sup> = 0.057  F (2,177) = 5.315  p < 0.05	4.18	Accepted
2b. To determine the extent to which Organizational Culture influence the relationship between Performance Contracting System and Organizational Performance in Government Ministries in Kenya	<b>H<sub>2b</sub></b> : The strength of the relationship between Performance Contracting System and Organizational Performance does not depend on Organizational Culture	r = 0.344  R <sup>2</sup> = 0.118  F (2,177) = 11.864  p < 0.05	4.20	Rejected

Research Objective	Hypothesis	Results	Table	Remarks
3. To establish the extent to which Cognitive Factors influence the relationship between Performance Contracting System and Organizational Performance in Government Ministries in Kenya	<b>H<sub>3</sub></b> : The strength of the relationship between Performance Contracting System and Organizational Performance does not depend on Cognitive Factors	$r = 0.181$ $R^2 = 0.033$ $F(1,179) = 6.074$ $p = 0.015 < 0.05$	4.26	Accepted
3a. To examine the extent to which Implementer Attitude influence the relationship between Performance Contracting System and Organizational Performance in Government Ministries in Kenya	<b>H<sub>3a</sub></b> : The strength of the relationship between Performance Contracting System and Organizational Performance does not depend on Implementer Attitude	$r = 0.181$ $R^2 = 0.033$ $F(1,179) = 6.074$ $p = 0.015 < 0.05$	4.23	Accepted
3b. To determine the extent to which Implementer M&E Skills influence the relationship between Performance Contracting System and Organizational Performance in Government Ministries in Kenya	<b>H<sub>3b</sub></b> : The strength of the relationship between Performance Contracting System and Organizational Performance does not depend on Implementer M&E Skills	$r = 0.374$ $R^2 = 0.140$ $F(2,177) = 9.588$ $p < 0.05$	4.25	Rejected

### 5.3 Conclusions

This section presents the conclusions made in the study. Research objective one in this study was to examine the extent to which performance contracting system influence organizational performance in Government Ministries in Kenya. The indicators of the PC system were PC targets, PC tools and PC implementer participation. The indicators for organizational performance were rate of customer satisfaction, rate of employee satisfaction and level of participation in corporate social responsibilities. Whereas PC implementer participation was not found to significantly influence organizational performance, PC tools positively influenced organizational performance while PC targets negatively influenced organizational performance. That PC tools and targets influenced the outcome of organizational performance, it was therefore concluded that performance contracting system influence organizational performance in Government Ministries in Kenya. To improve on organizational performance, it was therefore concluded that PC tools need to be simple to use, reliable and valid. Further, since respondents indicated that PC targets are good for performance, then to reverse the negative influence of PC targets on organizational performance, it was concluded that the process of setting targets should be more participatory. In addition, it was concluded that the targets set should directly impact on customer satisfaction, employee satisfaction and social responsibilities.

Research objective two in this study was to establish the extent to which contextual factors influence the relationship between performance contracting system and organizational performance in Government Ministries in Kenya. Contextual factors was a concept derived in this study for the combined influence of organizational structure and organizational culture on the relationship between performance contracting system and organizational performance. As such, there were no items under contextual factors in the research instruments but the determination of this variable was achieved at the analysis level through stepwise regression analysis. Results from the regression modelling indicated that contextual factors significantly influence the relationship between performance contracting system and organizational performance. It was therefore concluded that contextual factors influence the relationship between performance contracting system and organizational performance in Government Ministries in Kenya. Since PC tools were singled out as the only components of the PC system to have been moderated by the joint influence of contextual factors, it was therefore concluded that the development of PC tools should be

cognizant of contextual factors. That means that PC tools should be reliable, valid and simplified depending on the organizational context and not generalized.

Research objective 2<sub>a</sub> in this study was to assess the extent to which organizational structure influence the relationship between performance contracting system and organizational performance in Government Ministries in Kenya. The indicators for organizational structure were the mandate of the organization, size of the organization and model of the organization. The indicators for organizational performance were rate of customer satisfaction, rate of employee satisfaction and level of participation in corporate social responsibilities. Descriptive analysis showed that organizational structure in Government Ministries in Kenya does not significantly influence organizational performance. Inferential analysis indicated that the strength of the relationship between performance contracting system and organizational performance in Government Ministries in Kenya does not depend on organizational structure. It was therefore concluded that organizational structure does not significantly influence the relationship between performance contracting system and organizational performance in Government Ministries in Kenya. As such, customer satisfaction, employee satisfaction and corporate social responsibilities are not significantly influenced by the mandate, size and model of Government Ministries in Kenya. Since while testing the hypothesis on the influence of organizational structure on the relationship between performance contracting system and organizational performance, only PC tools were not excluded by the regression model, it was therefore concluded that the Government of Kenya should improve on the simplicity, validity and reliability of the PC tools regardless of the organizational structure of the Ministries.

Research objective 2<sub>b</sub> in this study was to determine the extent to which organizational culture influence the relationship between performance contracting system and organizational performance in Government Ministries in Kenya. The indicators of organizational culture in this study were clarity of organizational vision, promptness to duty and team work. The indicators for organizational performance were rate of customer satisfaction, rate of employee satisfaction and level of participation in corporate social responsibilities. Organizational culture was found to moderate the relationship between PC system and organizational performance. It was therefore concluded that organizational culture influences the relationship between performance contracting system and organizational performance in Government Ministries in Kenya. Descriptive analysis

showed that Government Ministries do not engage in team building activities annually. Absence of team building activities could explain why PC targets had a negative influence on organizational performance when organizational culture was factored in the regression modelling. Therefore to improve on the culture of involving all employees in setting of PC targets, it was concluded that Government Ministries should engage in team building activities annually.

Research objective three in this study was to establish the extent to which cognitive factors influence the relationship between performance contracting system and organizational performance in Government Ministries in Kenya. Cognitive factors was a concept derived in this study for the combined influence of implementer attitude and implementer M&E skills on the relationship between performance contracting system and organizational performance. As such, there were no items under cognitive factors in the research instruments but the influence of this variable was achieved at the analysis level through stepwise regression analysis. Results from the regression modelling indicated that cognitive factors do not influence the relationship between performance contracting system and organizational performance. It was therefore concluded that cognitive factors do not influence the relationship between performance contracting system and organizational performance in Government Ministries in Kenya. When cognitive factors and PC system were factored in the regression model, only PC tools were not excluded in the model. A model was not found to exist between any other factor and the dependent variable. That PC tools were found to influence organizational performance when cognitive factors were factored in excluding PC targets, PC implementer participation and cognitive factors from the model indicates that the reliability, validity and simplicity of the PC tools should be enhanced irrespective of cognitive factors. It was therefore concluded that Government Ministries should ensure that the PC tools are valid and reliable to improve customer satisfaction, employee satisfaction and level of participation in social responsibilities. In addition, it was concluded that PC tools should be simple to use by PC implementers in Government Ministries.

Research objective 3<sub>a</sub> in this study was to examine the extent to which implementer attitude influence the relationship between performance contracting system and organizational performance in Government Ministries in Kenya. Indicators for implementer attitude were level of support of the PC system and time taken to meet PC obligations. The indicators for organizational performance were rate of customer satisfaction, rate of employee satisfaction and

level of participation in corporate social responsibilities. Although descriptive analysis indicated that respondents had positive attitude towards the PC system, results from regression modelling did not indicate a significant influence of implementer attitude on the relationship between performance contracting system and organizational performance. It was therefore concluded that implementer attitude does not influence the relationship between performance contracting system and organizational performance in Government Ministries in Kenya. Since PC tools were shown to be the only predictor variables when implementer attitude was factored in the relationship between PC system and organizational performance, it was therefore concluded that the Government of Kenya should ensure that the PC tools are reliable and valid to measure the desired constructs to enhance customer satisfaction, employee satisfaction and involvement in corporate social responsibilities and that the PC tools should be simple to use for the PC implementers.

Research objective 3<sub>b</sub> in this study was to determine the extent to which implementer monitoring and evaluation (M&E) skills influence the relationship between performance contracting system and organizational performance in Government Ministries in Kenya. The indicators of M&E skills were type of M&E skills and level of M&E skills. The indicators for organizational performance were rate of customer satisfaction, rate of employee satisfaction and level of participation in corporate social responsibilities. Regression modelling indicated that M&E skills moderated the relationship between performance contracting system and organizational performance. It was therefore concluded that M&E skills significantly influence the relationship between performance contracting system and organizational performance in Government Ministries in Kenya. Based on the descriptive findings, it was concluded that an integrated performance management system across all Ministries should be developed to enhance organizational performance. In addition, it was concluded that all employees in Government Ministries should be trained on M&E skills geared towards equipping employees with skills to develop performance indicators, performance evaluation, performance personal work breakdown structures, project appraisals and generation of quarterly reports.

#### **5.4 Contribution of the Study to Knowledge in Performance Management**

Although this study was grounded on Results Theory since the PC system in Ministries of Government in Kenya is a performance management system that favourably compares with the monitoring and evaluation system developed by Kusek and Rist (2004) that attempted to simplify Results Framework for monitoring performance developed by Marsh and David (1999), results from this study indicate that results management cannot entirely be explained by any one theory. For instance, although Results Theory emphasis is on participatory management as postulated by Mohan (2001) as the only sure way for organizational performance, findings from this study indicate that performance can still be attained in the absence of implementer participation so long as the performance management system has effective monitoring and evaluation tools that are valid, reliable and simple to use by the implementers.

Since the PC system as an independent predictor variable was shown to influence organizational performance, then the findings of this study vindicates Social Technical Theory examined in this study. Social Technical Theory, advanced from the Systems Theory, envisions organizational performance as a component of the technical system in place comprising of tools, techniques and people (Delmas and Offel, 2008). That the PC system influenced organizational performance implies that Results Theory whose emphasis is on performance measurement should incorporate enhancing the performance system in place which was shown in this study to weigh more than people involvement advanced by Results Theory in pursuit of organizational performance.

Despite the process of setting targets being the core of Results Theory as postulated by Mohan (2001), this study indicated that the process of setting targets is not a determinant of organizational performance in a bureaucratic system like a government. This finding therefore requires an integration of Goal Setting Theory associated with Drucker's 1954 work and examined by Robbins (2005) with Max Weber's Theory of Bureaucracy reviewed by Bruun (2007). This is because the Goal Setting Theory identified individualized targets as key to performance but ignored the ordinary employee in the setting of goals. Respondents interviewed in this study indicated that although targets set are achieved, they may not be challenging enough to reflect organization's tangible progress and may also not be within the core mandate of a given Ministry which then implies that external customers may not be experiencing the impact of high performance rating of

Ministries. A key example identified by respondents was the Ministry of Lands which was ranked number three in the 2010/11 FY evaluation yet majority of people looking for title deeds were not satisfied with the issuance of title deeds which is the core mandate of the Ministry.

In addition, although Results Theory is critical of bureaucracies, organizational structure as a predictor variable was not found to moderate the relationship between the PC system and organizational performance in this study. The implication of this finding to theory is that Results Theory need to be flexible enough to accommodate bureaucratic organizations in performance management. This study indicates that bureaucracies cannot be eliminated in large organizations for effective management and prudent utilization of resources. For bureaucratic structures to enhance performance, the PC system in place need to be effective and implementers ought to be equipped with the necessary skills to measure performance. This study indicates that implementers and evaluators of the PC system ought to be equipped with skills to develop performance indicators, develop performance measurements frameworks, conduct an evaluation, produce quarterly reports and implement a monitoring and evaluation system. This finding on equipping PC implementers and evaluators with M&E skills validates Results Theory that performance agreements are monitoring and evaluation tools (Hatry and Harry, 2006).

That contextual factors were jointly found to moderate the relationship between PC system and organizational performance in this study confirms Contingency (Environment) Theory's basic principles. Contingency Theory is grounded on the premise that there does not exist any one best way to manage organizations and hence performance is a factor of the organization's contextual realities (Lutans, 2011). Other proponents of Contingency Theory such as Dobbin (2012) indicate that an organization's performance is influenced by the size of the organization and the firm's adaptability to its environment and differences among resources and operations. Whereas organizational structure independently was not shown in this study to moderate between PC system and organizational performance, organizational culture, a key component of contextual factors in this study, was shown to independently influence organizational performance, which partially validates Contingency Theory in explanation of organizational performance.

## **5.5 Recommendations**

This section presents recommendations made in the study that were based on the research findings, analysis, interpretation and discussion. Recommendations for policy and practice and recommendations for methodology were examined in this section.

### **5.5.1 Recommendations for Policy and Practice**

PC tools were shown in this study to be the main predictor variables of organizational performance. The implication of this finding for policy and practice is that Ministries of Government should ensure that the tools used in the PC tools are valid and reliable in performance management and simple to use by the PC implementers. This implies that in the development of PC tools, proper research should be undertaken in consultation with both employees and external customers to ensure that the PC tools measure the desired constructs. In addition, PC implementers should be trained on the usage of the PC tools and equipped with skills to ascertain the reliability and validity of the PC tools.

That the PC system was shown to be a predictor of organizational performance implies that laws should be enacted to safeguard gains made through the PC system through an ACT of Parliament. The PC system in Kenya operates under a Presidential decree which implies that an oncoming government can do away with the PC system. Such a move would reverse gains made since the PC system was enacted in the public sector in Kenya in 2003. However, to improve on organizational performance through the PC system, essential aspects of other performance systems especially those used in the private sector like Balanced Score Card (BSC) need to be examined for possible aspects that can be integrated in the public PC system so as to address items that are not adequately addressed by Ministries of Government like responsiveness to corporate social responsibilities and service delivery.

Implementer monitoring and evaluation skills were shown in this study to moderate the relationship between PC system and organizational performance. The implication of this finding to policy and practice is that organizational performance in Ministries of Government will largely be determined by M&E skills of the implementers of the PC system. The implementers of the PC

system at the lower cadres need to be equipped with skills in effective filling of appraisal forms, development of performance indicators, development of performance frameworks and production of quarterly reports. Implementers of the PC system at higher cadres of management as well as staff members in M&E units need to be equipped with skills to conduct evaluation including production of evaluation reports, design and development of M&E system and production of project proposals for funding. External evaluators of the PC system ought to be equipped with evaluation skills including types of evaluations and evaluation reports.

In addition, since the interaction between PC system and implementer M&E skills was found to predict organizational performance, the PC system in Ministries of Government, being a monitoring and evaluation system, need to be ICT driven and integrated across all Ministries of Government. The national M&E directorate should develop an integrated M&E system that is able to monitor performances including performance trends of Ministries of Government from a centralized unit. Although National Integrated Management Evaluation System (NIMES) manuals and frameworks have been developed, the integrated system has not yet been implemented. Parallels can be drawn from the Integrated Finance Management Information Systems (IFMIS) that is housed by the National Treasury in management of Government funds.

Organizational culture was found to moderate the relationship between PC system and organizational performance in this study. Further, respondents in this study indicated that team building activities were lacking in their organizations. Since team building influences team work, an indicator of organizational culture in this study, policies need to be enacted by Ministries of Government to enhance work culture through capacity building for like team building activities and continuous training on culture change with emphasis on promptness to duty and selling of organizational vision.

Since contextual factors were found in this study to jointly influence the relationship between PC system and organizational performance, considerations could be made to contextualize the PC system Ministry wise. This can be achieved by avoiding the ranking of Ministries and adopting an evaluation criteria for each Ministry as a unique entity with individualized targets cascaded down to all cadres of management. For this to be achieved, the PC tools also ought to be adaptable to the organizational context and mandate. Generalizations of performance evaluation can be

counterproductive since some Ministries' core mandate is service delivery while others it is development projects like infrastructures that are easily visible to the public. For instance, Ministries' external customers, largely the public, may tend to visualize performance from the Ministry of Transport and Infrastructure much more than the Ministry of Defense.

### **5.5.2 Recommendations for Methodology**

There were some aspects in the study where inadequacy was realized in the responses from the self-administered questionnaires and realities were only unearthed by use of the interview guide as a research instrument. For instance, respondents were neutral in the questionnaires on whether Ministries of Government had an integrated performance management system (Table 4.24). However, the face to face interviews confirmed that Ministries of Government did not have an integrated performance management system. This could imply different interpretation of what an integrated management system means which could only be clarified during the interview sessions. Another example would be the indication given by respondents on M&E skills. Respondents were conservative on the extent to which they were equipped with M&E skills and could hardly indicate that they were inadequate in this line. However, the face to face interviews with respondents revealed inadequacies in M&E skills. The implications of these findings to research methodology is triangulation in data collection procedures including in the selection of the research instruments to unearth hidden phenomena.

Another implication of the findings from this study for methodology is the growing need for mixed methods research approach in line with pragmatism paradigm in the construction and interpretation of reality. This is so because whereas the inferential data analysis in this study gave indications of whether relationships existed between variables in the study, and the strength of the relationships that existed, the inferential analysis largely ignored multiple realities which could have been lost especially where relationships were not confirmed to exist. For instance, inferential analysis showed no moderating relevance of implementer attitude on the relationship between PC system and organizational performance. Descriptive statistics revealed important aspects of implementer attitude that have implications on policy and practice in that the PC implementers are supportive of and have positive attitude towards the PC system. A second example would be organizational

structure which inferential analysis found not significantly moderating the relationship between PC system and organizational performance but findings from descriptive statistics indicated that organizational structure has a bearing in the setting, monitoring and evaluation of performance targets.

## **5.6 Suggestions for Further Research**

The Government of Kenya has developed various interventions to enhance organizational performance in the public sector. The four most outstanding are performance contracting system (PCs), National Integrated Management Evaluation System (NIMES), electronic management project management information systems (EPROMIS) and Vision 2030. All these interventions claim to have spearheaded performances of Ministries of Government and their performance measurement criteria are not synchronized. This study delimited itself to the PC system. Other studies can be carried out to investigate the influence of any or the combination of all these avenues designed to improve performance in the public sector.

This study delimited itself to the influence of the PC system on organizational performance and the moderating influence of contextual and cognitive factors on the relationship between the PC system and organizational performance. A study can be carried out to investigate the influence of other factors like employees' personal attributes, personalities, staggering of government funding, managerial commitment, change of governments and consequently restructuring of Ministries of Government every five years on the relationship between PC system and organizational performance. In addition, a study can still be done with the moderating variables in this study as the independent variables with the PC system as the intervening variable to ascertain the effect this would bring on organizational performance.

Another area for further research would be the usefulness, appropriateness and meaningfulness of the data collected through the PC tools in respect to public expectation on the performances of Ministries of Government. Interviews conducted in this study shows a discrepancy between the ranking scores of the Ministries with the public expectations which implied that good projects were forfeited in the target setting process since the focus in the PC system was on evaluation. Respondents interviewed indicated that doctoring of evaluation results by external evaluators was

common due to the PC system ranking criterion rather than the focus being on the Ministry's core mandate. The essence of PCs was to improve performance. It is therefore proposed that an independent study to be carried out on the validity and reliability of all PCs tools in respect to service delivery in light of public's expectations.

Respondents interviewed indicated that the PC system is only implemented in the executive arm of Government. The legislature and the Judiciary are not parties to the PC system. An independent study can therefore be done to compare the performance of the three arms of Government with an intention of verifying whether there was any advantage with the implementation of the PC system in the executive arm of Government.

The private sector largely uses the Balanced Score Card (BSC) performance measurement system which is aligned with organizational mandate. A comparative study can be undertaken to compare efficiency and effectiveness of BSC vis a vis the PC system including an investigation into the practicality of the implementation of the BSC in the public sector if the results reveal that BSC system is superior that PCs in service delivery, employee satisfaction and pro-activeness in corporate social responsibilities.

Finally, a study can be done to investigate whether incentives to PC implementers (employees in Ministries of Government) would enhance organizational performance holding all other variables in this study constant. PCs were introduced in the public sector in Kenya in 2003 and piloted in all parastatals in 2004 and some Ministries in 2005 and eventually rolled in all ministries in 2005 with the first ranking done in the 2005/2006 Financial Year. Respondents interviewed indicated that during the first ranking, the Ministry of Agriculture was ranked number one and employees in that Ministry were awarded one month's extra salary as a motivation for good performance. This incentive was critiqued and discontinued. An independent study therefore can be done to investigate the influence of employee motivation in the relationship between PC system and organizational performance in Ministries of Government in Kenya.

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## APPENDICES

### Appendix 1: Correlations of Variables

		<b>OP</b>	<b>PC targets</b>	<b>PC tools</b>	<b>IP</b>	<b>OS</b>	<b>OC</b>	<b>IA</b>	<b>IME</b>
<b>OP</b>	Pearson Correlation	1	-.003	.192**	.058	.165*	.319**	.008	.248**
	Sig. (2-tailed)		.969	.009	.435	.026	.000	.914	.001
	N	184	183	183	181	181	181	182	182
<b>PC targets</b>	Pearson Correlation	-.003	1	.605**	.552**	.510**	.436**	.633**	.459**
	Sig. (2-tailed)	.969		.000	.000	.000	.000	.000	.000
	N	183	183	183	181	181	181	182	182
<b>PC tools</b>	Pearson Correlation	.192*	.605**	1	.471**	.492**	.536**	.492**	.483**
	Sig. (2-tailed)	.009	.000		.000	.000	.000	.000	.000
	N	183	183	183	181	181	181	182	182
<b>IP</b>	Pearson Correlation	.058	.552**	.471**	1	.308**	.271**	.439**	.385**
	Sig. (2-tailed)	.435	.000	.000		.000	.000	.000	.000
	N	181	181	181	181	180	180	181	181
<b>OS</b>	Pearson Correlation	.165*	.510**	.492**	.308**	1	.557**	.438**	.418**
	Sig. (2-tailed)	.026	.000	.000	.000		.000	.000	.000
	N	181	181	181	180	181	180	181	181
<b>OC</b>	Pearson Correlation	.319*	.436**	.536**	.271**	.557**	1	.411**	.527**
	Sig. (2-tailed)	.000	.000	.000	.000	.000		.000	.000
	N	181	181	181	180	180	181	181	181
<b>IA</b>	Pearson Correlation	.008	.633**	.492**	.439**	.438**	.411**	1	.421**
	Sig. (2-tailed)	.914	.000	.000	.000	.000	.000		.000
	N	182	182	182	181	181	181	182	182
<b>IME</b>	Pearson Correlation	.248*	.459**	.483**	.385**	.418**	.527**	.421**	1
	Sig. (2-tailed)	.001	.000	.000	.000	.000	.000	.000	
	N	182	182	182	181	181	181	182	182

\*\* Correlation is significant at the 0.01 level (2-tailed)

\* Correlation is significant at the 0.05 level (2-tailed)

## Appendix 2: Correlations and Residual Tables

(i) **Correlations and residual tables for PC Targets, PC Tools, PC Implementer Participation and Organizational Structure**

**Excluded Variables**

a. Predictors in the Model: (Constant), PC tools						Collinearity Statistics
b. Predictors in the Model: (Constant), PC tools, PC targets						
Model		Beta In	t	Sig.	Partial Correlation	Tolerance
1	PC targets	-.189 <sup>a</sup>	-2.065	.040	-.153	.633
	PC Implementer Participation	-.036 <sup>a</sup>	-.434	.665	-.033	.778
	Organizational Structure	.054 <sup>a</sup>	.681	.497	.051	.880
	PC Targets + Organizational Structure	.003 <sup>a</sup>	.043	.966	.003	.824
	PC Tools + Organizational Structure	.021 <sup>a</sup>	.246	.806	.018	.733
	PC Implementer Participation + Organizational Structure	.033 <sup>a</sup>	.403	.688	.030	.818
2	PC Implementer Participation	.034 <sup>b</sup>	.378	.706	.028	.664
	Organizational Structure	.101 <sup>b</sup>	1.260	.209	.095	.822
	PC Targets + Organizational Structure	.076 <sup>b</sup>	.872	.384	.066	.710
	PC Tools + Organizational Structure	.069 <sup>b</sup>	.779	.437	.059	.688
	PC Implementer Participation + Organizational Structure	.093 <sup>b</sup>	1.092	.276	.082	.742

(ii) **Correlations and residual tables for PC Targets, PC Tools, PC Implementer Participation and Organizational Culture**

**Excluded Variables**

a. Predictors in the Model: (Constant), m2						Collinearity Statistics
b. Predictors in the Model: (Constant), m2, x1m2						
Model		Beta In	t	Sig.	Partial Correlation	Tolerance
1	PC targets	-.103 <sup>a</sup>	-1.389	.167	-.104	.918
	PC tools	.053 <sup>a</sup>	.665	.507	.050	.802
	PC Implementer Participation	.001 <sup>a</sup>	.016	.987	.001	.963
	PC Targets + Organizational Culture	-.729 <sup>a</sup>	-2.099	.037	-.156	.410
	PC Tools + Organizational Culture	-.019 <sup>a</sup>	-.057	.955	-.004	.460
	PC Implementer Participation + Organizational Culture	-.067 <sup>a</sup>	-.206	.837	-.016	.480
2	PC targets	.046 <sup>b</sup>	.386	.700	.029	.358
	PC tools	.167 <sup>b</sup>	1.888	.061	.141	.626
	PC Implementer Participation	.081 <sup>b</sup>	1.017	.311	.076	.785
	PC Tools + Organizational Culture	.642 <sup>b</sup>	1.547	.124	.116	.290
	PC Implementer Participation + Organizational Culture	.372 <sup>b</sup>	.996	.321	.075	.360

(iii) Correlations and residual tables for PC Targets, PC Tools, PC Implementer Participation and Implementer Attitude

Excluded Variables

Predictors in the Model: (Constant), PC tools Model					Collinearity Statistics	
		Beta In	t	Sig.	Partial Correlation	Tolerance
1	PC targets	-.178 <sup>a</sup>	-1.956	.052	-.145	.641
	PC Implementer Participation	-.035 <sup>a</sup>	-.414	.679	-.031	.778
	Implementer Attitude	-.034 <sup>a</sup>	-.441	.660	-.033	.903
	PC Targets + Implementer Attitude	-.066 <sup>a</sup>	-.825	.410	-.062	.845
	PC Tools + Implementer Attitude	-.050 <sup>a</sup>	-.569	.570	-.043	.712
	PC Implementer Participation + Implementer Attitude	-.038 <sup>a</sup>	-.472	.637	-.035	.845

(iv) Correlations and residual tables for PC Targets, PC Tools, PC Implementer Participation and M&E Skills

Excluded Variables

a. Predictors in the Model: (Constant), m4 b. Predictors in the Model: (Constant), m4, x1m4 c. Predictors in the Model: (Constant), m4, x1m4, PC tools Model					Collinearity Statistics	
		Beta In	t	Sig.	Partial Correlation	Tolerance
1	PC targets	-.109 <sup>a</sup>	-1.432	.154	-.107	.885
	PC tools	.087 <sup>a</sup>	1.098	.274	.082	.835
	PC Implementer Participation	-.024 <sup>a</sup>	-.319	.750	-.024	.910
	PC Targets + M&E Skills	-.947 <sup>a</sup>	-2.756	.006	-.202	.420
	PC Tools + M&E Skills	-.033 <sup>a</sup>	-.103	.918	-.008	.520
	PC Implementer Participation + M&E Skills	-.373 <sup>a</sup>	-1.100	.273	-.082	.450
2	PC targets	.147 <sup>b</sup>	1.194	.234	.089	.330
	PC tools	.208 <sup>b</sup>	2.486	.014	.184	.696
	PC Implementer Participation	.079 <sup>b</sup>	.957	.340	.072	.740
	PC Tools + M&E Skills	.562 <sup>b</sup>	1.557	.121	.116	.380
	PC Implementer Participation + M&E Skills	.146 <sup>b</sup>	.374	.709	.028	.330
3	PC targets	.036 <sup>c</sup>	.275	.784	.021	.281
	PC Implementer Participation	.026 <sup>c</sup>	.304	.761	.023	.685
	PC Tools + M&E Skills	-.194 <sup>c</sup>	-.368	.714	-.028	.180
	PC Implementer Participation + M&E Skills	-.005 <sup>c</sup>	-.012	.990	-.001	.320

(v) Correlations and residual tables for PC Targets, PC Tools, PC Implementer Participation and Contextual Factors

Excluded Variables

Predictors in the Model: (Constant), PC Tools + Contextual Factors Model						Collinearity Statistics
		Beta In	t	Sig.	Partial Correlation	Tolerance
1	PC targets	-.150 <sup>a</sup>	-1.953	.052	-.145	.844
	PC tools	.005 <sup>a</sup>	.059	.953	.004	.662
	PC Implementer Participation	-.056 <sup>a</sup>	-.734	.464	-.055	.877
	Contextual Factors	.131 <sup>a</sup>	.474	.636	.036	.660
	PC Targets + Contextual Factors	-.597 <sup>a</sup>	-1.962	.051	-.146	.540
	PC Implementer Participation+ Contextual Factors	-.098 <sup>a</sup>	-.358	.721	-.027	.680

(vi) Cognitive factors

Excluded Variables

Predictors in the Model: (Constant), PC tools Model						Collinearity Statistics
		Beta In	t	Sig.	Partial Correlation	Tolerance
1	PC targets	-.178 <sup>a</sup>	-1.956	.052	-.145	.641
	PC Implementer Participation	-.035 <sup>a</sup>	-.414	.679	-.031	.778
	Cognitive Factors	.110 <sup>a</sup>	1.398	.164	.104	.862
	PC Target + Cognitive Factors	.043 <sup>a</sup>	.524	.601	.039	.787
	PC Tools + Cognitive Factors	.110 <sup>a</sup>	1.203	.230	.090	.651
	PC Implementer Participation + Cognitive Factors	.071 <sup>a</sup>	.867	.387	.065	.800

### Appendix 3: Population of Employees in Ministries of Government of Kenya

<b>Government Ministry</b>	<b>Number of Departments per Ministry</b>	<b>Number of employees per Ministry</b>
1. Ministry of Agriculture, Livestock and Fisheries	34	14,080
2. Ministry of Defense	5	2,204
3. Ministry of Devolution and Planning	37	7,062
4. Ministry of East African Affairs, Commerce and Tourism	19	912
5. Ministry of Education	22	7,323
6. Ministry of Energy and Petroleum.	11	311
7. Ministry of Environment, Water and Natural Resource.	25	6,111
8. Ministry of Foreign Affairs	15	679
9. Ministry of Health	18	24,693
10. Ministry of Industrialization and Enterprise Development.	20	1,339
11. Ministry of Information, Communication and Technology	17	712
12. Ministry of Interior and Coordination of National Government	26	23,561
13. Ministry of Labour, Social Security and Services	28	953
14. Ministry of Land, Housing and Urban Development.	31	5,983
15. Ministry of Mining	8	116
16. Ministry of Sports, Culture and the Arts	17	1,925
17. Ministry of Transport and Infrastructure	21	3,273
18. The National Treasury	20	2,726
<b>Total</b>	<b>374</b>	<b>103,010</b>

Source: Organization of the Government of the Republic of Kenya. (May, 2013). Office of the President

## **Appendix 4: Letter of Request of Transmittal of Data**

4<sup>th</sup> December, 2013

Kinyanjui J. Nganga

University of Nairobi

School of Distance Education

Cell: 0721 222243

### **TO WHOM IT MAY CONCERN**

I am a PhD candidate at the University of Nairobi and currently conducting a research as partial requirement for the award of the degree of Doctor of Philosophy in Project Planning and Management. My research topic is “Influence of contextual and cognitive factors on the relationship between performance contracting system and organizational performance in Government Ministries in Kenya”.

The purpose of this letter is to request you to participate as a respondent in this study by completing the attached questionnaire as accurately as possible. All information collected through this exercise will only be used for academic purposes.

Thank you.

**Sincerely**



**Kinyanjui J. Nganga**

**Reg. No. L83/80681/11**

**University of Nairobi, Department of Extra Mural Studies**

**Appendix 5: Research clearance from the University**



**UNIVERSITY OF NAIROBI**  
COLLEGE OF EDUCATION AND EXTERNAL STUDIES  
SCHOOL OF CONTINUING AND DISTANCE EDUCATION  
DEPARTMENT OF EXTRA-MURAL STUDIES  
NAIROBI EXTRA-MURAL CENTRE

Your Ref:

Our Ref:

Telephone: 318262 Ext. 120

Main Campus  
Gandhi Wing, Ground Floor  
P.O. Box 30197  
NAIROBI

6<sup>th</sup> January 2014

REF: UON/CEES/NEMC/17/153

**TO WHOM IT MAY CONCERN**

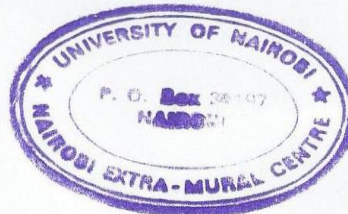
**RE: KINYANJUI JACOB NGANGA- REG.NO. L83/80681/2011**

This is to confirm that the above named is a student at the University of Nairobi College of Education and External Studies, School of Continuing and Distance Education, Department of Extra- Mural Studies pursuing Doctor of Philosophy Degree in Project Planning and Management.

He is proceeding for research entitled "influence of cognitive and contextual factors on the relationship between performance contracting system and organizational performance"

Any assistance given to him will be appreciated.

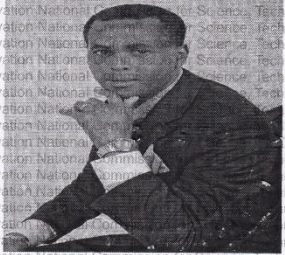
  
**DR. JOHN MBUGUA.**  
AG. RESIDENT LECTURER  
NAIROBI EXTRA MURAL CENTRE




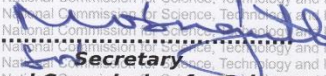
## Appendix 6: Research Clearance Permit

**THIS IS TO CERTIFY THAT:**  
**MR. JACOB NGANGA KINYANJUI**  
**of UNIVERSITY OF NAIROBI, 13514-100**  
**Nairobi, has been permitted to conduct**  
**research in Nairobi County**  
**on the topic: INFLUENCE OF**  
**CONTEXTUAL AND COGNITIVE FACTORS**  
**ON THE RELATIONSHIP BETWEEN**  
**PERFORMANCE CONTRACTING SYSTEM**  
**AND ORGANIZATIONAL PERFORMANCE**  
**IN GOVERNMENT MINISTRIES IN KENYA**  
**for the period ending:**  
**28th February, 2014**

**Permit No. : NACOSTI/P/14/5638/602**  
**Date Of Issue : 15th January, 2014**  
**Fee Received : Kshs khs2000.00**




**Applicant's Signature**  


**Secretary**  


**National Commission for Science, Technology & Innovation**

**CONDITIONS**

- You must report to the County Commissioner and the County Education Officer of the area before embarking on your research. Failure to do that may lead to the cancellation of your permit.**
- Government Officers will not be interviewed without prior appointment.**
- No questionnaire will be used unless it has been approved.**
- Excavation, filming and collection of biological specimens are subject to further permission from the relevant Government Ministries.**
- You are required to submit at least two (2) hard copies and one (1) soft copy of your final report.**
- The Government of Kenya reserves the right to modify the conditions of this permit including its cancellation without notice.**

**REPUBLIC OF KENYA**  
  
**NACOSTI**  
**National Commission for Science, Technology and Innovation**

**RESEARCH CLEARANCE PERMIT**  
**Serial No. A 844**  
**CONDITIONS: see back page**

## **Appendix 7: Interview Guide for Heads of Departments**

### **Introduction**

The purpose for this interview is to collect information on the influence of Performance Contracting System, Contextual Factors and Cognitive Factors on organizational performance in Government Ministries in Kenya. The information collected will be used for academic purposes only and it is expected that the findings from this study will make a significant contribution towards enhancing service delivery in Government Ministries in Kenya. The information collected will be handled with confidentiality and with academic professionalism. Kindly assist with the interview.

### **Section A: Demographic Information**

- 1) Highest Level of Education
- 2) How long have you worked in this department?
- 3) How long have you worked in the public service in Kenya?

### **Section B: Specific Information**

- 1) Has the performance of your department been satisfactory (since 2003)?
- 2) What are the indicators of performance in your department?
- 3) How would you rate (external) customers' satisfaction in your department?
- 4) How would you rate employees' satisfaction in your department?
- 5) How would you rate your departmental involvement in corporate social responsibilities?
- 6) Does the PC system in Ministries of Government contribute to performance?
- 7) Are the targets in the PC system precise, measure-able and attainable?
- 8) Are the tools used in the PC system valid, reliable and simple to use by the users?
- 9) To what extent do employees participate in the PC system?
- 10) Does organizational structure influence the effectiveness of the PC system in respect to organizational performance?

- 11) Does organizational culture influence the effectiveness of the PC system in respect to organizational performance?
- 12) Does implementer attitude influence the effectiveness of the PC system in respect to organizational performance?
- 13) Do implementer M&E skills influence the effectiveness of the PC system in respect to organizational performance?
- 14) Any other comment

**Thank you**

## Appendix 8: Questionnaire for Employees

### Introduction

This questionnaire is a research instrument designed to collect information on the influence of PC system, Organizational Structure, Organizational Culture, Implementer Attitude and Implementer M&E Skills on organizational performance in Government Ministries in Kenya. The information collected will be used for academic purposes only and it is expected that the findings from this study will make a significant contribution towards enhancing service delivery in Government Ministries in Kenya. The information collected will be handled with confidentiality and with academic professionalism. Kindly fill in the information as directed in the various sections provided.

### Key

Organization - Your place of work, the department where you work

PC – Performance Contracts

Implementer – Public Servants in Government Ministries in Kenya

### Section A: Demographic Information

1) Name of your Ministry {Please tick appropriately (√) in the space provided on the right}

Ministry of Government	Please tick one (√)
i. Ministry of Defense	
ii. Ministry of East African Affairs, Commerce and Tourism	
iii. Ministry of Energy and Petroleum	
iv. Ministry of Foreign Affairs	
v. Ministry of Industrialization and Enterprise Development	
vi. Ministry of Interior and Coordination of National Government	
vii. Ministry of Land, Housing and Urban Development	
viii. Ministry of Sports, Culture and the Arts	
ix. The National Treasury	

Gender {Please tick one (√) }

Male                       Female

2) Age Group {Please tick one (√) }

21 – 25 Years     26 – 30 years     31 – 35 years     36 – 40 years

41 – 45 Years     46 – 50 years     51 – 55 years     Over 55 years

3) Highest Level of Education {Please tick one (√) }

High School                       Certificate                       Diploma

Bachelors Degree                       Post Graduate Degree                       Other (specify)

.....  
.....

4) How long have you worked in this department?

.....  
.....

## Section B: Organizational Performance

This section contains items on Organizational Performance in your department

- 5) Kindly rate the following factors / statements using a scale of SA – Strongly Agree; A – Agree; N – Neutral; D – Disagree; and SD – Strongly Disagree

<b>Parameters</b>	<b>Strongly Agree (SA)</b>	<b>Agree (A)</b>	<b>Neutral (N)</b>	<b>Disagree (D)</b>	<b>Strongly Disagree (SD)</b>
a) The performance of our department is satisfactory					
b) We always achieve the annual targets set in the PCs as a department					
c) I am satisfied as an employee in our department					
d) The rating of customer satisfaction by external evaluators in our department is always satisfactory					
e) There is gender equity in all sections in our department					
f) We regularly receive complains as a department from our customers					
g) The work environment in our department is not always conducive for employees					
h) We participate in corporate social responsibilities every year					
i) The terms of employment in our department are not satisfactory					
j) We do not participate in HIV/AIDS campaigns in our department					

**Section C: Performance Contracting System and Organizational Performance**

This section contains items on the influence of Performance Contracting (PC) System on organizational performance in your department.

- 6) Kindly rate the following factors / statements using a scale of SA – Strongly Agree; A – Agree; N – Neutral; D – Disagree; and SD – Strongly Disagree

<b>Parameters</b>	<b>Strongly Agree (SA)</b>	<b>Agree (A)</b>	<b>Neutral (N)</b>	<b>Disagree (D)</b>	<b>Strongly Disagree (SD)</b>
a) I am very familiar with the PC system implemented in our department					
b) Drug and substance abuse has significantly increased in our department with the implementation of PCs					
c) PC system is well implemented in our department					
d) PC system has improved service delivery in our department					
e) PCs have improved performance in our department					
f) I am happier as an employee in our department with the implementation of PCs					
g) Customers in our department are less satisfied as a result of the PC system					
h) PCs have improved employees’ work environment					
i) Implementation of PCs has increased participation in corporate social responsibilities in our department					
j) HIV/AIDS awareness has decreased with the implementation of PCs in our department					

## Section D: Performance Contracting Targets and Organizational Performance

This section contains items on the influence of Performance Contracting (PC) Targets on organizational performance in your department.

- 7) Kindly rate the following factors / statements using a scale of SA – Strongly Agree; A – Agree; N – Neutral; D – Disagree; and SD – Strongly Disagree

<b>Parameters</b>	<b>Strongly Agree (SA)</b>	<b>Agree (A)</b>	<b>Neutral (N)</b>	<b>Disagree (D)</b>	<b>Strongly Disagree (SD)</b>
a) Targets are set in performance contracts					
b) No one attains PC targets in our department.					
c) I attain my PC targets					
d) PC targets are measure-able					
e) I sign performance contracts annually					
f) PC targets are attainable					
g) PC targets are realistic					
h) Targets set in the PC system are not attainable					
i) PC targets are too demanding					
j) Measurement of PC targets need to be changed					

**Section E: Performance Contracting Tools and Organizational Performance**

This section contains items on the influence of Performance Contracting (PC) Tools on organizational performance in your department.

- 8) Kindly rate the following factors / statements using a scale of SA – Strongly Agree; A – Agree; N – Neutral; D – Disagree; and SD – Strongly Disagree

<b>Parameters</b>	<b>Strongly Agree (SA)</b>	<b>Agree (A)</b>	<b>Neutral (N)</b>	<b>Disagree (D)</b>	<b>Strongly Disagree (SD)</b>
a) I am familiar with the tools in the PC system					
b) I am comfortable using the tools in the PC system					
c) The tools used in the PC system are relevant					
d) The tools used in the PC system are appropriate for measuring performance					
e) The tools used in the PC system are simple to use					
f) Tools used in PC system are reliable for measuring performance					
g) The tools used in the PC system are consistent					
h) Employees in our department are comfortable with the tools used in the PC system					
i) Results obtained using PC tools are consistent					
j) Tools used in the PC system need to be re-structured					

## Section F: Performance Contracting, Implementer Participation and Organizational Performance

This section contains items on the influence of Performance Contracting (PC) Implementer Participation on organizational performance in your department.

- 9) Kindly rate the following factors / statements using a scale of SA – Strongly Agree; A – Agree; N – Neutral; D – Disagree; and SD – Strongly Disagree

Parameters	Strongly Agree (SA)	Agree (A)	Neutral (N)	Disagree (D)	Strongly Disagree (SD)
a) Involving employees in setting PC targets is not important for departmental performance					
b) I sign performance contracts annually					
c) Setting of PC targets should be more participatory					
d) I voluntarily sign performance contracts					
e) Employees are not consulted in PC evaluations					
f) Employees are not involved in setting of PC targets					
g) PC evaluators are selected competitively					
h) PC targets for employees in our department are set by section heads.					
i) Tools used in the PC system are selected by employees					
j) I am involved in setting PC targets					

## Section G: Organizational Structure, PC System and Organizational Performance

This section contains items on the influence of Organizational Structure on PC System and organizational performance in your department.

10) Kindly rate the following factors / statements using a scale of SA – Strongly Agree; A – Agree; N – Neutral; D – Disagree; and SD – Strongly Disagree

Parameters	Strongly Agree (SA)	Agree (A)	Neutral (N)	Disagree (D)	Strongly Disagree (SD)
a) Implementation of PC in our department is guided by the mandate of the Ministry					
b) External customers in our department hardly access section heads					
c) Employees in our department easily access section heads					
d) I know all staff members in our department					
e) The size of a department in a Ministry of Government influences service delivery to customers					
f) Cross-sectional support in our department is not satisfactory					
g) The organizational structure in our department does not support corporate social responsibilities					
h) We hold departmental meetings at least every quarter					
i) Our department has too many sections / units for effective performance					
j) Signing of PCs in our department is delayed by bureaucracies					

**Section H: Organizational Culture, PC System and Organizational Performance**

This section contains items on the influence of Organizational Culture on PC System and organizational performance.

11) Kindly rate the following factors / statements using a scale of SA – Strongly Agree; A – Agree; N – Neutral; D – Disagree; and SD – Strongly Disagree

<b>Parameters</b>	<b>Strongly Agree (SA)</b>	<b>Agree (A)</b>	<b>Neutral (N)</b>	<b>Disagree (D)</b>	<b>Strongly Disagree (SD)</b>
a) Service delivery to customers is not effective in our department					
b) I always submit reports promptly when they are due					
c) Telephone calls are promptly answered in our department					
d) Corruption is regularly reported in our department					
e) Team work in our department is always exercised					
f) There is sufficient support from top management in our department					
g) Most people in our department do not report to work on time					
h) Performance is always recognized in our department					
i) All members in our department are familiar with the organizational vision					
j) We engage in team building activities in our department annually					

## Section I: Implementer Attitude, PC System and Organizational Performance

This section contains items on the influence of Implementer Attitude on PC System and organizational performance in your department.

12) Kindly rate the following factors / statements using a scale of SA – Strongly Agree; A – Agree; N – Neutral; D – Disagree; and SD – Strongly Disagree

<b>Parameters</b>	<b>Strongly Agree (SA)</b>	<b>Agree (A)</b>	<b>Neutral (N)</b>	<b>Disagree (D)</b>	<b>Strongly Disagree (SD)</b>
a) I am always ready and willing to sign my PC					
b) I am keen to follow the key PC indicators in my contract					
c) I always strive to achieve all that is stated in my PC					
d) Performance contracts are a waste of government resources					
e) PC system is a political strategy to mislead the public					
f) PC system should be scrapped from the public sector					
g) PCs do not lead to organizational performance					
h) I sign my PC every year within the time required					
i) PC evaluators are not skilled evaluators					
j) The evaluation criteria for PCs is flawed					

## Section J: Implementer M&E Skills, PC System and Organizational Performance

This section contains items on the influence of Implementer Monitoring and Evaluation (M&E) Skills on PC System and organizational performance in your department.

13) Kindly rate the following factors / statements using a scale of SA – Strongly Agree; A – Agree; N – Neutral; D – Disagree; and SD – Strongly Disagree

<b>Parameters</b>	<b>Strongly Agree (SA)</b>	<b>Agree (A)</b>	<b>Neutral (N)</b>	<b>Disagree (D)</b>	<b>Strongly Disagree (SD)</b>
a) I understand performance indicators					
b) I cannot write an evaluation report					
c) I can comfortably undertake performance evaluation					
d) Everyone in our department can effectively fill in performance appraisals					
e) I have never developed performance indicators					
f) Regular monitoring of individual performance is not necessary for performance evaluation					
g) All employees in our department have the skills to generate performance quarterly reports					
h) I have the skills to appraise a project for implementation					
i) Everyone in our department develops performance personal work breakdown schedules					
j) We have an integrated performance management system in our department					

**Thank you**

## Appendix 9: Organizational Structure of Government of Kenya

